

SAN RAFAEL FIRE DEPARTMENT

PERMIT APPLICATION

THIS IS NOT YOUR PERMIT

Address of Project 9000 Northgate Mall
 Project/Business Name Seas Food Truck & Co
 Contractor's Name _____
 Address _____
 City, State, Zip _____
 Phone No. _____
 State Contractors License # 012121 Expiration 12/31/89
 San Rafael Business License # _____ Expiration _____

A time keeping form will be kept to track time spent on your project. You will be charged for the actual time spent on your project to the nearest 1/4 hour, with a minimum one hour charge. The fee will be collected at the completion of your project, and an invoice will be mailed to you. Your project Permit will not receive final Fire Department approval until all fees are paid. The fees are due and payable upon receipt of the invoice and become overdue 30 days later. In addition to not issuing final approval, the Fire Department will pursue all other legal remedies for unpaid accounts.

I have read the above statement regarding fees for this project, and I understand how the fees will be calculated, agree to pay such fees and understand that they are due prior to final acceptance of my project. Further, under penalty of perjury, I declare that I am duly authorized to encumber expenses on behalf of the firm listed above.

X [Signature] Display Manager S. Christou 7/26/89
 Signature Title Print Name Date

UFC Permits:

- | | | |
|---|--|---|
| <input type="checkbox"/> Aircraft refueling vehicles | <input type="checkbox"/> Fireworks | <input type="checkbox"/> Oil and natural gas wells |
| <input type="checkbox"/> Aircraft repair hanger | <input type="checkbox"/> Flammable or combustible liquid pipeline operation and excavation | <input type="checkbox"/> Open burning |
| <input type="checkbox"/> Automobile wrecking yard | <input checked="" type="checkbox"/> Flammable or combustible liquids and tanks
<u>Display INSIDE BUILDING</u> | <input type="checkbox"/> Open-flame devices in marinas <i>permits</i> |
| <input type="checkbox"/> Bonfires or rubbish fires | <input type="checkbox"/> Fruit ripening | <input type="checkbox"/> Organic coatings <i>after closing</i> |
| <input type="checkbox"/> Bowling pin or alley refinishing | <input type="checkbox"/> Fumigation or thermal insecticidal fogging | <input type="checkbox"/> Ovens, industrial baking or drying <u>7/27</u> |
| <input type="checkbox"/> Burning in public place | <input type="checkbox"/> Garages | <input type="checkbox"/> Parade floats <i>1 mo</i> |
| <input type="checkbox"/> Candles and open flames in assembly areas | <input type="checkbox"/> Hazardous materials | <input type="checkbox"/> Places of assembly <i>8/31 apply</i> |
| <input type="checkbox"/> Cellulose nitrate storage | <input type="checkbox"/> Highly toxic pesticides | <input type="checkbox"/> Radioactive materials |
| <input type="checkbox"/> Combustible fiber storage | <input type="checkbox"/> High-piled combustible stock | <input type="checkbox"/> Refrigeration equipment |
| <input type="checkbox"/> Compressed gases, flammable | <input type="checkbox"/> Junk yards | <input type="checkbox"/> Spraying or dipping |
| <input type="checkbox"/> Cryogenics | <input type="checkbox"/> Liquefied petroleum gases | <input type="checkbox"/> Tank vehicles |
| <input type="checkbox"/> Dry cleaning plants | <input type="checkbox"/> Lumber yards | <input type="checkbox"/> Tents and air-supported structures |
| <input type="checkbox"/> Dust-producing operations | <input type="checkbox"/> Magnesium working | <input type="checkbox"/> Tire recapping |
| <input type="checkbox"/> Excavations near flammable or combustible liquid pipelines | <input type="checkbox"/> Mall, covered | <input type="checkbox"/> Waste material handling plant |
| <input type="checkbox"/> Explosives or blasting agents | <input type="checkbox"/> Nitrate film | <input type="checkbox"/> Welding and cutting operations |

Plan Reviews:

- Automatic Sprinkler Systems, # of heads _____
- Automatic Fixed Fire Extinguishing Systems (specify)
- Dry Chemical, # of Nozzles _____
- Halon, # of Nozzles _____
- Other, explain _____
- Fire Alarm System
- Automatic Fire Detection System, # of detectors _____
- Above Ground Tank Installation, # of tanks _____, tank capacity _____
- Above Ground Tank Removal, # of tanks _____, tank capacity _____
- Underground Tank Installation, # of tanks _____, tank capacity _____
- Underground Tank Removal, # of tanks _____, tank capacity _____
- Underground Tank Abandonment in Place, # of tanks _____, tank capacity _____
- Other, explain _____

Mail original to San Rafael Fire Department, retain copy for your records.

B

Inspection Report

San Rafael Fire Department 485-3308

permit still required for #93-LPG tank → 012121

012121

Address 9000 Northgate Mall Business Name SEARS - Department Store Misc. Services FP-13

Issued By: T. Maguire 1st Insp. 3/16/89 2nd Insp. OK 3rd Insp. OK Refer to FPB OK

At the time of the inspection those items marked in columns 1, 2 or 3 were found to be in violation and shall be corrected immediately. Re-inspections occur in approximate two week intervals. Items marked under NA or OK were either not applicable or were in compliance at the time of the inspection.

B-2: General Businesses—office, wholesale and retail stores, factories, workshops using materials not highly flammable or combustible, drinking/dining establishments, school rooms for those beyond the 12th grade, for less than 50 people, woodworking and cabinet shops which are owner operated or where not more than one employee is operating one piece of equipment or appliance.

GENERAL REQUIREMENTS AND SPECIAL HAZARDS

1. Install approved address identification.
2. Individual work station trash cans shall be metal or approved equal.
3. Trash cans used for collection shall be metal or approved equal with a lid.
5. Remove accumulation of waste material on exterior of building.
6. Maintain 30" clearance of combustibles to heat producing appliances
11. Maintain all area or occupancy separation walls and draft stops.
12. Maintain in operable condition and remove all obstructions to fire/smoke doors and fire dampers.
14. Keys needed for access to all portions of building are current and in Knox-Box.

Notice					
#1	#2	#3	NA	OK	
✓					1
					2
✓					3
OK					5
					6
					11
					12
					14

ANNOUNCEMENT

EXITING REQUIREMENTS, BASED ON AN OCCUPANT LOAD FACTOR OF ONE PERSON FOR EVERY:

- 100 square feet—offices
- 30 square feet—retail shops (ground floor)
- 50 square feet—retail shops (upper floors), library, locker areas, etc.
- 20 square feet—college classrooms
- 15 square feet—conference rooms

PREVENTION

17. Two exits required if occupant load exceeds 50 (except offices).
18. Two exits required if occupant load exceeds 30 (offices).
21. Two exits required from second floor if occupant load exceeds 10
22. Two exits required from all basements and above the second floor.
23. Two exits required from Mezzanines larger than 2000 square feet or 60 feet in any direction.
24. When two exits are required they must be separated by 1/2 of the diagonal distance of the room.
25. Three exits required if occupant load exceeds 500, four if over 1000.
27. Maximum distance to an exit is 150' (unsprinklered buildings) or 200' (sprinklered buildings).
28. Dead end corridors may not exceed 20'.
30. If occupant load is over 50, doors must swing out; if over 100 they must only swing out.
31. Exit doors shall not have dead bolts or other similar devices.
34. Exit doors and exit paths shall not be obstructed.
35. No storage beneath enclosed stairs unless protected by 1 hr. construction.
36. Corridors serving 30 or more shall be 1 hr. rated with 20 minute self closing doors.
38. If occupant load exceeds 100, all exits except the main entrance shall have exit signs.
40. If occupant load exceeds 300 the exit signs shall be illuminated on a separate circuit.
41. All exit paths shall be lighted at all time that the building is occupied. If separate circuits are required for the exit signs the exit lighting must also be on separate circuits.
95. Maximum occupant load sign is required if less than 50 people. (Restaurants; Lounges)
44. Interior stairways to be rated 1 hr. for 3 or 4 stories, 2 hr. for higher buildings.

OK					17
					18
					21
					22
					23
					24
					25
					27
					28
					30
					31
					34
OK					35
					36
					38
					40
					41
					95
					44

FIRE PROTECTION EQUIPMENT

45. One 2A10BC fire extinguisher shall be provided for every 6,000 sq. ft. with 75' maximum travel distance.
49. One additional 40BC extinguisher shall be provided in all kitchens.
50. Extinguishers shall be easily accessible, wall mounted at a height not less than 4" or more than 5' from floor.
51. Extinguishers shall be serviced annually, after use, and when gauge indicates recharge.
55. Fire protection or detection systems shall be extended, altered or repaired as necessary to maintain protection.
56. All sprinkler valves shall be locked in open position, accessible and unobstructed.
57. Fire Department connection caps in place and work freely.
58. Exterior exposed portions of systems that are not brass or galvanized shall be painted with rust preventative paint.
59. Storage shall be maintained at least 18" below sprinkler heads.
60. Storage shall be maintained at least 24" below ceiling in unsprinklered buildings.
61. Maintain systems as follows:

System Type	Inspected/Service	Tested
A. Standpipes	Semi-Annually	Every 5 years
B. Sprinkler	Quarterly	Every 5 years
C. Pre-engineered/Fixed	Semi-annually & after activation	Semi-annually
62. All commercial cooking shall have a dry chemical system protecting all cooking surfaces.
63. Hood and duct ventilation systems shall be maintained free of grease.

OK					45
OK					49
✓					50
OK					51
OK					55
OK					56
OK					57
OK					58
OK					59
OK					60
OK					61
					62
					63

ELECTRICAL REQUIREMENTS

66. Discontinue use of extension cords and cube adapters in lieu of permanent wiring.
67. Cords shall not be affixed to or extended through walls, ceilings, floors or under doors, nor subject to physical damage.
68. Maintain 30" clearance fronting and around electrical control panels.
69. Electrical main and sub-panels shall be labeled as to area served and not taped "on" position.

✓					66
OK					67
					68
					69

FLAMMABLE LIQUIDS

74. Discontinue use of liquids with flash point below 110°F for cleaning purposes.
75. No storage of class 1A liquids in basements.

OK					74
					75

PERMITS ARE REQUIRED OR COMPLIANCE WITH POSTED PERMIT.

87. To store in excess of 5 gallons of flammable liquids inside or 10 gallons outside.
88. To store in excess of 25 gallons of combustible liquids inside or 60 gallons outside.
89. For welding or cutting torch operations.
90. For above ground flammable liquids storage tanks.
91. Lumber yards in excess of 100,000 board feet of lumber.
92. To operate refrigeration equipment.
93. To have an LPG tank in excess of 120 water gallons.
94. To store hazardous materials in excess of 100 lbs. solid, 55 gallons liquid or 200 cu. ft. gas.

					87
					88
					89
					90
OK					91
					92
					93
					94

Will check

SAN RAFAEL FIRE DEPARTMENT

P E R M I T

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Address of Project 9000 Northgate Mall

Project/Business Name Sears

Type of Permit Tank Installation Permit No. FPB 89-048

Contractors Name Petrolane Gas

Address 2440 Whipple Road

City, State, Zip Hayward, CA 94544 Phone No. 487-1733

Issued by: _____ Date _____

Conditions: To comply with Fire Prev Std. 306.

Application Complete Incomplete* - Date 3-4-89

* _____

Code	3	2	2																	
Date	3/2	→																		
Initial	ur																			
Code																				
Date																				
Initial																				
Code																				
Date																				
Initial																				

Each block represents ¼ hour -- Codes: 1 - Plan Review, 2 - Field Inspection, 3 - Cancellation, 4 - Other

FLAMMABLE LIQUIDS TANK INSTALLATION

PLANS REVIEWED BY: _____ DATE: _____

TANKS INSPECTED BY: _____ DATE: _____

TANK CAPACITY _____ U.L. #: _____

PRESSURE TESTED BY: _____ DATE: _____

PIPING INSPECTED BY: _____ DATE: _____

PIPING TESTED BY: _____ DATE: _____

PERMIT APPLICATION Yes: _____ No: _____ DATE ISSUED: _____ By: _____

MARIN COUNTY ENVIRONMENTAL HEALTH PERMIT ISSUED Yes: _____ No: _____

OTHER INSPECTIONS: _____

By: _____ DATE: _____

COMMENTS: _____

89-048

SAN RAFAEL FIRE DEPARTMENT

PERMIT APPLICATION

THIS IS NOT YOUR PERMIT

Address of Project Northgate shopping mall
 Project/Business Name Sears
 Contractor's Name Petrolane Gas
 Address 2440 Whipple Rd.
 City, State, Zip Hayward, Calif. 94544
 Phone No. 415-482-1733
 State Contractors License # 235070 Expiration 2-28-90
 San Rafael Business License # _____ Expiration _____

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X W. E. Culkin Sales Mgr. Mark Conklin 3-3-89
 Signature Title Print Name Date

UFC Permits:

- | | | |
|---|--|---|
| <input type="checkbox"/> Aircraft refueling vehicles | <input type="checkbox"/> Fireworks | <input type="checkbox"/> Oil and natural gas wells |
| <input type="checkbox"/> Aircraft repair hanger | <input type="checkbox"/> Flammable or combustible liquid pipeline operation and excavation | <input type="checkbox"/> Open burning |
| <input type="checkbox"/> Automobile wrecking yard | <input type="checkbox"/> Flammable or combustible liquids and tanks | <input type="checkbox"/> Open-flame devices in marinas |
| <input type="checkbox"/> Bonfires or rubbish fires | <input type="checkbox"/> Fruit ripening | <input type="checkbox"/> Organic coatings |
| <input type="checkbox"/> Bowling pin or alley refinishing | <input type="checkbox"/> Fumigation or thermal insecticidal fogging | <input type="checkbox"/> Ovens, industrial baking or drying |
| <input type="checkbox"/> Burning in public place | <input type="checkbox"/> Garages | <input type="checkbox"/> Parade floats |
| <input type="checkbox"/> Candles and open flames in assembly areas | <input type="checkbox"/> Hazardous materials | <input type="checkbox"/> Places of assembly |
| <input type="checkbox"/> Cellulose nitrate storage | <input type="checkbox"/> Highly toxic pesticides | <input type="checkbox"/> Radioactive materials |
| <input checked="" type="checkbox"/> Combustible fiber storage | <input type="checkbox"/> High-piled combustible stock | <input type="checkbox"/> Refrigeration equipment |
| <input type="checkbox"/> Compressed gases, flammable | <input type="checkbox"/> Junk yards | <input type="checkbox"/> Spraying or dipping |
| <input type="checkbox"/> Cryogenics | <input type="checkbox"/> Liquefied petroleum gases | <input type="checkbox"/> Tank vehicles |
| <input type="checkbox"/> Dry cleaning plants | <input type="checkbox"/> Lumber yards | <input type="checkbox"/> Tents and air-supported structures |
| <input type="checkbox"/> Dust-producing operations | <input type="checkbox"/> Magnesium working | <input type="checkbox"/> Tire recapping |
| <input type="checkbox"/> Excavations near flammable or combustible liquid pipelines | <input type="checkbox"/> Mall, covered | <input type="checkbox"/> Waste material handling plant |
| <input type="checkbox"/> Explosives or blasting agents | <input type="checkbox"/> Nitrate film | <input type="checkbox"/> Welding and cutting operations |

Plan Reviews:

- Automatic Sprinkler Systems, # of heads _____
- Automatic Fixed Fire Extinguishing Systems (specify)
- Dry Chemical, # of Nozzles _____
- Halon, # of Nozzles _____
- Other, explain _____
- Fire Alarm System
- Automatic Fire Detection System, # of detectors _____
- Above Ground Tank Installation, # of tanks 1, tank capacity 1150 gal.
- Above Ground Tank Removal, # of tanks _____, tank capacity _____
- Underground Tank Installation, # of tanks _____, tank capacity _____
- Underground Tank Removal, # of tanks _____, tank capacity _____
- Underground Tank Abandonment in Place, # of tanks _____, tank capacity _____
- Other, explain _____

Mail original to San Rafael Fire Department, retain copy for your records.

SEARS GARDEN SHOP OPEN AREA

LOADING RAMP
DRIVEWAY

8'3" CHAIN LINK GATE
19'2"
5'10" CHAIN LINK GATE

BLOCK WALL

WALKWAY

PLANTER

17'

499

499 w/c

CRASH POST
INSTALLED
IN ACCORDANCE
WITH NEPA 58
AND TITLE 8 4" DIA
2' IN GROUND 3' ABOVE
GROUND FILLED WITH
CEMENT

PROpane TANK
WITH DISPENSING
UNIT INSTALLED
19W NEPA 58

TANK IS BEING
RELOCATED FROM
SEARS SERVICE CENTER
QT 2143 FRANCISCO
BLVD. TO THE
NORTHGATE MALL
SEARS

PARKING LOT

PETROLANE GAS SERVICE

2440 WHIPPLE RD.

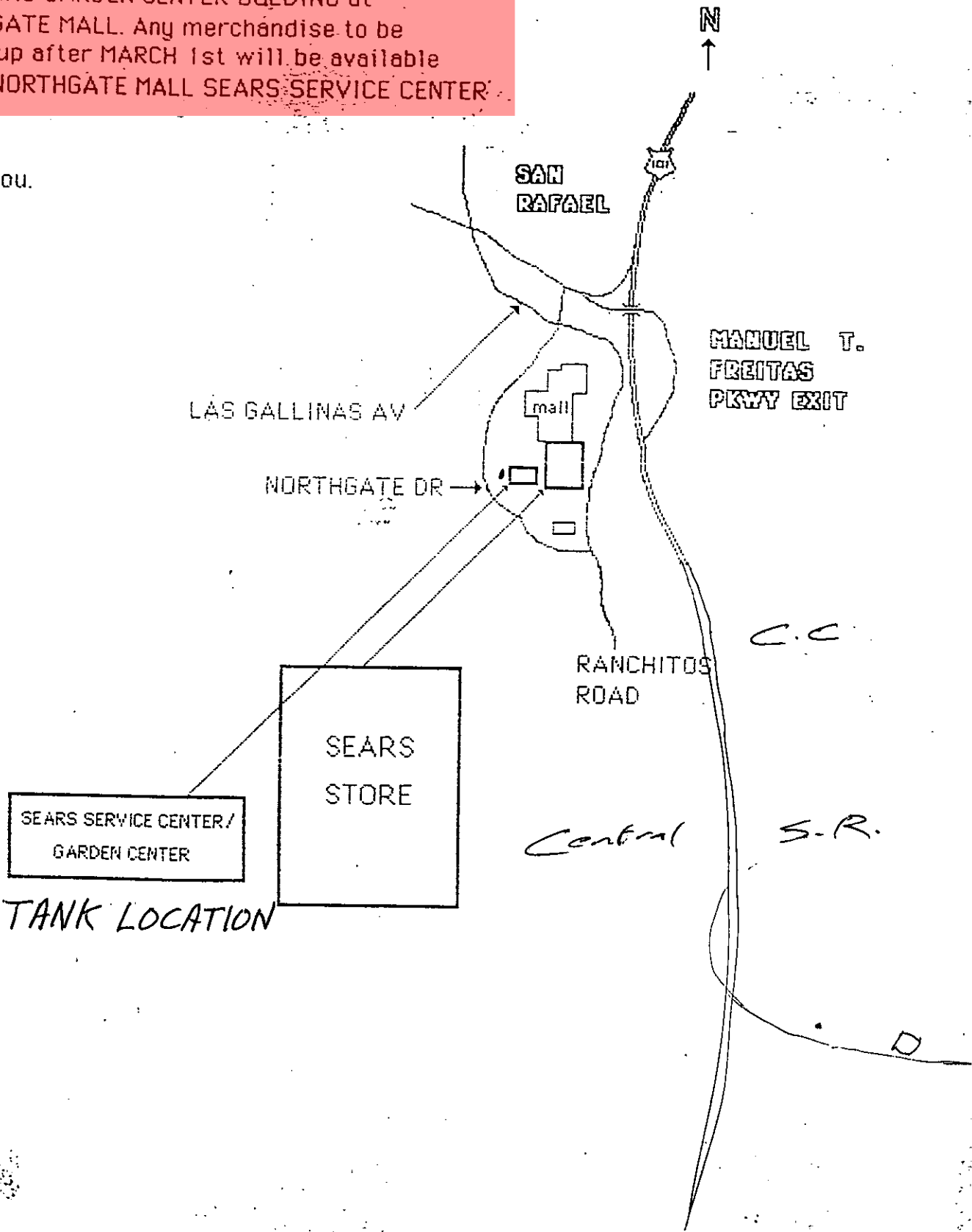
HAYWARD, CA 94544-7808

415 487 1733

WE ARE MOVING

The SEARS SERVICE CENTER is moving to the SEARS GARDEN CENTER BUILDING at NORTHGATE MALL. Any merchandise to be picked up after MARCH 1st will be available at the NORTHGATE MALL SEARS SERVICE CENTER.

Thank you.



A.R.T.

SAN RAFAEL FIRE DEPARTMENT

P E R M I T

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Address of Project 9000 Northgate Mall

Project/Business Name Sears Roebuck

Type of Permit Fire Alarm System Permit No. FPB 88-0169

Contractors Name _____

Address _____

City, State, Zip _____ Phone No. 472-3670

Issued by: William Belli Date 1/27/89

=====
Conditions: _____
=====

=====
Application Complete _____ Incomplete* _____ Date _____
=====

*

=====

Code	2	2	2	2															
Date	1/27																		
Initial	WT																		
Code																			
Date																			
Initial																			
Code																			
Date																			
Initial																			

Each block represents ¼ hour -- Codes: 1 - Plan Review, 2 - Field Inspection, 3 - Cancellation, 4 - Other

OTHER SYSTEMS

PLANS REVIEWED By: _____ DATE: _____

SYSTEM INSPECTION By: _____ DATE: _____

SYSTEM FUNCTIONAL TEST By: _____ DATE: _____

ALARM INSPECTION By: _____ DATE: _____

ALARM TEST By: WCP DATE: 1/27/89

UL CERTIFICATE ISSUED Yes _____ No _____ DATE: _____ BY: _____

OTHER INSPECTIONS: _____

By: _____ DATE: _____

COMMENTS: _____

PERMIT APPLICATION

THIS IS NOT YOUR PERMIT

Address of Project 9000 Northgate Mall San Rafael Cal. 94903
 Project/Business Name Sears Roebuck
 Contractor's Name Same
 Address Same
 City, State, Zip Same
 Phone No. 415-472-3670
 State Contractors License # _____ Expiration _____
 San Rafael Business License # _____ Expiration _____

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I have read the above statement regarding fees for this project, and I understand how the fees will be calculated and that they are due prior to final acceptance of my project.

[Signature] _____ Title _____
OPERATOR _____ Print Name _____
 _____ Date 9/20/88

UFC Permits:

- | | | |
|---|--|---|
| <input type="checkbox"/> Aircraft refueling vehicles | <input type="checkbox"/> Fireworks | <input type="checkbox"/> Oil and natural gas wells |
| <input type="checkbox"/> Aircraft repair hanger | <input type="checkbox"/> Flammable or combustible liquid pipeline operation and excavation | <input type="checkbox"/> Open burning |
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| <input type="checkbox"/> Dust-producing operations | <input type="checkbox"/> Magnesium working | <input type="checkbox"/> Tire recapping |
| <input type="checkbox"/> Excavations near flammable or combustible liquid pipelines | <input type="checkbox"/> Mail, covered | <input type="checkbox"/> Waste material handling plant |
| <input type="checkbox"/> Explosives or blasting agents | <input type="checkbox"/> Nitrate film | <input type="checkbox"/> Welding and cutting operations |

Plan Reviews:

- Automatic Sprinkler Systems, # of heads _____
 Automatic Fixed Fire Extinguishing Systems (specify)
 Dry Chemical, # of Nozzles _____
 Halon, # of Nozzles _____
 Other, explain _____
 Fire Alarm System _____
 Automatic Fire Detection System, # of detectors _____
 Above Ground Tank Installation, # of tanks _____, tank capacity _____
 Above Ground Tank Removal, # of tanks _____, tank capacity _____
 Underground Tank Installation, # of tanks _____, tank capacity _____
 Underground Tank Removal, # of tanks _____, tank capacity _____
 Underground Tank Abandonment in Place, # of tanks _____, tank capacity _____
 Other, explain _____

*Incomplete
 no
 Plans
 FC*



VIKING FIRE PROTECTION COMPANY
 1180 Holm Rd. #C
 Petaluma, CA 94952
 (707) 664-1555

Inspection Contract No.

**AUTOMATIC FIRE SPRINKLER SYSTEM
 INSPECTION REPORT**

REPORT TO: Sears Dept. Store
 ADDRESS: 9000 Northgate Mall
 CITY & STATE: San Rafael, CA 94903

DATE: June 19, 1987
 BUILDING: Main Store
Automotive and Garden

1. GENERAL		YES	N/A	NO
a.	Is the building occupied	X		
b.	Are all systems in service	X		
c.	Does building appear to be completely sprinklered	X		
d.	Is all stock or storage a minimum of 18" below sprinklers			X
e.	Are all sprinkler system main control valves open	X		
f.	Are all other valves in proper operating position	X		
g.	Do all valves have proper identification signs	X		
h.	Are all valves in satisfactory condition	X		
i.	Are control valves supervised	X		
j.	Are control valves sealed, If Yes, Seal No. _____	X		
k.	Are fire department connections and fire hose threads in satisfactory condition, couplings free, caps in place, check valves and gaskets tight	X		
l.	Was fire department connection flushed	X		
m.	Was flush free of debris	X		
n.	Are fire department connections visible and accessible	X		
2. WET SYSTEMS				
a.	Have antifreeze systems been tested and left in satisfactory condition		X	
b.	Does alarm valve and retard chamber appear to be in satisfactory condition from visual exterior inspection	X		
c.	Does waterflow indicator appear to be in satisfactory condition from visual exterior inspection ..	X		
3. DRY SYSTEMS				
a.	Is dry pipe valve in service		X	
b.	Air Pressure _____ P.S.I.		X	
c.	Is air compressor operational. Manual _____ Automatic _____		X	
d.	Were low points drained during this inspection		X	
e.	Are quick opening devices operational		X	
f.	Have dry pipe valves been trip tested _____ Seconds to operate		X	
g.	Do dry pipe valves appear to be adequately protected from freezing		X	
4. SPECIAL SYSTEMS (Describe) _____				
a.	Were valves trip tested and results satisfactory		X	
b.	Were all heat responsive systems tested and results satisfactory		X	
c.	Were supervisory features tested and results satisfactory		X	

Explain "No" answers in item 13.

N/A Not Applicable



Inspection Contract No. _____

5. ALARMS		YES	N/A	NO
a.	Water motor and gong test satisfactory _____ Seconds to operate			X
b.	Electric flow indicator alarm test satisfactory <u>40</u> Seconds to operate	X		
c.	Were alarms tested through inspectors test valve	X		
d.	Tamper switch alarm test satisfactory	X		
e.	Are any alarms connected to central stations	X		

6. SPRINKLERS - PIPING		YES	N/A	NO
a.	Do all sprinklers appear to be in satisfactory condition, not obstructed and free of corrosion or paint, and installed in proper position	X		
b.	Are sprinklers less than 50 years old	X		
c.	Are extra sprinklers and wrenches readily available	X		
d.	Does hand hose appear to be in satisfactory condition	X		

7. FIRE PUMPS		YES	N/A	NO
a.	Do fire pumps appear to be in satisfactory condition		X	
b.	Do gravity tanks or reservoirs appear to be in satisfactory condition		X	
c.	Do pressure tanks appear to be in satisfactory condition		X	

8. Wet Systems: Number 8 Make and Model Viking Model E 8"
 9. Dry Systems: Number _____ Make and Model _____
 10. Wet Systems: Number 1 Type Viking 6" Model E
 Make and Model _____ Condition _____

11. CONTROL VALVES	NO.	TYPE	OPEN		SECURED		SIGN		CONDITION
			YES	NO	YES	NO	YES	NO	
City Conn. Control Valve	1	Gate	X		X		X		Good
Tank Control Valves .....									.....
Pump Control Valves .....									.....
Sectional Control Valves	3	Gate	X		X		X		Good
System Control Valves	8	Gate	X		X		X		Good

12. Water Flow Test Yes _____ No _____ (If no, why?) _____

TEST PIPE LOCATION	SIZE TEST PIPE	PRESSURE BEFORE	FLOW PRESSURE	PRESSURE AFTER	RESTORATION TIME
On Risers	1 1/4"	125	125	135	2 seconds

Water Pressure: City 125 P.S.I. Tank N/A P.S.I. Pump N/A P.S.I.
 Gauge Accuracy Within +1-1 P.S.I. Of Certified Test Gauge.



Inspection Contract No.

13. EXPLANATION OF "NO" ANSWERS.

Water motor gong in automotive needs repair. Six heads under rull-up doors need to be relocated in automotive. In Portraits Department, one (1) head may be needed under new ceiling. In storage area next to toys where towels are stored, storage should be lowered 18" below sprinklers.

14. ADJUSTMENTS OR CORRECTIONS MADE.

All repairs were made of the above "no" answers.

15. DESIRABLE IMPROVEMENTS.

Vic couplings on 4" FDC are leaking and should be replaced in main store.

16. COMMENTS

Fire Department 485-3300
ADT 997-7800
System No. 1-82-22 Main store
Automotive 1-81-46 Customer PO R928190

17. Inspection label affixed to sprinkler system riser: [X] Yes June 29, 1987
[] No

The information provided by this report is based upon the inspection services of Viking Fire Protection Company (VFPC) on the date and time set forth on this report. No inspection or recommendation regarding the design criteria for the fire sprinkler system has been made. No statement of fact, promise, representation, affirmation or other indication has been made with respect to the inspected fire protection system; or any part thereof, other than which appears in the report. No warranties either expressed or implied, shall attach to this report; it being understood that VFPC shall not be liable for the quality and performance of the fire protection system should it prove defective after the inspection.

VIKING FIRE PROTECTION COMPANY

Contractor License No. C16 - 187293
State Fire Marshal License No.

Inspector

Date

FIELD INSPECTION CHECKLIST

SPRINKLER SYSTEMS

ADDRESS 9000 North Gate Mall - Sears.

UNDERGROUND INSPECTION BY: _____ DATE: _____
UNDERGROUND HYDRO BY: _____ DATE: _____
UNDERGROUND FLUSH BY: _____ DATE: _____
OVERHEAD HYDRO BY: _____ DATE: _____
OVERHEAD INSPECTION BY: _____ DATE: _____
ALARM INSPECTION BY: _____ DATE: _____
ALARM TEST BY: _____ DATE: _____
U.L. CERTIFICATE ISSUED Yes: _____ No: _____ DATE ISSUED: _____ BY: _____
PLANS REVIEWED BY: _____ DATE: _____
PERMIT APPLICATION Yes: _____ No: _____ DATE ISSUED: _____ BY: _____

OTHER SYSTEMS

SYSTEM INSPECTION BY: _____ DATE: _____
SYSTEM FUNCTIONAL TEST BY: _____ DATE: _____
PLANS REVIEWED BY: _____ DATE: _____
PERMIT APPLICATION Yes: _____ No: _____ DATE ISSUED: _____ BY: _____

FLAMMABLE LIQUIDS TANKS

TANKS INSPECTED BY: _____ DATE: _____
TANK CAPACITY _____ U.L. #: _____
PRESSURE TESTED BY: _____ DATE: _____
PIPING INSPECTED BY: _____ DATE: _____
PIPING TESTED BY: _____ DATE: _____
PLANS REVIEWED BY: _____ DATE: _____
PERMIT APPLICATION Yes: _____ No: _____ DATE ISSUED: _____ BY: _____

FLAMMABLE LIQUID TANK REMOVAL/ABANDON IN PLACE

TANK PRESSURE TEST - COMPANY NAME NA
WITNESSED BY: _____ DATE: _____

PIPING DISCONNECTED Yes No _____ TANK CAPACITY 550
TANK UL # unable to locate

TANK STEAM CLEANED OR TRIPLE RINSED WITH PRESSURE H2O, CHEMICAL OR TSP Yes No _____ DATE: 1/26/87

TANK FREED OF VAPORS Yes No _____ DATE: 1/26/87

METHOD USED CO2

HYDRO CARBON READING 0% O2 READING ? No O2 meter

TANK REMOVAL CONTRACTOR Balch Petroleum

ADDRESS 1400 Old Conejo Road

TANK HAULER H & H Shipping Co. ID OR EPA # HWH # 900849

ADDRESS/DESTINATION China Basin SF.

WASTE HAULER Sears ID OR EPA # CAD 000 313445

ADDRESS/DESTINATION _____

PERMIT APPLICATION Yes No _____ DATE ISSUED 1/26/87

BY Forest Craig MARIN COUNTY E.H. PERMIT # OK

Date: 1/22/87

Address/Location: 9000 Northgate Mall SAN RAFAEL

Business Owner(s): SEARS D.B.A. _____

Address: 900 S. FREMONT AVE ALHAMBRA CA 91802
(Street) (City) (State) (Phone) (818) 576-4225

Contractor (When applicable): Balch Petroleum/KE CURTIS CONSTRUCTION (PRIME)

Address: 9000 Northgate Mall 1400 OH CONEJO ROAD
(Street) (City) (State) (Phone) NEWBURY PARK, CA 91320

State License No. 396575B Type: A City Business Lic. No.: -NA-

Type of Permit	U. F. C. Section
___ Application of Flammable Finishes	45.102
___ Fumigation and Thermal Insecticidal Fogging	47.102
___ Compressed Gases	74.103
___ Cryogenic Fluids	75.103
___ Explosives and Blasting Agents	77.104
___ Fireworks	78.102
___ Flammable Liquids (Storage/Handling)	79.103
___ Hazardous Chemicals	80.102
___ High-Piled Combustible Stock	81.103
___ Liquefied Petroleum Gases	82.103
<input checked="" type="checkbox"/> Other Underground Tank Removal	79.103

Description of operations/Location of storage: Size + Number of Tanks: 1 TANK 500 gallon -- Waste Motor Oil
To comply w/ F.D. Std No. 310

FOR FIRE DEPARTMENT USE

Plans submitted:

Date: _____ Approved by: _____ Date: _____

Field Inspection:

By: FCraig Date: 1/26/87 By: _____ Date: _____

Final approval by: Edward McCraig Date: 1/26/87

Permit fee: \$30.00 Date paid: 1/22/87 Permit number: _____

Remarks: _____

CITY OF SAN RAFAEL

FIRE PREVENTION BUREAU

Correction Notice

9000

Job Located at Sears Ng Mall San Rafael

This job site has been inspected and has been found to be in violation of the applicable laws and ordinances of the City of San Rafael or the State of California. You are hereby notified that final approval will not be given (unless conditionally signed for below) until all of the violations are corrected and said corrections have been witnessed and initialed by the Fire Department. When the corrections have been made, call 485-3308 for a re-inspection. This notice has been placed conspicuously near the ~~Building Department sign-off card for the job~~ and, pursuant to Section 3.104 of the Uniform Fire Code, it shall not be removed or altered except by the Fire Department.

- ✓ (1) mall entrances - remove tables & Brochure stands from aisle.
- ✓ (2) South parking entrance remove table & xmas trees from exit pathway and stairway.
- ✓ (3) Maintain 5ft clear aisle width to all exits.

7 day notice
OK 12987 JMC

Date 12.12.86 By Forest Craig Inspector
Fire Department

Conditional Certificate of Occupancy
Approved By _____

cc: Fire Department
Building Department

DO NOT REMOVE THIS TAG



1400 FIFTH AVENUE, P.O. BOX 60 SAN RAFAEL
CALIFORNIA 94915-0060

Fire Department

November 18, 1986

MAYOR
LAWRENCE E. MURRYAN

COUNCIL MEMBERS
DOROTHY L. REIFNER
GARY R. FRUGOLI
RICHARD P. NAVE
JERRY RUSSOM

Kents Christmas Trees
9000 Northgate Mall
San Rafael, CA 94903

Subject: Fire Department Conditions and Requirements
a) Christmas Tree Lots
b) Flame Treating Trees
c) Tents and Awnings

This notice is to inform you that pursuant to Title 19, California Administrative Code and Uniform Fire Code, the following conditions and requirements apply:

- 1) All Christmas lots shall comply with Fire Department Standard No.'s 114 and 114A (copies attached).
- 2) A Special Use Permit is required by the Fire Department to install or use any tent or awning in connection with Christmas Tree Lots. Permit applications may be obtained by contacting the Fire Prevention Bureau at (415)485-3308, Monday through Friday 8:30 to 5:00 PM.
- 3) An onsite inspection of the lot is required by this Department. A 24 hour advance notification call is required to schedule an inspection appointment (normal business hours).

Should you have any questions regarding this notice or the conditions outlined herein, please contact the Fire Prevention Bureau.

Sincerely,

ROBERT E. MARCUCCI
Fire Chief

Forrest Craig
FORREST CRAIG
Fire Inspector

REM:FC:ss

Enclosures

cc: Building Department

CITY OF SAN RAFAEL
BUSINESS LICENSE APPLICATION

FOR: BUSINESSES LOCATED OUTSIDE
OF CITY LIMITS

APPLICATION VOID UNLESS FILLED OUT COMPLETELY
(USE N/A WHEN QUESTION NOT APPLICABLE)

COMPLETE PROMPTLY AND RETURN TO: CITY OF SAN RAFAEL, ^{Building Dept.} BUSINESS LICENSE OFFICE, CITY HALL
ROOM 204, 1400 FIFTH AVENUE, P.O. Box 60, SAN RAFAEL, CA 94915 (415) 456-1112

BUSINESS NAME: Kent's Christmas Trees TEL. No. 415-757-4898

ADDRESS OF BUSINESS: 9000 Northgate Mall San Rafael, CA 94903
STREET CITY ZIP

P.O. BOX OR MAIL ADDRESS: _____

TYPE OF BUSINESS OR PROFESSION: Christmas Tree Lot
in Sears Garden Center House

STATE LICENSE CONTRACTORS: TYPE OF WORK _____ STATE LICENSE No. _____
VEHICLES OPERATING IN SAN RAFAEL _____ STATE LICENSE EXPIRES _____

RETAIL - WHOLESALE DELIVERY AND SERVICE BUSINESSES: No. of VEHICLES OPERATING IN SAN RAFAEL 1

VENDING MACHINE OPERATORS: PLEASE LIST TYPES OF MACHINES, NUMBER AND COIN VALUE OF EACH, AND WHERE LOCATED IN SAN RAFAEL.

TYPE OF MACHINE	HOW MANY	COIN VALUE	LOCATED AT
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

I DECLARE THAT THE ABOVE INFORMATION IS TRUE AND CORRECT.

LEGAL SIGNATURE Frankie L. Kent TITLE Owner DATE 11-1-86
PRINTED NAME FRANKIE L. KENT

FOR CITY USE ONLY

FEE:

LICENSE No: _____

DATE APPLICATION RECEIVED: _____

DATE BILLED: _____

SECOND NOTICE: _____

REMARKS: _____

BASIC FEE: \$ 58.00
VEHICLES: 14.50
OTHER: _____
TOTAL DUE: \$ 72.50 prorated at 1/4

#18.13

SAN RAFAEL PLANNING DEPARTMENT COMMENT SHEET

- TO**
- CITY MANAGER
 - REDEVELOPMENT
 - CITY ENGINEER ●
 - TRAFFIC ENGINEER
 - FIRE ●
 - POLICE ●
 - RECREATION
 - CITY ATTORNEY
 - M.M.W.D.
 - P.G. & E.
 - P.T. & T.
 - U.S. POSTAL SERVICE
 - SAN RAFAEL SCHOOL DIST.
 - DIXIE SCHOOL DIST.
 - MOSQUITO ABATEMENT
 - MARIN COUNTY PLANNING
 - MARIN COUNTY TRANSIT DISTRICT
 - CALTRANS
 - B.C.D.C.
 - CORPS OF ENGINEERS
 - HOMEOWNERS' ASSOCIATION
 - OTHER _____
 -

DISTRIBUTION DATE: 9-9-86

ITEM ED86-82

ADDRESS 9000 Northgate Mall

APPLICANT M. Snodgrass for Sears

A.P. NO. _____

GENERAL PLAN Multi-use Water Bus. & Ind. Rec. Ag. Res. O.S.

ZONING C2-NG

NEIGHBORHOOD Northgate

SOILS CLASS 1 2 3 4 mu

DESCRIPTION Remove underground oil storage tank.
Install above ground oil storage tanks in
containment dike.

THE ABOVE ITEM HAS BEEN SCHEDULED FOR

ZONING ADMINISTRATOR ON September 24, 1986

PLEASE RETURN BY September 22, 1986

PLANNING COMMISSION ● ANTICIPATED SCHEDULE WILL BE DISCUSSED AT NEXT DEVELOPMENT COORDINATING COMMITTEE MEETING ● IF NOT ATTENDING, PLEASE RETURN BY _____

● THIS INFORMATION AND ANY ATTACHMENT IS CIRCULATED FOR YOUR REVIEW AND COMMENT ●

ENVIRONMENTAL ASSESSMENT Should the project require an EIR? If so, why? _____

CITY ENGINEER Will the project result in significant: NO NOTE
IF YES, SEE
COMMENTS BELOW

1. Exposure of people and facilities to unstable conditions . . .	<input type="checkbox"/>	
2. Alteration in the course or flow of surface or ground water . . .	<input type="checkbox"/>	
3. Need for improved downstream drainage	<input type="checkbox"/>	
4. Need for improved sewer systems	<input type="checkbox"/>	
5. Need for traffic system improvement	<input type="checkbox"/>	

TRAFFIC ENGINEER Will the proposal result in: NO

1. Generation of substantial additional vehicular movement	<input type="checkbox"/>	
2. Effects on existing parking facilities, or demand for new parking	<input type="checkbox"/>	
3. Substantial impact upon existing transportation systems	<input type="checkbox"/>	
4. Alterations to present patterns of circulation or movement of people and/or goods	<input type="checkbox"/>	
5. Alterations to waterborne, rail or air traffic?	<input type="checkbox"/>	
6. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	<input type="checkbox"/>	

COMMENTS/RECOMMENDATIONS . . . NONE/ _____

① Plans to conform to Fire Prevention Std No. 306 and Std No. 310

② Permits must be obtained from Marin Co. Environmental Health.

③ on site inspections required by Fire marshal.

SIGNED Joseph Craig DATE 9-12-86 ITEM ED86-82

CITY OF SAN RAFAEL

SAN RAFAEL, CALIFORNIA

INTER-DEPARTMENTAL MEMORANDUM

DATE:

TO: PLANNING DEPARTMENT
BUILDING DEPARTMENT
FROM: KEITH J. SCHOENTHAL, Fire Marshal

SUBJECT: Above Ground Flammable Liquid Tanks
Existing Non-Conforming Tanks
Plan Review

Attached is a plan submittal for:

SEARS

9000 NORTHGATE MALL

This plan and project should be reviewed as an existing, non-conforming, above ground tank, not as a new or complete plan review.

I have included a copy of the Fire Prevention Standard No. 306, Sections II and III, which outlines Planning and Building Department plan submittal requirements as they were previously established.

Plan review fees will be dispursed accordingly upon receipt of your Department's respective account numbers. Please return your comments/requirements, if any, by

SEPT. 4, 1986

Should you have any questions regarding this project, please contact me at Ext. 3308.

By: Forrest Craig, Insp.
KEITH J. SCHOENTHAL
Fire Marshal

cc: Property File

CITY OF SAN RAFAEL FIRE DEPARTMENT

FIRE PREVENTION
STANDARD NO. 306

ABOVE GROUND FLAMMABLE LIQUIDS
STORAGE TANKS

Keith J. Schoenthal
DEVELOPED BY - FIRE MARSHAL

PAGE 4 OF 4

Robert E. Maurer
APPROVED BY - FIRE CHIEF

PAST EDITIONS

DATE NOVEMBER 22, 1985

III. EXISTING FACILITIES THAT ARE UNDERGOING ENFORCEMENT FOR NON-COMPLIANCE BY THE FIRE DEPARTMENT SHALL COMPLY WITH THE FOLLOWING:

A. FEES:

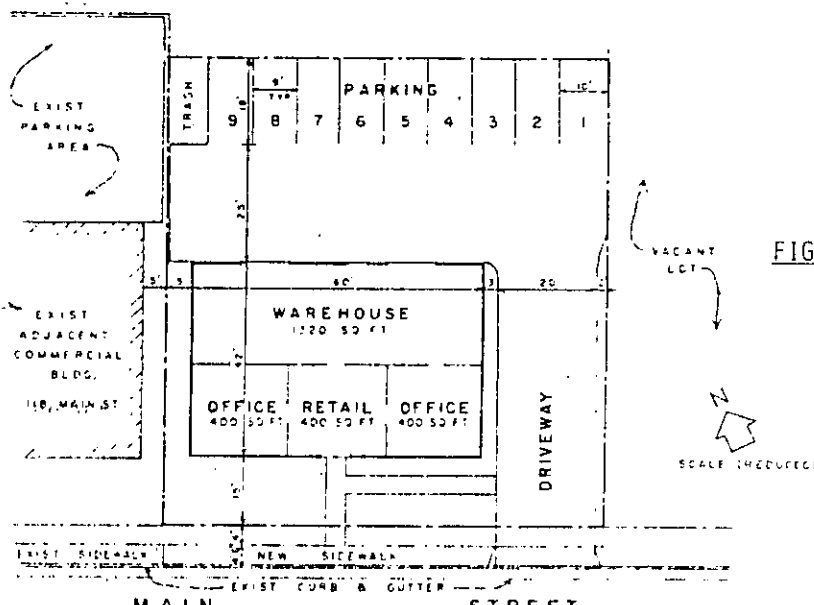
A ONE TIME PLAN CHECK AND PERMIT FEE OF \$50.00 MADE PAYABLE TO THE FIRE DEPARTMENT IS REQUIRED WITH THE APPLICATION. THE FIRE DEPARTMENT WILL DISBURSE THE MONEY TO THE OTHER DEPARTMENTS.

B. APPLICATIONS.

1. FILL OUT AND SIGN THE PLANNING DEPARTMENT GENERAL APPLICATION FORM CHECKING THAT YOU ARE APPLYING FOR DESIGN REVIEW.
2. FILL OUT THE FIRE DEPARTMENT APPLICATION FORM. RETURN BOTH FORMS TO THE FIRE DEPARTMENT FOR PROCESSING.

C. PLANS:

1. A SITE PLAN MUST BE SUBMITTED TO INCLUDING THE FOLLOWING INFORMATION:
 - A. BE CLEARLY DRAWN TO A MINIMUM SCALE OF 1" - 20' AND INCLUDE A NORTH ARROW.
 - B. BE ACCURATELY DIMENSIONED.
 - C. SHOW ALL PROPERTY LINES.
 - D. INDICATE TOPOGRAPHIC CONDITIONS (GENERAL SLOPE OF LOT, CUT BANKS AND FILL SLOPES IF LOT IS NOT LEVEL).
 - E. INDICATE THE CURRENT AND PROPOSED LOCATIONS OF THE TANK.
 - F. SHOW EXISTING STRUCTURES, PARKING AREA(S) AND VEHICLE CIRCULATION PATTERNS.
 - G. SHOW RELATIONSHIP OF EDGE OF STREET PAVEMENT TO PROPERTY LINE.
 - H. SHOW SIDEWALK, CURB AND/OR GUTTER - IF EXISTING.
 - I. A WRITTEN DESCRIPTION OF THE EXISTING AESTHETIC VALUES OF THE BUILDINGS (THE DIKE OR VAULT WILL BE REQUIRED TO MEET THE AESTHETIC CONCERNS OF THE PLANNING DEPARTMENT).
 - J. AN EXAMPLE SITE PLAN IS SHOWN AS FIGURE 1.
2. AN ARCHITECTURAL/STRUCTURAL DRAWING OF THE TANK DIKE OR VAULT MUST BE SUBMITTED IN ACCORDANCE WITH SECTION I.C.

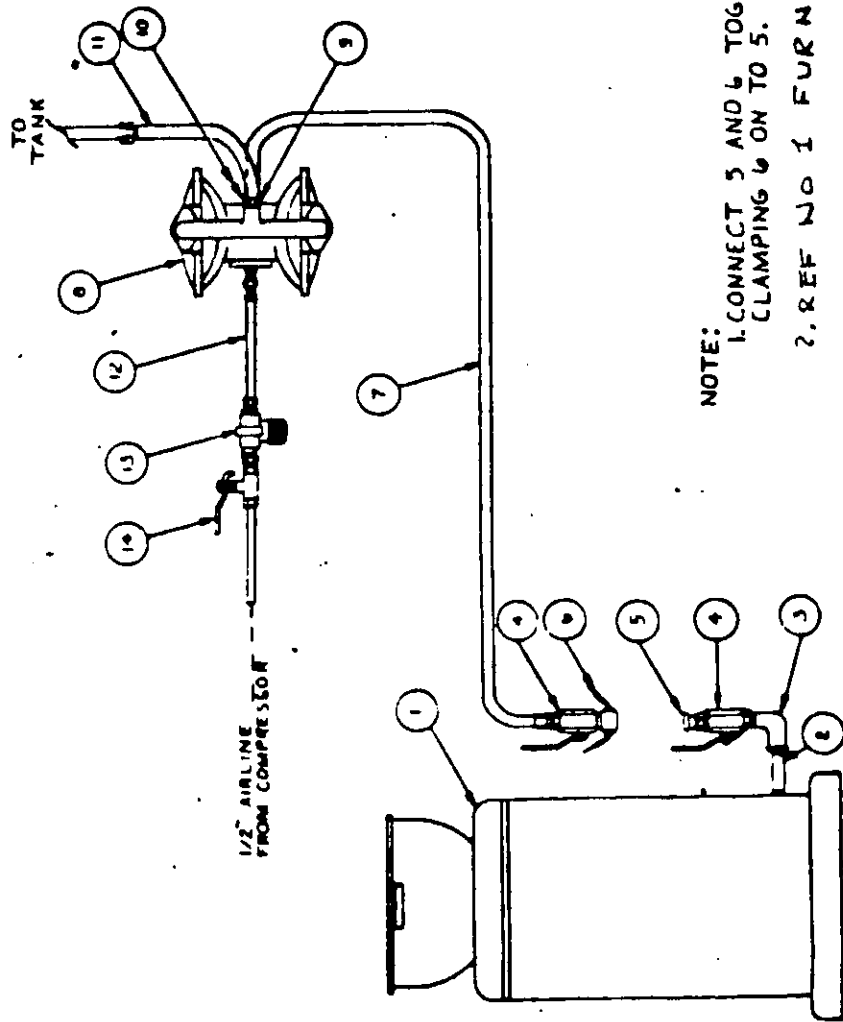


Attachment "A"

PLF NO.	PART NO.	DESCRIPTION	QTY
1	226-377	WASTE OIL REC.	1
2	125-034	OPTIONAL	1
3	100-627	NIPPLE	1
4	100-549	STREET FLBOW	1
5	108-537	BALL VALVE	2
6	108-514	CAMLOCK, M. 3/4"	1
7	108-515	CAMLOCK, FM. 3/4"	1
8	155-816	ROSE, 3/4" X 1/2"	1
9	218-940	DIAPH. PUMP	1
10	158-586	BUSHING	1
11	160-022	SWIVEL	1
12	220-444	HOSE, 1" X 20' LG.	1
13	204-561	AIR HOSE	1
14	202-156	AIR REG. 1/2 GVA.	1
15	107-142	BALL VALVE	1

* ORDER THESE FOR ADDITIONAL PORTABLE DRAINS.

PART NO ARE FOR GRACO INC. EQUIPMENT.



NOTE:
1. CONNECT 5 AND 6 TOGETHER BY CLAMPING 6 ON TO 5.

2. REF NO 1 FURNISHED BY SEARS

3. CONTRACTOR TO PROVIDE 1 SET OF REF NO 2, 3, 4 AND 5

TITLE : ROLL AROUND DRAIN EVACUATION SYSTEM

SAN RAFAEL PLANNING DEPARTMENT
 1400 FIFTH AVE. • P.O. BOX 60 SAN RAFAEL, CA 94915 • TEL. (415) 485-3085
GENERAL APPLICATION FORM

A P P L I C A T I O N F O R

<input checked="" type="checkbox"/> DESIGN REVIEW	<input type="checkbox"/> LOT, LINE ADJUSTMENT	<input type="checkbox"/> USE PERMIT AMENDMENT
<input type="checkbox"/> DESIGN REVIEW AMENDMENT	<input type="checkbox"/> REVERSION TO ACREAGE	<input type="checkbox"/> USE PERMIT EXTENSION
<input type="checkbox"/> DESIGN REVIEW EXTENSION	<input type="checkbox"/> SUBDIVISION - FINAL MAP	<input type="checkbox"/> VARIANCE
<input type="checkbox"/> DEVELOPMENT AGREEMENT	<input type="checkbox"/> SUBDIVISION - TENTATIVE MAP	<input type="checkbox"/> ZONE CHANGE
<input type="checkbox"/> GENERAL PLAN AMENDMENT	<input type="checkbox"/> SMALL SUBDIVISION	<input type="checkbox"/> ZONING ADMINISTRATOR
<input type="checkbox"/> SIGN REVIEW	<input type="checkbox"/> USE PERMIT	<input type="checkbox"/> OTHER

PROPERTY INFORMATION

STREET ADDRESS _____
 ASSESSOR' PARCEL NO(S) _____
 PRESENT USE OF PROPERTY _____
 SIZE OF PROPERTY _____ EXISTING ZONING _____

A P P L I C A N T I N F O R M A T I O N

PROPERTY OWNER	AUTHORIZED REPRESENTATIVE
NAME <u>SEARS</u>	NAME <u>MARK SNODGRAS</u>
ADDRESS <u>9000 Northgate Mall</u>	ADDRESS <u>9000 Northgate Mall</u>
<u>San Rafael 94903</u>	<u>SAN RAFAEL 94903</u>
TELEPHONE <u>472 3670</u>	TELEPHONE <u>472 3670</u>

DETAILED DESCRIPTION OF PROJECT

REMOVING UNDERGROUND OIL STORAGE TANK.
INSTALL ABOVE GROUND OIL STORAGE TANKS
IN CONTAINMENT DIKE

A C K N O W L E D G E M E N T S

- I acknowledge that all materials submitted in conjunction with this form shall be considered a part of this application.
- I acknowledge that this application will not be considered filed and processing may not be initiated until the Planning Department determines that the submittal is complete with all necessary information and is "accepted as complete." The City will notify the applicant of all application deficiencies no later than 30 days following application submittal.
- I declare under penalty of perjury that the information contained in this application is true and correct to the best of my knowledge.
- By signature on this form, the property owner authorizes the listed representative(s) to appear before the Planning Commission and to file applications, plans and other information on the owner's behalf. It is the Owner's responsibility to inform the Planning Department in writing of any changes.

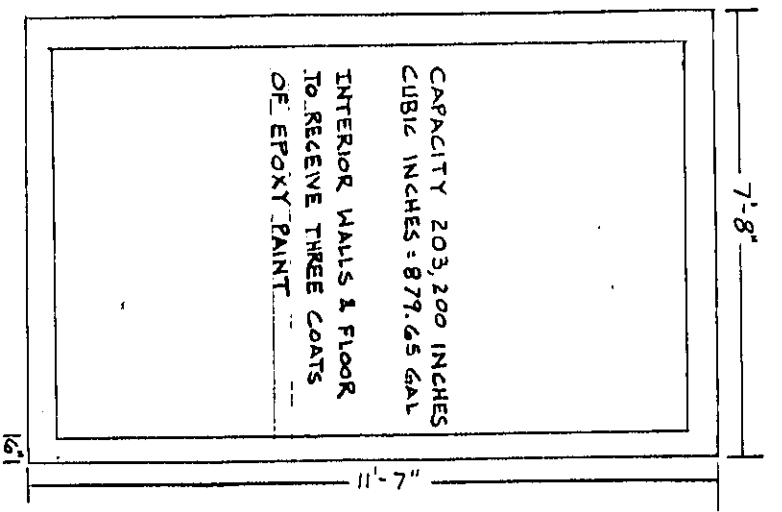
OWNER	REPRESENTATIVE
<u>Sears</u> DATE _____	<u>Mark Snodgras</u> DATE <u>8-15-86</u>

PLEASE DO NOT WRITE IN THE AREA BELOW

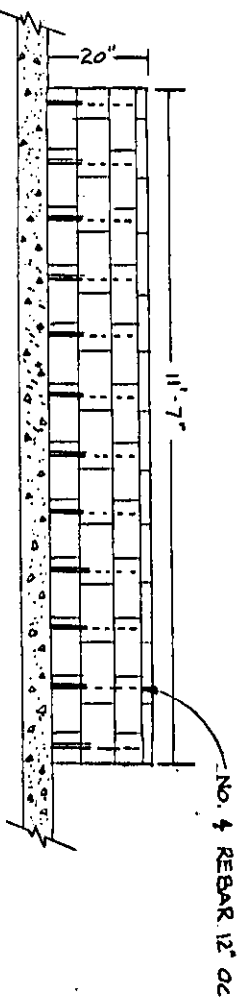
APPLICATION SUBMITTAL DATE _____ RCVD. BY _____ FEES PAID _____
 APPLICATION ACCEPTED AS COMPLETE DATE _____ BY _____

NOTE: The City of San Rafael, by Resolution No. 547B of the San Rafael City Council on June 5, 1978, has adopted the provisions of Section 1094.6 of the Code of Civil Procedure regarding judicial review of administrative determinations.

A BY ZONING ADMINISTRATOR _____ DATE _____
C BY PLANNING COMMISSION _____
T BY CITY COUNCIL _____
I BY PLNG. DIR. / STAFF _____
O BY OTHER _____
N CONDITIONS _____

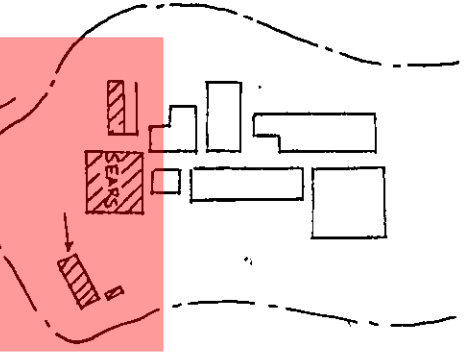


To contain only Class III materials

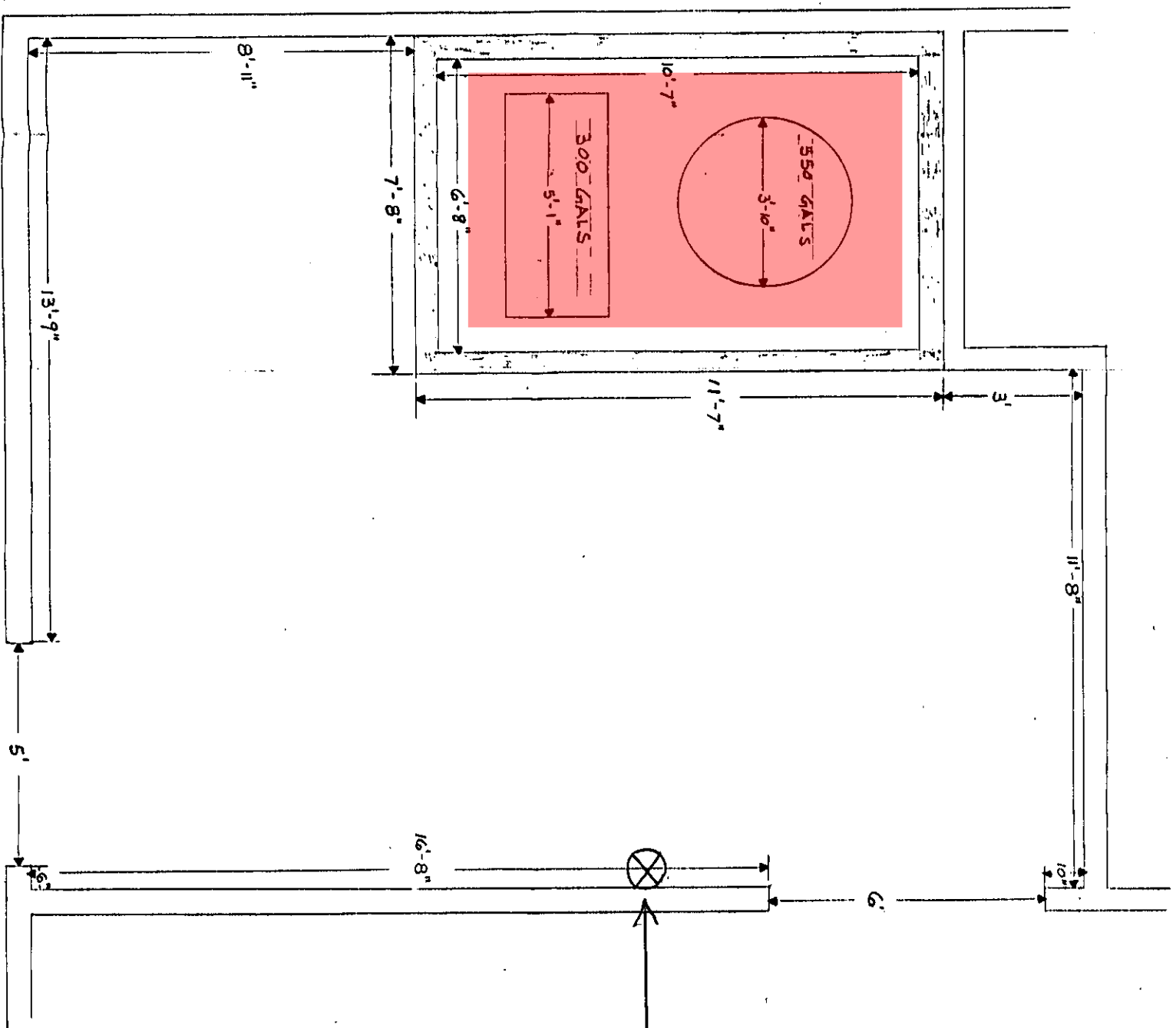


CONTAINMENT DIKE

SCALE: 1/2" = 1'-0"



PLOT PLAN



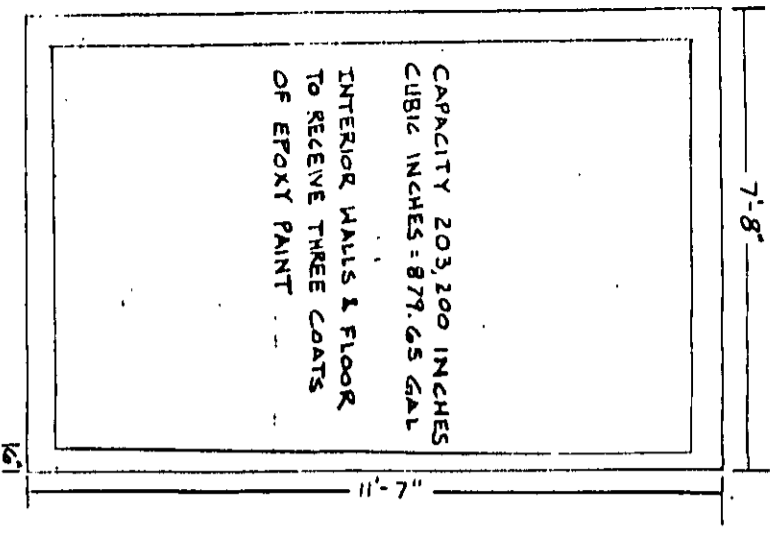
HEAVY DUTY AIR OPERATED MOTOR OIL TRANSFER PUMP (See Attachment "A")

these plans have been reviewed and appear to be in conformance with Local Ordinance and Nationally Recognized Standards for Fire Protection. Regardless of this review, conditions in the field shall meet said ordinance and standards prior to final occupancy.

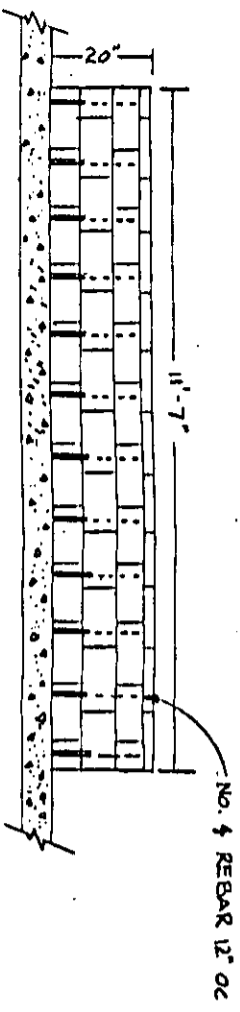
Shrestha, Deep
 FIRE MARSHAL DATE 8-11-86
 Preliminary only.
 Plans to be resubmitted for pump location

PLOT PLAN: WASTE OIL STORAGE

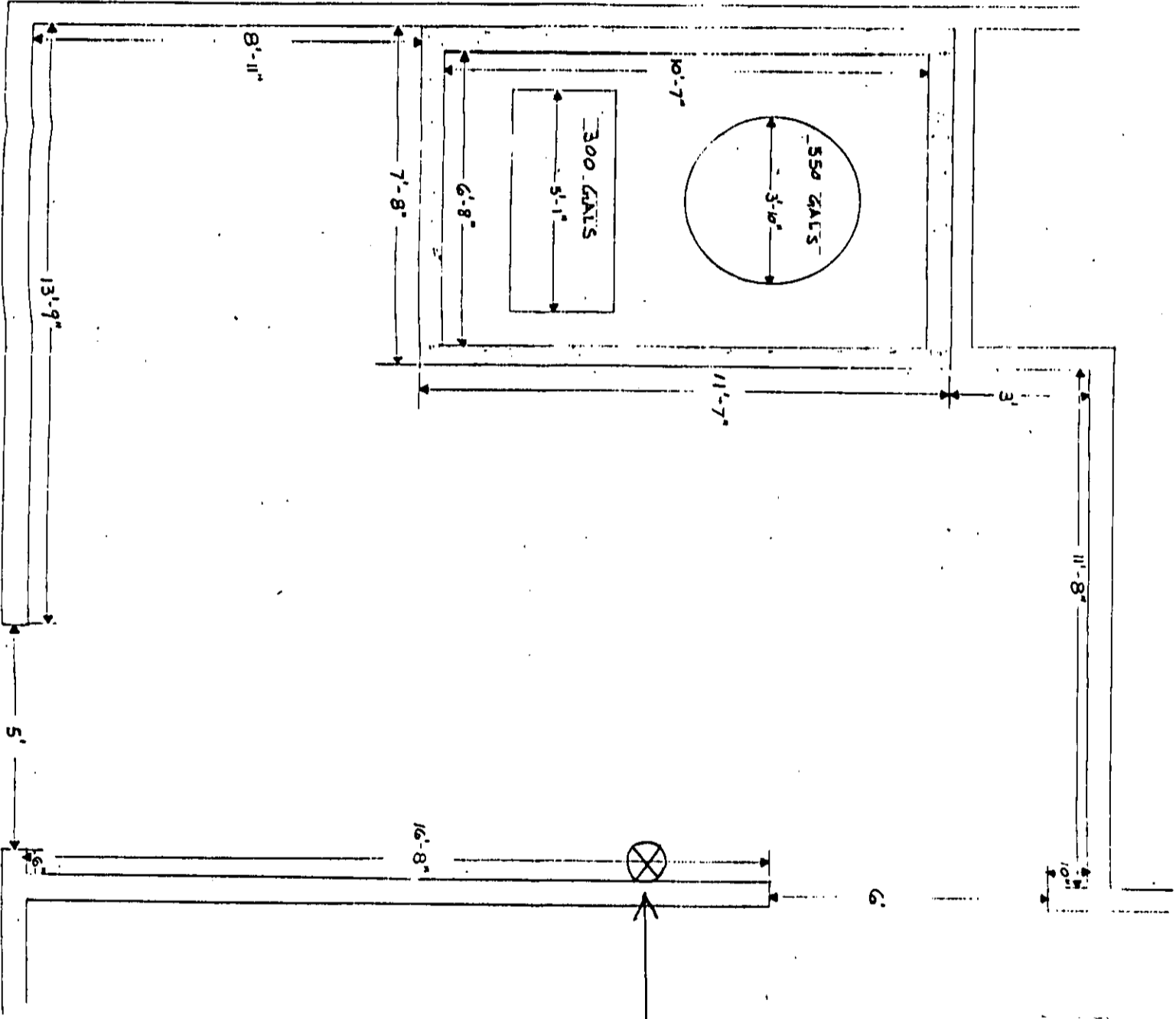
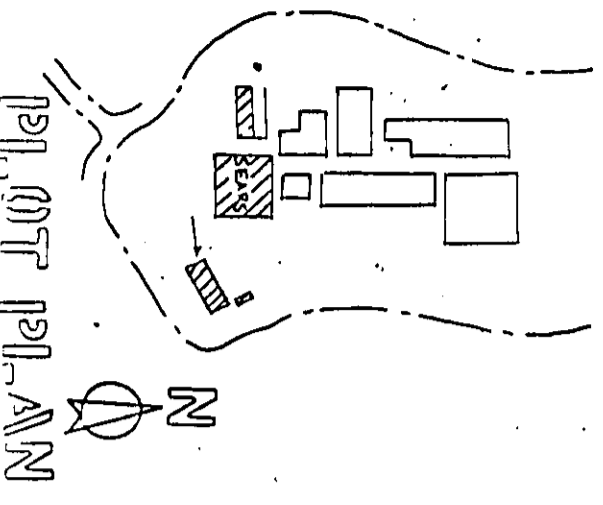
SCALE: 1/2" = 1'-0"



To contain only Class III Materials



CONTAINMENT DIKIE
SCALE: 1/2" = 1'-0"



HEAVY DUTY AIR OPERATED MOTOR OIL TRANSFER PUMP
(See Attachment "A")

these plans have been reviewed and appear to be in conformance with Local Ordinance and Nationally Recognized Standards for Fire Protection. Regardless of this review, conditions in the field shall meet said ordinance and standards prior to final occupancy.

HEVIL WED
DATE 8-11-96
FIRE MARSHAL

Preliminary only. Plans to be resubmitted for pump location.

10000 GALS WASTE OIL STORAGE
SCALE: 1/2" = 1'-0"

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Environmental Health Services
COUNTY OF MARIN
Hall of Justice • Civic Center • San Rafael, CA 94903
(415) 499-6907

RECEIVED

AUG 07 1986

FIRE DEPT.
CITY OF SAN RAFAEL

PERMIT TO REMOVE UNDERGROUND STORAGE TANK

TO Sears, Roebuck and Company NAME OF FACILITY San Rafael Store
Attn: Donald Woods
Merchandise Group-Western Law Office ADDRESS 9000 Northgate Mall
900 South Fremont Ave. San Rafael, CA 94903
Alhambra, CA 91802
NO. OF TANKS TO BE REMOVED 3

TANK ID#(S) 2929001,002, 003

PURSUANT TO THE CALIFORNIA ADMINISTRATIVE REGULATIONS, PERMISSION IS GRANTED TO REMOVE UNDERGROUND STORAGE TANKS AT THE ABOVE LOCATION WITH THE FOLLOWING CONDITIONS:

1. ALL STORED MATERIAL TO BE REMOVED.
2. TANK PURGED OF FLAMMABLE VAPORS.
3. PROPER DISPOSAL OF THE TANK.

SIGNED

Robert M. Marchese

DATE

August 5, 1986

cc: K. Schoenthal, San Rafael Fire Dept.
K.E. Curtis Construction Co.

AUTHORIZATION FORM

THE KNOX COMPANY, Post Office Box 2684, Newport Beach, CA 92603 (714) 550-2505

PRICE SCHEDULE 20A - 1987

ITEM #	DESCRIPTION	COLOR	QTY	PRICE	TOTAL \$
1	FIRE DEPARTMENT ALERT DECAL - Decal should be placed on all exterior doors to alert firemen that the building is equipped with a KNOX-RTX device. Decal is 2" square and made with fire resistant adhesive material. One Decal included with each order.			\$ 1.00	
37	KEY TAGS - White fibre tag with spring key cap (10 per set).			2.50	
33	TAMPER SEALS - Consecutively numbered. Pgs. 6		50	5.00	
34	TAMPER SEALS - Consecutively numbered. Pgs. 6		100	12.00	
2	RECESSED MOUNT MODEL 3200-KNOX-BOX This model is designed for lower level security (e.g. utility doors, back door docks, parking structures). Tamper Switch not available on this model. Polyester Finish. Outside dimensions including baseplate 4" H x 4" W x 2 1/2" D. Approx. wt. 5 lbs.	Black Aluminum Dk. Bronze		114.00 129.00 129.00	
3	HEAVY DUTY Surface Mount MODEL 3200-KNOX-BOX Without Alarm Tamper Switches. All 1/2" Heavy Plate Steel. Outside dimensions 4" W x 5" H x 3" D. Approx. wt. 9 lbs.	Black Aluminum Dk. Bronze		144.00 150.00 159.00	
4	HEAVY DUTY Surface Mount MODEL 3200-KNOX-BOX With Alarm Tamper Switches. All 1/2" Heavy Plate Steel. Outside dimensions 4" W x 5" H x 3" D. Approx. wt. 9 lbs.	Black Aluminum Dk. Bronze		144.00 150.00 159.00	
5	HEAVY DUTY Recessed Mount MODEL 3200-KNOX-BOX Without Alarm Tamper Switch. All 1/2" Heavy Plate Steel. Outside dimensions 4" W x 5" H x 3" D. with 1" x 1" Flange. Approx. wt. 10 lbs.	Black Aluminum Dk. Bronze		157.00 157.00 157.00	
6	HEAVY DUTY Recessed Mount MODEL 3200-KNOX-BOX With Alarm Tamper Switch. All 1/2" Heavy Plate Steel. Outside dimensions 4" W x 5" H x 3" D. with 1" x 1" Flange. Approx. wt. 10 lbs.	Black Aluminum Dk. Bronze	1	157.00	157.00
7	RECESSED MOUNTING KIT - MODEL 3200-RMK Greatly simplifies mounting in new concrete or masonry. For use with Models 3200-R and 3200-RTS ONLY. Kit contains a shell housing which is cast-in-place during new concrete or masonry construction. KNOX-BOX then mounts inside shell housing with hardware provided. *NOTE: Special Application.			39.00	
15	EXTRA HEAVY DUTY Surface Mount MODEL 4400-KNOX-VAULT Without Alarm Tamper Switches. 3/4" thick steel door. Large Capacity. Outside dimensions 7" W x 7" H x 5" D. Approx. wt. 23 lbs.	Black Aluminum Dk. Bronze		186.00 201.00 201.00	
16	EXTRA HEAVY DUTY Surface Mount MODEL 4400-KNOX-VAULT With Alarm Tamper Switches. 3/4" thick steel door. Large Capacity. Outside dimensions 7" W x 7" H x 5" D. Approx. wt. 23 lbs.	Black Aluminum Dk. Bronze		216.00 231.00 231.00	

ITEM #	DESCRIPTION	COLOR	QTY	PRICE	TOTAL \$
19	EXTRA HEAVY DUTY Recessed Mount MODEL 4400-KNOX-VAULT Without Alarm Tamper Switch. 3/4" thick steel door. Large Capacity. Outside dimensions 7" W x 7" H x 5" D. with 1" x 1" Flange. Approx. wt. 24 lbs.	Black Aluminum Dk. Bronze		236.00 251.00 251.00	
20	EXTRA HEAVY DUTY Recessed Mount MODEL 4400-KNOX-VAULT With Alarm Tamper Switch. 3/4" thick steel door. Large Capacity. Outside dimensions 7" W x 7" H x 5" D. with 1" x 1" Flange. Approx. wt. 24 lbs.	Black Aluminum Dk. Bronze		236.00 251.00 251.00	
21	RECESSED MOUNTING KIT - MODEL 4400-RMK Greatly simplifies mounting in new concrete or masonry. For use with Models 4400-R and 4400-RTS ONLY. Kit contains a shell housing which is cast-in-place during new concrete or masonry construction. KNOX-VAULT then mounts inside shell housing with hardware provided. *NOTE: Special Application.			49.00	
28	KEY & HAZ. MAT. VAULT MODEL 1200 - Holds keys, blueprints, Haz. Mat. data sheets, control switches, phones, etc. Use for high-rises, large building complexes and factories. Heavy plate steel construction. Beige polyester finish. Includes 27 key rings and key hook panel for 27 keys. Single key department lock and tamper seal tab standard. Not waterproof.	14 1/2" W x 18" H x 5" D Approx. wt. 47 lbs.		383.00	
31	KEY & HAZ. MAT. VAULT MODEL 1200 - Holds keys, blueprints, Haz. Mat. data sheets, control switches, phones, etc. Use for high-rises, large building complexes and factories. Heavy plate steel construction. Beige polyester finish. Includes 27 key rings and key hook panel for 27 keys. Single key department lock and tamper seal tab standard. Not waterproof.	14 1/2" W x 18" H x 7" D Approx. wt. 50 lbs.		391.00	
32	KEY & HAZ. MAT. VAULT MODEL 1200 - Holds keys, blueprints, Haz. Mat. data sheets, control switches, phones, etc. Use for high-rises, large building complexes and factories. Heavy plate steel construction. Beige polyester finish. Includes 27 key rings and key hook panel for 27 keys. Single key department lock and tamper seal tab standard. Not waterproof.	Option "TS" Dual Tamper Switches Dual "2A" - 2 Locks. Key to enter lock will open vault Dual "2B" - 2 Locks. Key to both locks req'd to open vault		34.00 24.00	
32-E	1200-10WH WEATHER HOUSING - For use w. in 1200 Key & HAZ-MAT Cabinet when an outdoor installation is required. Outside dimensions 23" H x 20" W x 14" D. Approx. wt. 30 lbs.			227.00	
36	MODEL 1100 DATA STORAGE BOX - For use by small businesses. Holds information, MSDS and floor plans. Interior capacity of 12" W x 11" H x 2" D holds a 2" thick binder. Steel and aluminum construction. Tan Polyester Powder Coat Finish. Outside dimensions 13" W x 14" H x 4 1/2" D. Approx. wt. 20 lbs.			187.00	
35	KEY OPERATED SWITCH MODEL KS-2. Key removable in either position. For override control of electric drives, gates equipment, etc. Includes special mounting kit.	NS-2 Without Dust Cover KS-2 DC With Dust Cover		29.00 38.00	
35-D	HEAVY DUTY PADLOCK MODEL PL-1. 3/4" diameter hardened steel shackle with solid cast brass body and pull resistant shrouded key hole.			39.00	
36-W	WEATHERPROOF HEAVY DUTY PADLOCK MODEL PL-1W. Elastomeric cover. 3/4" stainless steel shackle and brass key-way cover.			53.00	

ALL 4400 series vaults have 3/4" thick solid steel doors, with drill resistant hard plate and a special relocking feature.
NOTE: KNOX products are first sandblasted then coated with a tough weather resistant, neat fused polyester powder coat.

MAIL COMPLETED FORM TO:

THE KNOX COMPANY
P. O. BOX 2684
NEWPORT BEACH, CAL 92663



THIS ORDER WILL BE REJECTED UNLESS SIGNED WITH "AUTHORIZED SIGNATURE" REQUIRED ON OTHER SIDE OF THIS FORM.
Send this ORIGINAL FORM ONLY
Do NOT send a copy.

SUB-TOTAL BOTH COLUMNS 157.00
California residents only must add 6 1/2% or 6% Sales Tax 9.42
ADD SHIPPING, PROCESSING & DOCUMENTATION CHARGE 8.00

FULL PAYMENT MUST ACCOMPANY THIS ORDER. MAKE CHECK PAYABLE TO KNOX COMPANY. Allow 1-2 weeks for delivery.
74.42 TOTAL

PUBLIC SAFETY KEY BOX SYSTEM AUTHORIZATION FORM

IMPORTANT — READ THIS FORM CAREFULLY!!

Complete this special form to obtain KNOX-BOX devices which conform to your particular PUBLIC SAFETY KEY BOX SYSTEM as indicated by the system code number below.

WARNING — This order WILL NOT be processed unless the following items are completed.

1. This form must have the proper authorized signature from the issuing "PUBLIC SAFETY AGENCY."
2. Full payment for amount of purchase must accompany this order.
3. C.O.D. and credit orders cannot be accepted.
4. Send this **ORIGINAL** signed form only — do **NOT** send a copy.

PLEASE NOTE: Each KNOX-BOX device is specially fabricated and keyed to meet the requirements of your agency's key box system; therefore, you must allow 2 to 3 weeks for delivery.

All units are shipped WITHOUT KEYS. Contact your issuing agency for instructions covering keys and lockup. These vaults can only be opened and closed with authorized issuing agency key. KEYS ARE NOT SUPPLIED to purchaser. Instructions for mounting are supplied with each unit.

REMEMBER — All shipments are factory direct and will be sent on a PREPAID basis only. Shipping and processing (and sales tax - for California Residents only) must be added to unit price.

CAREFULLY COMPLETE THE FOLLOWING

Type or Print Clearly.

ORDERED BY: _____ ORDER DATE Sept. 20, 1988

Company Sears Roebuck

Street 9000 Northgate Mall

City/State San Rafael Cal 94903

INDIVIDUAL PLACING ORDER: Zip 94903

Name M. Snodgrass Phone (415) 472-3670

SHIP TO: _____ DO NOT USE P.O. BOX

Attention of: Mark Snodgrass

Company Sears Roebuck

Street 9000 Northgate Mall

City/State San Rafael Cal

Zip 94903

Purchase Order No. If Required _____

INSTALLATION ADDRESSES: (THIS IS AN AGENCY REQUIREMENT)
PURCHASERS MUST LIST BELOW ALL ACTUAL INSTALLATION ADDRESSES.
THIS LIST IS NECESSARY FOR AGENCY SECURITY RECORDS AND IS CONFIDENTIAL.

BUILDING NAME	STREET ADDRESS	CITY
SEARS	9000 Northgate Mall	San Rafael

THIS SPACE FOR AGENCY USE ONLY

SAN RAFAEL FIRE DEPT.

↑
Issuing Agency
↑

NOT VALID UNLESS SIGNED

Mark Snodgrass

AUTHORIZED SIGNATURE

SYSTEM CODE NUMBER

PS-01-006

KNOX CO. USE ONLY

RECD	RETURNED
VERIFY	O/N
REJECT	S CA | Z

PS Form 3811, July 1983 447-845

● **SENDER: Complete items 1, 2, 3 and 4.**

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

- 1. Show to whom, date and address of delivery.
- 2. Restricted Delivery.

3. Article Addressed to:

Mr. Fred Munser, Manager
Sears Automotive Repair
9000 Northgate Shopping Center
San Rafael, CA 94903

4. Type of Service:

- Registered
- Certified
- Express Mail
- Insured
- COD

Article Number

483 502 865

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee

X *[Handwritten Signature]*

6. Signature - Agent

X *[Handwritten Signature]*

7. Date of Delivery

8. Addressee's Address: *(ONLY if requested and fee paid)*

DOMESTIC RETURN RECEIPT

UNITED STATES POSTAL SERVICE

OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.



PENALTY FOR PRIVATE
USE \$300

RETURN

TO READER

NOV 23 1985

San Rafael Fire Department

(Name of Sender)

1039 "C" Street

(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

San Rafael, CA 94901

(City, State, and ZIP Code)

CTT OF SAN RAFAEL
NOV 23 1985

P 483 502 865

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Fred Munser	
Street and No. 9000 Northgate Shopping	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date 11/21/95	
Sears Automotive	
12/6/85	

PS Form 3800, Feb. 1982



1400 FIFTH AVENUE, P.O. BOX 60 SAN RAFAEL CALIFORNIA 94915-0060 PHONE (415) 456-1112

SAN RAFAEL FIRE DEPARTMENT

MAYOR LAWRENCE E. MULRYAN

COUNCIL MEMBERS DOROTHY L. BREINER GARY R. FRUGOLI RICHARD P. NAVE JERRY RUSSOM

PRE-CITATION LETTER

November 21, 1985 DATE

all items corrected at this time 12-17-85 PC

XXXX CERTIFIED MAIL-RETURN RECEIPT REQUESTED DELIVERED IN PERSON

Dear Mr. Fred Munser;

The San Rafael Fire Department conducted a fire safety inspection at the following:

Name Sears Automotive Repair

Address 9000 Northgate Shopping Center

On Date October 27, 1985

At that time a notice was issued indicating the corrections required to provide compliance with the applicable codes, regulations and ordinances. Compliance is required by the Uniform Fire Code, Section 3.102.

Reinspections were made on October 28, 1985 and again on November 18, 1985, in an attempt to gain compliance with the above mentioned fire code regulations. We were unsuccessful in obtaining compliance.

This letter is to inform you that a Fire Inspector for the San Rafael Fire Department will make a reinspection at the above mentioned establishment on December 6, 1985, to determine if the necessary corrections have been made. If the necessary corrections have not been completed by this date a citation will be issued, which will require an appearance by you in court.

This letter is written as a courtesy to you in order to avoid future litigation. 2 weeks extension on

Name Forrest Craig K. SCHOENTHAL, FIRE MARSHAL By FORREST CRAIG, INSPECTOR

CITY OF SAN RAFAEL



1400 FIFTH AVENUE, P O BOX 60, SAN RAFAEL
CALIFORNIA 94915-0060

MAYOR
LAWRENCE E. MURRYAN

COUNCIL MEMBERS
DOROTHY L. BREINER
GARY R. FRUGOLI
RICHARD P. NAYE
JERRY RUSSO

FIRE DEPARTMENT

November 5, 1985

Mr. Fred Munser, Manager
Sears Automotive Repair
9000 Northgate Shopping Center
San Rafael, California 94903

Subject: Required Exits

Dear Mr. Munser,

- ① On October 27, 1985, an inspection was conducted pursuant to a complaint received by this Department regarding locked exit doors.

At that time, the Captain of Engine Company 53 verbally requested the manager to unlock the required second exit.

- ② On October 28, 1985 a follow-up inspection was conducted by me and a walk-through of the shop area was completed. The following violations were found to exist:

- ③ *OK 12-17-85 FC*
NO 11-18 FC.
1. Repair the indicator on the south pair doors so that it states "opened" or "locked" with respect to the position of the deadbolt.
- ② *OK 12-17-85 FC*
NO 11-18
2. Remove the metal slide bolts from the two required exit doors in the shop area and post a sign over the doors stating "This door to remain unlocked during business hours." The sign shall have letters at least one inch high and in contrasting color to background.
- OK 12-17-85 FC*
NO 11-18
3. Remove the obstructions from the required second exit from the shop at the stairwell. The same requirements shall apply as in #2 above.
- OK 12-17-85 FC*
NO 11-18
4. Post an approved EXIT sign above the entry to the landing serving the exit door in #3 above.

You are hereby notified at the violations which currently exist. Corrective action should be taken immediately.

Mr. Fred Munser, Manager
November 5, 1985

Page Two

A re-inspection will be conducted in approximately two weeks by this Department to determine if the necessary corrections have been made.

Failure to comply may result in denial of fire clearance which, in turn, may revoke your license to operate.

Should you have any questions regarding this notice, please contact me immediately at 485-3309.

Sincerely,

ROBERT E. MARCUCCI
Fire Chief



By FORREST CRAIG
Inspector

cc: ~~Property File~~
Captain Hofstede

M A/22

Date: SEPT. 3, 1985

Address/Location: Northgate Mall, Terra Linda

Business Owner(s): Sears, Roebuck and Co. D. B.A. Sears Autocenter

Address: 9000 Northgate Mall, San Rafael, CA 472-3670
(Street) (City) (State) (Phone)

Contractor (When applicable): N/A

Address: _____
(Street) (City) (State) (Phone)

State License No. _____ Type: _____ City Business Lic. No.: _____

Type of Permit	U. F. C. Section
<input type="checkbox"/> Application of Flammable Finishes	45.102
<input type="checkbox"/> Fumigation and Thermal Insecticidal Fogging	47.102
<input type="checkbox"/> Compressed Gases	74.103
<input type="checkbox"/> Cryogenic Fluids	75.103
<input type="checkbox"/> Explosives and Blasting Agents	77.104
<input type="checkbox"/> Fireworks	78.102
<input checked="" type="checkbox"/> Flammable Liquids (Storage/Handling)	79.103
<input type="checkbox"/> Hazardous Chemicals	80.102
<input type="checkbox"/> High-Piled Combustible Stock	81.103
<input type="checkbox"/> Liquefied Petroleum Gases	82.103
<input type="checkbox"/> Other	_____

Description of operations/Location of storage: ABOVE GROUND
TANK INSTALLATION AND STORAGE. BULK OIL.
MUST CONFORM TO UFC 79 and FPS # 306

FOR FIRE DEPARTMENT USE

Plans submitted: NOT APPROVED 3-18-86
Date: _____ Approved by: _____ Date: _____

Field Inspection:
By: _____ Date: _____ By: _____ Date: _____

Final approval by: _____ Date: _____

Permit fee: \$30.00 Date paid: 9/4/85 JM Permit number: _____

Remarks:

July 1, 1985

Mr. Al Schetter
Department 700-8

RE: BULK OIL TANKS

The fear of the N.F.P.A. was that large containers of combustible material such as this could add fuel to a fire. For this reason they had a law on the books that limited the container size.

It was determined that this type of ruling should be established by local codes. Therefore, the N.F.P.A. has deleted its specifications and requested that local Fire Martials establish the quantities that can be stored as well as the venting required.

Regards,

J. W. Alzner
Department 731

JWA/el81

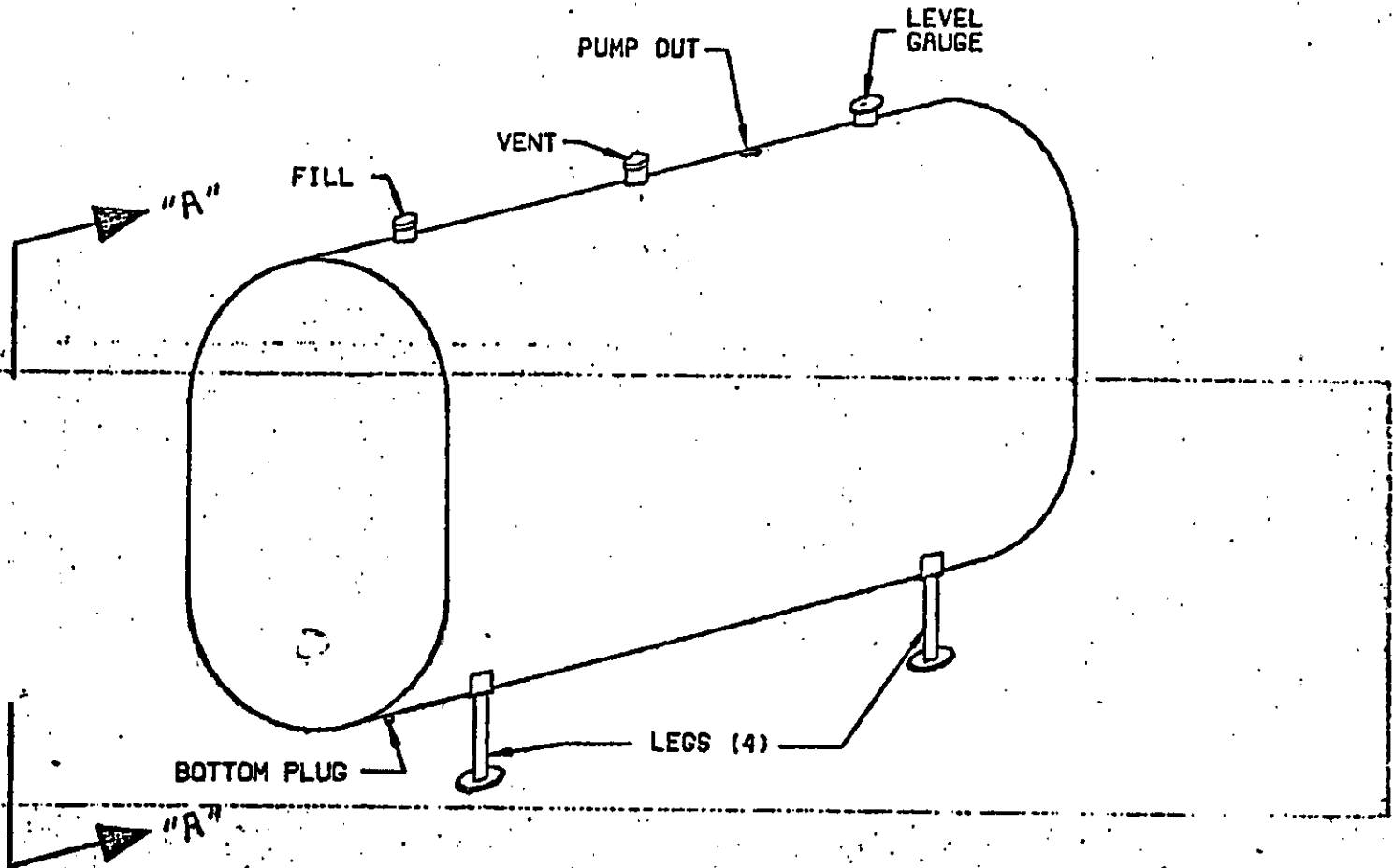
Above ground TANKS must conform
to UFC Article 79 and Five
Prev. Std. # 306.

By: Janet Craig, Inspector 3.18.86

OIL STORAGE TANK

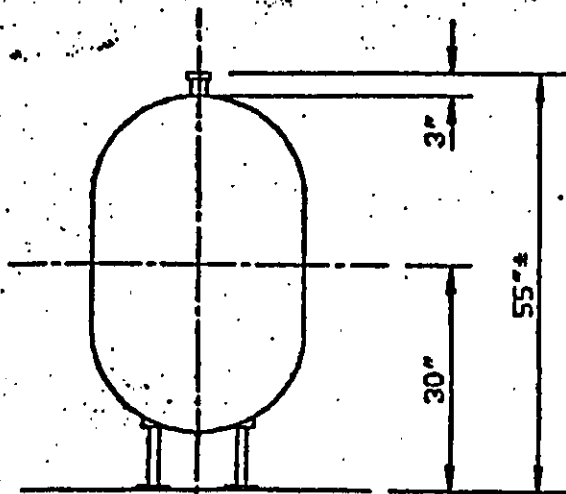
275 GAL. CAP.

12 GA. CARBON STEEL

APPLICATION - STORAGE MOTOR OILS
SEARS STORES

MATERIAL LIST

1. TANK (1)
2. 4 - LEG NIPPLES 1 1/4" X 8"
3. 4 - LEG FLANGES
4. 1 - FILL EXTENSION NIPPLE 2"
5. 1 - 2" FILL CAP
6. 1 - LEVEL GAUGE
7. 2" PUMP OUT CONNECTION
8. 2" VENT CONNECTION
9. 1/2" BOTTOM PLUG
10. RED LEAD PRIMER



SECT. "A"-"A"

6" concrete = 3 hours

environmental health

660 gallons

CONSTRUCTION

- ① Enclosure shall be vapor and liquid tight
- ② Space shall be backfilled w/ sand
- ③ Sides ^{on ground} ~~top and bottom~~ shall be 6" _{total} 3" thick with openings for inspection through top only.
- ④ Tank connections shall be piped or enclosed that ~~neither vapors nor liquids~~ can escape into enclosed space.
- ⑤ 12" of fill ~~under tanks~~ 12" / on all sides
- ⑥ Tank inspection opening shall be 15" / 1 ft around tank fill opening
- ⑦

DISPENSING

VENTING

FIRE PROTECTION

Certificate of Flame Resistance



REGISTERED
APPLICATION
CONCERN NO.

A-5

ISSUED BY

CALIFORNIA FLAMEPROOFING & PROCESSING CO.

R. E. Ellis, Owner

170 NORTH HALSTEAD STREET

PASADENA, CALIFORNIA

Date treated

11/7/72

This is to certify that the materials described here have been flame-retardant treated (or are inherently nonflammable).

FOR Sears 51528

San Rafael,

CITY

ADDRESS

9000 Cortingate

California 94903

STATE

Certification is hereby made that: (Check "a" or "b")



(a) The articles described on this Certificate have been treated with a flame-retardant chemical approved and registered by the State Fire Marshal and that the application of said chemical was done in accordance with the laws of the State of California and the Rules and Regulations of the State Fire Marshal.

Name of chemical used

No. 11

Chem. Reg. No. C 3-12

Immerse

Method of application



(b) The articles described on the reverse side hereof are made from a flame-resistant fabric or material registered and approved by the State Fire Marshal for such use.

Trade name of flame-resistant fabric used

Reg. No.

The Flame Retardant Process Used **will Be Removed By Washing**

(will or will not)

CALIFORNIA FLAMEPROOFING & PROCESSING CO.

Name of Applicator

By

Owner

CUSTOMER ORDER NO. 426824

OUR INVOICE NO.

11-5

DESCRIPTION

152 Yds P-70588

Sausalito, Calif.

c/o Marin Co.

RECEIVED

NOV 15 1972

FIRE DEPT.
CITY OF SAN RAFAEL

CITY OF SAN RAFAEL

SAN RAFAEL, CALIFORNIA

INTER - DEPARTMENTAL MEMO

DATE: September 11, 1972

TO: ALL PERSONNEL

SUBJECT: Sears Buildings
9000, 9100, 9200 Northgate Fashion Mall

As of this date the sprinkler systems to the above captioned buildings are in service.

The risers and OS & Y valves for the Main Building and the Garden Shop are located in the basement of the Main Building about mid-point on the south wall.

The F.D.C. for the above systems is outside the south wall.

The riser and F.D.C. for the Automotive Center are located on the north wall towards the west end. This is an independent system.

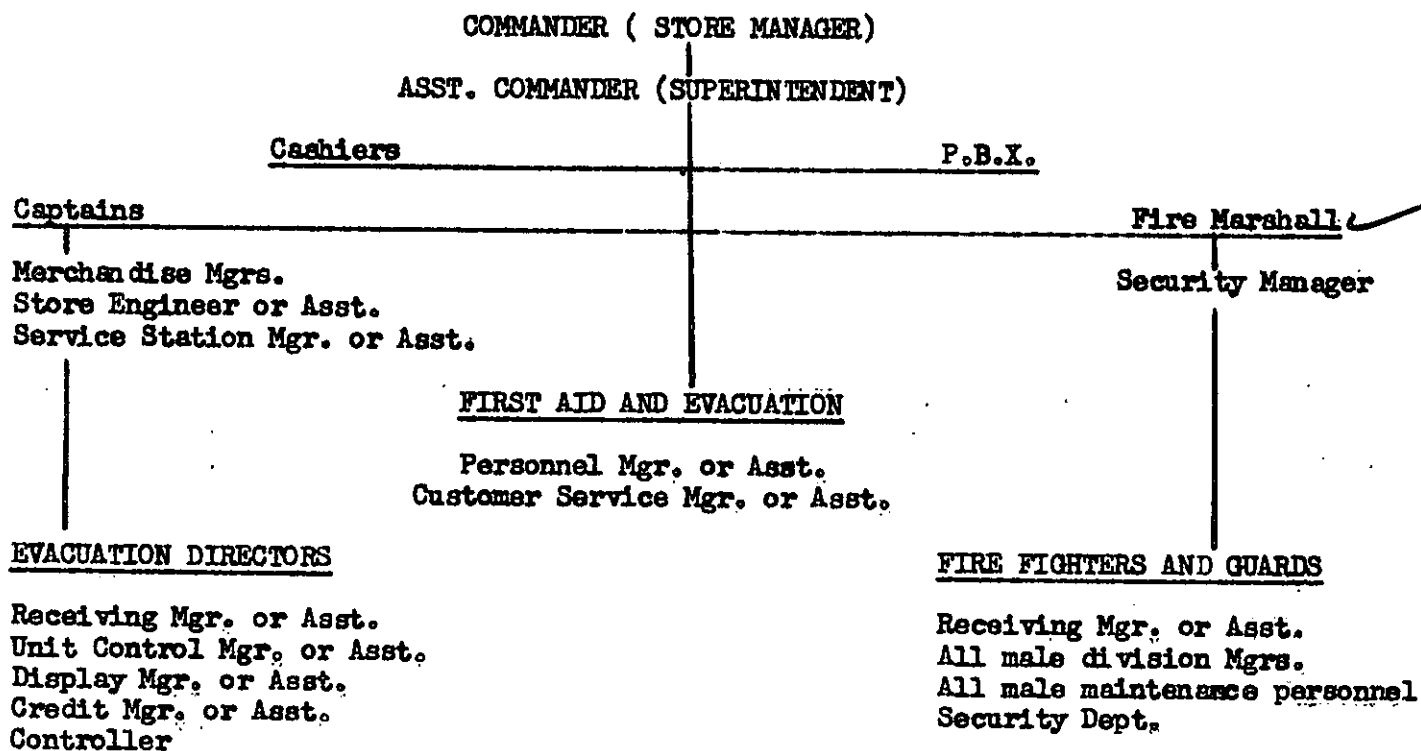
An A. D. T. locator panel is located at the east entrance on the north wall of the main building, but it is not in service at this time.


KENNETH MAZZA
Fire Marshal

KM:jm

FIRE AND DISASTER MANUAL

SEARS SAN RAFAEL 1528



This manual is set up as a basic guide in the event of fire, building evacuation or other disasters. The above chart delegates the lines of authority and responsibilities. Teamwork is the key to combating any type of disaster at any time. Remember to work as quickly and as safely as possible. In this way you will help to minimize our losses and possibly eliminate injuries to employes and customers.

W. C. Dunlap
Security Manager

DUTIES:

COMMANDER:

The commander will maintain complete authority over the operation and determine if and when the store should be evacuated.

ASSISTANT COMMANDER:

The Assistant Commander shall have the same duties in the event that the Commander is absent. He shall determine what store staff will remain in the store in case of evacuation to guard the store against looters. The Asst. Commander shall appoint one or two male members of the fire brigade to stand by the cashiers office until a member of the Police department arrives or a member of the store staff can take the post.

CAPTAINS:

The captains shall respond to every fire or disaster call. Their first duties should be to seal off the area from customers as well as employees. They should allow only members of the fire brigade to enter the danger area. The captains shall see that all blowers are turned off and be ready to shut off the risers in the area. They should know the locations of disaster equipment in the store and be ready to supply necessary equipment to the fire fighters.

In the event that the fire cannot be contained and it becomes a hazard to personnel fighting the fire the captains shall determine the safest exit.

The captains shall also see that the registers in the area are guarded against foul play, and, if necessary, remove the cash and detail to be placed in the main safe. Upon notice to evacuate the captains shall see that the registers are cleared and be ready to lock and secure the store.

FIRE MARSHALL:

The Fire Marshall or his assistant shall respond to every fire or disaster call. Upon his arrival he shall determine what type of equipment should be used in combating the problem. He will direct the fire fighters and guards and help contain the fire wherever possible. The Fire Marshall shall also help in the evacuation of the store. In the event that the store is evacuated, he will see that the store is locked and secured.

The Fire Marshall or his assistant shall make daily inspections of the store eliminating fire hazards wherever possible. He shall make sure all disaster and fire fighting equipment are in proper working order. The Fire Marshall shall see that enough flashlights are placed around the store in case they are needed in an emergency.

FIRST AID DIRECTORS:

The Personnel Manager or assistant will stand by in the FIRST AID ROOM in the event minor first aid is needed by employees or customers. If it becomes necessary the first aid director may seek help from the customer service department to assist in first aid treatment.

In the event the main store is evacuated the first aid director shall set up in the service station first level manager's office.

EVACUATION DIRECTORS:

The primary function of the evacuation directors is to see that employes and customers leave the store quickly and safely. They will open wide all outer doors and see that all stairways are kept clear and the people moving. They will aid elderly people, calm hysterical people, and help handicapped people leave the store.

The secondary function is the protection of the building, its merchandise, and the store records. In the event the store records must be removed, and if they can be removed with no danger to the personnel removing them, they will be evacuated to safety. The files to be removed shall be marked "Files First" in red labeling on the outside of the file cabinets. The locations of important files are the personnel dept., unit control, customer service, and the credit department. The audit dept. will be responsible for their own files. The receiving dept. and the service station have safes for their important files.

In the event the store is evacuated no one is permitted to enter the store except the police department, fire department, or emergency first aid teams.

FIRE FIGHTERS AND GUARDS:

The fire fighters and guards will respond to every fire and disaster call. They will stand by and be ready to use whatever equipment is assigned to them. They shall follow the instructions given to them by the Fire Marshall or the store staff.

→ Whenever possible, burning materials should be carried out of the store and put out. This will help cut down the losses from both smoke and water damage. The fire fighters and guards shall also aid in the evacuation of the store and be ready to guard exposed registers. This will help minimize the chances of looters taking advantage of the circumstances. Also, they should remove any valuable merchandise out of the danger area, such as diamonds, furs, etc. This also applies to store records and documents, as well as merchandise.

In the event of a power failure the fire fighters and guards shall assign themselves to the nearest registers.

Fire fighters and guards see zone duties.

P.B.X.

The P.B.X. operator shall make the following announcement immediately upon report of a disaster or fire.

Mrs. O'Riley, please go to division (where needed) immediately
Mrs. O'Riley, division (where needed) immediately
Mrs. O'Riley, division (where needed) immediately

This announcement will be repeated three times.

The operator will then call the local fire department and report the nature of the disaster and its location.

STORE EVACUATION NOTICE

"Good Morning" (afternoon, evening). The office of the civilian defense department has asked Sears to participate in a test alert for the evacuation of our store. We request that all customers please leave the building by the nearest exit immediately. The store will re-open as soon as possible. (Repeat) This is only a test. Thank you for your cooperation."

This announcement shall be repeated twice and once every 15 minutes thereafter until requested to stop by a member of the store staff. Also, in the case of a CIVIL DEFENSE alert the above announcement will be used only by substituting evacuation to the lower level by the closest stairway at once. The sales personnel shall direct the customers within their own departments to the nearest stairway.

Regardless of whether the fire is on the premises or in a building nearby, the fire department must be called immediately.

CASHIERS:

The cashiers will remain in their office unless notified by a member of the store staff to evacuate. Upon that request to evacuate they shall see that the safe is locked and secured.

DUTIES: ZONE CAPTAINS AND ALTERNATES

Zone captains shall have added responsibilities as follows:

1. Sound alarm to all personnel in your zone and direct them to exits away from the fire.
2. After the area has been cleared of personnel, all doors should be closed and all electrical panels in the danger area should be turned off.
3. Be aware of the locations of all fire fighting equipment in your zone.
4. Know the locations of all the riser valves in your zone. If it become necessary for the valves to be turned off, the fire captains should show the fire department where and how to operate them.
5. If there is a sprinkler head running in your zone, the Fire Marshall should know the location at once.
6. Return all unused fire fighting equipment to its proper place.
7. If the fire fighting equipment is used, notify the Fire Marshall so that it may be replaced.
8. Be aware of fire hazards in your zone and help head off a disaster before it happens.

ZONE 1A: Captain - Assistant Customer Service Manager
Divisions - P.B.X., security, management offices, mail room, audit, credit, cashier, customer service, training room.

ZONE 1B: Captain - Div. 37 Mgr.
Divisions - 1, 21, 24, 96, 25, 36, 37, 49, 57.

ZONE 1C: Captain - Receiving Mgr.
First level stock area, receiving, and the display and maintenance depts.

ZONE 2A: Captain - Div. 29 Mgr.
Divisions - 29, 40, 48, 33, 41, 45, 51, 14, 15, 3, 87, Tailor Shop.

ZONE 2B: Captain - Women's Fashion Manager
Divisions - 7, 17, 19, 31, 77, 4, 8, 75, 18, 38, 88

ZONE 2C: Captain - Div. 9 Mgr.
Divisions - Coffee House, 6, 9, 20, 30, Tobacco Shop and Key Shop

ZONE 2D: Captain - Div. 42 Mgr.
Divisions - 22, 26, 46, 47, 42, 64, 65, 32, 11, 34

ZONE 2F: Captain - Div. 28 Mgr.
Divisions - 28, 190, 95, stockroom and the employees lounge

ZONE 2G: Captain - Div. 71 Mgr.
Catalog and Seasonal Sales building

CALIFORNIA FLAME PROOFING
170 NORTH HALSTEAD
PASADENA, CALIF. 91107

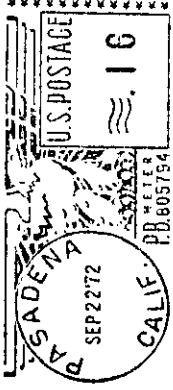
QUALITY REMAINS
LONG AFTER
PRICE IS FORGOTTEN

RECEIVED

SEP 23 1972

FIRE DEPT.
CITY OF SAN RAFAEL

CHIEF OF FIRE DEPT
FIRE DEPT. HQTS.
SAN RAFAEL, CALIFORNIA



Certificate of Flame Resistance



REGISTERED
APPLICATION
CONCERN NO.

A-5

ISSUED BY

CALIFORNIA FLAMEPROOFING & PROCESSING CO.

R. E. Ellis, Owner

170 NORTH HALSTEAD STREET
PASADENA, CALIFORNIA

Date treated

9/21/72

*This is to certify that the materials described here have been flame-retardant treated
(or are inherently nonflammable).*

FOR **Sears Roebuck Co #1528**

ADDRESS **9000 Northgate**

CITY **San Rafael,**

STATE **California**

Certification is hereby made that: (Check "a" or "b")



(a) The articles described on this Certificate have been treated with a flame-retardant chemical approved and registered by the State Fire Marshal and that the application of said chemical was done in conformance with the laws of the State of California and the Rules and Regulations of the State Fire Marshal.

Name of chemical used

#11

Chem. Reg. No. **C 3.12**

Method of application

Immersed



(b) The articles described on the reverse side hereof are made from a flame-resistant fabric or material registered and approved by the State Fire Marshal for such use.

Trade name of flame-resistant fabric used

Reg. No.

The Flame Retardant Process Used will Be Removed By Washing

(will or will not)

CALIFORNIA FLAMEPROOFING & PROCESSING CO.

J. E. Ellis

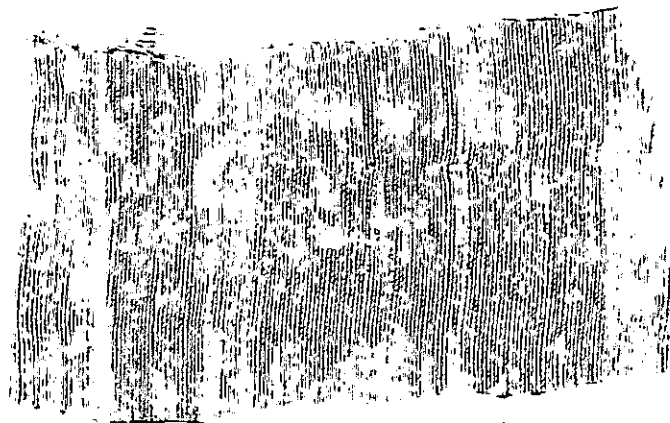
By

Name of Applicator

Owner

CUSTOMER ORDER NO. **527742 s/m Cust. Serv.** OUR INVOICE NO. **11-12**

DESCRIPTION **32 Yds ~~70500~~ 70500 Tawny Mushroom Lt. - part acetate**



Certificate of Flame Resistance



REGISTERED
APPLICATION
CONCERN NO.

A-5

ISSUED BY

CALIFORNIA FLAMEPROOFING & PROCESSING CO.

R. E. Ellis, Owner

170 NORTH HALSTEAD STREET
PASADENA, CALIFORNIA

Date treated

9/21/72

*This is to certify that the materials described here have been flame-retardant treated
(or are inherently nonflammable).*

FOR **Sears Roebuck Co. #1528**

CITY **San Rafael**

ADDRESS

9000 Northgate

California

STATE

Certification is hereby made that: (Check "a" or "b")



(a) The articles described on this Certificate have been treated with a flame-retardant chemical approved and registered by the State Fire Marshal and that the application of said chemical was done in conformance with the laws of the State of California and the Rules and Regulations of the State Fire Marshal.

Name of chemical used

#1

Chem. Reg. No. **0-3-12**

Method of application

Immersed



(b) The articles described on the reverse side hereof are made from a flame-resistant fabric or material registered and approved by the State Fire Marshal for such use.

Trade name of flame-resistant fabric used

Reg. No.

The Flame Retardant Process Used WILL Be Removed By Washing

(will or will-not)

CALIFORNIA FLAMEPROOFING & PROCESSING CO.

Name of Applicator

Jed Brown

By

R. E. Ellis

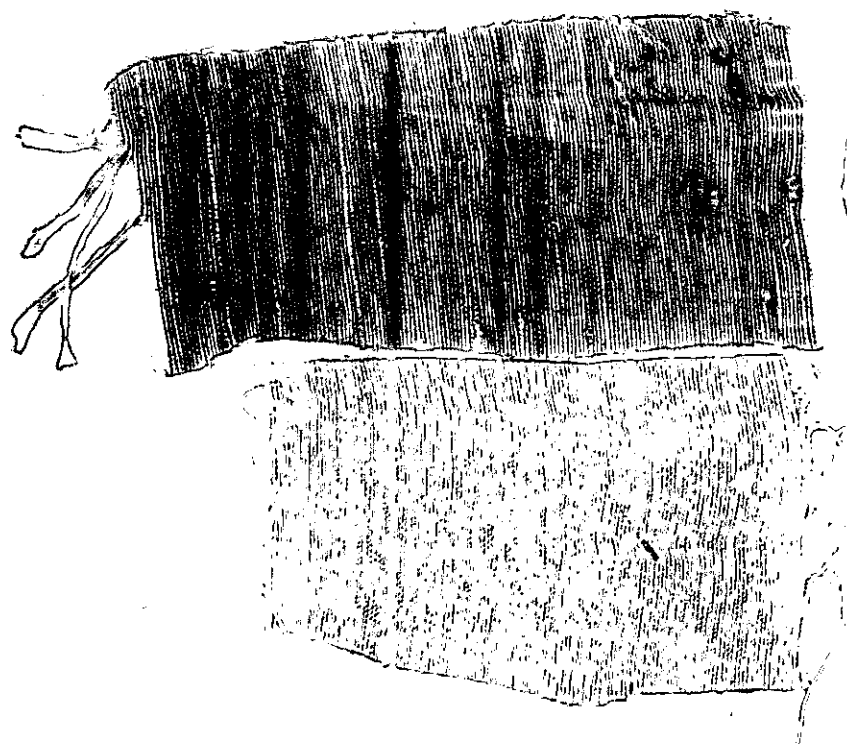
Owner

CUSTOMER ORDER NO. **537980 s/m Store**

OUR INVOICE NO. **11-14 & 15**

DESCRIPTION **11-14 6 yds 70500 - 2 Noorwhite - part acetate**

11-15 4 yds - Tangerine - #



Certificate of Flame Resistance



REGISTERED
APPLICATION
CONCERN NO.

A-5

CALIFORNIA FLAMEPROOFING & PROCESSING CO.

R. E. Ellis, Owner

170 NORTH HALSTEAD STREET
PASADENA, CALIFORNIA

ISSUED BY

Date treated

9/22/72

This is to certify that the materials described here have been flame-retardant treated

(or are inherently nonflammable).

FOR **Sears Roebuck & Co. #1528**
CITY **San Rafael,**

ADDRESS **9000 Northgate**
STATE **California**

Certification is hereby made that: (Check "a" or "b")



(a) The articles described on this Certificate have been treated with a flame-retardant chemical approved and registered by the State Fire Marshal and that the application of said chemical was done in accordance with the laws of the State of California and the Rules and Regulations of the State Fire Marshal.

Name of chemical used **#1** Chem. Reg. No. **6312**

Method of application **Immersion**



(b) The articles described on the reverse side hereof are made from a flame-resistant fabric or material registered and approved by the State Fire Marshal for such use.

Trade name of flame-resistant fabric used _____ Reg. No. _____

The Flame Retardant Process Used will Be Removed By Washing

(will or will not)

CALIFORNIA FLAMEPROOFING & PROCESSING CO.

Jed Barrows

Name of Applicator

By

R. E. Ellis

Owner

CUSTOMER ORDER NO. **538008, 538005, 538001**

OUR INVOICE NO. **12-6 thru 12-12 & 12-15**

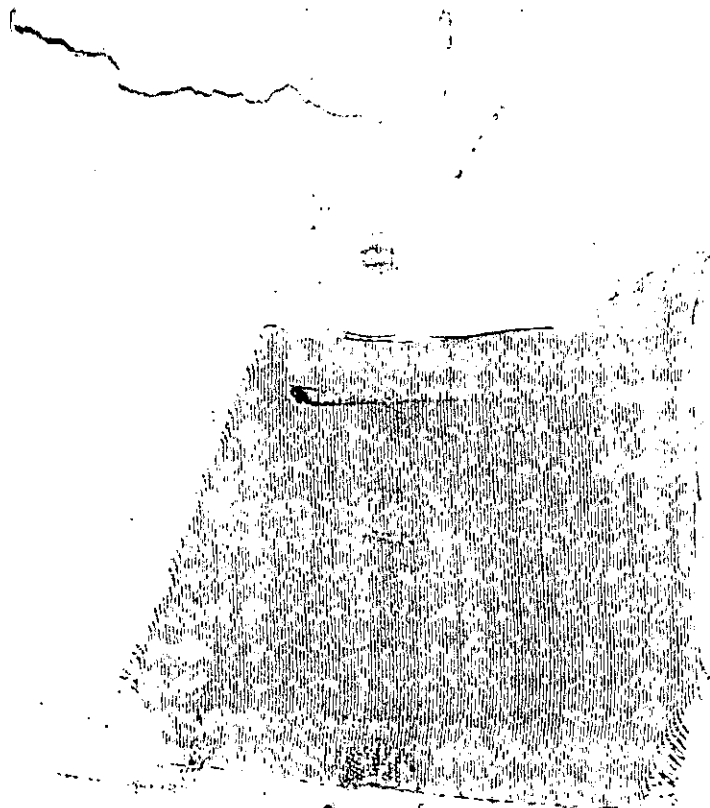
538003, 53009

DESCRIPTION

12-6 18 Yds Polyester - part acetate **12-9 5 1/2 Yds Bouy - part acetate**

12-7 8 " Fern Green - " " 12-10 6 Yds Jorquill - " "

12-8 8 " Bouy " " 12-11 6 " Federal State 104 -part Acetate



Certificate of Flame Resistance



REGISTERED
APPLICATION
CONCERN NO.

A-5

ISSUED BY

CALIFORNIA FLAMEPROOFING & PROCESSING CO.

R. E. Ellis, Owner

170 NORTH HALSTEAD STREET

PASADENA, CALIFORNIA

Date treated

9/29/72

This is to certify that the materials described here have been flame-retardant treated
(or are inherently nonflammable).

FOR **Seare Beback & Co.**

ADDRESS **9000 Northgate**

CITY **San Rafael,**

STATE

California

Certification is hereby made that: (Check "a" or "b")



(a) The articles described on this Certificate have been treated with a flame-retardant chemical approved and registered by the State Fire Marshal and that the application of said chemical was done in accordance with the laws of the State of California and the Rules and Regulations of the State Fire Marshal.

Name of chemical used

PII

Chem. Reg. No. **0 3-12**

Method of application

Immersion



(b) The articles described on the reverse side hereof are made from a flame-resistant fabric or material registered and approved by the State Fire Marshal for such use.

Trade name of flame-resistant fabric used

Reg. No.

The Flame Retardant Process Used **will** Be Removed By Washing

(will or will not)

CALIFORNIA FLAMEPROOFING & PROCESSING CO.

Jed Bonner

By

R. E. Ellis

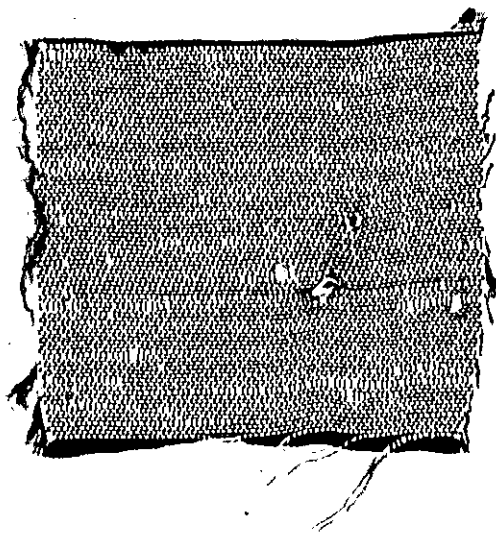
Name of Applicator

Owner

CUSTOMER ORDER NO. **53800, 06160, 53807, 53806** INVOICE NO. **12** ALL ARE PART AGENTS
54130, 06157, 51102, 06158

DESCRIPTION all pattern 70500, but different colors as follows: 70 yrs Autumn Orange 14.,
10 yrs Blue Grass, 6 yrs Pampala 3, 4 yrs Starline, 15 yrs 1987 Persimmon, 12 yrs 1987 Leona, 6 yrs 209 Spared,
14 yrs 271 Inland Brick, 50 yrs 1660 Process, 28 yrs 16601 Genroc, 24 yrs 11754 Ashroom, 10 yrs Terry Lite,

Labels 12-1 cent. Labels 200-1/2 x 1 cent. Labels 200-1/2 x 1 cent. Labels 100-1/2 cent. Labels 100-1/2 cent.



SAN RAFAEL FIRE DEPARTMENT

Bureau of Fire Prevention & Investigation

Date 4/2/71

Type of Inspection Plan Check (Sprinkler)

Hour 11:40

BUSINESS

BUILDING

Name Sears

Owner _____

Address 9000 Portofino

Address _____

Owner/Manager _____

Occupied as F-2

Remarks:

Steve Luker, Office Manager for Williams -
Barron ^{also} the General Contractor on this job
brought in four sets of underground plans for
the undersigned to check. These plans met the
approval of this office as well as the requirements
of NFPA #13. Three sets of plans were signed
and dated and returned to Mr. Luker.

It was noted on these plans that the proposed
location of the F.P. connection on the Auto Center
would not meet with this department's approval.
Barkin Associates Architects have been so
advised. (Mr. Luker was advised by us.)

[Signature]
Inspector

Parkin

Architects
Engineers
Planners

1333 Westwood Boulevard
Los Angeles
California 90024
(213) 479-4353

Inter Office Memo

FIELD PROCEED ORDER NO 17

9000 Northgate Mall

To Roy J. Ontano, Supt. Williams & Burrows, Inc.	From Mauri Metz Res. Architect - Parkin	Project No. 70008-32
Project Sears, San Rafael - Automotive Center		Date 11/2/71

By telephone authority of Chas. H. Day of Sears, at the request of Ken Mazza, San Rafael City Fire Marshal, you are being asked to relocate the 2 1/2" x 2 1/2" x 4" Flush F.D. connection shown on the south side of the **Auto Center** at Col. Line "F", to the north side of the building, approximately 3'-0" east of Col. Line "B".

Please quote a deductive price for the 156'-0" of 4" pipe, that will be saved by this change, for my forwarding to my Los Angeles office for approval and future change order. Please locate the hose connection 3'-0" above the planting area fin. grade.

cc. Chas. H. Day, Sears
Ken Mazza, S.R. Fire Marshal
Tony Valaitis, Parkin

Sears & Co. 9000 Northgate S.C.
Schirmer
ENGINEERING CORPORATION

5940 W. TOUHY AVENUE • NILES, ILLINOIS 60648 • AREA CODE: 312 647-9390

CHESTER W. SCHIRMER, P.E., PRESIDENT

ROBERT W. SCHIRMER, P.E., CONSULTANT

April 22, 1971

Mr. Kenneth Marzza, Fire Marshal
San Rafael Fire Department
San Rafael, California

Dear Mr. Marzza:

This letter will confirm our telephone conversation of April 21, during which we discussed the proposed fire alarm system for the Sears, Roebuck and Co. Retail Store and Auto Center to be constructed in San Rafael. The purpose of the conversation was to review several questions you had voiced as a result of reviewing the plans for the alarm system we designed for the subject job.

In response to your two specific questions, the following conclusions were reached:

1. I verified that the waterflow alarm for the seasonal sales building was connected to a separate zone on the fire alarm system control unit. We agreed that it would be satisfactory to leave the manual fire alarm station on the same zone as the retail store manual stations, as is currently shown on the drawings.
2. Regarding your request for a remote fire alarm annunciator, we agreed that it would be desirable to provide such an annunciator. However, as I explained, the cost factor of this additional device is something that must be approved by the owner.

I will convey your request to the owner and if his approval is granted for the remote annunciator, it will be provided. From an aesthetic point of view, the architect would prefer that the annunciator not be installed on the outside wall in the area you suggested. Therefore, if the annunciator is provided, we will assure you that it will be located where it will be visible without the need of forcing entry into the store. At this point, I cannot tell you exactly where this would be, but it would

FIRE PROTECTION
ENGINEERING

SEMI-ANNUAL
NATION-WIDE
INSPECTIONS
FOR
FIRE, SAFETY,
AND MAINTENANCE

CASUALTY AND
WORKMEN'S
COMPENSATION
ENGINEERING AND
INSPECTION

FIRE, BURGLAR ALARM,
AND SECURITY
CONSULTANTS

INSURANCE
RATING ANALYSIS

FIRE AND BUILDING
CODE ANALYSIS

SPRINKLER DESIGN
LAYOUTS AND
SPECIFICATIONS

Mr. Kenneth Marzza

- 2 -

April 22, 1971

appear that it could be located on the first floor immediately beneath the location presently shown for the main fire alarm control unit.

I trust that the above agrees with the notes you made regarding our conversation. I'll follow up on your request with the owner and see what can be provided.

Very truly yours,

SCHIRMER ENGINEERING CORPORATION



B. W. Garner, Manager
Alarm Systems Department

BWG:jc

cc: R. W. Gould
M. Taff

CITY OF



San Rafael

*Mayor
Albert J. Boro*

*Council Members
Paul M. Cohen
Barbara Heller
Cyr N. Miller
Gary O. Phillips*

*Fire Chief
John Montenero*

10/05/2005

Northgate 1 Cleaners
Attn: Yongi Yi
8985 Northgate Mall
San Rafael, CA 94901

Re: Business License Application – On Hold

Dear Business License Applicant:

The San Rafael Fire Department is holding our approval of your business license application for the following reason/s:

* With this letter is hazardous materials CUPA program permit application paperwork. Return to this department as soon as possible.

Once you have completed the above code requirements, we will approve your application and forward to the Business License Bureau. Should you have any further questions, I can be reached at 415-485-3309.

Sincerely,

A handwritten signature in black ink that reads "Bradley R. Mark".

Bradley R. Mark, Captain
Deputy Fire Marshal
City of San Rafael Fire Department

cc: Karen Landesman – Business License Bureau

018839

Address 8985 N.G. Mall Business Name Fairfax Fr. Cleaners FP-13

Issued By/Date 1st Insp. JKC 8/29/91 2nd Insp. / 3rd Insp. FMA Refer to FPB

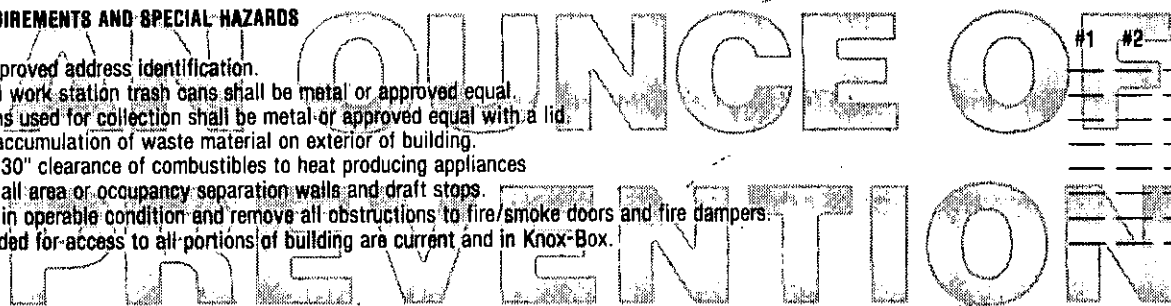
At the time of the inspection those items marked in columns 1, 2 or 3 were found to be in violation and shall be corrected immediately. Re-inspections occur in approximate two week intervals. Items marked under NA or OK were either not applicable or were in compliance at the time of the inspection.

B-2: General Businesses—office, wholesale and retail stores, factories, workshops using materials not highly flammable or combustible, drinking/dining establishments, school rooms for those beyond the 12th grade, for less than 50 people, woodworking and cabinet shops which are owner operated or where not more than one employee is operating one piece of equipment or appliance.

GENERAL REQUIREMENTS AND SPECIAL HAZARDS

- * 1. Install approved address identification.
* 2. Individual work station trash cans shall be metal or approved equal.
* 3. Trash cans used for collection shall be metal or approved equal with a lid.
5. Remove accumulation of waste material on exterior of building.
6. Maintain 30" clearance of combustibles to heat producing appliances
11. Maintain all area or occupancy separation walls and draft stops.
12. Maintain in operable condition and remove all obstructions to fire/smoke doors and fire dampers.
* 14. Keys needed for access to all portions of building are current and in Knox-Box.

Table with columns: Notice #1, #2, #3, NA, OK. Contains handwritten checkmarks and numbers 1-14.



EXITING REQUIREMENTS, BASED ON AN OCCUPANT LOAD FACTOR OF ONE PERSON FOR EVERY:

- 100 square feet—offices
30 square feet—retail shops (ground floor)
50 square feet—retail shops (upper floors), library, locker areas, etc.
20 square feet—college classrooms
15 square feet—conference rooms

- 17. Two exits required if occupant load exceeds 50 (except offices).
18. Two exits required if occupant load exceeds 30 (offices).
21. Two exits required from second floor if occupant load exceeds 10
22. Two exits required from all basements and above the second floor.
23. Two exits required from Mezzanines larger than 2000 square feet or 60 feet in any direction.
24. When two exits are required they must be separated by 1/2 of the diagonal distance of the room.
25. Three exits required if occupant load exceeds 500, four if over 1000.
27. Maximum distance to an exit is 150' (unsprinklered buildings) or 200' (sprinklered buildings).
28. Dead end corridors may not exceed 20'.
30. If occupant load is over 50, doors must swing out; if over 100 they must only swing out.
31. Exit doors shall not have dead bolts or other similar devices.
34. Exit doors and exit paths shall not be obstructed.
35. No storage beneath enclosed stairs unless protected by 1 hr. construction.
36. Corridors serving 30 or more shall be 1 hr. rated with 20 minute self closing doors.
38. If occupant load exceeds 100, all exits except the main entrance shall have exit signs.
40. If occupant load exceeds 300 the exit signs shall be illuminated on a separate circuit.
41. All exit paths shall be lighted at all time that the building is occupied. If separate circuits are required for the exit signs the exit lighting must also be on separate circuits.
95. Maximum occupant load sign is required if less than 50 people. (Restaurants, Lounges)
44. Interior stairways to be rated 1 hr. for 3 or 4 stories; 2 hr. for higher buildings.

Table with columns: Notice #1, #2, #3, NA, OK. Contains handwritten checkmarks and numbers 17-44.

FIRE PROTECTION EQUIPMENT

- 45. One 2A10BC fire extinguisher shall be provided for every 6,000 sq. ft. with 75' maximum travel distance.
49. One additional 40BC extinguisher shall be provided in all kitchens.
50. Extinguishers shall be easily accessible, wall mounted at a height not less than 4" or more than 5' from floor.
51. Extinguishers shall be serviced annually, after use, and when gauge indicates recharge.
55. Fire protection or detection systems shall be extended, altered or repaired as necessary to maintain protection.
56. All sprinkler valves shall be locked in open position, accessible and unobstructed.
57. Fire Department connection caps in place and work freely.
58. Exterior exposed portions of systems that are not brass or galvanized shall be painted with rust preventative paint.
59. Storage shall be maintained at least 18" below sprinkler heads.
60. Storage shall be maintained at least 24" below ceiling in unsprinklered buildings.
* 61. Maintain systems as follows:
System Type
A. Standpipes Semi-Annually Every 5 years
B. Sprinkler Quarterly Every 5 years
C. Pre-engineered/Fixed Semi-annually & after activation Semi-annually
62. All commercial cooking shall have a dry chemical system protecting all cooking surfaces.
63. Hood and duct ventilation systems shall be maintained free of grease.

Table with columns: Notice #1, #2, #3, NA, OK. Contains handwritten checkmarks and numbers 45-63.

ELECTRICAL REQUIREMENTS

- 66. Discontinue use of extension cords and cube adapters in lieu of permanent wiring.
67. Cords shall not be affixed to or extended through walls, ceilings, floors or under doors, nor subject to physical damage.
68. Maintain 30" clearance fronting and around electrical control panels.
69. Electrical main and sub-panels shall be labeled as to area served and not taped "on" position.

Table with columns: Notice #1, #2, #3, NA, OK. Contains handwritten checkmarks and numbers 66-69.

FLAMMABLE LIQUIDS

- 74. Discontinue use of liquids with flash point below 110°F for cleaning purposes.
75. No storage of class 1A liquids in basements.

Table with columns: Notice #1, #2, #3, NA, OK. Contains handwritten checkmarks and numbers 74-75.

PERMITS ARE REQUIRED OR COMPLIANCE WITH POSTED PERMIT.

- * 87. To store in excess of 5 gallons of flammable liquids inside or 10 gallons outside.
* 88. To store in excess of 25 gallons of combustible liquids inside or 60 gallons outside.
* 89. For welding or cutting torch operations.
* 90. For above ground flammable liquids storage tanks.
* 91. Lumber yards in excess of 100,000 board feet of lumber.
* 92. To operate refrigeration equipment.
* 93. To have an LPG tank in excess of 120 water gallons.
* 94. To store hazardous materials in excess of 100 lbs. solid, 55 gallons liquid or 200 cu. ft. gas.

Table with columns: Notice #1, #2, #3, NA, OK. Contains handwritten checkmarks and numbers 87-94.

CITY OF SAN RAFAEL

FIRE PREVENTION BUREAU

Correction Notice

Job Located at 8985 NG Mall FFX French Cleaners.

This job site has been inspected and has been found to be in violation of the applicable laws and ordinances of the City of San Rafael or the State of California. You are hereby notified that final approval will not be given (unless conditionally signed for below) until all of the violations are corrected and said corrections have been witnessed and initialed by the Fire Department. When the corrections have been made, call 485-3308 for a re-inspection. This notice has been placed conspicuously near the Building Department sign off card for the job and, pursuant to Section 3.104 of the Uniform Fire Code, it shall not be removed or altered except by the Fire Department.

11/17/87
OK
12/1/87
OK
11/17/87
OK
12/1/87
OK

① Install one 2A 10BC Fire Extinguisher

② Sprinkler system coverage does not conform to NFPA Std 13 Code.

OK FWC 2-5-88

Date 10.30.87 By Joseph Craig
Fire Department

Conditional Certificate of Occupancy
Approved By _____

cc: Fire Department
Building Department

H.

DO NOT REMOVE THIS TAG

FIELD INSPECTION CHECKLIST

SPRINKLER SYSTEMS

ADDRESS 9000 North Gate Mall - Sears.

UNDERGROUND INSPECTION BY: _____ DATE: _____
UNDERGROUND HYDRO BY: _____ DATE: _____
UNDERGROUND FLUSH BY: _____ DATE: _____
OVERHEAD HYDRO BY: _____ DATE: _____
OVERHEAD INSPECTION BY: _____ DATE: _____
ALARM INSPECTION BY: _____ DATE: _____
ALARM TEST BY: _____ DATE: _____
U.L. CERTIFICATE ISSUED Yes: _____ No: _____ DATE ISSUED: _____ BY: _____
PLANS REVIEWED BY: _____ DATE: _____
PERMIT APPLICATION Yes: _____ No: _____ DATE ISSUED: _____ BY: _____

OTHER SYSTEMS

SYSTEM INSPECTION BY: _____ DATE: _____
SYSTEM FUNCTIONAL TEST BY: _____ DATE: _____
PLANS REVIEWED BY: _____ DATE: _____
PERMIT APPLICATION Yes: _____ No: _____ DATE ISSUED: _____ BY: _____

FLAMMABLE LIQUIDS TANKS

TANKS INSPECTED BY: _____ DATE: _____
TANK CAPACITY _____ U.L. #: _____
PRESSURE TESTED BY: _____ DATE: _____
PIPING INSPECTED BY: _____ DATE: _____
PIPING TESTED BY: _____ DATE: _____
PLANS REVIEWED BY: _____ DATE: _____
PERMIT APPLICATION Yes: _____ No: _____ DATE ISSUED: _____ BY: _____

FLAMMABLE LIQUID TANK REMOVAL/ABANDON IN PLACE

TANK PRESSURE TEST - COMPANY NAME NA
WITNESSED BY: _____ DATE: _____

PIPING DISCONNECTED Yes V No _____ TANK CAPACITY 550
TANK UL # unable to locate

TANK STEAM CLEANED OR TRIPLE RINSED WITH PRESSURE H2O, CHEMICAL OR TSP Yes V No _____ DATE: 1/26/87

TANK FREED OF VAPORS Yes V No _____ DATE: 1/26/87

METHOD USED CO2

HYDRO CARBON READING 0% O2 READING ? No O2 meter

TANK REMOVAL CONTRACTOR Balch Petroleum

ADDRESS 1400 Old Conejo Road

TANK HAULER H & H Shipping Co. ID OR EPA # HWH # 900849

ADDRESS/DESTINATION China Basin SF.

WASTE HAULER Sears ID OR EPA # CAD 000 313445

ADDRESS/DESTINATION _____

PERMIT APPLICATION Yes X No _____ DATE ISSUED 1/26/87

BY Forest Craig MARIN COUNTY E.H. PERMIT # OK

Date: 1/22/87

Address/Location: 9000 Northgate Mall SAN RAFAEL

Business Owner(s): SEARS D.B.A. _____

Address: 900 S. FREMONT AVE ALHAMBRA CA 91802
(Street) (City) (State) (Phone) (818) 576-4225

Contractor (When applicable): Balch Petroleum/KE CURTIS CONSTRUCTION (PRIME)

Address: 9000 Northgate Mall 1400 OH CONEJO ROAD
(Street) (City) (State) (Phone) NEWBURY PARK, CA 91320

State License No. 396575B Type: A City Business Lic. No.: -NA-

Type of Permit	U. F. C. Section
<input type="checkbox"/> Application of Flammable Finishes	45.102
<input type="checkbox"/> Fumigation and Thermal Insecticidal Fogging	47.102
<input type="checkbox"/> Compressed Gases	74.103
<input type="checkbox"/> Cryogenic Fluids	75.103
<input type="checkbox"/> Explosives and Blasting Agents	77.104
<input type="checkbox"/> Fireworks	78.102
<input type="checkbox"/> Flammable Liquids (Storage/Handling)	79.103
<input type="checkbox"/> Hazardous Chemicals	80.102
<input type="checkbox"/> High-Piled Combustible Stock	81.103
<input type="checkbox"/> Liquefied Petroleum Gases	82.103
<input checked="" type="checkbox"/> Other Underground Tank Removal	79.103

Description of operations/Location of storage: Size + Number of
Tanks: 1 TANK 500 gallon -- Waste Motor Oil
To comply w/ FID. Std No. 310

FOR FIRE DEPARTMENT USE

Plans submitted:

Date: _____ Approved by: _____ Date: _____

Field Inspection:

By: FCraig Date: 1/26/87 By: _____ Date: _____

Final approval by: Edward M. Craig Date: 1/26/87

Permit fee: \$30.00 Date paid: 1/22/87 Permit number: _____

Remarks: _____

SAN RAFAEL COMMUNITY DEVELOPMENT DEPT.
 BUILDING AND SAFETY DIVISION
 1400 FIFTH AVENUE - PO BOX 151560 - SAN RAFAEL - CA 94915-1560
 PHONE 415 485-3365

APPLICATION FOR BUILDING PERMIT

PERMIT NO. 50410-064 DATE RECEIVED _____ DATE ISSUED 10-18-04 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

JOB ADDRESS 9000 NORTHGATE MAIL

ASSESSOR'S PARCEL _____

OWNER SEARS ROEBUCK BUILDING

ADDRESS 3333 BARKLEY ROAD

CITY Hoffman Estates PHONE 820-854-3842

CONTRACTOR WATSON ROOFING

ADDRESS 5185 LONGVIEW DR

CITY SACRAMENTO CA PHONE 916-481-6293

STATE LIC.# 602258 CITY LIC.# _____

PLANS SUBMITTED Yes No

PLANS PREPARED BY _____

ADDRESS _____

CONSTRUCTION LENDER _____

VALUATION \$ 110,000

DESCRIPTION OF WORK Re. Roof

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 7031.5 of the Business and Professional Code.

Signature of Permittee [Signature] Date Oct. 18, 2004

OFFICE USE ONLY

NOTES

"Extra Inspections" are inspections necessitated by failure to make noted correction, work not ready, inspection of work done without permit prior to issuance of permit or inspector unable to gain entry to job

Twenty-four (24) hours notice is required for called inspections

This permit becomes null and void if the work is not commenced within one-hundred eighty (180) days or is abandoned for a period of one-hundred eighty (180) days. Application for refund must be submitted within one-hundred eighty (180) days from date of issuance.

CONDITIONS

The following conditions together with the submitted plans and/or specifications are made a part of this permit:

OCCUPANCY				
A	B	E	F	H
I	M	R	S	U

CONSTRUCTION

I II III IV V

NO. OF STORIES _____ NO. OF UNITS _____

FLOOR AREA (Main Building) _____

FLOOR AREA (Garage) _____ ACCESS BLDG. _____

VALUATION \$ _____

BUILDING PERMIT FEE _____

PREPAID PLAN REVIEW FEE _____

PLAN CHECK FEE. (Balance) _____

PLAN RETENTION FEE _____

S. M. I. P. 23.10

BEDROOM TAX _____

DEVELOPMENT TAX _____

OTHER Street Maintenance 1,000.00

TOTAL 1,942.17

PLANS APPROVED FOR ISSUANCE BY: _____ PERMIT ISSUED BY: [Signature]

SAN RAFAEL COMMUNITY DEVELOPMENT DEPT.
 BUILDING AND SAFETY DIVISION
 1400 FIFTH AVENUE - PO BOX 151560 - SAN RAFAEL - CA 94915-1560
 PHONE 415 485-3365

APPLICATION FOR MECHANICAL PERMIT

PERMIT NO. M0202017 DATE RECEIVED 2-15-02 DATE ISSUED 2-15-02 MAIL PERSON

JOB ADDRESS 900 WORTHGATE MALL
(SEARS)
 MECHANICAL CONTRACTOR CALL-AC
 ADDRESS 3555 AIRWAY BL
 CITY SANTA ROSA PHONE (707) 547-1059
 STATE LIC.# 137195 CITY BUS. LIC.# _____

I hereby acknowledge that I have read this application and that the information is correct and agree to comply with all city ordinances and state laws regulating work governed by this permit.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgements resulting from this permit.

CHECK THE APPROPRIATE STATEMENT

- I hereby certify that I am properly registered and/or licensed as required by San Rafael and the State of California
- I hereby certify that I am exempt from the Contractors License Laws of the State of California under Section 7031.5 of the Bus. and Prof. Code

Signature of Permittee [Signature]

NOTES

- 1 A Reinspection is an inspection made necessary by failure to complete corrections noted on initial inspection or extra work that cannot be inspected under original permit inspections.
- 2 This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance.
- 3 24 hour notice required for inspections.
- 4 Mechanical code is the Uniform Mechanical Code. Copies available at City Treasurer's Office.
- 5 Late permits will be assessed a double fee with minimum of \$103.50

NO.	SCHEDULE OF FEES	EACH	FEE
	ISSUANCE OF PERMIT		17.25
	IN ADDITION FOR INSTALLATION, RELOCATION OR REPLACEMENT OF :		
	HEATING GAS APPLIANCE NOT OVER 100,000 BTU	10.35	
	HEATING GAS APPLIANCE OVER 100,000 BTU	12.65	
	RESIDENTIAL COOLING UNIT (OTHER THAN PORTABLE)	10.35	
	COMMERCIAL GAS COOK RANGE	7.50	
	FOOD PREPARATION GAS APPLIANCE - NOT HEREIN LISTED	7.50	
	AIR HANDLING UNIT EXCEEDING 10,000 CFM	12.65	
	VENTILATION FAN	5.25	
	GAS APPLIANCE - NOT HEREIN LISTED	7.50	
	SUPPLY AND RETURN AIR OUTLETS	EA. 1.15	
	GAS VENT	EA. 5.25	
	VENTILATING DUCTS	7.50	
	COMMERCIAL HOOD, DUCTS & BLOWER	7.50	
	RESIDENTIAL HOOD & DUCT	7.50	
	CHIMNEYS (SOLID FUEL)	7.50	
	REFRIGERATION UNIT (COMMERCIAL)	10.35	
1	BOILER COMPRESSOR, PACKAGED HEATING COOLING UNIT, ABSORPTION SYSTEM		
	NOT OVER 3 HP OR 100,000 BTU's	10.35	
	NOT OVER 15 HP OR 500,000 BTU's	19.00	
	NOT OVER 30 HP OR 1,000,000 BTU's	25.90	
	NOT OVER 50 HP OR 1,750,000 BTU's	38.50	
	OVER 50 HP OR 1,750,000 BTU's	64.50	
	EACH APPLIANCE OR PIECE OF EQUIPMENT REGULATED BY THIS CODE FOR WHICH NO FEE IS LISTED	7.50	
	SPECIAL INSPECTION OR INVESTIGATION TO DETERMINE CODE COMPLIANCE PER HOUR (\$34.50 MINIMUM)	34.50	
	EACH REINSPECTION	34.50	
	GAS PIPING	3.45	
	MINIMUM FEE	\$51.75	
	TOTAL	\$	

PERMIT ISSUED BY: [Signature]

SAN RAFAEL COMMUNITY DEVELOPMENT DEPT.
 BUILDING AND SAFETY DIVISION
 1400 FIFTH AVENUE - PO BOX 151560 - SAN RAFAEL - CA 94915-1560
 PHONE 415 485-3365

APPLICATION FOR
 BUILDING PERMIT

PERMIT NO. Bul08-057 DATE RECEIVED _____ DATE ISSUED 8-17-01 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

JOB ADDRESS 9000 NORTHEATE DR
 ASSESSOR'S PARCEL _____
 OWNER SEARS ROEBUCK
 ADDRESS 9000 NORTHEATE DR
 CITY SAN RAFAEL PHONE 507-2351

PLANS SUBMITTED Yes No
 PLANS PREPARED BY D Puccetti
 ADDRESS 9000 NORTHEATE MAUI

CONTRACTOR N/A OWNER
 ADDRESS _____
 CITY _____ PHONE _____
 STATE LIC.# _____ CITY LIC.# _____

CONSTRUCTION LENDER _____
 VALUATION \$ _____

DESCRIPTION OF WORK
Block off Two Sets of Doors & Build out WALL

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 7031.5 of the Business and Professional code.

Signature of Permittee [Signature] Date 8/17/01

OFFICE USE ONLY

NOTES

"Extra Inspections" are inspections necessitated by failure to make noted correction, work not ready, inspection of work done without permit prior to issuance of permit or inspector unable to gain entry to job

Twenty-four (24) hours notice is required for called inspections

This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance

CONDITIONS:

The following conditions together with the submitted plans and/or specifications are made a part of this permit:

OCCUPANCY

A	B	E	F	H
I	M	R	S	U

CONSTRUCTION

I	II	III	IV	V
---	----	-----	----	---

NO. OF STORIES _____ NO. OF UNITS _____

FLOOR AREA (Main Building) _____

FLOOR AREA (Garage) _____ ACCESS BLDG. _____

VALUATION \$ _____

BUILDING PERMIT FEE	<u>31.25</u>
PREPAID PLAN REVIEW FEE	_____
PLAN CHECK FEE. (Balance)	_____
PLAN RETENTION FEE	_____
S. M. I. P.	<u>50</u>
BEDROOM TAX	_____
DEVELOPMENT TAX	_____
OTHER	_____
TOTAL	<u>31.25</u>

PLANS APPROVED FOR ISSUANCE

PERMIT ISSUED BY:

BY: [Signature]



9000 Northgate Mall
San Rafael, CA 94903
415-507-2300
FAX: 415-479-1306

August 02, 2001

To: Building Commission
San Rafael, CA.

From: Sears San Rafael unit #1528
C/O Dennis Puccetti
9000 Northgate Mall
San Rafael, CA. 94903

Re: Building Remodel Proposal

To Whom It May Concern:

In the effort for us here at Sears in San Rafael, to control the ongoing problem of inventory loss and merchandise selection availability, we are planning to do some minor building remodeling.

This letter is our stores proposal for the following planned building remodel for Sears at Northgate Mall.

Please find enclosed with this letter a map that shows the areas of the building that we plan to remodel.

Referring to the map:

Green Area "A"

This area we plan to lock the existing customer entrance doors and construct a wall that will completely cover and block the fore mentioned entrance. From the map if you look directly to the left you will see a door that will act as an emergency exit door. On this door we will install a time delayed crash bar that will, in an emergency, allow customers and associates access to the exterior of the building.



9000 Northgate Mall
San Rafael, CA 94903
415-507-2300
FAX: 415-479-1306

Green Area "B"

This area of the store our plan is to completely lock and secure two (2) of the existing customer entrance doors. Then with the other two (2) remaining doors we plan to install time delayed crash bars. Our intent with this plan is to completely restrict access through these doors from both customers and associates.

The forgoing is our proposed building remodel plan, and we at Sears are seeking your review and approval so that we may expedite these plans as soon as possible.

We would like to thank you in advance for your careful consideration in this very important matter

Sincerely,

Dennis Puccetti
Director of Operations
Sears San Rafael

**SAN RAFAEL COMMUNITY DEVELOPMENT DEPT.
BUILDING DIVISION**

1400 FIFTH AVENUE • PO BOX 151560 • SAN RAFAEL, CA 94915-1560
PHONE (415) 485-3365

**APPLICATION FOR
BUILDING PERMIT**

PERMIT NO. 44680 DATE RECEIVED 2-10-98 DATE ISSUED 2-10-98 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

JOB ADDRESS 9000 NORTHCATE MALL

ASSESSOR'S PARCEL _____

OWNER SEARS

ADDRESS 9000 NORTHCATE AV

CITY SAN RAFAEL PHONE 415 5072300

CONTRACTOR WIM R. MEYNER & SONS

ADDRESS 5316 CLIFF SIDE DRIVE

CITY VENTURA CA PHONE 805 6477004

STATE LIC.# 701134 CITY LIC.# 701134

PLANS SUBMITTED Yes No

PLANS PREPARED BY _____

ADDRESS _____

CONSTRUCTION LENDER _____

VALUATION \$ 4000

DESCRIPTION OF WORK (1) INTERIOR NON
BEDRING WALL CEILING REPAIR
LIGHT SWITCH

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 7031.5 of the Business and Professional code.

Signature of Permittee [Signature]

Date _____

OFFICE USE ONLY

NOTES

"Extra inspections" are inspections necessitated by failure to make noted correction, work not ready, inspection of work done without permit prior to issuance of permit or inspector unable to gain entry to job

Twenty-four (24) hours notice is required for called inspections

This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance.

CONDITIONS:

The following conditions together with the submitted plans and/or specifications are made a part of this permit:

interior tenant improvement
ok Planning 2/10/98 Jha
Frame Joe
Final 3-24-98 ps

OCCUPANCY

A B E F H
I M R S U

CONSTRUCTION

I II III IV V

NO. OF STORIES _____ NO. OF UNITS _____

FLOOR AREA (Main Building) _____

FLOOR AREA (Garage) _____ ACCESS BLDG. _____

VALUATION \$ _____

BUILDING PERMIT FEE 78.50
PREPAID PLAN REVIEW FEE _____
PLAN CHECK FEE. (Balance) _____
PLAN RETENTION FEE _____
S. M. I. P. 50
BEDROOM TAX _____
DEVELOPMENT TAX _____
OTHER _____

TOTAL 79.30

PLANS APPROVED FOR ISSUANCE

PERMIT ISSUED BY:

BY: [Signature] 2/10/98

[Signature]

**SAN RAFAEL PUBLIC WORKS
BUILDING DEPARTMENT**

1400 FIFTH AVENUE • PO BOX 151560 • SAN RAFAEL, CA 94915-1560
PHONE (415) 485-3365

**APPLICATION FOR
BUILDING PERMIT**

PERMIT NO. 43433 DATE RECEIVED 6-5-97 DATE ISSUED 6-5-97 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

JOB ADDRESS 9000 NORTHGATE
ASSESSOR'S PARCEL _____
OWNER SEARS
ADDRESS 9000 NORTHGATE
CITY SAN RAFAEL PHONE _____

PLANS SUBMITTED Yes No
PLANS PREPARED BY _____
ADDRESS _____

CONTRACTOR WILLIAM R. MEDUNER'S INC
ADDRESS 8250 SULLAND ST
CITY VENTURA CA PHONE 805 6477008
STATE LIC.# 701134 CITY LIC.# _____

CONSTRUCTION LENDER NA
VALUATION \$ 38,000.00

DESCRIPTION OF WORK
RETAIL T.L. ALTER PARTITION WALLS ETC & NEW WALLS

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 7031.5 of the Business and Professional code.

Signature of Permittee PA Schlimm Date 6-5-97

OFFICE USE ONLY

NOTES

"Extra Inspections" are inspections necessitated by failure to make noted correction, work not ready, inspection of work done without permit prior to issuance of permit or inspector unable to gain entry to job.

Twenty-four (24) hours notice is required for called inspections.

This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance.

CONDITIONS:

The following conditions together with the submitted plans and/or specifications are made a part of this permit:

Plans OK to construct new walls in Sears on the 2nd & 3rd floor. No other expansions, modifications or additions are allowed w/ this permit.
SKUDKIVA Planning 6/4/97

OCCUPANCY

A	B	E	F	H
I	M	R	S	U

CONSTRUCTION

I	II	III	IV	V
---	----	-----	----	---

NO. OF STORIES _____ NO. OF UNITS _____

FLOOR AREA (Main Building) _____

FLOOR AREA (Garage) _____ ACCESS BLDG. _____

VALUATION \$ _____

BUILDING PERMIT FEE 420.60

PREPAID PLAN REVIEW FEE _____

PLAN CHECK FEE. (Balance) _____

PLAN RETENTION FEE _____

S. M. I. P. 7.60

BEDROOM TAX _____

DEVELOPMENT TAX _____

OTHER _____

TOTAL 428.20

PLANS APPROVED FOR ISSUANCE BY: JRC/m

PERMIT ISSUED BY: [Signature]

**SAN RAFAEL PUBLIC WORKS
BUILDING DEPARTMENT**

1400 FIFTH AVENUE • PO BOX 151560 • SAN RAFAEL, CA 94915-1560
PHONE (415) 485-3365

**APPLICATION FOR
BUILDING PERMIT**

PERMIT NO. 41740 DATE RECEIVED _____ DATE ISSUED 4/20/96 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

JOB ADDRESS 9000 NORTH GATE
ASSESSOR'S PARCEL _____
OWNER SEARS
ADDRESS 9000 NORTH GATE
CITY SAN RAFAEL PHONE _____

CONTRACTOR SUNNENSON CONSTR. CO. INC
ADDRESS 1701 FORTUNE DR., SUITE B
CITY SAN JOSE PHONE 408-434-1686
STATE LIC.# 430341 CITY LIC.# _____

PLANS SUBMITTED Yes No

PLANS PREPARED BY _____

ADDRESS _____

CONSTRUCTION LENDER _____

VALUATION \$ 5000⁰⁰

DESCRIPTION OF WORK TRAYANT IMPROVEMENT

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 2031.5 of the Business and Professional code.

Signature of Permittee [Signature] Date 6-19-96

OFFICE USE ONLY

NOTES

"Extra Inspections" are inspections necessitated by failure to make noted correction, work not ready, inspection of work done without permit prior to issuance of permit or inspector unable to gain entry to job.

Twenty-four (24) hours notice is required for called inspections.

This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance.

CONDITIONS:

The following conditions together with the submitted plans and/or specifications are made a part of this permit:

OCCUPANCY

A B E F H
I M R S U

CONSTRUCTION

I II III IV V

NO. OF STORIES _____ NO. OF UNITS _____

FLOOR AREA (Main Building) _____

FLOOR AREA (Garage) _____ ACCESS BLDG. _____

VALUATION \$ 5000

BUILDING PERMIT FEE 90⁰⁰

PREPAID PLAN REVIEW FEE _____

PLAN CHECK FEE. (Balance) _____

PLAN RETENTION FEE _____

S. M. I. P. 50

BEDROOM TAX _____

DEVELOPMENT TAX _____

OTHER _____

TOTAL 90 50

PLANS APPROVED FOR ISSUANCE

PERMIT ISSUED BY:

BY: [Signature]

**SAN RAFAEL PUBLIC WORKS
BUILDING DEPARTMENT**

1400 FIFTH AVENUE • PO BOX 151560 • SAN RAFAEL, CA 94915-1560
PHONE (415) 485-3365

**APPLICATION FOR
BUILDING PERMIT**

PERMIT NO. 41451 DATE RECEIVED 21 FEB 96 DATE ISSUED 5-2-96 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

JOB ADDRESS 9000 NORTHGATE MALL
ASSESSOR'S PARCEL _____
OWNER JIFFY LUBE
ADDRESS 7525 N.E. AMBASSADOR PL - M.
CITY PORTLAND, OR PHONE 97220 (503) 287-9224
CONTRACTOR SIERRA CONTRACTING
ADDRESS 934 S. ANDREASSEN DR - F
CITY ESCONDIDO CA PHONE 92029 (619) 745-8769
STATE LIC.# X689329 CITY LIC.# _____

PLANS SUBMITTED Yes No
PLANS PREPARED BY CCS ARCH'TS - RUDY JURGENIK
ADDRESS 2450 DUPONT DR, IRVINE, CA
CONSTRUCTION LENDER _____
VALUATION \$ 45,000 ±
DESCRIPTION OF WORK TENANT IMPROVEMENT
JIFFY LUBE

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 7031.5 of the Business and Professional code.

Signature of Permittee [Signature] Date 5/2/96

OFFICE USE ONLY

NOTES

"Extra Inspections" are inspections necessitated by failure to make noted correction, work not ready, inspection of work done without permit prior to issuance of permit or inspector unable to gain entry to job.

Twenty-four (24) hours notice is required for called inspections.

This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance.

CONDITIONS:

The following conditions together with the submitted plans and/or specifications are made a part of this permit:

OCCUPANCY									
A	B	E	F	H	I	M	R	S	U
CONSTRUCTION									
I	II	III	IV	V					
NO. OF STORIES _____					NO. OF UNITS _____				
FLOOR AREA (Main Building) _____									
FLOOR AREA (Garage) _____					ACCESS BLDG. _____				

VALUATION \$ 45,000.00

BUILDING PERMIT FEE	<u>477.50</u>
PREPAID PLAN REVIEW FEE	<u>310.40</u>
PLAN CHECK FEE. (Balance)	—
PLAN RETENTION FEE	<u>3.50</u>
S. M. I. P.	<u>9.50</u>
BEDROOM TAX	—
DEVELOPMENT TAX	—
OTHER	—
TOTAL	<u>\$ 490.50</u>

PLANS APPROVED FOR ISSUANCE PERMIT ISSUED BY:

BY: [Signature] 4223-96 _____

**SAN RAFAEL PUBLIC WORKS
BUILDING DEPARTMENT**

1400 FIFTH AVENUE • PO BOX 151560 • SAN RAFAEL, CA 94915-1560

PHONE (415) 485-3365

**APPLICATION FOR
BUILDING PERMIT**

PERMIT NO. 408523 DATE RECEIVED 11-21-95 DATE ISSUED 11-30-95 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

9000
JOB ADDRESS NORTH GATE MALL LAST FLR
AND 2ND FLOOR NEW CONFERENCE AREA
ASSESSOR'S PARCEL _____

OWNER SEARS
ADDRESS NORTH GATE MALL
CITY SAN RAFAEL PHONE (415) 507-2800

CONTRACTOR WEGAT & Co
ADDRESS 1073^B SHARY CIR
CITY CONCORD CA PHONE (510) 798-8678
STATE LIC.# 568397 CITY LIC.# _____

PLANS SUBMITTED Yes No

PLANS PREPARED BY _____

ADDRESS _____

CONSTRUCTION LENDER _____

VALUATION \$ 11. K

DESCRIPTION OF WORK ERRECT APPROXIMATELY
90 LIN FEET OF PARTITION WALLS
INCLOSING AND OR SEPERATING
EXISTING WALLS

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 7031.5 of the Business and Professional code.

Signature of Permittee [Signature] Date 11-21-95

OFFICE USE ONLY

NOTES

"Extra Inspections" are inspections necessitated by failure to make noted correction, work not ready, inspection of work done without permit prior to issuance of permit or inspector unable to gain entry to job.

Twenty-four (24) hours notice is required for called inspections.

This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance.

CONDITIONS:

The following conditions together with the submitted plans and/or specifications are made a part of this permit: _____

OCCUPANCY

A B E H
I M R

CONSTRUCTION

I II III IV V

NO. OF STORIES _____ NO. OF UNITS _____

FLOOR AREA (Main Building) _____

FLOOR AREA (Garage) _____ ACCESS BLDG. _____

VALUATION \$ 11,000

BUILDING PERMIT FEE 15,715.00

PREPAID PLAN REVIEW FEE _____

PLAN CHECK FEE. (Balance) _____

PLAN RETENTION FEE 1.50

S. M. I. P. 2.20

BEDROOM TAX _____

DEVELOPMENT TAX _____

OTHER _____

TOTAL 161,20

PLANS APPROVED FOR ISSUANCE

PERMIT ISSUED BY:

BY: [Signature] 11-30-95

[Signature]

**SAN RAFAEL PUBLIC WORKS
BUILDING DEPARTMENT**

1400 FIFTH AVENUE • PO BOX 151560 • SAN RAFAEL, CA 94915-1560
PHONE (415) 485-3365

**APPLICATION FOR
BUILDING PERMIT**

PERMIT NO. 39017 DATE RECEIVED 10 DATE ISSUED 10-27-94 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

JOB ADDRESS 9000 NORTHGATE MALL
ASSESSOR'S PARCEL _____
OWNER SEARS
ADDRESS 9000 NORTHGATE MALL
CITY SAN RAFAEL PHONE 415 507-2351

CONTRACTOR SWENSON CONSTR CO.
ADDRESS 1701 FORTUNE DR, SUITE B
CITY SAN JOSE PHONE 408 434-1686
STATE LIC.# 430341 CITY LIC.# _____

PLANS SUBMITTED Yes No
PLANS PREPARED BY ARCHITECTS PACIFICA LTD.
ADDRESS 17711 MITCHELL NORTH SUITE B
IRVINE CA 92714

CONSTRUCTION LENDER NONE
VALUATION \$ 20,000⁰⁰

DESCRIPTION OF WORK ALTERATIONS
TO MALL ENTRANCE

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 7031.5 of the Business and Professional code.

Signature of Permittee [Signature]

Date 9-27-94

OFFICE USE ONLY

NOTES

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Twenty-four (24) hours notice is required for called inspections.

This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance.

CONDITIONS:

The following conditions together with the submitted plans and/or specifications are made a part of this permit: _____

OCCUPANCY

A B E H
I M R

CONSTRUCTION

I II III IV V

NO. OF STORIES _____

NO. OF UNITS _____

FLOOR AREA (Main Building) _____

FLOOR AREA (Garage) _____

ACCESS BLDG. _____

VALUATION \$ _____

BUILDING PERMIT FEE 258.80
PREPAID PLAN REVIEW FEE _____
PLAN CHECK FEE (Balance) 168.20
PLAN RETENTION FEE 1.50
S. M. I. P. 4.00
BEDROOM TAX _____
DEVELOPMENT TAX _____
OTHER _____

TOTAL 432.50

PLANS APPROVED FOR ISSUANCE

PERMIT ISSUED BY:

BY: [Signature]

[Signature]

**SAN RAFAEL PUBLIC WORKS
BUILDING DEPARTMENT**

1400 FIFTH AVENUE • PO BOX 151560 • SAN RAFAEL, CA 94915-1560
PHONE (415) 485-3365

**APPLICATION FOR
BUILDING PERMIT**

PERMIT NO. 37774 DATE RECEIVED 11-23-93 DATE ISSUED 1-4-94 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

JOB ADDRESS 9000 Northgate
ASSESSOR'S PARCEL _____
OWNER SEANS ROEBUCK & CO.
ADDRESS _____
CITY _____ PHONE _____

CONTRACTOR SWENSEN CONST.
ADDRESS 1701 Fortune Dr Suite B
CITY San Jose PHONE (408) 434-1686
STATE LIC.# 430341 CITY LIC.# _____

PLANS SUBMITTED Yes No
PLANS PREPARED BY FRANCIS ANDERSON
ADDRESS 115 S. OLIVE, ORANGE, CA 92666

CONSTRUCTION LENDER _____
VALUATION \$ 170,000

DESCRIPTION OF WORK MODIFICATION OF
INTERIOR PARTITIONS AND DISPLAY
OF RETAIL (EXISTING) AREA.

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 7031.5 of the Business and Professional code.

Signature of Permittee [Signature]

Date Nov. 23, 1993

OFFICE USE ONLY

NOTES

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This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance.

CONDITIONS:

The following conditions together with the submitted plans and/or specifications are made a part of this permit: _____

OCCUPANCY

A B E H
I M R

CONSTRUCTION

I II III IV V

NO. OF STORIES _____ NO. OF UNITS _____

FLOOR AREA (Main Building) _____

FLOOR AREA (Garage) _____ ACCESS BLDG. _____

VALUATION \$ 170,000

BUILDING PERMIT FEE 1107.40
PREPAID PLAN REVIEW FEE 719.80
PLAN CHECK FEE. (Balance) 1
PLAN RETENTION FEE 2.50
S. M. I. P. 34.17
BEDROOM TAX 1
DEVELOPMENT TAX 1
OTHER _____

TOTAL

1144.87

PLANS APPROVED FOR ISSUANCE

PERMIT ISSUED BY:

BY: [Signature] 11-23-93

**SAN RAFAEL PUBLIC WORKS
BUILDING DEPARTMENT**

1400 FIFTH AVENUE • PO BOX 151560 • SAN RAFAEL, CA 94915-1560
PHONE (415) 485-3365

**APPLICATION FOR
BUILDING PERMIT**

PERMIT NO. 37245 DATE RECEIVED 6-3-93 DATE ISSUED 8/31/93 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

JOB ADDRESS 9000 NORTHGATE
ASSESSOR'S PARCEL _____
OWNER SEAKS
ADDRESS 9000 NORTHGATE
CITY SAN RAFAEL PHONE 507-2300
CONTRACTOR CORNELL CONST.
ADDRESS 35 EAST 15TH ST.
CITY ANTIOCH PHONE (510) 754-6571
STATE LIC.# 556283 CITY LIC.# _____

PLANS SUBMITTED Yes No
PLANS PREPARED BY ROBERT HOLM
ADDRESS 88 F. BELVEDERE ST. SAN RAFAEL
CONSTRUCTION LENDER NONE
VALUATION \$ 32,000
DESCRIPTION OF WORK BATHROOM REMODEL
ADA

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 7031.5 of the Business and Professional code.

Signature of Permittee [Signature]

Date 6-3-93

OFFICE USE ONLY

NOTES

"Extra Inspections" are inspections necessitated by failure to make noted correction, work not ready, inspection of work done without permit prior to issuance of permit or inspector unable to gain entry to job.

Twenty-four (24) hours notice is required for called inspections.

This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance.

CONDITIONS:

The following conditions together with the submitted plans and/or specifications are made a part of this permit: _____

OCCUPANCY

A B 2 E H
I M R

CONSTRUCTION

I II III IV V

NO. OF STORIES _____

NO. OF UNITS _____

FLOOR AREA (Main Building) _____

FLOOR AREA (Garage) _____

ACCESS BLDG. _____

VALUATION \$ 32,000

BUILDING PERMIT FEE

PREPAID PLAN REVIEW FEE 241.70

PLAN CHECK FEE. (Balance) _____

PLAN RETENTION FEE 1.00

S. M. I. P. 3.20

BEDROOM TAX _____

DEVELOPMENT TAX _____

OTHER _____

TOTAL

375.10

PLANS APPROVED FOR ISSUANCE

PERMIT ISSUED BY:

BY: _____

[Signature]

**SAN RAFAEL PUBLIC WORKS
BUILDING DEPARTMENT**

1400 FIFTH AVENUE • PO BOX 151560 • SAN RAFAEL, CA 94915-1560
PHONE (415) 485-3365

**APPLICATION FOR
BUILDING PERMIT**

PERMIT NO. 37095 DATE RECEIVED 6-30-93 DATE ISSUED 8-2-93 MAIL PERSON

APPLICANT INFORMATION (Please Type or Print)

JOB ADDRESS 9000 North Gate Mall

ASSESSOR'S PARCEL _____

OWNER Sears

ADDRESS _____

CITY _____ PHONE _____

CONTRACTOR Swenson Construction

ADDRESS 1701 Fortune Dr

CITY San Jose PHONE 408-434-1686

STATE LIC.# 430341 CITY LIC.# _____

PLANS SUBMITTED Yes No

PLANS PREPARED BY Garcinbel + Gonzales
ADDRESS 260 Churchill Ave Palo Alto Ca.

CONSTRUCTION LENDER 50,000.

VALUATION \$ 100,000.

DESCRIPTION OF WORK Retail TI work

I hereby acknowledge that I have read this application and that it is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify and keep harmless the City of San Rafael, its officers and duly appointed representatives against all liabilities and judgments resulting from this permit.

I hereby certify that I am properly registered and/or licensed as required by the City of San Rafael and the State of California or that I am exempt from the Contractor License Laws of the State of California under Section 7031.5 of the Business and Professional code.

Signature of Permittee D. Costa Date 6-30-93

OFFICE USE ONLY

NOTES

"Extra Inspections" are inspections necessitated by failure to make noted correction, work not ready, inspection of work done without permit prior to issuance of permit or inspector unable to gain entry to job.

Twenty-four (24) hours notice is required for called inspections.

This permit becomes null and void if the work is not commenced within one-hundred-eighty (180) days or is abandoned for a period of one-hundred-eighty (180) days. Application for refund must be submitted within one-hundred-eighty (180) days from date of issuance.

CONDITIONS:

The following conditions together with the submitted plans and/or specifications are made a part of this permit:

OCCUPANCY

A B E H
I M R

CONSTRUCTION

I II III IV V

NO. OF STORIES _____ NO. OF UNITS _____

FLOOR AREA (Main Building) _____

FLOOR AREA (Garage) _____ ACCESS BLDG. 50,000

VALUATION \$ 100,000.

BUILDING PERMIT FEE 336.80 518.10
PREPAID PLAN REVIEW FEE 519.60

PLAN CHECK FEE. (Balance) _____

PLAN RETENTION FEE 3.00

S. M. I. P. 10.50

BEDROOM TAX _____

DEVELOPMENT TAX _____

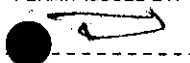
OTHER _____

TOTAL \$531.60

PLANS APPROVED FOR ISSUANCE

PERMIT ISSUED BY:

BY: EV 7-28-93



APPLICATION FOR BUILDING PERMIT

CITY of SAN RAFAEL
1400 FIFTH AVENUE, P.O. BOX 60, SAN RAFAEL
CALIFORNIA 94915-0060

PHONE
(415) 485-3365

DEPARTMENT OF
PUBLIC WORKS
LAND DEVELOPMENT DIVISION - RM. 300

PERMIT NUMBER 29614
JOB ADDRESS (9000 Northgate Mall
ASSESSOR'S PARCEL _____

DATE RECEIVED 2-3-89
DATE ISSUED 2-9-89 VALUATION \$ 5000⁰⁰
BUILDING PERMIT FEE _____ 50⁵⁰
PLAN CHECK FEE _____ 32⁸⁰
PLAN RETENTION FEE _____ 2⁵⁰
S.M.I.P. _____ 0⁷⁵
CITY ORD.#1046 _____ 86⁵⁵

APPLICANT TO FILL IN WITHIN HEAVY LINES - TYPE OR PRINT

OWNER Sears, Roebuck & Co.
ADDRESS 9000 Northgate Mall (Garden Shop)
CITY San Rafael PHONE 456-9091

CONTRACTOR Phillipss Construction Co.
ADDRESS 34 Branching Way
CITY Petaluma, Ca. 94952 PHONE (707)763-1551
CITY LIC. NO. _____ STATE LIC. NO. 184033

PLANS SUBMITTED YES NO
PLANS PREPARED BY v. R. Huber 456-9091
ADDRESS 2143 Francisco Blvd., San Rafael

CONSTRUCTION LENDER:

NONE

VALUATION \$ _____

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, and duly appointed representatives against all liabilities and judgments resulting from this permit.

FIRM NAME: _____

BY: v. R. Huber

OCCUPANCY: A.1 A.2-2.1-3-4 E I
 H B.1.2.3. B.4 R.1 R.3 M
CONSTRUCTION: I II III IV V NO. OF STORIES: _____
FLOOR AREA (MAIN BUILDING) _____ NO. OF UNITS _____
FLOOR AREA (GARAGE) _____ ACCESS. BLDG. _____

DESCRIPTION OF WORK: _____

Tenant Imp
DEMISING WALL

PLAN CHECKED BY: [Signature] DATE: 2-7-89

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:

THIS PERMIT EXPIRES AND BECOMES NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 180 DAYS. LOCATION OF THE STRUCTURE ON THE PROPERTY IS THE RESPONSIBILITY OF THE PERMITTEE.

ISSUED BY: [Signature]

DISTRIBUTION:
WHITE - FILE
YELLOW - APPLICANT
PINK - ASSESSOR
ORANGE - FIRE DEPT

APPLICATION FOR BUILDING PERMIT

CITY of SAN RAFAEL

1400 FIFTH AVENUE, P.O. BOX 80, SAN RAFAEL
CALIFORNIA 94915-0060

PHONE (415) 485-3365

DEPARTMENT OF
PUBLIC WORKS

LAND DEVELOPMENT DIVISION * AM. 300

PERMIT NUMBER 25007
JOB ADDRESS 9000 NORTHGATE MALL
ASSESSOR'S PARCEL _____

DATE RECEIVED 1-12-87
DATE ISSUED 1-12-87 VALUATION \$ 31,600.00
BUILDING PERMIT FEE _____ 202.00
PLAN CHECK FEE _____
PLAN RETENTION FEE _____
S.M.I.P. _____ 3.16
CITY ORD. #1046 _____ 205.16

APPLICANT TO FILL IN WITHIN HEAVY LINES - TYPE OR PRINT

OWNER SEARS ROEBUCK AND CO.
ADDRESS 9000 NORTHGATE MALL
CITY SAN RAFAEL PHONE 472-3670

CONTRACTOR Wedge Roofing, Inc.
ADDRESS P. O. Box 821
CITY Novato PHONE 897-6168
CITY LIC. NO. 14567 STATE LIC. NO. 416737

PLANS SUBMITTED YES NO

PREPARED BY _____
ADDRESS _____

CONSTRUCTION LENDER
Nawel
VALUATION \$ 31,600.00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.
I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, and duly appointed representatives against all liabilities and judgments resulting from this permit.

FIRM NAME Wedge Roofing, Inc.
BY: [Signature]

THIS PERMIT EXPIRES AND BECOMES NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN **180** DAYS. LOCATION OF THE STRUCTURE ON THE PROPERTY IS THE RESPONSIBILITY OF THE PERMITTEE.

OCCUPANCY A.1 A.2-2.1-3-4 E I
 H B.1.2.3. B.4 R.1 R.3 M
CONSTRUCTION: I II III IV V NO. OF STORIES: _____
FLOOR AREA (MAIN BUILDING) _____ NO. OF UNITS _____
FLOOR AREA (GARAGE) _____ ACCESS. BLDG. _____

DESCRIPTION OF WORK: RE ROOFING
PLAN CHECKED BY: _____ DATE: _____

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:
FINISHED 2/10/87 [Signature]
ISSUED BY: [Signature]

PART II "DECLARATION" ATTACHED AND PART OF THIS APPLICATION

APPLICATION FOR BUILDING PERMIT

CITY of SAN RAFAEL

1400 FIFTH AVENUE, P.O. BOX 60, SAN RAFAEL
CALIFORNIA 94915-0060

PHONE
(415) 485-3365

DEPARTMENT OF
PUBLIC WORKS
LAND DEVELOPMENT DIVISION - RM. 300

PERMIT NUMBER 25760
JOB ADDRESS 9000 NORTHGATE SHOPPING CNTR
ASSESSOR'S PARCEL _____

DATE RECEIVED _____
DATE ISSUED 5-4-87 VALUATION \$ 8,000⁰⁰
BUILDING PERMIT FEE _____ 68.50
PLAN CHECK FEE _____ 44.50
PLAN RETENTION FEE _____ 0.50
S.M.I.P. _____ 0.80
CITY ORD. #1046 _____ \$14.30

APPLICANT TO FILL IN WITHIN HEAVY LINES - TYPE OR PRINT

OWNER SEARS, ROEBUCK & CO.
ADDRESS 9000 NORTHGATE SHOPPING CNTR
CITY SAN RAFAEL PHONE 472-3670

CONTRACTOR SWENSON CONSTR. CO., INC.
ADDRESS 1701 FORTUNE DR., SUITE G
CITY SAN JOSE, CA 95131 PHONE 408-434-1686
CITY LIC. NO. _____ STATE LIC. NO. 430341

PLANS SUBMITTED YES NO

PLANS PREPARED BY OWNER

ADDRESS _____

CONSTRUCTION LENDER: _____

VALUATION \$ 8,000⁰⁰

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, and duly appointed representatives against all liabilities and judgments resulting from this permit.

FIRM NAME SWENSON CONSTR. CO., INC.

BY: [Signature]

THIS PERMIT EXPIRES AND BECOMES NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN **180** DAYS. LOCATION OF THE STRUCTURE ON THE PROPERTY IS THE RESPONSIBILITY OF THE PERMITTEE.

OCCUPANCY: A.1 A.2-2.1-3-4 E I
 H B.1.2.3. B.4 R.1 R.3 M
CONSTRUCTION: I II III IV V NO. OF STORIES: _____
FLOOR AREA (MAIN BUILDING) _____ NO. OF UNITS _____
FLOOR AREA (GARAGE) _____ ACCESS. BLDG. _____

DESCRIPTION OF WORK: TENANT IMPROVEMENT
1ST FLOOR PORTRAIT STUDIO

PLAN CHECKED BY: [Signature] DATE: 4-21-87

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:

ISSUED BY: [Signature]

DISTRIBUTION:
WHITE - FILE
YELLOW - APPLICANT
PINK - ASSESSOR
ORANGE - FIRE DEPT

PART II "DECLARATIONS" ATTACHED AND PART OF THIS APPLICATION

APPLICATION FOR BUILDING PERMIT

CITY of SAN RAFAEL

1400 FIFTH AVENUE, P.O. BOX 60, SAN RAFAEL
CALIFORNIA 94915-0060

PHONE (415) 485-3365

DEPARTMENT OF
PUBLIC WORKS
LAND DEVELOPMENT DIVISION - RM. 300

PERMIT NUMBER 24142
JOB ADDRESS 9000 NORTHEAST MARK
ASSESSOR'S PARCEL 175-060-40

DATE RECEIVED 1-16-86
DATE ISSUED 1-24-86 VALUATION \$ 10,000.00
BUILDING PERMIT FEE 80.50
PLAN CHECK FEE 52.30
PLAN RETENTION FEE 5.00
S.M.I.P. 1.00
CITY ORD. #1046 ---
\$138.80

APPLICANT TO FILL IN WITHIN HEAVY LINES - TYPE OR PRINT

OWNER SEARS
ADDRESS 9000 NORTHEAST SHOPPING CTR
CITY SAN RAFAEL PHONE 818-5764808

CONTRACTOR OWNER
ADDRESS _____
CITY _____ PHONE _____
CITY LIC. NO. _____ STATE LIC. NO. _____

PLANS SUBMITTED YES NO
PLANS PREPARED BY CLEMENTS & CLEMENTS ARCHT.
ADDRESS 123 S. LAKE AVE PASADENA CA 91101
CONSTRUCTION LENDER NONE

VALUATION \$ 10,000

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.
I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, its employees, and duly appointed representatives against all liabilities and judgments resulting from this permit.

FIRM NAME SEARS ROEBUCK & CO
BY: Mark T. Heenan

THIS PERMIT EXPIRES AND BECOMES NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN **180** DAYS. LOCATION OF THE STRUCTURE ON THE PROPERTY IS THE RESPONSIBILITY OF THE PERMITTEE.

OCCUPANCY: A.1 A.2-2.1-3-4 E I
 H B.1.2.3. B.4 R.1 R.3 M
CONSTRUCTION: I II III IV V NO. OF STORIES: _____
FLOOR AREA (MAIN BUILDING) _____ NO. OF UNITS _____
FLOOR AREA (GARAGE) _____ ACCESS. BLDG. _____

DESCRIPTION OF WORK: INTERIOR PARTITIONS

PLAN CHECKED BY: [Signature] DATE: 1-18-86

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:

MODIFY FIRE SPRINKLER SYSTEM TO THE SATISFACTION OF THE SAN RAFAEL FIRE DEPT.

ISSUED BY: [Signature]

PART II "DECLARATIONS" ATTACHED AND PART OF THIS APPLICATION

APPLICATION FOR BUILDING PERMIT

CITY OF SAN RAFAEL
1400 FIFTH AVENUE, P.O. BOX 60, SAN RAFAEL
CALIFORNIA 94915-0060 PHONE: _____

PHONE
(415) 485-3365

DEPARTMENT OF
PUBLIC WORKS
LAND DEVELOPMENT DIVISION - RM. 300

PERMIT NUMBER 19080

JOB ADDRESS 9000 Northgate S.C

ASSESSOR'S PARCEL _____

APPLICANT TO FILL IN WITHIN HEAVY LINES

OWNER MAJESTY SEARS (NORTHGATE MALL)

ADDRESS _____

CITY ALHAMBRA PHONE _____

CONTRACTOR BRYANT ORGANIZATION

ADDRESS 3229 SAN LEONARDO ST. P.O. Box 24081

CITY OAKLAND PHONE 532-4635

CITY LIC. NO. _____ STATE LIC. NO. 365357

PLANS SUBMITTED YES NO

PLANS PREPARED BY _____

ADDRESS _____

CONSTRUCTION LENDER _____

VALUATION \$ 151,000.00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.
I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, and duly appointed representatives against all liabilities and judgments resulting from this permit.

FIRM NAME BRYANT ORGANIZATION

BY: Dary M. Lucas

THIS PERMIT EXPIRES AND BECOMES NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 180 DAYS. LOCATION OF THE STRUCTURE ON THE PROPERTY IS THE RESPONSIBILITY OF THE PERMITTEE.

DATE RECEIVED _____

DATE ISSUED 5-12-83 VALUATION \$ 151,000.

BUILDING PERMIT FEE _____ 560.58

PLAN CHECK FEE _____

PLAN RETENTION FEE _____

S.M.I.P. _____ 15.00

CITY ORD. #1046 _____

575.50

OCCUPANCY: A.1 A.2-2.1-3-4 E I
 H B.1.2.3. B.4 R.1 R.3 M

CONSTRUCTION: I II III IV V NO. OF STORIES: _____

FLOOR AREA (MAIN BUILDING) _____ NO. OF UNITS _____

FLOOR AREA (GARAGE) _____ ACCESS BLDG. _____

DESCRIPTION OF WORK:

Interior alterations

RE ROOF

PLAN CHECKED BY: FV. DATE: 5-2-83

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:

ISSUED BY: _____

PART II "DECLARATIONS" ATTACHED AND PART OF THIS APPLICATION

DISTRIBUTION:
WHITE - FILE
YELLOW - APPLICANT
PINK - ASSESSOR
ORANGE - FIRE DEPT

APPLICATION FOR BUILDING PERMIT

CITY of SAN RAFAEL
1400 FIFTH AVENUE, P.O. BOX 60, SAN RAFAEL
CALIFORNIA 94915-0060

PHONE
(415) 485-3365

DEPARTMENT OF
PUBLIC WORKS
LAND DEVELOPMENT DIVISION - RM. 300

PERMIT NUMBER 19064
JOB ADDRESS 9000 NORTHGATE SHOP.
ASSESSOR'S PARCEL 175-060-40CITE.

DATE RECEIVED 5-9-83
DATE ISSUED 5-10-83 VALUATION \$ 24,000⁰⁰
BUILDING PERMIT FEE 164.50
PLAN CHECK FEE 106.90
PLAN RETENTION FEE 1.40
S.M.I.P. 2.40
CITY ORD. #1046 —
\$274.20

APPLICANT TO FILE IN WITHIN HEAVY LINES TYPE OR PRINT

OWNER SEARS ROEBUCK & CO.
ADDRESS 9000 NORTHGATE MALL
CITY SAN RAFAEL PHONE —

CONTRACTOR SUENSON CONSTR CO, INC
ADDRESS 1701 FORTUNE DR, SUITE G
CITY SAN JOSE, CA PHONE (408) 946-6866
CITY LIC. NO. — STATE LIC. NO. 430341

PLANS SUBMITTED YES NO
PLANS PREPARED BY SEARS
ADDRESS —
CONSTRUCTION LENDER —

VALUATION \$ 24,000⁰⁰

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.
I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, and duly appointed representatives against all liabilities and judgments resulting from this permit.

FIRM NAME SUENSON CONSTR CO, INC.
BY: [Signature]

THIS PERMIT EXPIRES AND BECOMES NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN **180** DAYS. LOCATION OF THE STRUCTURE ON THE PROPERTY IS THE RESPONSIBILITY OF THE PERMITTEE.

OCCUPANCY: A.1 A.2-2.1-3-4 E I
 H B.1,2,3. B.4 R.1 R.3 M
CONSTRUCTION: I II III IV V NO. OF STORIES: —
FLOOR AREA (MAIN BUILDING) — NO. OF UNITS —
FLOOR AREA (GARAGE) — ACCESS BLDG. —

DESCRIPTION OF WORK: INSTALL INTERIOR PARTITIONS - 1ST FLOOR - SEARS FINANCIAL NETWORK

PLAN CHECKED BY: FV DATE: 5-9-83

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:

ISSUED BY: F.V.

PART II "DECLARATIONS" ATTACHED AND PART OF THIS APPLICATION

DISTRIBUTION:
WHITE - FILE
YELLOW - APPLICANT
PINK - ASSESSOR
ORANGE - FIRE DEPT

APPLICATION FOR BUILDING PERMIT

CITY of SAN RAFAEL

1400 FIFTH AVENUE, SAN RAFAEL, CALIF. 94902

PHONE
456-1112 EXT. 52

BUILDING DEPARTMENT

ROOM 302

PERMIT NUMBER 10088
 JOB ADDRESS: 9000 Northgate
 ASSESSOR'S PARCEL _____

APPLICANT TO FILL IN WITHIN HEAVY LINES - TYPE OR PRINT

OWNER Sean Roebuck + Co
 ADDRESS 9000 Northgate Mall
 CITY San Rafael PHONE 472-3676

CONTRACTOR Sean Roebuck + Co
 ADDRESS 9000 Northgate Mall
 CITY San Rafael PHONE _____
 CITY LIC. NO. _____ STATE LIC. NO. 025455

PLANS SUBMITTED YES NO
 PLANS PREPARED BY _____

ADDRESS _____

CONSTRUCTION LENDER: _____

VALUATION \$ _____

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, and duly appointed representatives against all liabilities and judgments resulting from this permit.

FIRM NAME Sean Roebuck + Co
 BY: J. Watson Supt.

NOTE: OWNER MUST FILL IN REVERSE SIDE OF THIS APPLICATION

THIS PERMIT EXPIRES AND BECOMES NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 60 DAYS. LOCATION OF THE STRUCTURE ON THE PROPERTY IS THE RESPONSIBILITY OF THE PERMITTEE.

DATE RECEIVED 6/14/78
 DATE ISSUED _____ VALUATION \$ 650.00
 BUILDING PERMIT FEE DOUBLE FEE 7.00
 PLAN CHECK FEE 3.50
 ANNEX FEE Penalty 7.00
 S.M.I.P. _____
 CITY ORD. # 1046 _____ 17.50

NEW ADD ALTER REPAIR
 MOVE DEMOLISH SWIMMING POOL
 OCCUPANCY A B C D E F G H I J
 CONSTRUCTION I II IV V
 FIRE ZONE 1 2 3
 NO. OF LIVING UNITS _____ NO. OF FLOORS _____
 FLOOR AREA, MAIN BUILDING _____
 FLOOR AREA GARAGE _____ ACCESS. BLDG. _____

DESCRIPTION OF WORK INTERIOR PARTITIONS METAL STUDS & 5/8" GYPSUM

PUBLIC WORKS DEPT. CHECKED BY _____

PLANNING DEPT. CHECKED BY _____

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:

JACK K. COATES
 CHIEF BUILDING INSPECTOR BY

[Signature]

FILE COPY

DECLARATION EXEMPTION FOR OWNER-BUILDER
Reference From
State Business and Professional Code

7031.5 Statement of contractor as to license required as part of local permit regulations. Each county or city which requires the issuance of a permit as a condition precedent to the construction, alteration, improvement, demolition or repair of any building or structure shall also require that each applicant for such a permit file as a condition precedent to the issuance of a permit a statement which he has prepared and signed stating that the applicant is licensed under the provisions of this chapter, giving the number of the license and stating that it is in full force and effect, or, if the applicant is exempt from the provisions of this chapter, the basis for the alleged exemption.

I HEREBY CERTIFY THAT I AM EXEMPT FROM THE CONTRACTORS LICENSE
LAWS OF THE STATE OF CALIFORNIA UNDER SECTION 7031.5 OF THE
BUS. AND PROF. CODE BECAUSE OF ONE OR MORE OF THE FOLLOWING CONDITIONS:

- 1 I am the owner of the property and the structure is being built for the occupancy of the owner and will not be offered for sale within the year. (Sec. 7044)
- 2 The building does not contain more than three (3) dwelling units, one of which will be occupied by me as the owner. (Sec. 7044)
- 3 As the owner, I am contracting with a licensed contractor to construct the project. (Sec. 7050)
- 4 Aggregate total of the contracts is not more than \$100 for labor, material and all other items of work. (Sec. 7048)
- 5 I am a licensed architect, engineer, or structural pest control operator operating within the scope of my license. (Sec. 7051)
- 6 I am furnishing materials and supplies without fabrication as exempted by Sec. 7052 of the State Contractors License Laws. (Sec. 7052)
- 7 I am an employee with wages as my sole compensation. (Sec. 7053)
- 8 The property is in the ownership of the Federal Government. (Sec. 7047)

Signed (Owner):

Seas Roeluck & Co

Signed (Agent for Owner):

Watson Dept

Owner's Address:

9006 Northgate mall San Rafael

Telephone No.:

472-3670

Date:

6/14/78

APPLICATION FOR BUILDING PERMIT

CITY of SAN RAFAEL

1400 FIFTH AVENUE, SAN RAFAEL, CALIF. 94902

PHONE
456-1112 EXT. 52

BUILDING DEPARTMENT

ROOM 302

PERMIT NUMBER 3103
 JOB ADDRESS 9000 Northgate
 ASSESSOR'S PARCEL _____

DATE RECEIVED 7/30/75
 DATE ISSUED 7/30/75 VALUATION \$ 950.10
 BUILDING PERMIT FEE _____
 PLAN CHECK FEE _____
 ANNEX FEE _____
 S.M.I.P. _____
 CITY ORD. #.1046 _____

APPLICANT TO FILL IN WITHIN HEAVY LINES - TYPE OR PRINT

OWNER Sean & Barbara
 ADDRESS _____
 CITY San Rafael PHONE _____
 CONTRACTOR Baldwin Cont Co
 ADDRESS 5800 Northgate
 CITY _____ PHONE 742-5114
 CITY LIC. NO. _____ STATE LIC. NO. _____

NEW ADD ALTER REPAIR
 MOVE DEMOLISH SWIMMING POOL
 OCCUPANCY A B C D E F G H I J
 CONSTRUCTION I II III IV V
 FIRE ZONE 1 2 3
 NO. OF LIVING UNITS _____ NO. OF FLOORS _____
 FLOOR AREA, MAIN BUILDING _____
 FLOOR AREA GARAGE _____ ACCESS. BLDG. _____

PLANS SUBMITTED, YES NO
 PLANS PREPARED BY _____
 ADDRESS _____

DESCRIPTION OF WORK Trash enclosure

CONSTRUCTION LENDER: _____

PUBLIC WORKS DEPT. _____ CHECKED BY _____
 PLANNING DEPT. _____ CHECKED BY _____

VALUATION \$ _____

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.

I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, and duly appointed representatives against all liabilities and judgments resulting from this permit.

FIRM NAME Baldwin Cont Co
 BY Loy Phillips

JACK K. COATES
 CHIEF BUILDING INSPECTOR BY

Jc *Be...*

FILE COPY

NOTE: OWNER MUST FILL IN REVERSE SIDE OF THIS APPLICATION

THIS PERMIT EXPIRES AND BECOMES NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 60 DAYS. LOCATION OF THE STRUCTURE ON THE PROPERTY IS THE RESPONSIBILITY OF THE PERMITTEE.

APPLICATION FOR BUILDING PERMIT

CITY of SAN RAFAEL
1400 FIFTH AVENUE, SAN RAFAEL, CALIF. 94902

PHONE
456-1112 EXT. 52

BUILDING DEPARTMENT
ROOM 302

PERMIT NUMBER 8754
JOB ADDRESS 9200 NORTHGATE CENTER
ASSESSOR'S PARCEL _____

DATE RECEIVED ISSUED 7-21-71 VALUATION \$ 516,150
BUILDING PERMIT FEE 643.50
PLAN CHECK FEE (pd) 321.75
ANNEX FEE _____
GRADING PERMIT _____
POWER POLE _____

APPLICANT TO FILL IN WITHIN HEAVY LINES - TYPE OR PRINT

OWNER SEARS, ROEBUCK AND Co
ADDRESS 900 S. FREMONT AVE
CITY ALHAMBRA, CA PHONE 576-4802

CONTRACTOR Williams & Borrowes
ADDRESS 500 HARBOR BLVD
CITY BELMONT, CA PHONE _____
CITY LIC. NO. _____ STATE LIC. NO. _____

PLANS SUBMITTED YES NO
PLANS PREPARED BY PARKIN ARCHITECTS-ENG-PLANNERS
ADDRESS 1333 WESTWOOD BLVD L.A. CA 90024

NUMBER OF BUILDINGS NOW ON LOT 6
USE OF PROPOSED STRUCTURE AUTOMOTIVE CENTER
LENDER: _____
VALUATION \$ 500,000.00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.
I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, and duly appointed representatives against all liabilities and judgments resulting from this permit.
FIRM NAME PARKIN ARCHITECTS-ENG-PLANNERS
BY: Shobhan Zashan
NOTE: OWNER MUST FILL IN REVERSE SIDE OF THIS APPLICATION

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NEW ADD ALTER REPAIR
MOVE DEMOLISH SWIMMING POOL
OCCUPANCY: A B C D E (F) G H I J
CONSTRUCTION: I II III IV (V)
FIRE ZONE: 1 (2) 3
NO. OF LIVING UNITS 0 NO. OF FLOORS 2
FLOOR AREA, MAIN BUILDING 28522
FLOOR AREA GARAGE _____ ACCESS. BLDG. 1904

DESCRIPTION OF WORK AUTO SERVICE STORE WITH GAS DISPENS. ISLAND & COVERED PUMPS.

PUBLIC WORKS DEPT. 290 CHECKED BY JSP
PLANNING DEPT. OK CHECKED BY eff

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:
THIS PERMIT ISSUED SUBJECT TO COMPLIANCE BY OWNER TO THE REQUIREMENTS SPECIFIED ON DWG. SHTS. CA 1 THRU 5, THE S.R. PLANNING COMM.'S REQUIREMENTS AND THE ATTACHED D.P.W. SHT. NO. 290, ALL ATTACHED.
JACK K. COATES
CHIEF BUILDING INSPECTOR BY Je BEM

DECLARATION EXEMPTION FOR OWNER-BUILDER

Reference From

State Business and Professional Code

7031.5 Statement of contractor as to license required as part of local permit regulations. Each county or city which requires the issuance of a permit as a condition precedent to the construction, alteration, improvement, demolition or repair of any building or structure shall also require that each applicant for such a permit file as a condition precedent to the issuance of a permit a statement which he has prepared and signed stating that the applicant is licensed under the provisions of this chapter, giving the number of the license and stating that it is in full force and effect, or, if the applicant is exempt from the provisions of this chapter, the basis for the alleged exemption.

I HEREBY CERTIFY THAT I AM EXEMPT FROM THE CONTRACTORS LICENSE LAWS OF THE STATE OF CALIFORNIA UNDER SECTION 7031.5 OF THE BUS. AND PROF. CODE BECAUSE OF ONE OR MORE OF THE FOLLOWING CONDITIONS:

- 1.... I am the owner of the property and the structure is being built for the occupancy of the owner and will not be offered for sale within the year. (Sec. 7044)
- 2.... The building does not contain more than three (3) dwelling units, one of which will be occupied by me as the owner. (Sec. 7044)
3. As the owner, I am contracting with a licensed contractor to construct the project. (Sec. 7050)
- 4.... Aggregate total of the contracts is not more than \$100 for labor, material and all other items of work. (Sec. 7048)
- 5.... I am a licensed architect, engineer, or structural pest control operator operating within the scope of my license. (Sec. 7051)
- 6.... I am furnishing materials and supplies without fabrication as exempted by Sec. 7052 of the State Contractors License Laws. (Sec. 7052)
- 7.... I am an employee with wages as my sole compensation. (Sec. 7053)
- 8.... The property is in the ownership of the Federal Government. (Sec. 7047)

Signed (Owner): _____

Signed (Agent for Owner):

PARISIN ARCHITECTS *Alban Kabin*

Owner's Address:

900 J-Fremont St *Alhambra Calif*

Telephone No.:

556-4802

Date:

4/2/71

APPLICATION FOR BUILDING PERMIT

CITY of SAN RAFAEL
1400 FIFTH AVENUE, SAN RAFAEL, CALIF. 94902.

PHONE
456-1112 EXT. 52

BUILDING DEPARTMENT
ROOM 302

PERMIT NUMBER 8753
JOB ADDRESS 9000 NORTHGATE CENTER
ASSESSOR'S PARCEL _____

ISSUED 7-21-71 VALUATION \$ 3,435,430
BUILDING PERMIT FEE _____ 3,562.50
PLAN CHECK FEE (pd) _____ 1781.25
ANNEX FEE _____
GRADING PERMIT _____
POWER POLE _____

APPLICANT TO FILL IN WITHIN HEAVY LINES - TYPE OR PRINT
OWNER SEARS, ROEBUCK AND CO
ADDRESS 900 S. FREMONT AVE
CITY ALHAMBRA CA PHONE 576-4802

NEW ADD ALTER REPAIR
MOVE DEMOLISH SWIMMING POOL
OCCUPANCY A B C D E F G H I J
CONSTRUCTION I II III IV V
FIRE ZONE I 2 3
NO. OF LIVING UNITS 0 NO. OF FLOORS 3
FLOOR AREA, MAIN BUILDING 178464
FLOOR AREA GARAGE _____ ACCESS. BLDG. _____

CONTRACTOR Williams & Burrows
ADDRESS 500 HARBOR BLVD.
CITY BELMONT, CA. PHONE _____
CITY LIC. NO. _____ STATE LIC. NO. _____

DESCRIPTION OF WORK RETAIL SALES STORE

PLANS SUBMITTED YES NO
PLANS PREPARED BY PARKIN ARCHITECTS-ENG-PLANNERS
ADDRESS 1333 WESTWOOD BLVD L.A. CA 90024

PUBLIC WORKS DEPT. 290 CHECKED BY ISD
PLANNING DEPT. OK CHECKED BY CAF

NUMBER OF BUILDINGS NOW ON LOT 6
USE OF PROPOSED STRUCTURE RETAIL STORE
LENDER: _____
VALUATION \$ 2,800,000.00

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:
THIS PERMIT ISSUED SUBJECT TO COMPLIANCE BY OWNER TO THE REQUIREMENTS SPECIFIED ON DWG. SHTS. CA 1 THRU 5, THE S.R. PLANNING COMMISSION'S REQUIREMENTS AND D.P.U. SHIT. NO. 290, ALL ATTACHED.

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.
I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, and duly appointed representatives against all liabilities and judgments resulting from this permit.
FIRM NAME PARKIN ARCHITECTS-ENG-PLANNERS
BY: Charles Losh

JACK K. COATES
CHIEF BUILDING INSPECTOR BY JKC BGM

NOTE: OWNER MUST FILL IN REVERSE SIDE OF THIS APPLICATION
THIS PERMIT EXPIRES AND BECOMES NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 60 DAYS. LOCATION OF THE STRUCTURE ON THE PROPERTY IS THE RESPONSIBILITY OF THE PERMITEE.

DECLARATION EXEMPTION FOR OWNER-BUILDER
Reference From
State Business and Professional Code

7031.5 Statement of contractor as to license required as part of local permit regulations. Each county or city which requires the issuance of a permit as a condition precedent to the construction, alteration, improvement, demolition or repair of any building or structure shall also require that each applicant for such a permit file as a condition precedent to the issuance of a permit a statement which he has prepared and signed stating that the applicant is licensed under the provisions of this chapter, giving the number of the license and stating that it is in full force and effect, or, if the applicant is exempt from the provisions of this chapter, the basis for the alleged exemption.

I HEREBY CERTIFY THAT I AM EXEMPT FROM THE CONTRACTORS LICENSE LAWS OF THE STATE OF CALIFORNIA UNDER SECTION 7031.5 OF THE BUS. AND PROF. CODE BECAUSE OF ONE OR MORE OF THE FOLLOWING CONDITIONS:

1. I am the owner of the property and the structure is being built for the occupancy of the owner and will not be offered for sale within the year. (Sec. 7044)
2. The building does not contain more than three (3) dwelling units, one of which will be occupied by me as the owner. (Sec. 7044)
3. As the owner, I am contracting with a licensed contractor to construct the project. (Sec. 7050)
4. Aggregate total of the contracts is not more than \$100 for labor, material and all other items of work. (Sec. 7048)
5. I am a licensed architect, engineer, or structural pest control operator operating within the scope of my license. (Sec. 7051)
6. I am furnishing materials and supplies without fabrication as exempted by Sec. 7052 of the State Contractors License Laws. (Sec. 7052)
7. I am an employee with wages as my sole compensation. (Sec. 7053)
8. The property is in the ownership of the Federal Government. (Sec. 7047)

Signed (Owner): _____

Signed (Agent for Owner):

PARKIN ARCHITECTS
Abraham Loshin

Owner's Address:

900 S. Fremont St. Alhambra Calif

Telephone No.:

576-4802

Date:

4/2/71

APPLICATION FOR BUILDING PERMIT

CITY of SAN RAFAEL
1400 FIFTH AVENUE, SAN RAFAEL, CALIF. 94902

PHONE
456-1112 EXT. 52

BUILDING DEPARTMENT
ROOM 302

PERMIT NUMBER 8752
JOB ADDRESS: 9100 NORTHGATE CENTER
ASSESSOR'S PARCEL _____

DATE RECEIVED: Issued 7-21-71 VALUATION \$ 221,000
BUILDING PERMIT FEE _____ 357.50
PLAN CHECK FEE (pd.) _____ 178.75
ANNEX FEE _____
GRADING PERMIT _____
POWER POLE _____

APPLICANT TO FILL IN WITHIN HEAVY LINES - TYPE OR PRINT

OWNER SEARS, ROEBUCK AND Co
ADDRESS 900 S. FREMONT AVE
CITY ALHAMBRA CA PHONE 576-4802

CONTRACTOR Williams & Burrows
ADDRESS 500 HARBOR BLVD.
CITY BELMONT PHONE _____
CITY LIC. NO. _____ STATE LIC. NO. _____

PLANS SUBMITTED YES NO
PLANS PREPARED BY PARKIN ARCHITECTS-ENG-PLANNERS
ADDRESS 1333 WESTWOOD BLVD L.A. CA 90024

NUMBER OF BUILDINGS NOW ON LOT 6
USE OF PROPOSED STRUCTURE SEASONAL SALES
LENDER: _____
VALUATION \$ 200,000.00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City ordinances and State laws regulating building construction.
I hereby agree to save, indemnify, and keep harmless the City of San Rafael, its officers, and duly appointed representatives against all liabilities and judgments resulting from this permit.

FIRM NAME PARKIN ARCHITECTS-ENG-PLANNERS
BY: Abraham Zabin

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NEW ADD ALTER REPAIR
MOVE DEMOLISH SWIMMING POOL
OCCUPANCY A B C D E F G H I J
CONSTRUCTION I II III IV V
FIRE ZONE I II III
NO. OF LIVING UNITS _____ NO. OF FLOORS 1
FLOOR AREA, MAIN BUILDING 12000
FLOOR AREA GARAGE _____ ACCESS. BLDG. _____

DESCRIPTION OF WORK: SEASONAL SALES RETAIL STORE

PUBLIC WORKS DEPT. 290 CHECKED BY [Signature]
PLANNING DEPT. (OK) CHECKED BY [Signature]

THE FOLLOWING CONDITIONS TOGETHER WITH THE SUBMITTED PLANS AND/OR SPECIFICATIONS ARE MADE A PART OF THIS PERMIT:

THIS PERMIT ISSUED SUBJECT TO COMPLIANCE BY OWNER TO THE REQUIREMENTS SPECIFIED ON DWG. SHTS. CA 1 THRU 5, THE S.P. PLANNING COMM.'S REQUIREMENTS AND THE ATTACHED D.P.W. SHT. NO. 290

ALL ATTACHED.
JACK K. COATES
CHIEF BUILDING INSPECTOR BY: [Signature] [Signature]

DECLARATION EXEMPTION FOR OWNER-BUILDER

Reference From

State Business and Professional Code

7031.5 Statement of contractor as to license required as part of local permit regulations. Each county or city which requires the issuance of a permit as a condition precedent to the construction, alteration, improvement, demolition or repair of any building or structure shall also require that each applicant for such a permit file as a condition precedent to the issuance of a permit a statement which he has prepared and signed stating that the applicant is licensed under the provisions of this chapter, giving the number of the license and stating that it is in full force and effect, or, if the applicant is exempt from the provisions of this chapter, the basis for the alleged exemption.

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- 2.... The building does not contain more than three (3) dwelling units, one of which will be occupied by me as the owner. (Sec. 7044)
- 3 As the owner, I am contracting with a licensed contractor to construct the project. (Sec. 7050)
- 4.... Aggregate total of the contracts is not more than \$100 for labor, material and all other items of work. (Sec. 7048)
- 5.... I am a licensed architect, engineer, or structural pest control operator operating within the scope of my license. (Sec. 7051)
- 6.... I am furnishing materials and supplies without fabrication as exempted by Sec. 7052 of the State Contractors License Laws. (Sec. 7052)
- 7.... I am an employee with wages as my sole compensation. (Sec. 7053)
- 8.... The property is in the ownership of the Federal Government. (Sec. 7047)

Signed (Owner): _____

Signed (Agent for Owner):

PARKIN ARCHITECTS
Albania Rashin

Owner's Address:

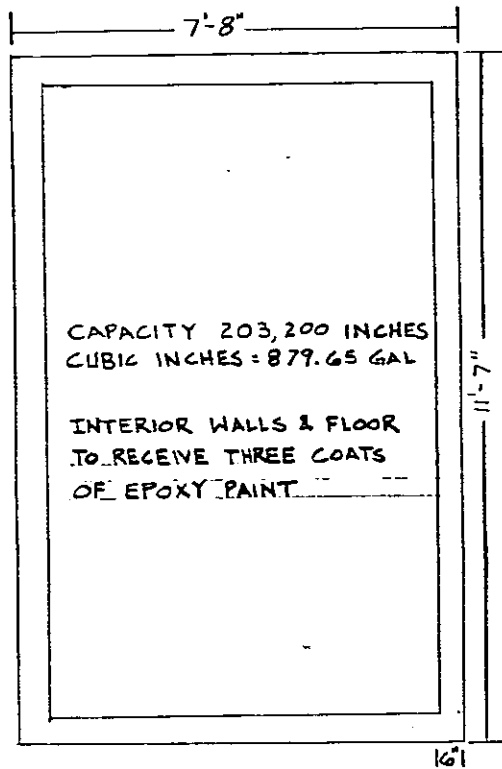
900 S. Fremont St. Alhambra Calif

Telephone No.:

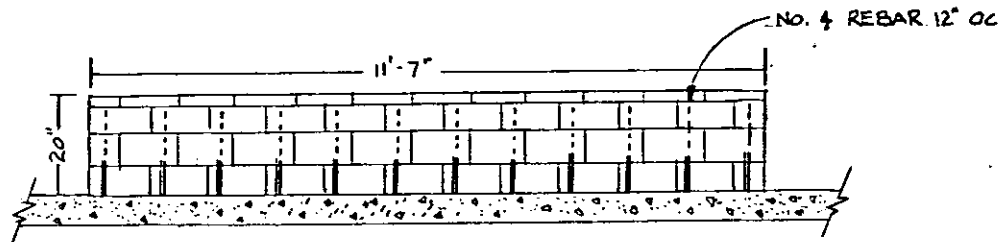
56-4802

Date:

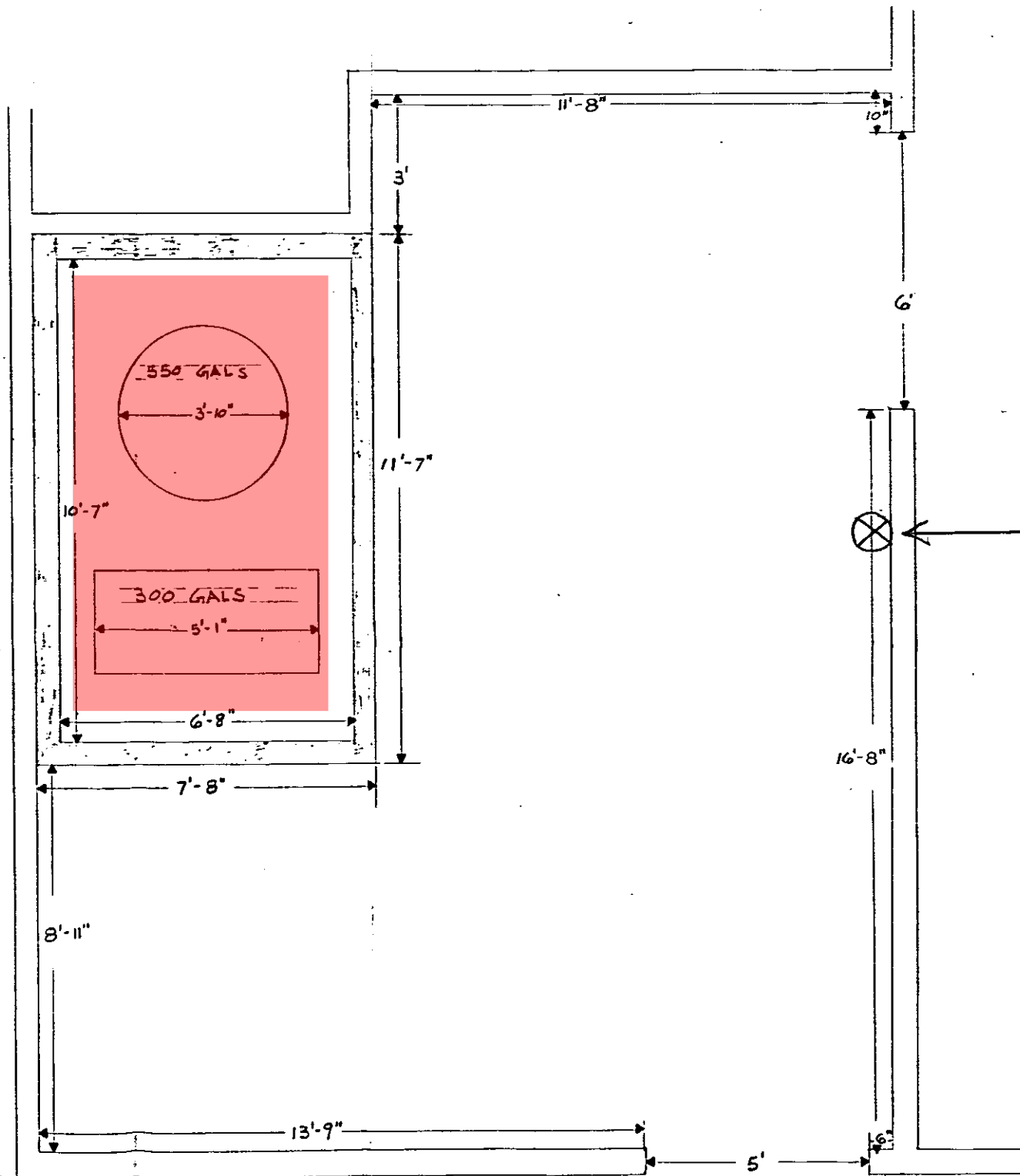
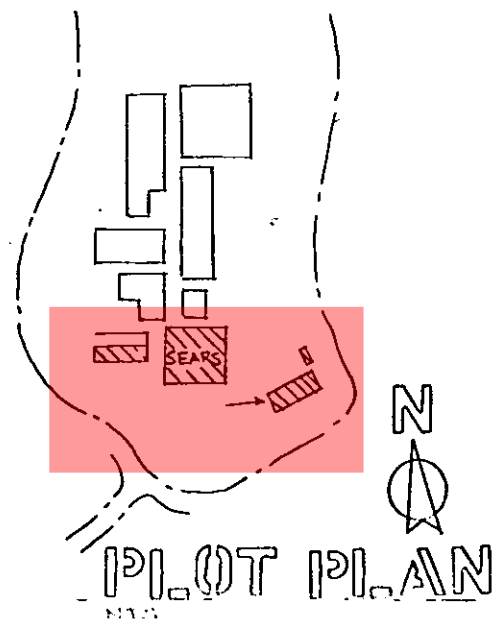
4/2/71



To contain only
Class III materials



CONTAINMENT DIKE
SCALE: 1/2" = 1'-0"



HEAVY DUTY AIR
OPERATED MOTOR OIL
TRANSFER PUMP
(See Attachment 'A')

these plans have been
REVIEWED
for and appear to be in conformance
with Local Ordinance and Nationally
Recognized Standards for Fire Protection.
Regardless of this review, conditions in
the field shall meet said ordinance and
standards prior to final occupancy.

Joseph H. Hupp 8-11-86
FIRE MARSHAL DATE

Preliminary only.
Plans to be resubmitted
for pump location.

FLOOR PLAN: WASTE OIL STORAGE
SCALE: 1/2" = 1'-0"

Appendix J

Subject Property Photographic Log



Photo 1: Northgate Mall east side entrance, San Rafael, California.



Photo 2: Shops on west side of Northgate Mall. Camera is facing east.



Photo 3: Home Goods store on east side of Northgate Mall property. Camera facing east.



Photo 4: Sears building on the south end of Northgate Mall.



Photo 5: Kohl's on the west side of Northgate Mall property. Camera facing east.



Photo 6: Vacant former Sear's appliance service center. Camera facing north.



Photo 7: Sear's Automotive Service Center southeast corner of Northgate Mall Property.

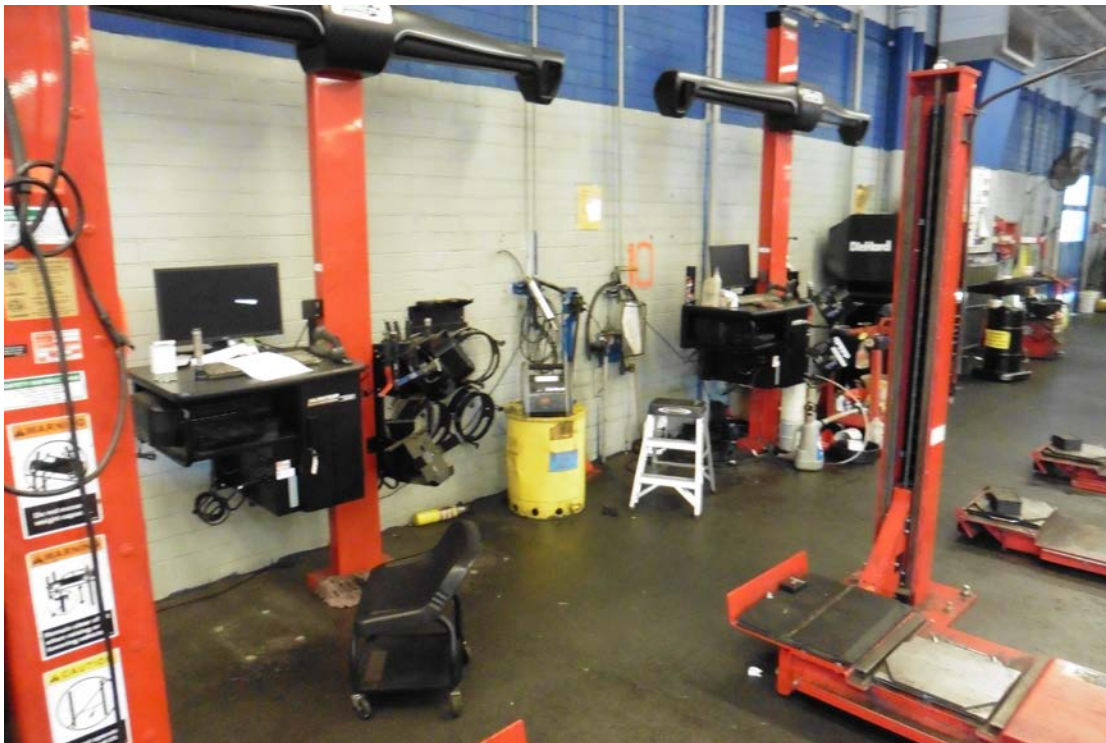


Photo 8: Work stations in auto shop wheel alignment area.



Photo 9: In-ground hydraulic lift and fresh oil AST storage at Sears Automotive Center.



Photo 10: Emergency generator housed in east parking area of Northgate Mall property.



Photo 11: Elevator motor room in Sear's department store basement. Note absorb towels for leaking hydraulic fluid.



Photo 12: Chiller room, Sear's basement.



Photo 13: Air compressor and oil drum storage on concrete floor in Sear's basement.

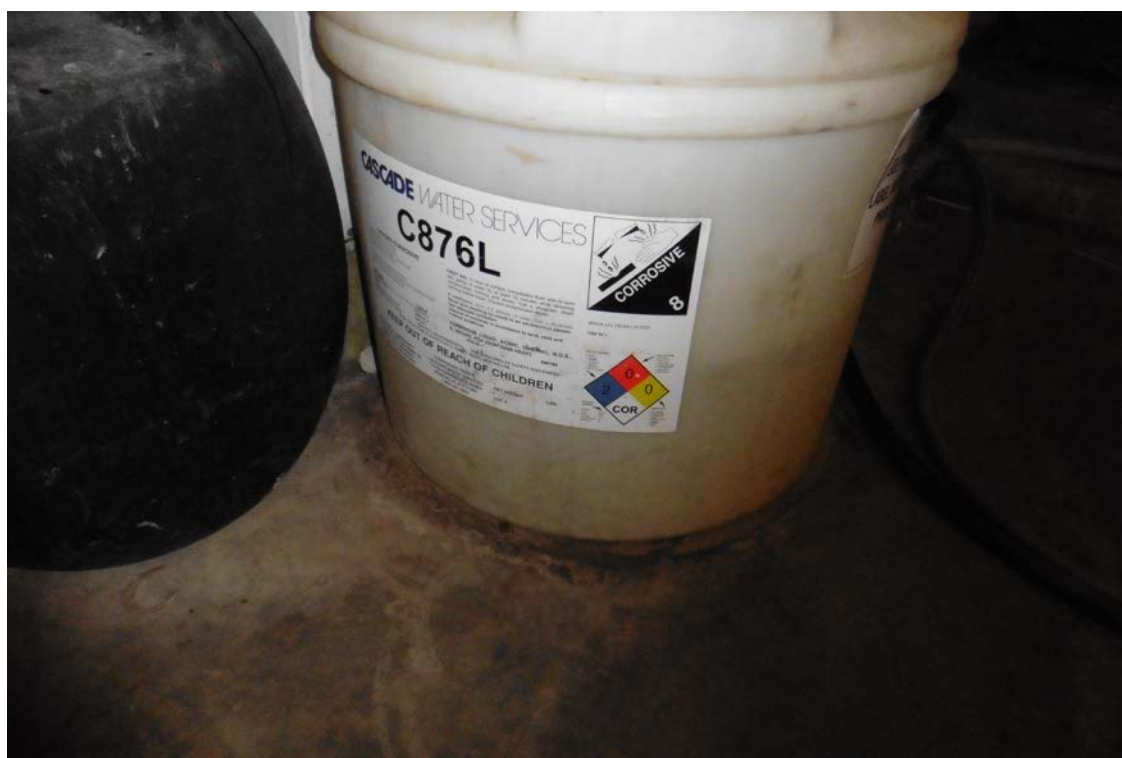


Photo 14: Corrosive liquid storage, Sear's department store basement.



Photo 15: Heavy duty evaporator coil cleaner in Sear's basement.



Photo 14: Hydraulic oil at elevator motor room Sear's department store basement.



Photo 15: Hazardous waste staging area in Sear's basement.



Photo 16: Groundwater pumping system in Sears basement.:



Photo 17: Groundwater pumping system in Sear's basement.



Photo 18: Sump in Sear's basement area.



Photo 19: elevator piston casing. Note leaking hydraulic oil.



Photo

Photo 20: Restaurant fats oils and grease storage area on west side of property.



Photo 21: Waste staging area in vacant Sear's appliance center.



Photo 22: Mall maintenance shop under west side parking garage at Northgate Mall.



Photo 23: Fats oils and grease storage area.

February 17, 2017

Ms. Patricia Feeley
Manager, Environmental Affairs/Legal Dept.
Sears Holdings Management Corporation
3333 Beverly Road
Hoffman Estates, IL 60179



**RE: Passenger Elevator Jack Removal Assessment Summary
Sears Retail Store #1528
Northgate Mall, San Rafael, California**

Dear Ms. Feeley:

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), is pleased to submit this summary letter detailing activities associated with the removal of a passenger elevator jack in the Sears Holdings Management Corporation (Sears) retail store Unit #1528 located at 9000 Northgate Mall in San Rafael, Marin County, California. The site location is depicted in **Figure 1**. The general site layout is depicted in **Figure 2**.

INTRODUCTION

Amec Foster Wheeler was retained by Sears to observe activities associated with the removal of a passenger elevator jack at the subject site. Schindler Elevator Corporation (Schindler) was contracted by Sears to remove and replace the elevator jack. Sears requested that Amec Foster Wheeler personnel be onsite to perform the following activities; (1) evaluate whether a reportable release to the environment may have occurred based on field observations, (2) conduct soil sampling, and (3) document the observations during associated field activities. A photographic log documenting the field activities is provided as **Appendix A**.

FIELD ACTIVITIES

Schindler had informed Amec Foster Wheeler that the initiation of the piston removal would commence during the week of January 2, 2017 with subsequent removal of the sediment within the casing. Amec Foster Wheeler visited the site on January 6, 2017 and met with a Schindler representative who indicated that the piston removal was taking more time than expected due to the removal of extra concrete around the top of the piston via jackhammer and/or drilling.

Amec Foster Wheeler returned to the Site on January 13, 2017, based upon updates from Schindler. Schindler stated that the piston was removed on January 12, 2017 and appeared to be in good condition with no evidence of leakage. Schindler subcontracted KM McRae, Inc. of Hayward, California to set up a drill rig mounted inside the elevator shaft and drill out the sediments. Amec Foster Wheeler observed the sediments within the casing as they were brought to the surface as drill cuttings. The sediment appeared to consist of sand with no visual indication of impact. Groundwater was encountered at approximately 15 feet below ground surface (bgs) and Amec Foster Wheeler collected a sediment sample from the drill cuttings, just

Passenger Elevator Jack Removal Assessment Summary
Sears Retail Store #1528
San Rafael, California

above the groundwater at approximately 13 to 14 feet bgs. Amec Foster Wheeler detected a slight petroleum odor emanating from the sample sediment during collection. Once groundwater was encountered, the auger being used could no longer bring the sediments to the surface and KM McRae, Inc. arranged to have a “bucket” auger delivered the following Monday to remove the remaining saturated sediments.

Amec Foster Wheeler returned to the Site on January 16, 2017 to observe the removal of the remaining sediments in the casing. Groundwater had risen to approximately 13.5 feet bgs over the weekend and a slight product sheen was noted on top of the groundwater. KM McRae, Inc. utilized a spill pad to remove the product sheen before proceeding with the sediment removal.

KM McRae, Inc. continued with the drilling and sediment removal using the “bucket” auger to a total depth of 20.2 feet bgs. Sediments consisted mostly of coarse grained sands with minor gravel and some concrete removed from the bottom of the casing. KM McRae, Inc. indicated that the bottom of the casing was capped with concrete, as they had refusal at depth and were bring up small concrete chunks along with the normal sediments removed. A total of five 55-gallon drums of sediment were removed from the casing including the sediment interval sampled by Amec Foster Wheeler. No samples were collected from the saturated sediment. The drums were staged onsite pending disposal by Schindler.

Schindler informed Amec Foster Wheeler that they would be replacing the piston. Amec Foster Wheeler did not observe the replacement.

The sediment sample collected between 13 and 14 feet bgs was delivered to Curtis & Tompkins, Ltd. Laboratory in Berkeley, California for analyses. The soil sample was analyzed for total petroleum hydrocarbons (TPH) diesel range organics (DRO) and motor oil range organics (ORO) by USEPA method 8015M, polycyclic aromatic hydrocarbons (PAHs) using USEPA Method 8270-SIM, and polychlorinated biphenyls (PCBs) by USEPA Method 8082.

ANALYTICAL RESULTS

The analytical results were compared to the current California Environmental Screening Levels (ESLs) (Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Table F-1b - Water Board February 2016).

- TPH DRO was detected at a concentration of 550 milligrams per kilogram (mg/kg), which exceeds the ESL for soil of 230 mg/kg.
- TPH ORO and PAHs were either not detected above the laboratory method detection limits (MDLs) or at concentrations below their applicable ESLs.
- PCBs were not detected above the laboratory MDLs.

The laboratory report is provided in **Appendix B**.

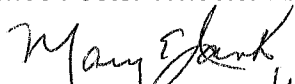
CONCLUSIONS

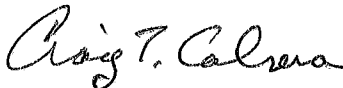
Based on the observations, information provided by Schindler, and laboratory analytical results, the following conclusions were made:

- The elevator jack was removed by Schindler on January 12, 2016.
- The contents of the casing were removed on January 13 and 16, 2016 to a total depth of 20.2 feet. Approximately five 55-gallon drums of liquid and sediment were removed from the cylinder and staged onsite pending disposal.
- Amec Foster Wheeler collected one sediment sample just above first encountered water between 13 and 14 feet bgs and submitted it for laboratory analysis of TPH-DRO, TPH-MRO, PAHs and PCBs. TPH-DRO was detected at a concentration of 550 mg/kg, which exceeded the ESL of 230 mg/kg. The TPH-ORO and PAHs were either below the laboratory MDLs or at concentrations below their applicable ESLs. PCBs were not detected above the laboratory MDLs.
- If the integrity of the casing was not compromised, it is likely that any hydraulic fluid release would be contained within the casing. The casing contents and sampled material were removed and drummed pending proper disposal off-site.
- Based on the apparent containment of the sediment and subsequent removal and disposal of the contents, It is Amec Foster Wheeler's opinion that the elevator does not appear to meet the criteria for a reportable release.

Please contact Craig Cabrera of Amec Foster Wheeler with any questions or comments.

Sincerely,
Amec Foster Wheeler Environment & Infrastructure, Inc.

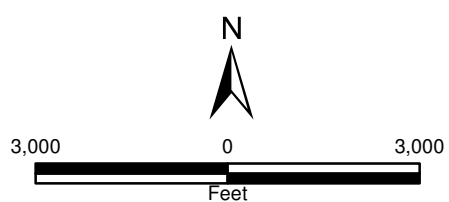
for 
Scott R. Graham *with permission*
Staff Geologist


Craig T. Cabrera
Principal Scientist

Attachments: Figures
 Appendix A – Photographic Documentation
 Appendix B – Laboratory Report

Passenger Elevator Jack Removal Assessment Summary
Sears Retail Store #1528
San Rafael, California

FIGURES



SITE LOCATION AND TOPOGRAPHIC MAP
Sears Unit #1528
San Rafael, California

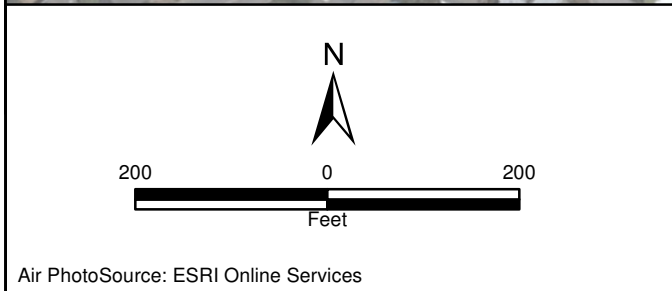


Figure 1

Source: Novato and San Rafael Quadrangles (USGS 1:24,000 Sheets)

Date: 02/01/2017

Project No. 3205171572



SITE LAYOUT
 Sears Unit #1528
 San Rafael, California

Date: 02/13/2017 Project No. 3205171572





Figure
2

Passenger Elevator Jack Removal Assessment Summary
Sears Retail Store #1528
San Rafael, California

APPENDIX A

Photographic Documentation

Photograph #1	Remarks
	Lower level elevator entrance.
Photograph #2	Remarks
	Drilling setup.

Sears Retail Store #1528
San Rafael, California
Photograph Dates: January 6, 13, and 16, 2017

Photograph #3	Remarks
	Drilling out sediments. Removed piston in upper left corner.

Passenger Elevator Jack Removal Assessment Summary
Sears Retail Store #1528
San Rafael, California

APPENDIX B

Laboratory Report



Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 285132
ANALYTICAL REPORT**

AMEC Environment & Infrastructure
180 Grand Ave
Oakland, CA 94612

Project : 3205171572
Location : Sears # 1528, Northgate
Level : II

Sample ID

CS-11

CS-14

Lab ID

285132-001

285132-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Patrick McCarthy
Project Manager
patrick.mccarthy@ctberk.com
(510) 204-2236

Date: 01/26/2017

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: 285132
Client: AMEC Environment & Infrastructure
Project: 3205171572
Location: Sears # 1528, Northgate
Request Date: 01/17/17
Samples Received: 01/17/17

This data package contains sample and QC results for one soil sample, requested for the above referenced project on 01/17/17. The sample was received intact.

TPH-Extractables by GC (EPA 8015B):

Matrix spikes QC868991, QC868992 (batch 243506) were not reported because the parent sample required a dilution that would have diluted out the spikes. CS-14 (lab # 285132-002) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

CS-14 (lab # 285132-002) was diluted due to high non-target analytes. No other analytical problems were encountered.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. High responses were observed for Aroclor-1016 and Aroclor-1260 in the CCV analyzed 01/20/17 00:16; affected data was qualified with "b". No other analytical problems were encountered.



285132

CHAIN OF CUSTODY FORM

1465 North McDowell Blvd.
Suite 200
Petaluma, CA 94954
(707) 793-3800

Seq. No. 2736
Lab: CAT
Job Number: 3205171572

Samplers: Scott Graham

Name/Location: Sears #1528, Northgate

Recorder: *Craig Cabrera*
(Signature Required)

MATRIX	# CONTAINERS			SAMPLE NUMBER	DATE			STATION DESCRIPTION	DEPTH
	Water	Soil	Slur		YR	MO	DAY			TIME
X				CS-111	17	01	18	0947	
X				CS-114	17	01	18	1029	

ANALYSIS REQUESTED										
8260	8270	TITLE 22 METALS	TPH-DRO -8015M	TPH-OAO -8015M	PAHs 8270	PCBs 8082				
			GM hold							
			X	X	X	X				

CHAIN OF CUSTODY RECORD 1/16/17 (Date/Time)

Relinquished By (Signature): *Scott Graham* (Print Name) AMEC (Company) 1300 (Date/Time)

Received By (Signature): *Debra Meadows* (Print Name) CS (Company) 1/17/17 (Date/Time)

Relinquished By (Signature): *Debra Meadows* (Print Name) CS (Company) 1/17/17 (Date/Time)

Received By (Signature): *Hunter Fox* (Print Name) CS (Company) 1/17/17 (Date/Time)

Relinquished By (Signature): _____ (Print Name) _____ (Company) _____ (Date/Time)

Received By (Signature): _____ (Print Name) _____ (Company) _____ (Date/Time)

Method of Shipment: _____

ADDITIONAL INFORMATION

REPORT TO: Craig.Cabrera@amec.com
Scott.Graham@amec.com

PO#: 3205171572-01

TAT: _____

Comments: Field Filtered Y/N

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 285132 Date Received 1/17/17 Number of coolers 1
Client AMEC Project 3205171572

Date Opened 1/17 By (print) DTN (sign) [Signature]
Date Logged in J By (print) HF (sign) [Signature]
Date Labeled J By (print) DTN (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many Name Date

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)

- Bubble Wrap, Cloth material, Foam blocks, Cardboard, Bags, Styrofoam, None, Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet, Blue/Gel, None Temp(°C)

Temperature blank(s) included? Thermometer# IR Gun#

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO

If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? (pH strip lot#) YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? By Date:

COMMENTS

Blank lines for handwritten comments.

Detections Summary for 285132

Results for any subcontracted analyses are not included in this summary.

Client : AMEC Environment & Infrastructure
 Project : 3205171572
 Location : Sears # 1528, Northgate

Client Sample ID : CS-14

Laboratory Sample ID :

285132-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	550	Y	20	mg/Kg	As Recd	20.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	640		100	mg/Kg	As Recd	20.00	EPA 8015B	EPA 3550B
Phenanthrene	51		25	ug/Kg	As Recd	5.000	EPA 8270C-SIM	EPA 3550B
Chrysene	27		25	ug/Kg	As Recd	5.000	EPA 8270C-SIM	EPA 3550B

Y = Sample exhibits chromatographic pattern which does not resemble standard

Total Extractable Hydrocarbons			
Lab #:	285132	Location:	Sears # 1528, Northgate
Client:	AMEC Environment & Infrastructure	Prep:	EPA 3550B
Project#:	3205171572	Analysis:	EPA 8015B
Field ID:	CS-14	Sampled:	01/17/17
Matrix:	Soil	Received:	01/17/17
Units:	mg/Kg	Prepared:	01/18/17
Basis:	as received	Analyzed:	01/19/17
Batch#:	243506		

Type: SAMPLE Diln Fac: 20.00
 Lab ID: 285132-002

Analyte	Result	RL
Diesel C10-C24	550 Y	20
Motor Oil C24-C36	640	100

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

Type: BLANK Diln Fac: 1.000
 Lab ID: QC868989

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	117	59-140

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

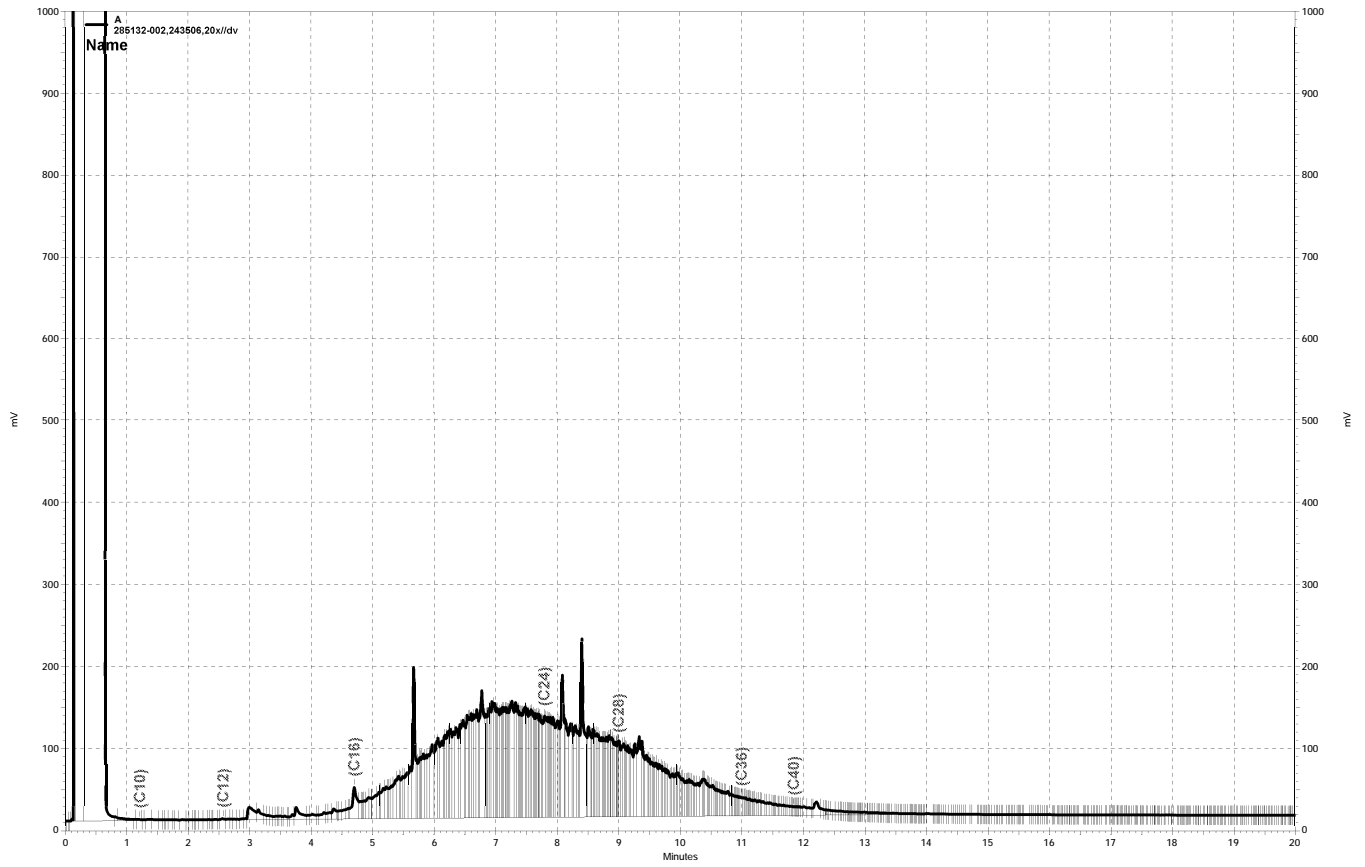
Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	285132	Location:	Sears # 1528, Northgate
Client:	AMEC Environment & Infrastructure	Prep:	EPA 3550B
Project#:	3205171572	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC868990	Batch#:	243506
Matrix:	Soil	Prepared:	01/18/17
Units:	mg/Kg	Analyzed:	01/19/17

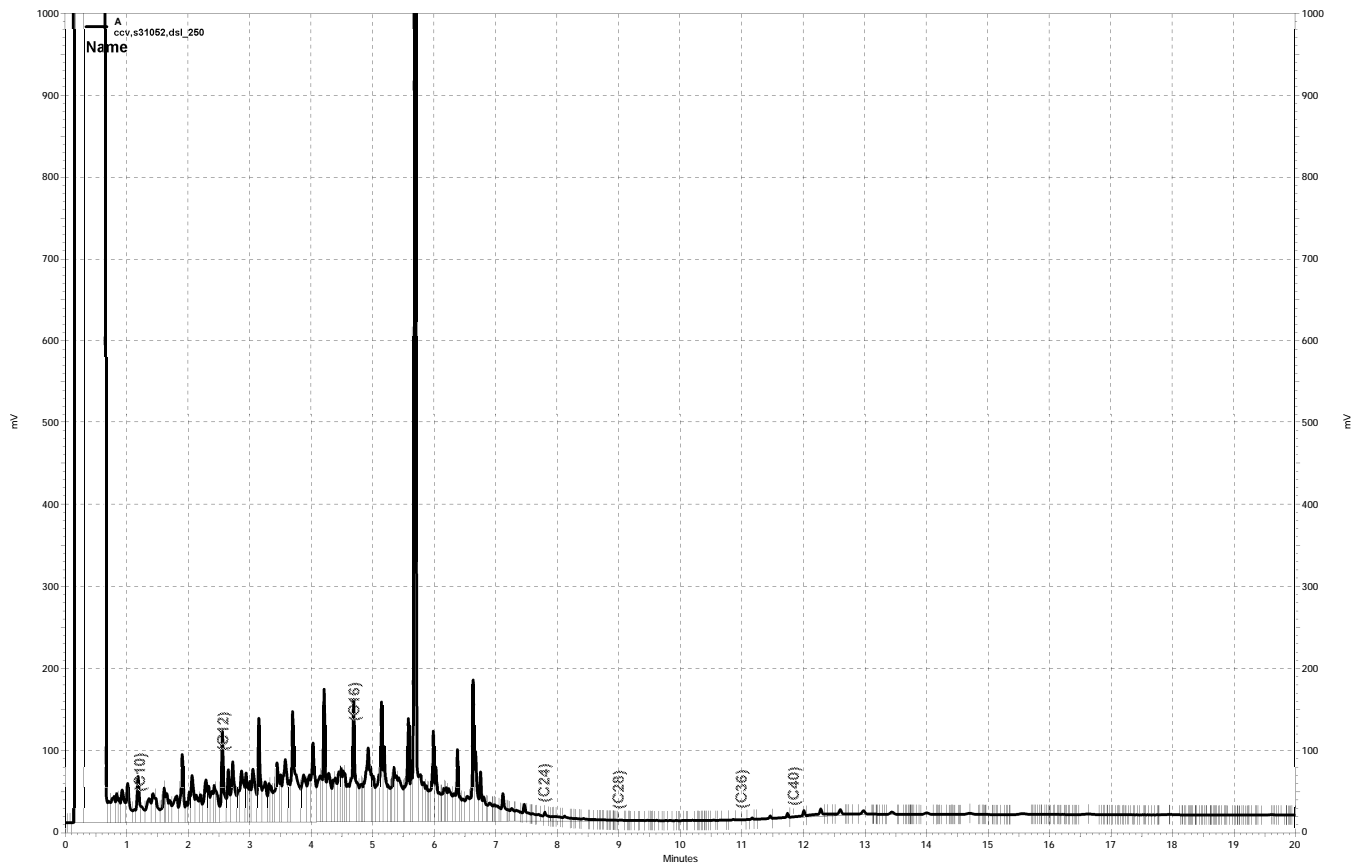
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	40.89	82	58-137

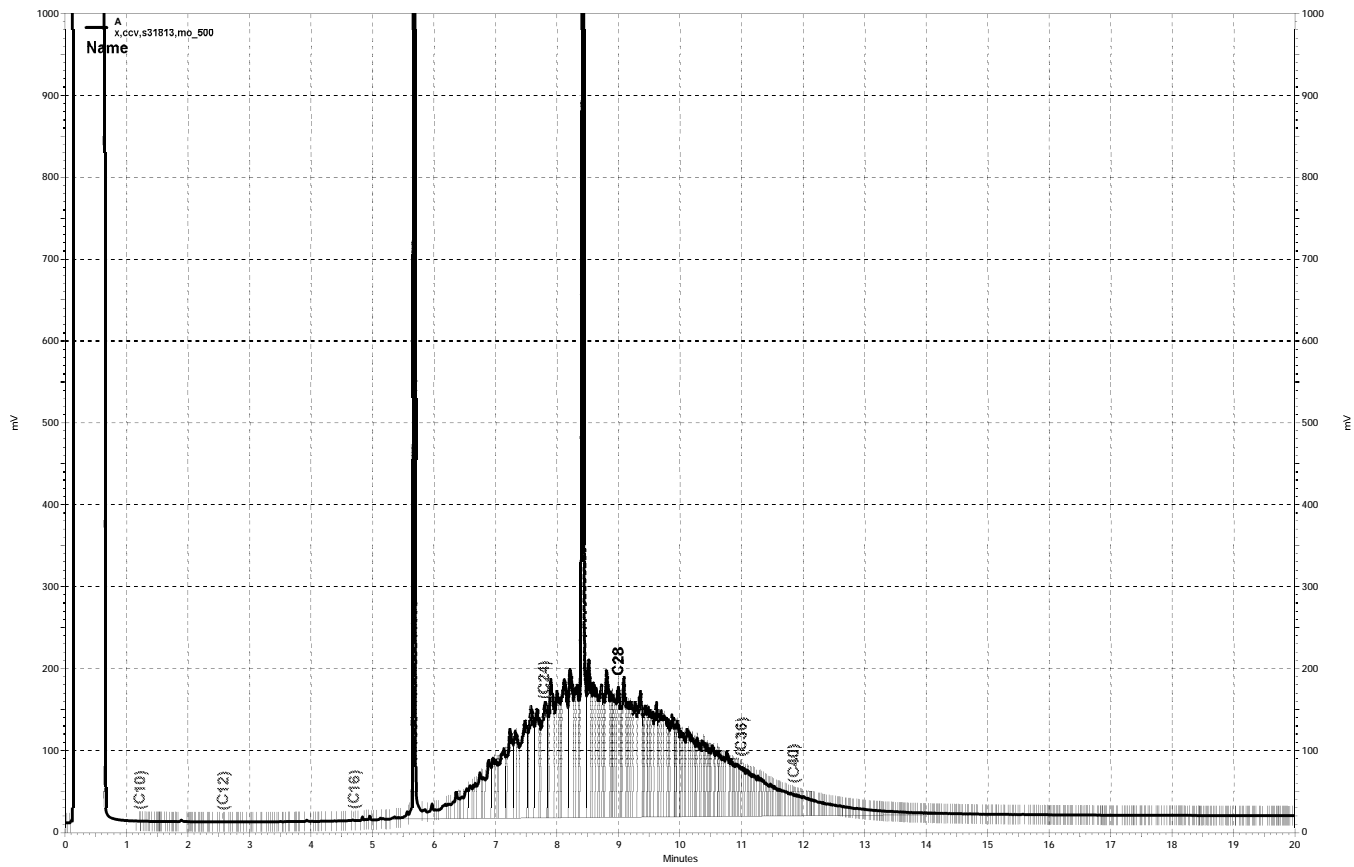
Surrogate	%REC	Limits
o-Terphenyl	86	59-140



— \\kraken\drive\ezchrom\Projects\GC17a\Data\018a061, A



— \\kraken\drive\ezchrom\Projects\GC17a\Data\018a033, A



\\kraken\drive\ezchrom\Projects\GC17a\Data\018a036, A

Semivolatile Organics by GC/MS SIM

Lab #: 285132	Location: Sears # 1528, Northgate
Client: AMEC Environment & Infrastructure	Prep: EPA 3550B
Project#: 3205171572	Analysis: EPA 8270C-SIM
Field ID: CS-14	Batch#: 243560
Lab ID: 285132-002	Sampled: 01/17/17
Matrix: Soil	Received: 01/17/17
Units: ug/Kg	Prepared: 01/19/17
Basis: as received	Analyzed: 01/19/17
Diln Fac: 5.000	

Analyte	Result	RL
Naphthalene	ND	25
Acenaphthylene	ND	25
Acenaphthene	ND	25
Fluorene	ND	25
Phenanthrene	51	25
Anthracene	ND	25
Fluoranthene	ND	25
Pyrene	ND	25
Benzo(a)anthracene	ND	25
Chrysene	27	25
Benzo(b)fluoranthene	ND	25
Benzo(k)fluoranthene	ND	25
Benzo(a)pyrene	ND	25
Indeno(1,2,3-cd)pyrene	ND	25
Dibenz(a,h)anthracene	ND	25
Benzo(g,h,i)perylene	ND	25

Surrogate	%REC	Limits
Nitrobenzene-d5	87	40-120
2-Fluorobiphenyl	83	46-120
Terphenyl-d14	93	43-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report
Semivolatile Organics by GC/MS SIM

Lab #:	285132	Location:	Sears # 1528, Northgate
Client:	AMEC Environment & Infrastructure	Prep:	EPA 3550B
Project#:	3205171572	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC869212	Batch#:	243560
Matrix:	Soil	Prepared:	01/19/17
Units:	ug/Kg	Analyzed:	01/20/17

Analyte	Result	RL
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	ND	5.0
Benzo(a)anthracene	ND	5.0
Chrysene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Benzo(a)pyrene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0

Surrogate	%REC	Limits
Nitrobenzene-d5	91	40-120
2-Fluorobiphenyl	83	46-120
Terphenyl-d14	94	43-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	285132	Location:	Sears # 1528, Northgate
Client:	AMEC Environment & Infrastructure	Prep:	EPA 3550B
Project#:	3205171572	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC869213	Batch#:	243560
Matrix:	Soil	Prepared:	01/19/17
Units:	ug/Kg	Analyzed:	01/20/17

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	33.47	33.29	99	49-120
Pyrene	33.47	38.73	116	48-120

Surrogate	%REC	Limits
Nitrobenzene-d5	97	40-120
2-Fluorobiphenyl	91	46-120
Terphenyl-d14	99	43-120

Polychlorinated Biphenyls (PCBs)			
Lab #:	285132	Location:	Sears # 1528, Northgate
Client:	AMEC Environment & Infrastructure	Prep:	EPA 3550B
Project#:	3205171572	Analysis:	EPA 8082
Field ID:	CS-14	Batch#:	243446
Matrix:	Soil	Sampled:	01/17/17
Units:	ug/Kg	Received:	01/17/17
Basis:	as received	Prepared:	01/17/17
Diln Fac:	1.000	Analyzed:	01/19/17

Type: SAMPLE Lab ID: 285132-002

Analyte	Result	RL
Aroclor-1016	ND	9.6
Aroclor-1221	ND	19
Aroclor-1232	ND	9.6
Aroclor-1242	ND	9.6
Aroclor-1248	ND	9.6
Aroclor-1254	ND	9.6
Aroclor-1260	ND	9.6

Surrogate	%REC	Limits
Decachlorobiphenyl	61	25-135

Type: BLANK Cleanup Method: EPA 3620B
 Lab ID: QC868755

Analyte	Result	RL
Aroclor-1016	ND	9.6
Aroclor-1221	ND	19
Aroclor-1232	ND	9.6
Aroclor-1242	ND	9.6
Aroclor-1248	ND	9.6
Aroclor-1254	ND	9.6
Aroclor-1260	ND	9.6

Surrogate	%REC	Limits
Decachlorobiphenyl	76	25-135

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	285132	Location:	Sears # 1528, Northgate
Client:	AMEC Environment & Infrastructure	Prep:	EPA 3550B
Project#:	3205171572	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC868756	Batch#:	243446
Matrix:	Soil	Prepared:	01/17/17
Units:	ug/Kg	Analyzed:	01/19/17

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.4	150.0	90	64-140
Aroclor-1260	166.4	131.1	79	65-146

Surrogate	%REC	Limits
Decachlorobiphenyl	56	25-135

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	285132	Location:	Sears # 1528, Northgate
Client:	AMEC Environment & Infrastructure	Prep:	EPA 3550B
Project#:	3205171572	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	243446
MSS Lab ID:	285077-001	Sampled:	01/13/17
Matrix:	Soil	Received:	01/16/17
Units:	ug/Kg	Prepared:	01/17/17
Basis:	as received	Analyzed:	01/19/17
Diln Fac:	1.000		

Type: MS Lab ID: QC868757

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<2.350	165.8	174.5 b	105	60-161
Aroclor-1260	6.671	165.8	190.2 b	111	42-166

Surrogate	%REC	Limits
Decachlorobiphenyl	66	25-135

Type: MSD Lab ID: QC868758

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	167.1	204.7 b	122	60-161	15	43
Aroclor-1260	167.1	226.0 b	131	42-166	16	51

Surrogate	%REC	Limits
Decachlorobiphenyl	71	25-135

b= See narrative

RPD= Relative Percent Difference

**Limited Phase II Soil, Soil Gas, and
Groundwater Assessment**

**Sears at Northgate Mall
9000 Northgate Drive
San Rafael, California 94903**

22 August 2017

Prepared for

**Glaser Weil Fink Howard
Avchen & Shapiro LLP**

10250 Constellation Boulevard, 19th Floor
Los Angeles, California 90067

**LIMITED PHASE II SOIL, SOIL GAS, AND
GROUNDWATER ASSESSMENT
SEARS AT NORTHGATE MALL
9000 NORTHGATE MALL ROAD
SAN RAFAEL, CALIFORNIA 94903**

REPORT CERTIFICATION

This report was prepared by the staff of TOR Environmental, Inc. (TOR) under the supervision of the Professional Geologist or Engineer whose signature and license appears hereon.

The services performed by TOR have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in California. No other warranty is expressed or implied.



**JEFFREY D. BORUM, P.G. #4149, E.G. #1330
PRINCIPAL GEOLOGIST**



Project Number: GW-246 & GW-254

Issued: 22 August 2017

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- Appendix E:** Soil Gas Laboratory Analytical Report and Chain-of-Custody Form

List of Abbreviations

Amec Foster Wheeler	..... Amec Foster Wheeler Environment & Infrastructure, Inc.
APN	..... Assessor parcel number
ASTs	..... aboveground storage tanks
bgs	..... below ground surface
BTEX	..... benzene, toluene, ethylbenzene, and xylenes
btoc	..... below top of casing
Cal EPA	..... California Environmental Protection Agency
CAM/CCR17	..... California Assessment Manual/California Code of Regulations 17 Metals
Cascade	..... Cascade Drilling, Inc.
CFR	..... Code of Federal Regulations
CHHLS-C	..... Commercial/Industrial California Human Health Screening Levels
CHHSL-R	..... Residential California Human Health Screening Levels
COC	..... chain-of-custody
DOT	..... California Department of Transportation
DTSC	..... Department of Toxic Substances Control
EDR	..... Environmental Data Resources, Inc.
EHS	..... Marin County Environmental Health Services
ESL	..... San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels
Glaser Weil	..... Glaser, Weil, Fink, Howard, Avchen, & Shapiro LLP
HASP	..... Health and Safety Plan
HCl	..... hydrochloric acid
HERO	..... DTSC Human and Ecological Risk Office
HHRA	..... Human Health Risk Assessment
IDW	..... investigation derived waste
McCampbell	..... McCampbell Analytical, Inc.
MTBE	..... methyl-tert-butyl-ether
mg/kg	..... milligrams per kilogram
MGM	..... Merlone Geier Management
msl	..... mean sea level
OEHHA	..... Office of Environmental Health Hazard Assessment
OSHA	..... Occupational Safety and Health Administration
Pace	..... Pace Analytical Services LLC
Phase I ESA	..... Phase I Environmental Site Assessment
PID	..... photoionization detector
PPE	..... personal protective equipment
PVC	..... polyvinyl chloride
RECs	..... Recognized Environmental Conditions
RSL	..... U.S. EPA Regional Screening Level
SCS	..... Soil Conservation Service
Sigma	..... Sigma Engineering, Inc.

Subject Property.....	Sears at Northgate Mall, 9000 Northgate Drive, San Rafael, CA
SWRCB.....	California State Water Resources Control Board
TEG.....	TEG Northern California, Inc.
TOR.....	TÖR Environmental, Inc.
TPH.....	total petroleum hydrocarbons
TPHg.....	total petroleum hydrocarbons as gasoline
TPHd.....	total petroleum hydrocarbons as diesel
TPHo.....	total petroleum hydrocarbons as motor oil
U.S. EPA.....	United States Environmental Protection Agency
µg/L.....	micrograms per liter
USCS.....	United Soil Classification System
USDA.....	United States Department of Agriculture
UST.....	underground storage tank
VOA.....	Volatile Organic Analyte
VOCs.....	volatile organic compounds

Section 1: Introduction

TOR Environmental, Inc. (TOR) prepared this Limited Phase II Soil, Soil Gas, and Groundwater Assessment Report of the Sears Department Store, Sears Automotive Center, and Sears Appliance Service Center located at 9000 Northgate Mall, San Rafael, California 94903 (Subject Property). This assessment included two subsurface sampling events. The first was undertaken on 16 December 2016 and the second on 27 to 30 June 2017. The work was completed on behalf of Glaser, Weil, Fink, Howard, Avchen Shapiro LLP (Glaser Weil) and Merlone Geier Management (MGM) as a part of a property transaction. This Phase II assessment was completed to evaluate potential impacts to soil, soil gas, and groundwater associated with *Recognized Environmental Conditions (RECs)* identified by the Phase I Environmental Site Assessment (Phase I ESA) of the Northgate Mall by TOR in December 2016 (TOR, 2016). The Phase II assessment was conducted in accordance with TOR's proposals dated 12 December 2016 and 20 June 2017 with minor deviations as described herein.

1.1 Background

1.1.1 Site Description

The Subject Property is located east and north of Northgate Drive and west of Las Gallinas Avenue in San Rafael, California (*Illustration 1*). The Sears Department Store is connected to the southern end of the Northgate Mall. The Sears Appliance Service Center and Sears Automotive Centers are stand-alone buildings located west and southeast of the Sears Department Store, respectively. The three Sears buildings and associated parking areas comprise approximately 10.3 acres. The Subject Property is identified by the Marin County Assessor parcel number (APN) 175-060-40.

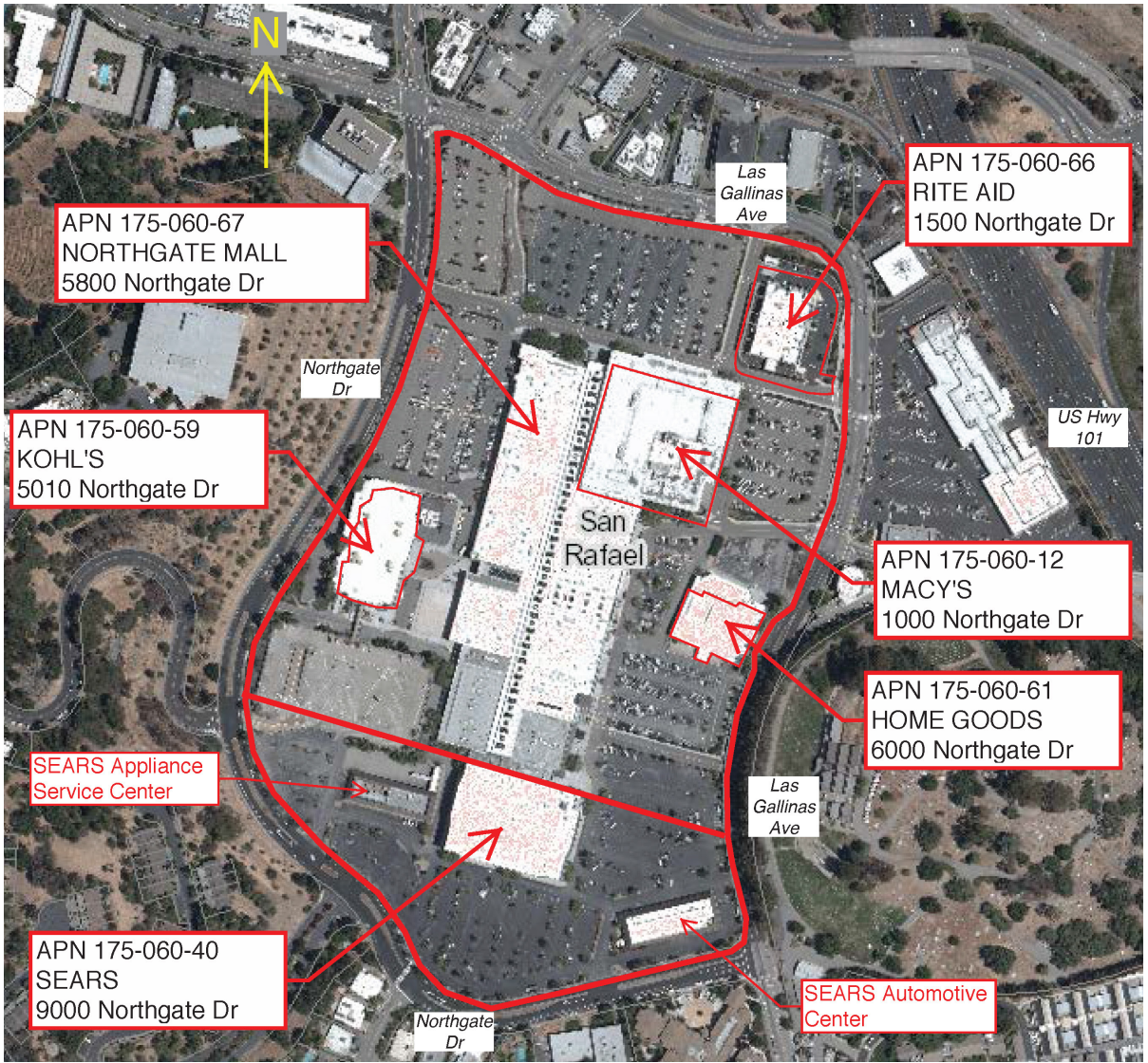


Illustration 1. Northgate Mall Building Layout with Subject Property at the South End.

1.1.2 Current Recognized Environmental Conditions (*RECs*)

Based on the findings of TOR's Phase I ESA, the following facilities were identified for further assessment of potential impacts to soil, soil gas, and groundwater:

Sears Automotive Center:

- Underground hydraulic lifts on auto maintenance shop floor
- Freight elevator to second floor tire storage room
- Battery storage area
- Suspect underground storage tank (UST) location
- Three-stage In-ground clarifier from shop floor drains
- AST and used oil storage area

Sears Appliance Service Center:

- Hazardous waste storage area

Sears Department Store:

- Two freight elevators and one passenger elevator

1.2 Regional Geology

According to EDR GeoCheck (TOR, 2016), the Subject Property is located at 38.003884 North latitude, 122.544308 West longitude and is at a topographic elevation of 42 feet above mean seal level (msl). The Subject Property and most of the surrounding area generally slopes downward to the northeast and east.

The Subject Property is located in the Coast Ranges on the west side of San Pablo Bay. The Subject Property is reported to be underlain by Tertiary-age strata (TOR, 2016). Subsurface soils within the upper approximately 23 feet beneath the Subject Property are reported to consist of alluvium that includes silt, sand, clay, with gravel (Sigma, 2009). The United States Department of Agriculture (USDA), Soil Conservation Service (SCS) describes soils in the vicinity of the Subject Property as urban land (TOR, 2016).

1.3 Hydrogeologic Information

Limited groundwater information for the Subject Property and surrounding area was provided in Environmental Data Resources (EDR) GeoCheck - Aquiflow Information System. Various directions of groundwater flow reported at select sites from ¼ to ½ mile from the Subject Property were found in reports submitted to regulatory agencies, including towards the southwest, toward the northwest, and varied, (TOR, 2016). Due to the varying

hydrogeology of the area, groundwater flow is likely varied in different areas of the Subject Property. The topographic gradient in much of the Subject Property vicinity is varied but appears generally to slope towards the north-northeast and is assumed, for the purposes of this report, to be the direction of groundwater flow.

Based on a review of the California State Water Resources Control Board (SWRCB) GeoTracker web site, the depth to ground water across Las Gallinas Boulevard to the north of the Subject Property has varied from about 0.60 feet below ground surface (bgs) to almost 28 feet bgs (data from former Exxon site at 930 Del Presidio Boulevard).

In January 2017, the piston for the passenger elevator in the Sears Department Store was removed and replaced. Groundwater was first encountered at approximately 15 feet bgs and stabilized at 13.5 feet bgs the next day as reported by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec, 2017).

1.4 Site-Specific Subsurface Conditions

The boring logs from this investigation suggest subsurface soils around the Sears Automotive Center consist primarily of layered beds of silty clay, clayey silt, and sand to depths of five to 6.5 feet bgs, underlain by weathered shale and clay to the maximum depth explored of 15 feet bgs. Native soil was not encountered during drilling under the concrete slab in the Sears Department Store basement. The slab is underlain by poorly graded very coarse to coarse rounded gravel quarry spec drainrock.

Groundwater was not encountered during drilling in borings around the Sears Automotive Center up to the maximum depth explored of 15 feet bgs. Groundwater was encountered in the basement of the Sears Department Store approximately two feet below the surface of the concrete slab. Field boring logs for the December 2016 and June 2017 samples are included in *Appendix A*.

During TOR's assessment of the Subject Property, two permanent groundwater monitoring wells (MW-3 and MW-4) were observed north of the Sears Automotive Center, associated with the former gas station at that location. Groundwater was encountered at 9.82 and 6.48 feet below top of casing (btoc), respectively.

Section 2: Scope of Assessment

2.1 Health & Safety

TOR prepared a site-specific Health & Safety Plan (HASP) for the project. The HASP identified the potential hazards that could be encountered during performance of the proposed subsurface investigation. The HASP was consistent with current Federal Occupational Safety and Health Administration (OSHA) requirements for hazardous waste operations [29 Code of Federal Regulations (CFR) 1910.120 (e)]. All activities were conducted in Level D personal protective equipment (PPE).

2.2 Permitting

A Permit for Test Holes/Soil Borings was obtained from the Marin County Environmental Health Services (EHS) for the June 2017 borings due to extending deeper than 10 feet and encountering and sampling of groundwater (*Appendix B*).

2.3 Utility Clearance for Subsurface Drilling

To initiate assessment of underground utilities that might be encountered during subsurface drilling and sampling activities, TOR contacted USA North 811, consulted with property management personnel, obtained as-built utility schematics for the Subject Property, and engaged Geophysical Survey Systems, Inc. and Encompass Inspections LLC, private utility locators. Underground improvements were marked on the parking lot pavement and boring locations were selected to avoid their encounter during drilling activities. Boring locations were screened during the geophysical survey.

Geophysical surveillance was used around the west, east, and south sides of the Sears Automotive Center to evaluate for the potential presence of unknown but reported underground storage tanks. Encompass identified the probable location of one or more USTs near the southeastern corner of the Sears Automotive Center.

2.4 Subsurface Sampling Assessment

The objective of this assessment was to collect data to evaluate potential residual impacts to soil, soil gas, or groundwater from the identified facilities in the Sears Department Store, Sears Appliance Service Center, and Sears Automotive Center in preparation for site redevelopment.

The scope of the assessment included the following:

- Advanced 13 temporary borings in the area of the Sears Automotive Center: in the auto shop floor adjacent to existing in-ground hydraulic lifts and in the sunken work

bay, in the oil storage area southwest of the building, adjacent to suspect location for existing USTs southeast of the building, adjacent to existing clarifier northwest of the building, and adjacent to the elevator.

- Advanced three temporary borings in the Sears Department Store basement adjacent to three elevators.
- Advanced one temporary boring in the former Sears Appliance Service Center in the vicinity of a waste oil and trash storage area.
- Collected groundwater samples from two existing groundwater monitoring wells northeast of the Sears Automotive Center.
- Collected a concrete sample from the floor in the battery storage area of the Sears Automotive Center.
- The concrete or asphalt was cored at each sample location.
- Chain-of-custody (COC) documentation was maintained throughout the sampling process.
- Following collection of the samples, borings were properly abandoned and the surface was patched in each location.
- Soil cuttings were generated with the drilling methods used and residuals were placed in a DOT-approved 55-gallon drum, labeled, and stored onsite pending analytical results. Disposal of IDW has been scheduled and documentation will be provided following receipt from the disposal contractor.

Soil Samples

- A truck-mounted or limited access direct push GeoProbe sampler or hand-held auger or hammer drill was utilized to drill the temporary borings up to 15 feet bgs. The direct push rigs were equipped with 2.25-inch diameter Macro Core™ drill rods and fitted with acetate liners for continuous sampling. Due to limited access, some borings were hand-drilled.
- Soil samples were collected at five-foot intervals in borings where the direct push rigs are used. Soil samples were not collected from hand-drilled borings because the hand drill was not equipped for soil sample retrieval.
- Soil samples were analyzed in a fixed-based laboratory, Pace Analytical Services LLC (Pace) or McCampbell Analytical, Inc. (McCampbell). Analytical methods included EPA Method 8260B for volatile organic compounds (VOCs), EPA Method 8015B for total petroleum hydrocarbons (TPH) in the diesel-range (TPHd) and motor oil-ranged (TPHo), and EPA Method 8021B/8015Bm for gas-range TPH (TPHg). Samples collected adjacent to the clarifier were also analyzed for CAM/CCR 17 Metals by EPA Method 6020.

Groundwater Samples

- Grab groundwater samples were collected from temporary groundwater wells installed at the three Sears Department Store locations near the elevators. The two existing groundwater monitoring wells were gauged and grab groundwater samples were collected using low-flow purging methods.
- Groundwater samples were analyzed by McCampbell's fixed-based laboratory. Analytical methods included: EPA Method 8260B for VOCs, EPA Method 8015B for TPHd and TPHo, and EPA Method 8021B/8015Bm for BTEX and MTBE.

Soil Gas Samples

- After soil samples were collected, temporary soil gas wells were set in the Sears Automotive Center. In two locations, temporary nested soil gas probes were installed with sampling depths at 5 feet and 10 feet bgs. The other four soil gas wells had their probes set at five feet bgs. The soil gas probes were set in 12 inches of sand, followed by six inches of dry bentonite, with hydrated bentonite to the soil surface, in accordance with current California Environmental Protection Agency (Cal EPA) Department of Toxic Substances (DTSC) guidelines.
- Temporary soil gas wells were allowed to set for a minimum of two hours before sampling, in accordance with DTSC guidelines.
- Soil gas samples were collected and analyzed onsite by a California state-certified mobile laboratory TEG Northern California, Inc.(TEG) and analyzed by EPA Method 8260B for VOCs.

Concrete Sample

- The concrete sample was collected by drilling the concrete slab and collecting the concrete dust and it was analyzed for Title 22 CAM 17 Trace Metals by EPA Methods 6010B and 7471A in a fixed-base laboratory (subcontracted by Pace to Eurofins Calscience laboratory).

2.5 Sample Locations

2.5.1 Soil Sample Locations

On 16 December 2016, six soil samples were collected from the Subject Property, as listed in *Table 1*. Five soil samples were collected from ten feet deep in the Sears Automotive Center adjacent to existing in-ground hydraulic lifts and labeled 1SAC10, 2SAC10, 3 SAC10, 4 SAC10, and 5SAC10 (*Illustration 2*). One soil sample was collected from one foot below the concrete slab of the former Sears Appliance Service Center in the vicinity of a waste oil and trash storage area and labeled 1Sears1 (*Illustration 3*). A soil sample was not collected from the boring in the sunken work bay of the Sears Automotive Center (6SAC1)

because it was hand drilled. Field boring logs for the December 2016 samples are provided in *Appendix A*.

Table 1. Soil Sample Boring Details, December 2016

Boring ID	Building	Date of Sample	Depth of Soil Sample ft bgs
1SAC10	Sears Automotive Ctr	12/16/16	10'
2SAC10	Sears Automotive Ctr	12/16/16	10'
3SAC10	Sears Automotive Ctr	12/16/16	10'
4SAC10	Sears Automotive Ctr	12/16/16	10'
5SAC10	Sears Automotive Ctr	12/16/16	10'
1SEARS1	Sears Appl Service Ctr	12/16/16	1'

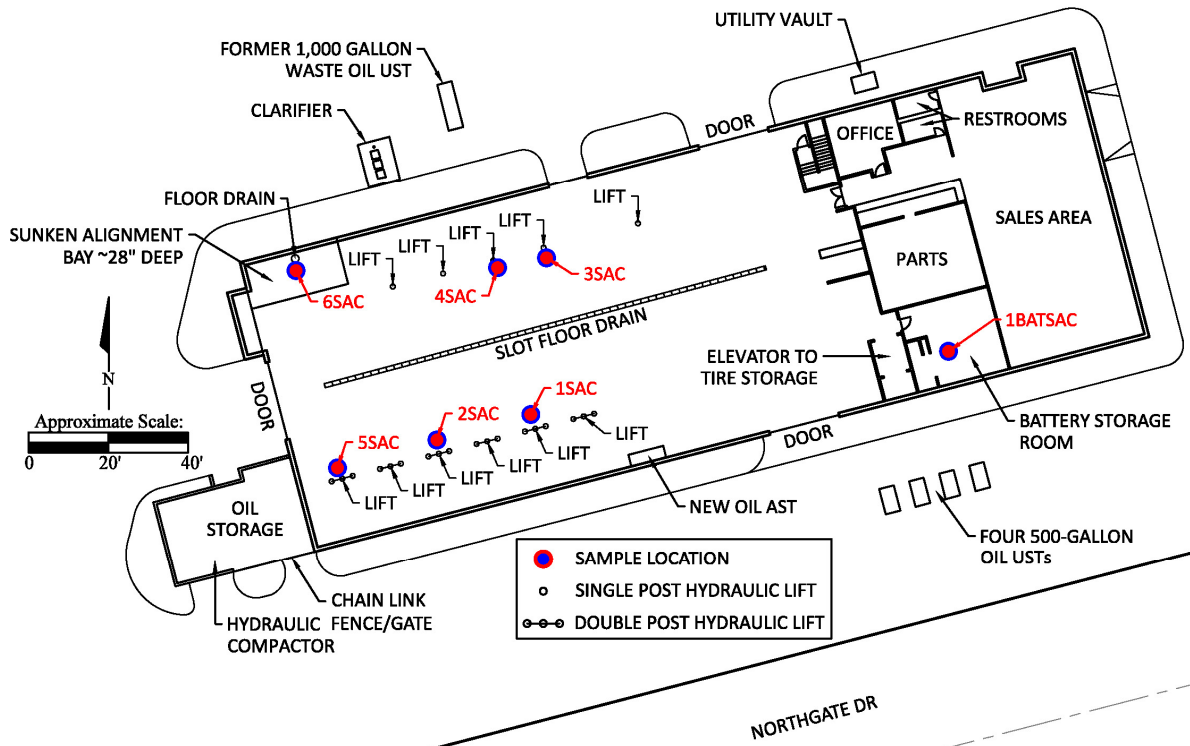


Illustration 2. Sample Locations in the Sears Automotive Center, December 2016.

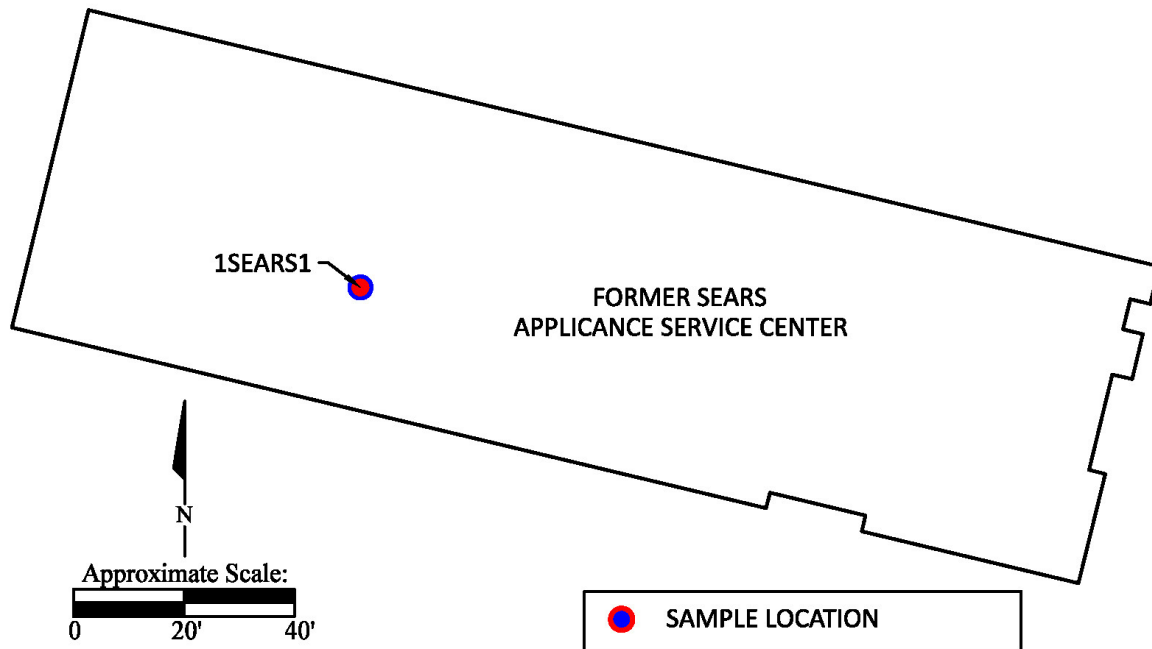


Illustration 3. Sample Location in the Sears Appliance Service Center, December 2016.

On 29 and 30 June 2017, 18 soil samples were collected from the Subject Property, as listed in *Table 2*. Two borings (SB-UST-E and SB-UST-W) were placed adjacent to the suspected four 500-gallon oil USTs located southeast of the Sears Automotive Center. Two borings (SB-CLFR-E and SB-CLFR-W) were placed adjacent to the three-stage clarifier located northwestern of the Sears Automotive Center. Two borings (SB-WasteOil-N SB-WasteOil-S) and were placed adjacent to the used oil above ground storage tanks (ASTs) on the southwest side of the Sears Automotive Center’s oil storage area.

The soil borings for sampling adjacent to the elevator in the Sears Automotive Center and the three elevators in the Sears Department Store were placed as close to the elevator shaft as possible. One boring (SB-Elev-Auto) was placed on the western side of the Sears Automotive Center freight elevator wall. One boring (SB-Elev-P1) was placed in the basement motor room below the Sears Department Store passenger elevator. A soil sample was collected at one foot below the concrete slab, immediately above encountered groundwater, at this location. One boring (SB-Elev-F2) was placed on the western side of the Sears Department Store northern freight elevator in front of the basement elevator doors. One boring (SB-Elev-F3) was placed on the western side of the Sears Department Store southern freight elevator in front of the basement elevator doors. Soil samples were not collected from borings SB-Elev-F2 and SB-Elev-F3 due to the encounter of coarse gravel under the slab. Soil sample locations for June 2017 are shown on *Illustration 4*. Field boring logs for the June 2017 samples are provided in *Appendix A*.

Table 2. Soil Sample Boring Details, June 2017

Location ID	Depth of Sample	Date of Sample	Depth of Samples
SB-UST-W	Sears Automotive Ctr	6/29/17	5', 10', 13'
SB-UST-E	Sears Automotive Ctr	6/29/17	5', 10', 15'
SB-CLFR-W	Sears Automotive Ctr	6/29/17	5', 10', 15'
SB-CLFR-E	Sears Automotive Ctr	6/29/17	5', 10', 15'
SB-Waste Oil-N	Sears Automotive Ctr	6/30/17	5', 10', 12'
SB-Waste Oil-S	Sears Automotive Ctr	6/30/17	5'
SB-Elev-Auto	Sears Automotive Ctr	6/30/17	5.5'
SB-Elev-P1	Sears Dept Store	6/30/17	1'

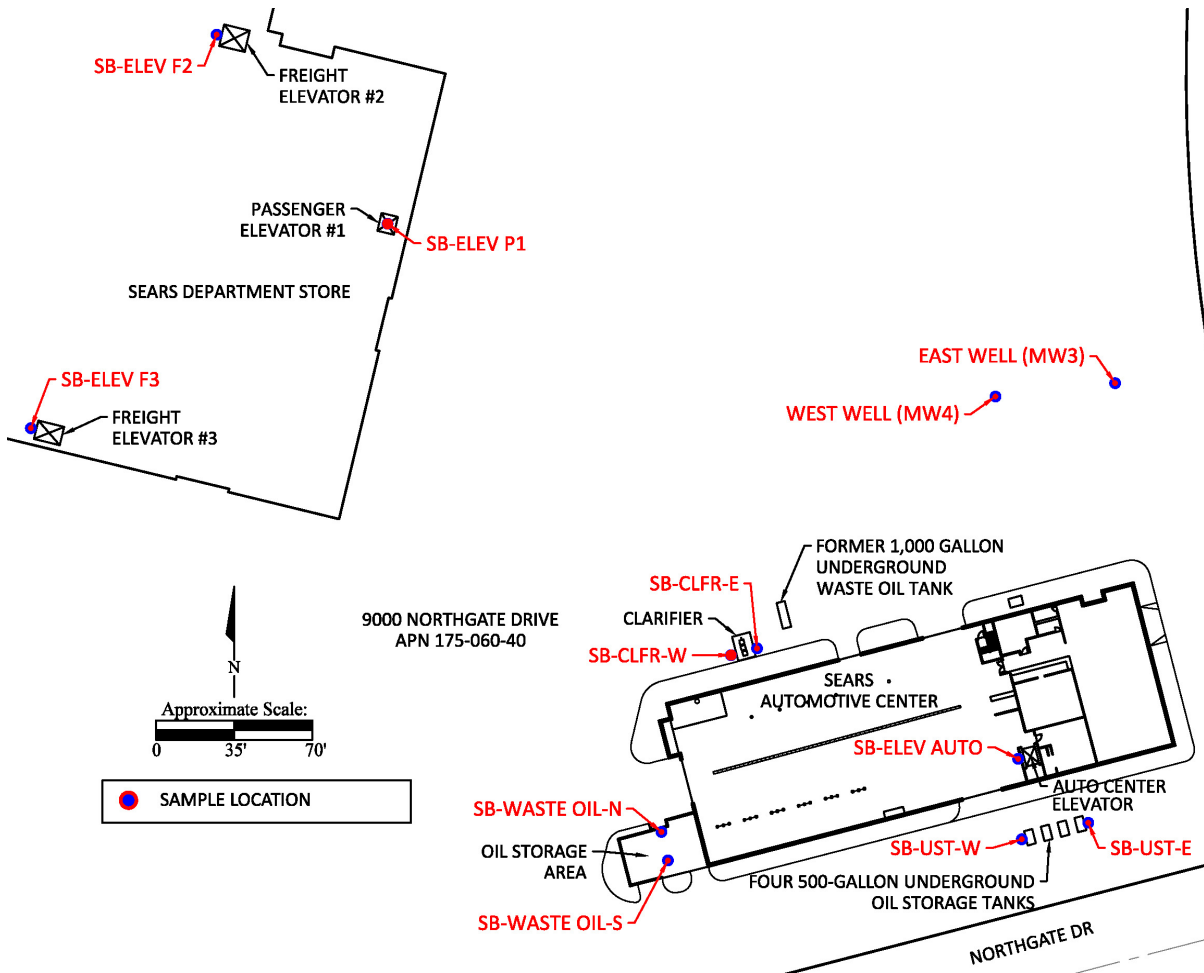


Illustration 4. Sample Locations in the Sears Department Store and Sears Automotive Center, June 2017.

2.5.2 Groundwater Sample Locations

On 30 June 2017, three temporary groundwater sampling wells were installed in borings SB-Elev-P1, SB-Elev-F2, and SB-Elev-F3, adjacent to the elevators in the Sears Department

Store basement. A full groundwater sample was collected from SB-Elev-P1 and a partial groundwater sample was collected from SB-Elev-F2. Sample SB-Elev-F2 was analyzed for TPHd and TPHo only, there was an insufficient amount of water collected to analyze for VOCs. There was insufficient water to collect a sample from SB-Elev-F3.

Two existing permanent groundwater monitoring wells were sampled, MW-3 (East Well) and MW-4 (West Well), located north of the Sears Automotive Center. The wells were gauged for depth to groundwater and well depth. Groundwater sample depths are summarized in *Table 3*. Well construction details were obtained from Sigma Engineering's Phase II Environmental Site Assessment Report (Sigma, 2009). Groundwater sample locations for June 2017 are shown on *Illustration 4*. Field boring logs for the June 2017 groundwater samples are provided in *Appendix A*.

Table 3. Groundwater Sample Construction Details, June 2017.

Sample ID ID	General Location	Date of Sample	Screen Depth ft bgs	Well Depth ft btoc/bgs	Depth to Groundwater ft btoc/bgs	Depth of Sample ft btoc/bgs
West Well (MW4)	Sears Auto Center	6/30/17	6-16	13.98	6.48	11.90
East Well (MW3)	Sears Auto Center	6/30/17	10-15	15.82	9.82	11.15
SB-Elev-P1	Sears Dept Store	6/30/17	0-2	3	1.5	2
SB-Elev-F2	Sears Dept Store	6/30/17	0-2	2	1.5	2

MW3 and MW4 are permanent groundwater monitoring wells

P1 and F2 are temporary groundwater sample wells

ft btoc = feet below top of casing

ft bgs = feet below surrounding ground surface

Measurements for well depth, depth to groundwater, and depth of sample for MW3 & MW4 are reference to below top of casing, whereas P1 and F2 reference surrounding ground surface (basement level).

2.5.3 Soil Gas Sample Locations

On 16 December 2016, eight soil gas samples were collected from the Subject Property, as listed in *Table 4*. Boring locations 1SAC and 5SAC were constructed as nested temporary soil gas wells with soil gas probes at five feet and 10 feet bgs in the same borehole (1SAC5, 1SAC10, 5SAC5, and 5SAC10). Boring locations 2SAC, 3SAC, and 4SAC were constructed as single temporary soil gas wells with a single soil gas probe at five feet bgs (2SAC5, 3SAC5, and 4SAC5). Boring location 6SAC was a soil boring in the sunken work bay (6SAC1). The 6SAC1 well was constructed as a sub-slab soil gas well approximately one foot under the concrete slab in the sunken bay. The locations of the soil gas probes are shown on *Illustration 2*. Field boring logs for the December 2016 soil gas samples are provided in *Appendix A*.

Table 4. Soil Gas Sample Construction Details, December 2016.

Boring ID	Building	Date of Sample	Depth of Soil Gas Sample ft bgs
1SAC5	Sears Automotive Ctr	12/16/16	5'
1SAC10	Sears Automotive Ctr	12/16/16	10'
2SAC5	Sears Automotive Ctr	12/16/16	5'
3SAC5	Sears Automotive Ctr	12/16/16	5'
4SAC5	Sears Automotive Ctr	12/16/16	5'
5SAC5	Sears Automotive Ctr	12/16/16	5'
5SAC10	Sears Automotive Ctr	12/16/16	10'
6SAC1	Sears Automotive Ctr	12/16/16	1'

2.5.4 Concrete Sample Location

On 16 December 2016, one concrete sample was collected from the Subject Property. The sample was collected from the concrete slab inside the battery storage room of the Sears Automotive Center (1BATSAC). The location of the concrete sample is shown on *Illustration 2*.

2.6 Sampling Methodologies

2.6.1 Soil Sampling Methodology

Drilling on 16 December 2016 was conducted by TEG of Rancho Cordova, California and on 29 to 30 June 2017 was conducted by Cascade Drilling Inc. (Cascade), of Richmond, California. A truck-mounted or limited access direct push GeoProbe sampler or hand-held auger or hammer drill was utilized to drill the temporary borings up to 15 feet bgs. The direct push rigs were equipped with 2.25-inch diameter Macro Core™ drill rods and fitted with acetate liners for continuous sampling. Acetate liners were opened using a specialized cutting tool. Soil samples were collected from the acetate liners at each sample depth and placed into one 4-ounce wide-mouth glass jar and sealed with a Teflon™ lined lid. The jars were labeled by sample location, depth, and date and time of collection. Soil samples were placed in an ice-filled cooler for transport using COC protocol to Pace or McCampbell fixed-based laboratories for analysis. COC documentation was maintained throughout the sampling process. Due to limited access, some borings were hand-augered or hand-drilled. Soil samples were not collected from hand-drilled borings because the hand drill was not equipped for soil sample retrieval.

Part of each soil sample was also placed in a zip-top plastic bag for headspace analysis using a photoionization device (PID). PID values were recorded on the boring logs. Soil cores were logged in the field for soil lithology according to the Unified Soil Classification System (USCS) and were continuously field-screened during sampling for the presence of

VOCs using a PID. Soil boring logs completed for each borehole are provided in *Appendix A*. Soil samples were collected by a California Professional Geologist. Following soil sample collection, the borehole was backfilled with bentonite grout and chips to the surface, and patched with concrete. For the three elevator borings in the Sears Department Store basement, a temporary groundwater sampling well was installed and the borehole was abandoned after groundwater sample collection was attempted.

2.6.2 Groundwater Sampling Methodology

Temporary groundwater sampling wells were installed on 30 June 2017 in three borings advanced using a hand auger operated by Cascade: SB-Elev-P1, SB-Elev-F2, and SB-Elev-F3, all in the Sears Department Store basement. Temporary groundwater sampling wells were constructed using one-inch diameter, Schedule 40 polyvinyl chloride (PVC) casing with five feet of 0.010-inch slotted screen.

Each temporary well was gauged following installation to verify sufficient groundwater volume for sampling. Wells were sampled with a peristaltic pump and tubing. A full sample was collected from SB-Elev-P1, but only a partial sample was collected from SB-Elev-F2 due to a lack of sufficient water. Groundwater never infiltrated into the temporary well casing in SB-Elev-F3 in sufficient quantities to collect a sample. Following groundwater sample collection, the PVC casings of the temporary wells were removed and the boreholes backfilled with hydrated bentonite to the surface and patched with concrete.

TOR also sampled two existing permanent groundwater monitoring wells, MW-3 (East Well) and MW-4 (West Well), located north of the Sears Automotive Center and associated with the former gas station at that location. The wells were sampled with a peristaltic pump. The screen interval depths for the wells were not known at time of sampling, so the pump tubing end was placed halfway between the water level and the bottom of the well casing. Water quality parameters were not collected and the wells were not purged prior to grab groundwater sampling.

The groundwater samples were collected into six 40-mL glass Volatile Organic Analyte (VOA) vials with laboratory prepared hydrochloric acid (HCl) preservative. The vials were labeled by sample location and date and time of collection. Groundwater samples were placed in an ice-filled cooler for transport using COC protocol to the fixed-based laboratory for analysis.

2.6.3 Soil Gas Sampling Methodology

Soil gas samples were collected from six temporary soil gas monitoring wells installed in the Sears Automotive Center by TEG on 16 December 2016. Samples were collected in accordance with guidance for active soil gas investigations by the July 2015 DTSC-RWQCB “*Advisory Active Soil Gas Investigations*” (Cal EPA DTSC, LARWQCB, SFRWQCB, 2015).

Prior to sampling, a leak detection test was conducted at each soil gas monitoring well to help ensure the integrity of the sampling system and credibility of the results. Each well was purged using a calibrated flow meter or a calibrated syringe and vacuum gauge. An open VOA container filled with a mixture of 1,1-difluoroethane was placed adjacent to the probe at the surface while purging and sampling to evaluate the probe for leaks between the ground surface and the sampling screen. No 1,1-difluoroethane was found in any of the samples reported. Also prior to sampling, a shut-in test was conducted at each soil gas monitoring well to check for leaks in the above ground fittings. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum reading on the gauge did not change. The probes were purged of three calculated well volumes prior to sampling as recommended by DTSC/RWQCB guidance documents.

Samples were collected using a laboratory-supplied glass syringe fitted with a disposable needle and valve that shuts off flow and secures the sample within the syringe. Samples were analyzed for VOCs by EPA Method 8260B using an onsite state-certified mobile laboratory from TEG. Detection limits were set at or below the California Environmental Protection Agency (Cal EPA) Office of Environmental Health Hazard Assessment (OEHHA) Residential California Human Health Screening Levels (CHHSL-R) (Cal EPA OEHHA, 2010).

The syringes used for soil gas sampling were filled with ambient air and the ambient air analyzed before beginning probe sampling for the day. The process helped to identify any contaminants associated with the syringe and to verify the effectiveness of the syringe decontamination procedures. The syringes and their appurtenant pieces were decontaminated by placing them in the gas chromatograph oven and heating it to 120 degrees centigrade for 30 minutes. The syringes were allowed to cool to the ambient temperature before using again.

One duplicate soil gas sample was collected (labeled 3SAC5 DUP). The duplicate soil gas sample was collected in the same manner as the initial sample immediately following the collection of the initial sample.

2.6.4 Concrete Sampling Methodology

A hole in the concrete slab in the Sears Automotive Center battery room was hand-drilled. A sample of the concrete spoils created by the drilling was collected in a glass jar and sealed with a Teflon™ lined lid. The jar was labeled by sample location, depth, and date and time of collection. The concrete sample was placed in an ice-filled cooler for transport using COC protocol to the Pace fixed-based laboratory for analysis. Pace subsequently subcontracted the Title 22 CAM 17 Trace Metals analysis to Eurofins Calscience laboratory. COC documentation was maintained throughout the sampling process.

2.7 Sample Laboratory Analysis

Soil samples were analyzed in the Pace or McCampbell fixed-based laboratories. Analytical methods included EPA Method 8260B for VOCs, EPA Method 8015B for TPHd and TPHo, and EPA Method 8021B/8015Bm for TPHg. Samples collected adjacent to the clarifier were also analyzed for CAM/CCR 17 Metals by EPA Method 6020. Detection limits were appropriate to evaluate residual levels of compounds.

Groundwater samples were analyzed in the McCampbell fixed-based laboratory. Analytical methods included: EPA Method 8260B for VOCs, EPA Method 8015B for TPHd and TPHo, and EPA Method 8021B/8015Bm for benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl-tert-butyl-ether (MTBE). Detection limits were appropriate to evaluate residual levels of compounds as well as compare them to regulatory screening levels.

Soil gas samples were collected and analyzed onsite by the TEG California state-certified mobile laboratory by EPA Method 8260B for VOCs. Detection limits were set at or below the CHHSL-R screening levels.

The concrete sample was analyzed for Title 22 CAM 17 Trace Metals by EPA Methods 6010B and 7471A in a fixed-base laboratory (subcontracted by Pace to Eurofins Calscience laboratory).

All laboratories are State-Certified laboratories. COC documentation was maintained throughout the sampling process for soil, soil gas, groundwater, and concrete samples. Analytical reports for soil and concrete samples are included in *Appendix C*. The analytical report for groundwater samples is included in *Appendix D*. The analytical report for soil gas samples is included in *Appendix E*.

2.8 Investigation Derived Waste (IDW)

During the process of this assessment, various IDWs were generated, including used PPE and disposable sampling equipment. Used PPE and disposable equipment was doubled bagged and placed in a municipal refuse dumpster. Soil cuttings were generated with the drilling methods used and residuals were placed in a DOT-approved 55-gallon drum, labeled, and stored onsite pending analytical results. Disposal of IDW has been scheduled and documentation will be provided following receipt from the disposal contractor.

Section 3: Assessment Findings

3.1 Analytical Results for Soil Samples

The analytical testing results for soil sampling on 12 December 2016 are summarized in *Table 5*. Soil boring sample locations with analytical results for the Sears Automotive Center are shown on *Illustration 5* and the former Sears Appliance Service Center on *Illustration 6*. The laboratory analytical reports for soil samples are provided in *Appendix C*.

VOCs were not detected in the December 2016 soil samples collected from beneath the auto shop floor at the Sears Automotive Center. One sample exceeded the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs) for soil for TPHd (2SAC10). The other detections of TPHd and TPHo were below the ESLs.

TPH detections indicate leaks/spills associated with the hydraulic lifts or the auto servicing activities. This initial assessment was planned to reveal the presence of impacts rather than definition of the lateral and vertical extent of impacts found. Lack of VOC impacts suggests limited extent of TPH impacts that may be limited around the hydraulic lifts which appear to be the primary source of the releases revealed. A soil management plan should be developed for the identification and handling of impacted soil encountered during removal of the underground lifts and an subsequent redevelopment of the property.

Table 5. Soil Sample Results, December 2016

Sample ID	Depth of Sample	Date of Sample	VOCs ug/kg	TPHd mg/kg	TPHo mg/kg
1SAC10	10	12/16/16	ND	8.1	ND
2SAC10	10	12/16/16	ND	273	476
3SAC10	10	12/16/16	ND	4.8	ND
4SAC10	10	12/16/16	ND	37.0	27.0
5SAC10	10	12/16/16	ND	3.7	ND
1SEARS1	1	12/16/16	ND	12.5	29.1
SFRWQCB ESL (mg/kg)			-	230	5,100

VOCs = Volatile organic compounds

TPHd = Diesel-range total petroleum hydrocarbons

TPHo = Motor oil-range total petroleum hydrocarbons

ug/kg = micrograms per kilogram (ppb)

mg/kg = milligrams per kilogram (ppm)

Auto Ctr = Sears Automotive Center

Appl Ctr = former Sears Appliance Service Center

ND indicates not detected at or above reporting limit.

SFRWQB ESL screening level is from the San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels (ESLs), Tier 1 ESLs Table dated February 2016 (Rev. 3).

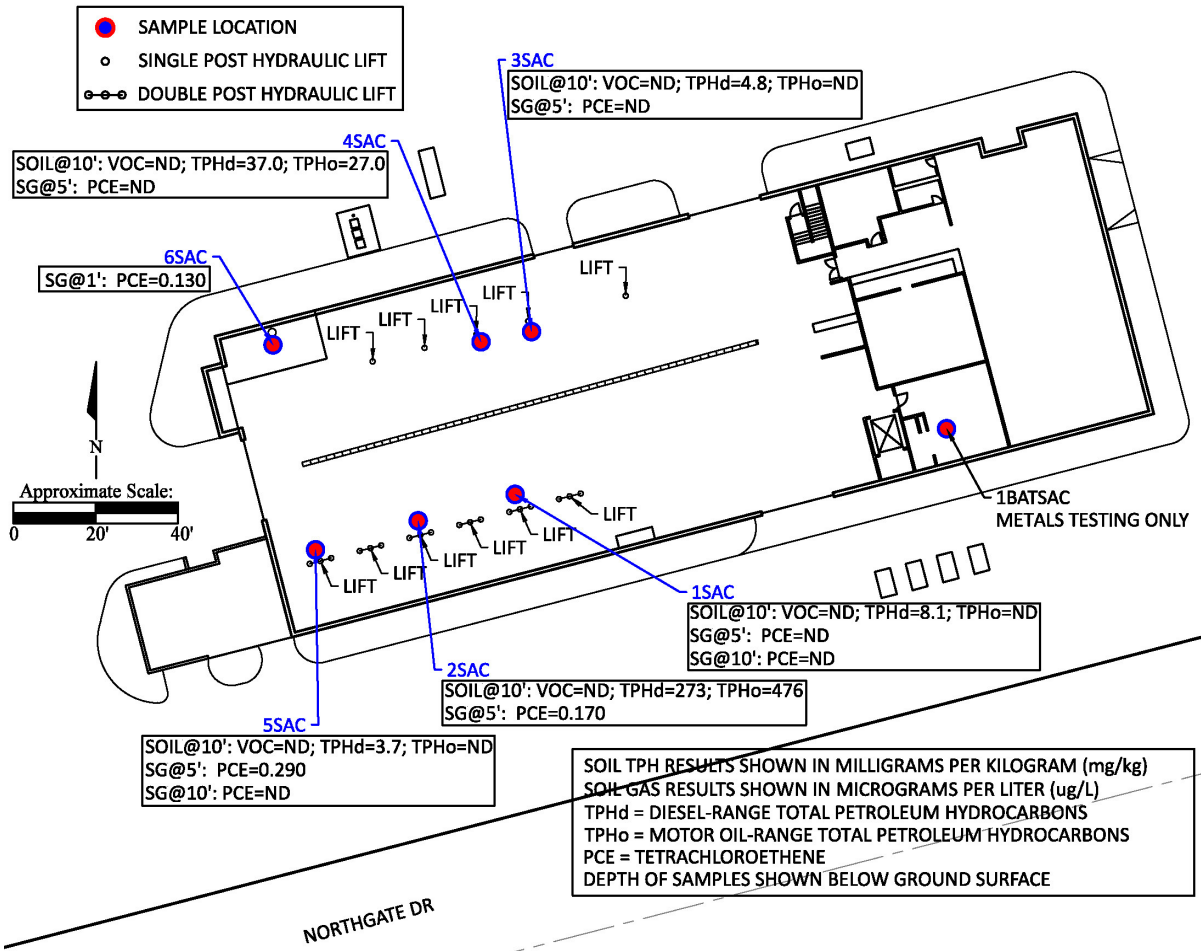


Illustration 5: Soil Boring Sample Locations with Soil and Soil Gas Analytical Results for VOCs and TPH in the Sears Automotive Center, December 2016.

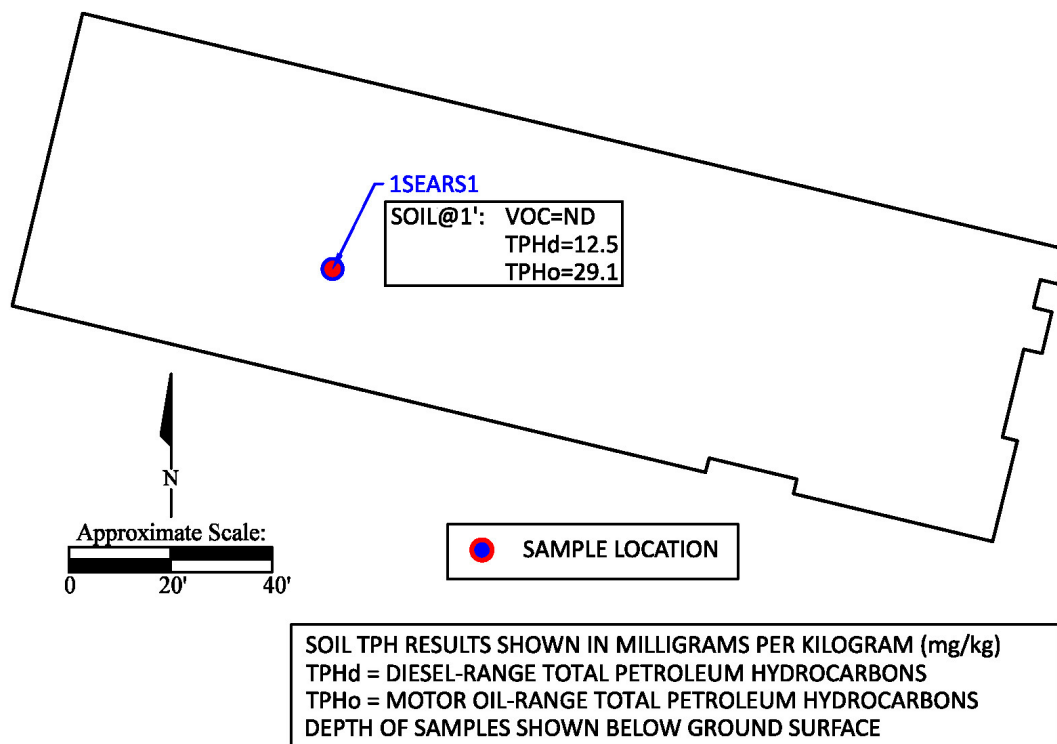


Illustration 6: Soil Boring Sample Location with Soil Analytical Results in the Sears Appliance Service Center, December 2016.

Analytical testing results for soil sampling on 30 to 31 June 2017 are summarized in *Tables 6, 7, and 8*. Soil boring sample locations with soil analytical results for VOCs and TPH are shown on *Illustration 7*. Laboratory analytical reports for soil samples are provided in *Appendix C*.

For June 2017 soil samples, VOCs were detected in sample SB-USTE-15. Naphthalene and xylenes were detected below the ESL soil screening level. Since there is no ESL to compare 1,2,4-trimethylbenzene, the detection was compared to and result was below DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 screening level for residential soil (Cal EPA DTSC HERO, 2016). There is no ESL or HERO Note 3 value for 1,3,5-trimethylbenzene, so it was compared to and result was below U.S. EPA Regional Screening Level (RSL) for residential soil and risk-based soil screening level protective of groundwater. Naphthalene (0.0057 mg/kg) slightly exceeds the risk-based soil screening level protective of groundwater (0.0054 mg/kg).

TPHg, TPHd, and TPHo were detected in four of the 18 soil samples (*Table 7*). One soil sample (SB-Elev P1-1) exceeded the ESL for TPHd. TPHd detections in soil near the passenger elevator equipment in the basement of the Sears Department Store exceeded ESLs. The detection indicates a release of oil from the hydraulic equipment that has impacted soil and groundwater. The lateral and vertical extent of the release in soil and

groundwater will be required to better evaluate the optimal remedial application for clean up the impacted media.

Table 6. Soil Sample Results for VOCs, June 2017

Sample ID	Date of Sample	Depth of Sample	Naphthalene mg/kg	1,2,4-Trimethylbenzene mg/kg	1,3,5-Trimethylbenzene mg/kg	Xylenes Total mg/kg	Other VOCs mg/kg
SB-USTE-5	6/29/17	5'	ND	ND	ND	ND	ND
SB-USTE-10	6/29/17	10'	ND	ND	ND	ND	ND
SB-USTE-15	6/29/17	15'	0.0057	0.011	0.0076	0.011	ND
SB-USTW-5	6/29/17	5'	ND	ND	ND	ND	ND
SB-USTW-10	6/29/17	10'	ND	ND	ND	ND	ND
SB-USTW-13	6/29/17	13'	ND	ND	ND	ND	ND
SB-CLFRW-5	6/29/17	5'	ND	ND	ND	ND	ND
SB-CLFRW-10	6/29/17	10'	ND	ND	ND	ND	ND
SB-CLFRW-15	6/29/17	15'	ND	ND	ND	ND	ND
SB-CLFRE-5	6/29/17	5'	ND	ND	ND	ND	ND
SB-CLFRE-10	6/29/17	10'	ND	ND	ND	ND	ND
SB-CLFRE-15	6/29/17	15'	ND	ND	ND	ND	ND
SB-Elev Auto-5.5	6/30/17	5.5'	ND	ND	ND	ND	ND
SB-Waste Oil N-5	6/30/17	5'	ND	ND	ND	ND	ND
SB-Waste Oil N-10	6/30/17	10'	ND	ND	ND	ND	ND
SB-Waste Oil N-12	6/30/17	12'	ND	ND	ND	ND	ND
SB-Waste Oil S-5	6/30/17	5'	ND	ND	ND	ND	ND
SB-Elev P1-1	6/30/17	1'	ND	ND	ND	ND	ND
SFRWQCB ESL (mg/kg)			0.033	NA	NA	2.3	
HERO Note 3 Residential Soil (mg/kg)			NA	NA	270	NA	
RSL Residential Soil (mg/kg)			3.8	300	270	580	
SSL for Protection of Groundwater (mg/kg)			0.00054	0.081	0.087	0.19	

VOC = volatile organic compound

mg/kg = milligrams per kilogram

ND = not detected at or above reporting limit

NA = not applicable

SFRWQB ESL screening level is from the San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels (ESLs), Tier 1 ESLs Table, dated February 2016 (Rev. 3).

HERO Note 3 Screening Level for Residential Soil is from the CA Department of Toxic Substances Control, Human and Ecological Risk Office, Human Health Risk Assessment Note Number 3, DTSC-modified Screening Levels, Release Date June 2017, Interim Update, Table 1 DTSC-Recommended Screening Levels for Soil.

Regional Screening Level (RSL) for Residential Soil and Risk-Based Soil Screening Level (SSL) for the Protection of Groundwater are from the U.S. Environmental Protection Agency Regional Screening Level Summary Table (TR=1E-06, HQ=1), dated June 2017.

Table 7. Soil Sample Results for TPH, June 2017

Sample ID	Date of Sample	Depth of Sample	TPHg mg/kg	TPH w/ SG (Diesel) mg/kg	TPH w/ SG (Motor Oil) mg/kg
SB-USTE-5	6/29/17	5'	ND	ND	ND
SB-USTE-10	6/29/17	10'	ND	ND	ND
SB-USTE-15	6/29/17	15'	2.3	3.0	ND
SB-USTW-5	6/29/17	5'	ND	2.6	40
SB-USTW-10	6/29/17	10'	ND	ND	ND
SB-USTW-13	6/29/17	13'	ND	ND	ND
SB-CLFRW-5	6/29/17	5'	ND	ND	ND
SB-CLFRW-10	6/29/17	10'	ND	ND	ND
SB-CLFRW-15	6/29/17	15'	ND	ND	ND
SB-CLFRE-5	6/29/17	5'	ND	ND	ND
SB-CLFRE-10	6/29/17	10'	27	14	46
SB-CLFRE-15	6/29/17	15'	ND	ND	ND
SB-Elev Auto-5.5	6/30/17	5.5'	ND	ND	ND
SB-Waste Oil N-5	6/30/17	5'	ND	ND	ND
SB-Waste Oil N-10	6/30/17	10'	ND	ND	ND
SB-Waste Oil N-12	6/30/17	12'	ND	ND	ND
SB-Waste Oil S-5	6/30/17	5'	ND	ND	ND
SB-Elev P1-1	6/30/17	1'	ND	560	1,800
SFRWQCB ESL (mg/kg)			100	230	5,100

TPHg = gasoline range volatile hydrocarbons as gasoline

TPH w/ SG = total extractable petroleum hydrocarbons with silica gel cleanup

mg/kg = milligrams per kilogram

ND = not detected at or above reporting limit

SFRWQB ESL screening level is from the San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels (ESLs), Tier 1 ESLs Table dated February 2016 (Rev. 3).

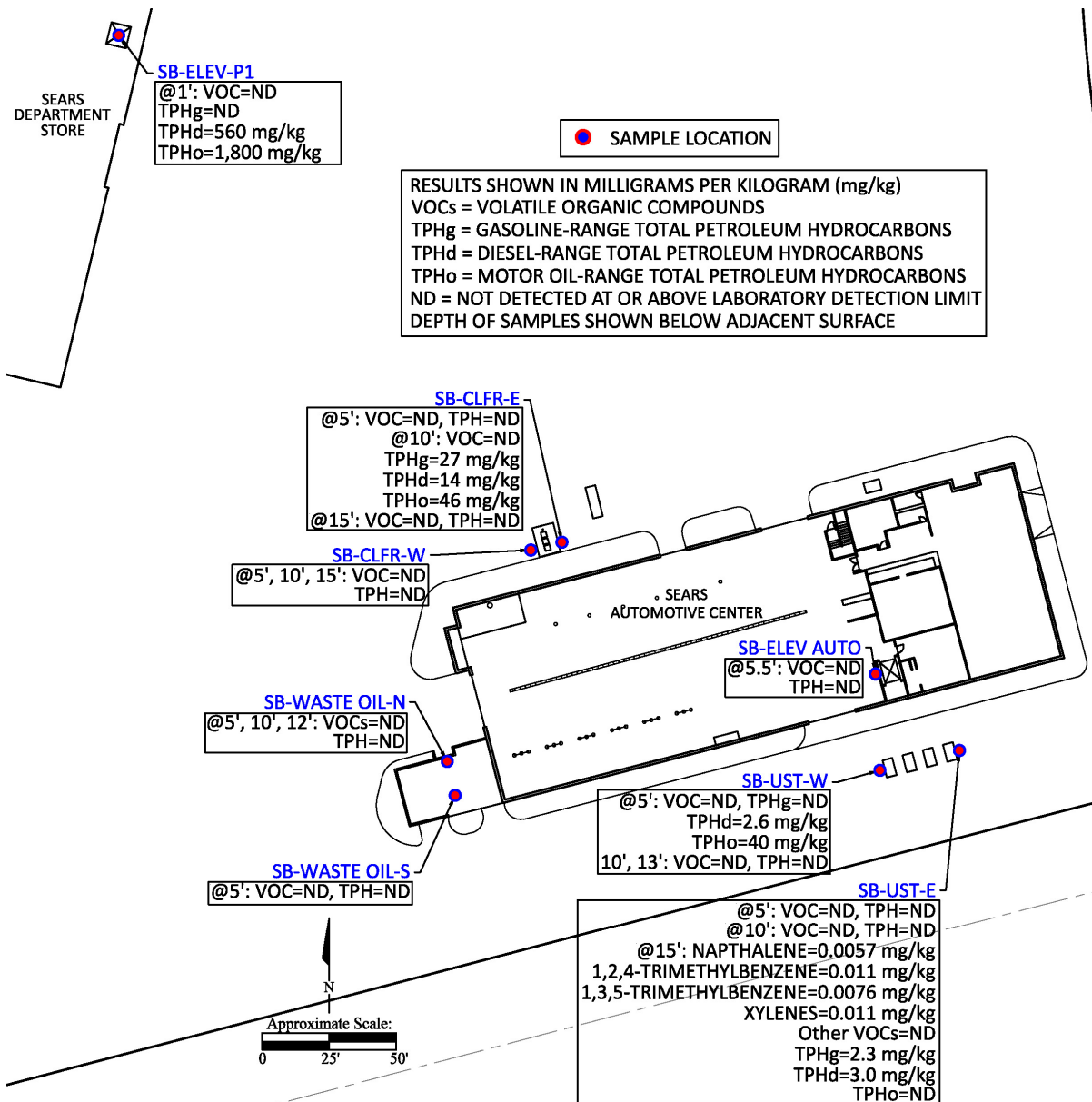


Illustration 7: Soil Boring Sample Locations with Soil Analytical Results for VOC and TPH, June 2017.

TPH and VOC detections in association with the UST locations on the southeast side of the Sears Automotive Center (*Illustration 7*) suggest a minor release of petroleum hydrocarbons to soil. TOR recommends these tanks be removed and surrounding soil tested in accordance with regulatory requirements.

Waste oil from businesses like automotive service centers can contain heavy metals. Oil-water-separators or clarifiers have potential to collect these metals and if leakage occurs, spill out elevated concentrations of metals into adjacent soils surrounding clarifiers. The four soil samples collected adjacent to the clarifier were analyzed for CAM/CCR 17 Metals and compared to ESLs as shown in *Table 8*. All samples contained concentrations of

arsenic (4.3 to 7.9 milligrams per kilogram [mg/kg]) above the ESL (0.067 mg/kg). Background levels of arsenic in California have been documented as 12.7 mg/kg in the 95th percentile, which exceeds the ESL (Hunter, et. al., 2005). The CAM/CCR 17 Metals test presented results for total chromium (42 to 64 mg/kg), however the ESL table only provides screening levels for Chromium III (120,000 mg/kg) and Chromium VI (0.30 mg/kg), but not for total chromium. Based on the history of the site, Chromium VI impacts are not expected to be present. One sample (SB-CLFRW-10) contained cobalt (25 mg/kg) above the ESL of 23 mg/kg. This concentration is in the range of the background concentrations reported for cobalt (22 mg/kg) and 2 mg/kg above the ESL.

Table 8. Soil Sample Results for Metals, June 2017

Sample ID	SB-CLFRW-5	SB-CLFRW-10	SB-CLFRE-5	SB-CLFRE-10	SFRWQCB
Depth	5'	10'	5'	10'	ESL
Analytes	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Antimony	ND	ND	0.55	ND	31
Arsenic*	4.3	7.9	7.2	5.4	0.067
Barium	110	110	160	100	3,000
Beryllium	ND	0.68	0.57	0.55	42
Cadmium	ND	ND	ND	ND	39
Chromium	54	64	42	51	*
Cobalt	16	25	21	15	23
Copper	15	19	35	15	3,100
Lead	9.1	14	13	8.8	80
Mercury	0.35	0.27	0.10	0.17	13
Molybdenum	ND	0.64	0.57	ND	390
Nickel	36	52	61	41	86
Selenium	ND	ND	ND	ND	390
Silver	ND	ND	ND	ND	390
Thallium	ND	ND	ND	ND	0.78
Vanadium	41	60	46	42	390
Zinc	22	32	58	22	23,000

mg/kg = milligrams per kilogram (ppm)

ND = not detected at or above reporting limit

* ESL for Cr III = 120,000 mg/kg; ESL for Cr VI = 0.30 mg/kg

SFRWQB ESL screening level is from the San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels (ESLs), Tier 1 ESLs Table, dated February 2016 (Rev. 3).

The detection of heavy metals in soil was an expected result of the sampling and analysis completed. Concentrations revealed do not appear to capture a release to the environment, but rather, naturally occurring background concentrations. Regulatory screening levels were not exceeded with the exception of one sample containing cobalt with a concentration minimally exceeding the ESL but still within the range of background conditions. Confirmation sampling should be conducted when the clarifier is removed to support the results presented herein and regulatory closure of the facility.

3.2 Analytical Results for Groundwater

The analytical testing results for groundwater sampling on 30 to 31 June 2017 are summarized in *Tables 9 and 10*. Groundwater sample locations with analytical results for VOCs and TPH are shown on *Illustration 8*. Laboratory analytical reports for groundwater samples are provided in *Appendix D*.

VOCs, MTBE, and BTEX were not detected in groundwater samples. No VOCs, TPHd, or TPHo were detected in groundwater monitoring well MW3. In groundwater monitoring well MW4, TPHd was detected at the ESL of 100 micrograms per Liter ($\mu\text{g/L}$).

Both groundwater samples in the Sears Department Store in the vicinity of the passenger elevator (SB-Elev P1) and the northern freight elevator (SB-Elev F2) contained TPHd and TPHo above ESLs. A groundwater sample could not be collected from the southern freight elevator #3 in the Sears Department Store because the drilled hole repeatedly collapsed due to cohesionless gravels encountered. Detections of TPH impacts in groundwater samples suggests leakage from the elevator's hydraulic mechanisms. Characterization of the extent of TPH impacts and remediation may be required. Elevator #3 is assumed to be of the same vintage as the other two elevators and may require characterization/remediation consistent with the other elevators.

Table 9. Groundwater Sample Results for VOCs, MTBE, and BTEX, June 2017.

Sample ID	Sample Date	Total VOCs $\mu\text{g/L}$	MTBE $\mu\text{g/L}$	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethyl-benzene $\mu\text{g/L}$	Xylenes $\mu\text{g/L}$
West Well	6/30/17	ND	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<1.5
East Well	6/30/17	ND	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<1.5
SB-Elev P1	6/30/17	ND	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<1.5

VOCs = volatile organic compounds

MTBE = methyl-tert-butyl-ether

ND = analyte was not detected at or above the laboratory method reporting limit

$\mu\text{g/L}$ = micrograms per Liter

Table 10. Groundwater Sample Results for TPH, June 2017.

Sample ID	Sample Date	TPH w/o SG Diesel $\mu\text{g/L}$	TPH w/o SG Motor Oil $\mu\text{g/L}$
West Well	6/30/17	100	ND<250
East Well	6/30/17	ND<50	ND<250
SB-Elev P1	6/30/17	38,000	120,000
SB-Elev F2	6/30/17	140	590
SFRWQCB ESL ($\mu\text{g/L}$)		100	See below

TPH w/o SG = total extractable petroleum hydrocarbons without silica gel cleanup
 ND = analyte was not detected at or above the laboratory method reporting limit
 mg/L = milligrams per Liter

SFRWQB ESL screening level is from the San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels (ESLs), Tier 1 ESLs Table dated February 2016 (Rev. 3).

From ESL Table: "TPH motor oil is not soluble. TPH motor oil detections in water most likely are petroleum degradates or less likely NAPL. If the detections are degradates add TPH motor oil and TPH diesel results and compare to TPH diesel criterion."

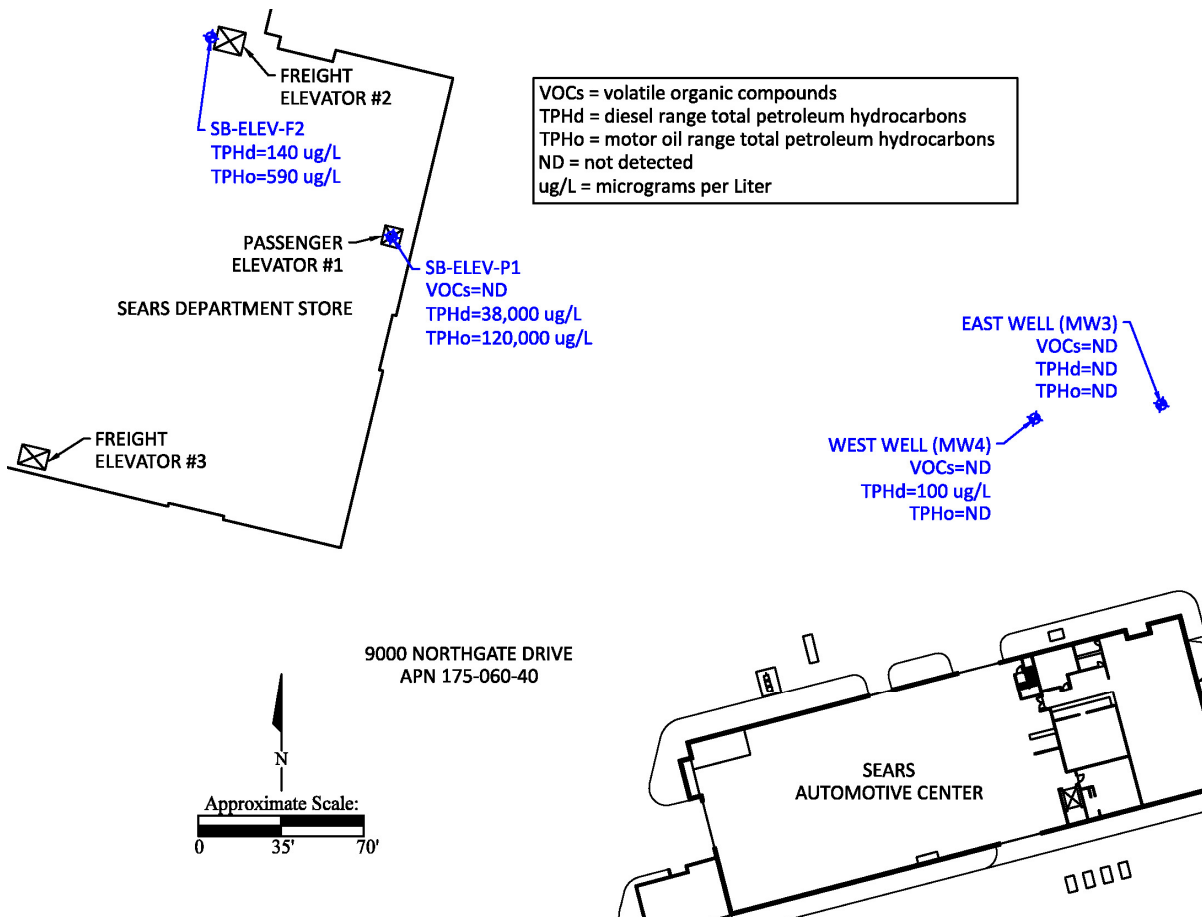


Illustration 8: Groundwater Sample Locations with Analytical Results June 2017.

3.3 Analytical Results for Soil Gas Samples

The analytical testing results for soil gas sampling on 16 December 2016 are summarized in *Table 11*. Soil gas sample locations with analytical results for VOCs and TPH are shown on *Illustration 5*. The laboratory analytical report for soil gas samples are provided in *Appendix E*.

PCE was detected in three of the eight soil gas samples analyzed. Two of the detections were from samples collected at five feet bgs and the third was from the sunken bay one foot below grade of the floor. Detections were found at concentrations below CHHSL-R and commercial/industrial CHHSL (CHHSL-C) screening levels. VOCs were not detected in soil gas at a depth of 10 feet bgs suggesting these impacts were at low levels and were limited to shallow soil.

Chlorinated solvents and even gasoline were often used for parts cleaning and they can impact soil and groundwater as well as the indoor air quality the building. The testing of soil gas beneath the Sears Automotive Center shop floor was limited in extent and analytical results of soil gas samples indicates the presence of PCE, a degreasing solvent. A soil management plan should be developed and used as a part of redevelopment of this area.

Table 11. Soil Gas Sample Results, December 2016.

Sample ID	Date of Sample	Sample Depth ft bgs	PCE µg/L	Other VOCs Analyzed µg/L
1SAC5	12/16/16	5	ND<0.100	ND
1SAC10	12/16/16	10	ND<0.100	ND
2SAC5	12/16/16	5	0.170	ND
3SAC5*	12/16/16	5	ND<0.100	ND
4SAC5	12/16/16	5	ND<0.100	ND
5SAC5	12/16/16	5	0.290	ND
5SAC10	12/16/16	10	ND<0.100	ND
6SAC1	12/16/16	1	0.130	ND
CHHSL-R (µg/L)			0.470	
CHHSL-C (µg/L)			1.60	

Other VOCs analyzed for these samples were not detected above laboratory reporting limits.

VOCs = volatile organic compounds

PCE = tetrachloroethene

µg/L = micrograms per Liter

ft bgs = feet below ground surface

* A duplicate sample was collected at 3SAC5, the results were also ND for compounds analyzed.

Detected concentration is above CHHSL-R, but below CHHSL-C levels.

CHHSL-R = CA Human Health Screening Level for Residential Scenarios

CHHSL-C = CA Human Health Screening Level for Commercial/Industrial Scenarios

CHHSL values are based on the CAL EPA, Office of Environmental Health Hazard Assessment (OEHHA), Soil Screening Levels, Updated Table dated 9/23/10, Table 2 - Soil-Gas-Screening Numbers for Volatile Chemicals Below Buildings Constructed with Engineered Fill Below Sub-Slab Gravel

3.4 Analytical Results for Concrete Sample

Concrete in the spent battery storage area of the Sears Automotive Center was drilled and sampled for analysis of residual heavy metal impact. The results reveal CAM 17 metals in accordance with background concentrations found in the area. Lead is often found in conjunction with battery storage; however it is not elevated in this case. Further characterization of residual metals at this location is not recommended based on these test results. The laboratory analytical report for the concrete sample is provided together with the soil laboratory analytical report for December 2016 in *Appendix C*.

Table 12. Concrete Sample Results, December 2016.

California Title 22 Metals	Units	Sample ID 1BATSAC
Antimony (Sb)	mg/kg	ND
Arsenic (As)	mg/kg	3.68
Barium (Ba)	mg/kg	1,290
Beryllium (Be)	mg/kg	0.288
Cadmium (Cd)	mg/kg	0.529
Chromium Total (Cr)	mg/kg	40.7
Cobalt (Co)	mg/kg	9.28
Copper (Cu)	mg/kg	23.6
Lead (Pb)	mg/kg	23.2
Mercury (Hg)	mg/kg	ND
Molybdenum (Mo)	mg/kg	0.533
Nickel (Ni)	mg/kg	65.4
Selenium (Se)	mg/kg	ND
Silver (Ag)	mg/kg	ND
Thallium (Tl)	mg/kg	ND
Vanadium (V)	mg/kg	34.1
Zinc (Zn)	mg/kg	38.1

mg/kg = milligrams per kilogram (ppm)

ND indicates not detected at or above reporting limit.

Section 4: Conclusions and Recommendations

TOR conducted a Limited Phase II Soil, Soil Gas, and Groundwater Assessment of the Sears Department Store, Sears Automotive Center, and Sears Appliance Service Center at the Northgate Mall in San Rafael, California. Aboveground and subsurface improvements identified during a Phase I Environmental Site Assessment of Northgate Mall were evaluated including two used oil above ground storage tanks (ASTs), one clarifier, a suspected underground storage tank (UST) area, four elevators, 14 underground hydraulic lifts, a battery storage area, and a waste storage area. TOR developed and completed the subsurface evaluation of potential impacts from hazardous substances to soil, soil gas, and groundwater.

The scope of work involved installation of 17 soil borings, six soil gas sampling wells, and three temporary groundwater wells. Two existing permanent groundwater monitoring wells were also sampled. A total of 24 soil samples, eight soil gas samples, and four groundwater samples were collected and analyzed by state certified mobile and fixed-based laboratories to complete the assessment.

Concentrations of volatile organic compounds (VOCs) were detected in one soil sample, SB-USTE-15': 0.0057 mg/kg naphthalene, 0.011 mg/kg 1,2,4-trimethylbenzene, 0.0076 mg/kg 1,3,5-trimethylbenzene, and 0.011 mg/kg total xylenes. The detections were associated with the location of a bank of suspected underground storage tanks located on the southeast side of the Sears Automotive Center. Naphthalene and xylenes were detected below the San Francisco Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESL). Since there is no ESL to compare 1,2,4-trimethylbenzene, its detection was compared to and result was below DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 screening level for residential soil. There is no ESL or HERO Note 3 value for 1,3,5-trimethylbenzene, its detection was compared to and result was below U.S. EPA Regional Screening Level (RSL) for residential soil and risk-based soil screening level protective of groundwater. Other volatile organic compounds were not detected above laboratory reporting limits. Naphthalene (0.0057 mg/kg) minimally exceeds the risk-based soil screening level protective of groundwater (0.0054 mg/kg). These detections signal residual impacts caused by leaks and or spills and require further assessment/remediation to characterized their maximum concentration and lateral and vertical extent in soil.

Total petroleum hydrocarbon concentrations including TPHg, TPHd, and TPHo were detected in four soil samples: SB-USTE-15, SB-USTW-5, SB-CLFRE-10, and SB-Elev-P1. The highest concentration of TPHg in soil was detected in SB-CLFRE-10 at 27 mg/kg at the location of the in-ground clarifier servicing the Sears Automotive Center. The detection of TPHg adjacent to the clarifier indicates a release from the facility and further assessment/remediation of the condition is recommended.

The highest concentrations of TPHd and TPHo in soil were detected next to the passenger elevator in the Sears Department Store at 560 and 1,800 mg/kg, respectively. The concentration of TPHd was above the ESL for soil. The detections indicate a release of oil from the hydraulic equipment. The lateral and vertical extent of the release in soil and groundwater will be required to fully evaluate the optimal remedial measures to be implemented for clean up the impacted media.

Three temporary groundwater sampling wells were installed adjacent to the elevators inside the basement of the Sears Department Store. One of the three temporary wells collapsed following drilling (SB-Elev F1); another produced only a partial sample (SB-Elev F2); the third produced a full sample (SB-Elev P1). VOCs were not detected in SB-Elev P1 water samples, but TPHg, TPHd, and TPHo were detected in both SB-Elev P1 and SB-Elev F2, with the highest concentrations found under the Sears Department Store passenger elevator. Concentrations of TPHd and TPHo detected near the passenger elevator were 38,000 µg/L and 120,000 µg/L, respectively, and exceeding the ESL for groundwater of 100 µg/L for TPHd and TPHo established by the SFRWQCB.

Detections of TPH impacts in groundwater samples suggests leakage from the elevators' hydraulic mechanisms. Characterization of the extent of TPH impacts and remediation is recommended. Although Elevator F3 was not sampled and detections were not revealed as a result of testing soil next to the elevator in the automotive center, it is assumed these facilities are of the same vintage as the other elevators where releases have been documented and may require further assessment/remediation in kind.

Two existing permanent groundwater monitoring wells, associated with a former fueling facility on the northeast side of the Sears Automotive Center, were sampled. VOCs were not detected in the grab well water samples, but one detection of TPHg was found in the west well that matched the ESL in groundwater of 100 µg/L for TPHg. TOR understands the former fueling facility has site closure status with regulatory agencies and further investigations are not recommended.

Soil gas samples were collected from within the Sears Automotive Center in the vicinity of five of the 14 existing hydraulic lifts and one within a sunken work bay. Although PCE, a chlorinated solvent found in association with parts cleaning activities, was detected in three shallow soil gas samples (up to 0.290 µg/L), the concentrations were below California Human Health Screening Levels. Nevertheless, these detections signal residual impacts that require further assessment/remediation to characterized their lateral and vertical extent and concentration beneath the floor of the auto maintenance shop floor.

Evaluation of residual metal impacts associated with the in-ground clarifier and battery storage area did not indicate a release to the environment. Further characterization of metals impacts to soil or groundwater is not recommended as a result of this assessment.

Section 5: Limitations

The results contained in this report are based upon the information acquired during the investigation. It is possible that variations at the property could exist beyond or between points explored during the course of the investigation. Also, changes in conditions found could occur at some time in the future due to possible contaminant migration, variations in rainfall, temperature, and/or other factors not apparent at the time of field activities. Undocumented, unauthorized releases of hazardous materials, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation. TOR does not assume responsibility for the discovery and elimination of hazards that could possibly cause accidents, injuries, or damage unless those hazards were apparent, and should have been discovered, as a result of the services TOR performed for the Client. This document is based in part on information collected, compiled, or otherwise provided by entities other than TOR. TOR therefore makes no representation as to the adequacy or professionalism of those analysts, or to the thoroughness or validity of agency-generated information. Changes in regulatory policy and/or requirements and technological advances that post-date this report obviously are beyond the scope of this investigation and report.

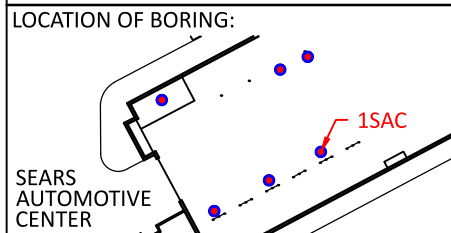
Work for this project was performed and this report prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. It is intended for the exclusive use of the Client and/or regulatory agencies for specific application to the reference property. This report does not represent a legal opinion. No other warranty is made, expressed or implied.

Section 6: References

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- TOR Environmental, Inc. (TOR), 2016.** *Phase I Environmental Site Assessment, Northgate Mall, 1000, 1500, 5010, 5800, 6000, and 9000 Northgate Drive, San Rafael, California 94903.* 15 December 2016. 1,909p.
- United States Environmental Protection Agency (US EPA), June 2017.** *Regional Screening Levels (RSLs) Summary Table (T=1E-06, HQ=1) June 2017.*

Appendix A

Field Boring Logs



JOB NO.: 246 - NORTHGATE MALL PHASE II
9500 NORTHGATE RIVE, SAN RAFAEL, CA

DRILLING METHOD:
DIRECT PUSH - 2.25" DIAMETER

SAMPLING METHOD:
SOIL: GRAB SAMPLE, FIXED-BASE LAB
SOIL GAS: SYRINGE, MOBILE LAB

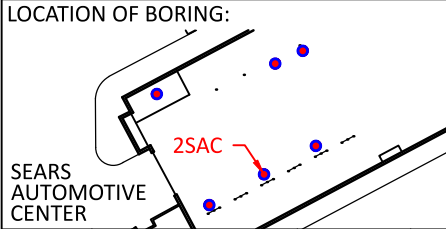
LOCATION:
SEARS AUTOMOTIVE CENTER, EAST
BORING ALONG SOUTHERN DOUBLE LIFTS

BORING NO.:
1SAC

SHEET:
1 OF 1

DATE:
12/16/16

SAMPLE DEPTH	SAMPLE NAME	WELL CONSTR	RECOVERY	DEPTH	DESCRIPTION
					CONCRETE
	1/4" TUBING			1'	
	HYDRATED BENTONITE			2'	DRY TO SLIGHTLY MOIST, MOTTLED BROWN & LIGHT BROWN (YELLOW), POSSIBLE FILL MATERIAL
	6" DRY BENTONITE			3'	
				4'	
	SOIL GAS: 1SAC5			5'	SLIGHTLY MOIST, BROWN, SILTY CLAY W/ GRAVEL (POSSIBLE FILL)
	PLASTIC AIR DIFFUSER			5'	
	12" SAND			6'	
				7'	
	HYDRATED BENTONITE			7'	
	6" DRY BENTONITE			8'	MOIST, DRAK BROWN/BLACK W/ RED-BROWN MOTTLING, SILTY CLAY W/ GRAVEL
	PLASTIC AIR DIFFUSER			9'	
	SOIL GAS: 1SAC10			9'	
	SOIL: 1SAC10			10'	
	12" SAND			10'	BOTTOM OF BOREHOLE @ 10 FT BGS
	2.25" BOREHOLE			11'	NO FREE WATER ENCOUNTERED
				12'	NESTED SOIL GAS WELL, PROBES @ 5 FT & 10 FT BGS
				13'	SOIL SAMPLE @ 10 FT BGS
				14'	
				15'	
				16'	
				17'	
				18'	
				19'	
				20'	



JOB NO.: 246 - NORTHGATE MALL PHASE II
9500 NORTHGATE RIVE, SAN RAFAEL, CA

DRILLING METHOD:
DIRECT PUSH - 2.25" DIAMETER

SAMPLING METHOD:
SOIL: GRAB SAMPLE, FIXED-BASE LAB
SOIL GAS: SYRINGE, MOBILE LAB

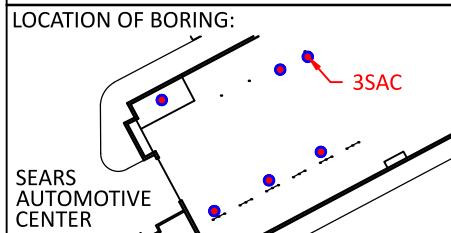
LOCATION:
SEARS AUTOMOTIVE CENTER, CENTER
BORING ALONG SOUTHERN DOUBLE LIFTS

BORING NO.:
2SAC

SHEET:
1 OF 1

DATE:
12/16/16

SAMPLE DEPTH	SAMPLE NAME	WELL CONSTR	RECOVERY	DEPTH	DESCRIPTION
					CONCRETE
	1/4" TUBING			1'	
	HYDRATED BENTONITE			2'	DRY TO SLIGHTLY MOIST, MOTTLED BROWN & LIGHT BROWN (YELLOW), POSSIBLE FILL MATERIAL
	6" DRY BENTONITE			3'	
				4'	
	SOIL GAS: 2SAC5 PLASTIC AIR DIFFUSER			5'	SLIGHTLY MOIST, BROWN, SILTY CLAY W/ GRAVEL (POSSIBLE FILL)
	12" SAND			6'	
				7'	
	HYDRATED BENTONITE			8'	MOIST, DRAK BROWN/BLACK W/ RED-BROWN MOTTLING, SILTY CLAY W/ GRAVEL
				9'	
	SOIL: 2SAC10			10'	
	2.25" BOREHOLE			11'	BOTTOM OF BOREHOLE @ 10 FT BGS NO FREE WATER ENCOUNTERED SOIL GAS WELL PROBE @ 5 FT BGS SOIL SAMPLE @ 10 FT BGS
				12'	
				13'	
				14'	
				15'	
				16'	
				17'	
				18'	
				19'	
				20'	



JOB NO.: 246 - NORTHGATE MALL PHASE II
9500 NORTHGATE RIVE, SAN RAFAEL, CA

DRILLING METHOD:
DIRECT PUSH - 2.25" DIAMETER

SAMPLING METHOD:
SOIL: GRAB SAMPLE, FIXED-BASE LAB
SOIL GAS: SYRINGE, MOBILE LAB

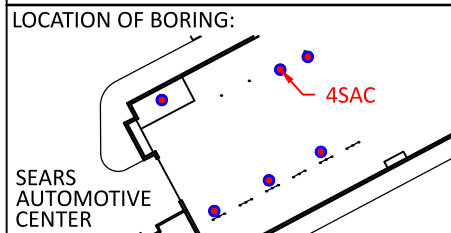
LOCATION:
SEARS AUTOMOTIVE CENTER, EAST BORING
ALONG NORTHERN SINGLE LIFTS

BORING NO.:
3SAC

SHEET:
1 OF 1

DATE:
12/16/16

SAMPLE DEPTH	SAMPLE NAME	WELL CONSTR	RECOVERY	DEPTH	DESCRIPTION
					CONCRETE
	1/4" TUBING			1'	
	HYDRATED BENTONITE			2'	DRY TO SLIGHTLY MOIST, MOTTLED BROWN & LIGHT BROWN (YELLOW), POSSIBLE FILL MATERIAL
	6" DRY BENTONITE			3'	
				4'	
	SOIL GAS: 3SAC5 PLASTIC AIR DIFFUSER 12" SAND			5'	SLIGHTLY MOIST, BROWN, SILTY CLAY W/ GRAVEL (POSSIBLE FILL)
				6'	
	HYDRATED BENTONITE			7'	
				8'	MOIST, DRAK BROWN/BLACK W/ RED-BROWN MOTTLING, SILTY CLAY W/ GRAVEL
				9'	
	SOIL: 3SAC10			10'	
	2.25" BOREHOLE			11'	BOTTOM OF BOREHOLE @ 10 FT BGS NO FREE WATER ENCOUNTERED SOIL GAS WELL PROBE @ 5 FT BGS SOIL SAMPLE @ 10 FT BGS
				12'	
				13'	
				14'	
				15'	
				16'	
				17'	
				18'	
				19'	
				20'	



JOB NO.: 246 - NORTHGATE MALL PHASE II
9500 NORTHGATE RIVE, SAN RAFAEL, CA

DRILLING METHOD:
DIRECT PUSH - 2.25" DIAMETER

SAMPLING METHOD:
SOIL: GRAB SAMPLE, FIXED-BASE LAB
SOIL GAS: SYRINGE, MOBILE LAB

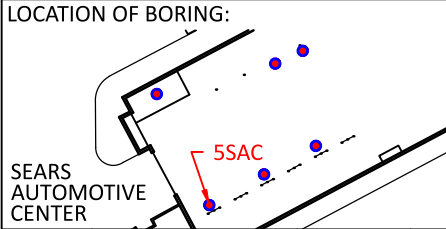
LOCATION:
SEARS AUTOMOTIVE CENTER, CENTER
BORING ALONG NORTHERN SINGLE LIFTS

BORING NO.:
4SAC

SHEET:
1 OF 1

DATE:
12/16/16

SAMPLE DEPTH	SAMPLE NAME	WELL CONSTR	RECOVERY	DEPTH	DESCRIPTION
					CONCRETE
	1/4" TUBING			1'	
	HYDRATED BENTONITE			2'	DRY TO SLIGHTLY MOIST, MOTTLED BROWN & LIGHT BROWN (YELLOW), POSSIBLE FILL MATERIAL
	6" DRY BENTONITE			3'	
				4'	
	SOIL GAS: 4SACS			5'	SLIGHTLY MOIST, BROWN, SILTY CLAY W/ GRAVEL (POSSIBLE FILL)
	PLASTIC AIR DIFFUSER			6'	
	12" SAND			7'	
				8'	
	HYDRATED BENTONITE			9'	MOIST, DRAK BROWN/BLACK W/ RED-BROWN MOTTLING, SILTY CLAY W/ GRAVEL
				10'	
	SOIL: 4SAC10			11'	BOTTOM OF BOREHOLE @ 10 FT BGS NO FREE WATER ENCOUNTERED SOIL GAS WELL PROBE @ 5 FT BGS SOIL SAMPLE @ 10 FT BGS
	2.25" BOREHOLE			12'	
				13'	
				14'	
				15'	
				16'	
				17'	
				18'	
				19'	
				20'	



JOB NO.: 246 - NORTHGATE MALL PHASE II
9500 NORTHGATE RIVE, SAN RAFAEL, CA

DRILLING METHOD:
DIRECT PUSH - 2.25" DIAMETER

SAMPLING METHOD:
SOIL: GRAB SAMPLE, FIXED-BASE LAB
SOIL GAS: SYRINGE, MOBILE LAB

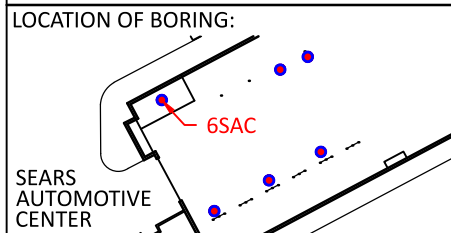
LOCATION:
SEARS AUTOMOTIVE CENTER, WEST
BORING ALONG SOUTHERN DOUBLE LIFTS

BORING NO.:
5SAC

SHEET:
1 OF 1

DATE:
12/16/16

SAMPLE DEPTH	SAMPLE NAME	WELL CONSTR	RECOVERY	DEPTH	DESCRIPTION
					CONCRETE
	1/4" TUBING			1'	
	HYDRATED BENTONITE			2'	DRY TO SLIGHTLY MOIST, MOTTLED BROWN & LIGHT BROWN (YELLOW), POSSIBLE FILL MATERIAL
	6" DRY BENTONITE			3'	
				4'	
	SOIL GAS: 5SAC5			5'	SLIGHTLY MOIST, BROWN, SILTY CLAY W/ GRAVEL (POSSIBLE FILL)
	PLASTIC AIR DIFFUSER			5'	
	12" SAND			6'	
				7'	
	HYDRATED BENTONITE			7'	
	6" DRY BENTONITE			8'	MOIST, DRAK BROWN/BLACK W/ RED-BROWN MOTTLING, SILTY CLAY W/ GRAVEL
	PLASTIC AIR DIFFUSER			9'	
	SOIL GAS: 5SAC10			10'	
	SOIL: 5SAC10			10'	
	12" SAND			10'	BOTTOM OF BOREHOLE @ 10 FT BGS
	2.25" BOREHOLE			11'	NO FREE WATER ENCOUNTERED
				12'	NESTED SOIL GAS WELL, PROBES @ 5 FT & 10 FT BGS
				13'	SOIL SAMPLE @ 10 FT BGS
				14'	
				15'	
				16'	
				17'	
				18'	
				19'	
				20'	



JOB NO.: 246 - NORTHGATE MALL PHASE II
9500 NORTHGATE RIVE, SAN RAFAEL, CA

DRILLING METHOD:
ROTOHAMMER DRILL, NO ACCESS FOR DRILL RIG

SAMPLING METHOD:
SOIL: GRAB SAMPLE, FIXED-BASE LAB
SOIL GAS: SYRINGE, MOBILE LAB

LOCATION:
SEARS AUTOMOTIVE CENTER, NORTHWEST CORNER WHEEL ALIGNMENT AREA

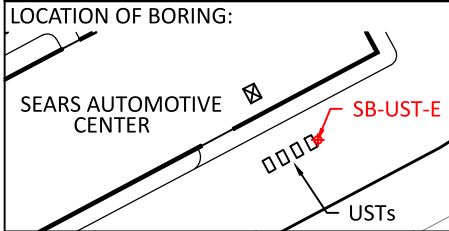
BORING NO.:
6SAC

SHEET:
1 OF 1

DATE:
12/16/16

SAMPLE DEPTH	SAMPLE NAME	WELL CONSTR	RECOVERY	DEPTH	DESCRIPTION
				1'	WHEEL ALIGNMENT AREA 2'-8" SUNKEN AREA
				2'	
	HYDRATED BENTONITE			2'	
	1/4" TUBING			2'	
	PLASTIC AIR DIFFUSER			2'	
	SOIL GAS: 6SAC1			2'	
				3'	CONCRETE
				3'	DRY TO SLIGHTLY MOIST, MOTTLED BROWN & LIGHT BROWN (YELLOW) FILL
	6" SAND			4'	BOTTOM OF BOREHOLE @ 3.5 FT BGS
	2.25" BOREHOLE			4'	NO FREE WATER ENCOUNTERED
				5'	SOIL GAS WELL PROBE @ 3.3 FT BGS
				5'	NO SOIL SAMPLE COLLECTED
				6'	
				7'	
				8'	
				9'	
				10'	
				11'	
				12'	
				13'	
				14'	
				15'	
				16'	
				17'	
				18'	
				19'	
				20'	

TÖR ENVIRONMENTAL, INC.



JOB NO.: 254 - NORTHGATE MALL PHASE II
9000 NORTHGATE DRIVE, SAN RAFAEL, CA

DRILLING METHOD:
HAND AUGER & DIRECT PUSH - 2.25" DIAMETER

SAMPLING METHOD:
GRAB SAMPLE; 8 OZ JARS

LOCATION:
SEARS AUTOMOTIVE CENTER
EAST OF USTs SOUTH OF BUILDING

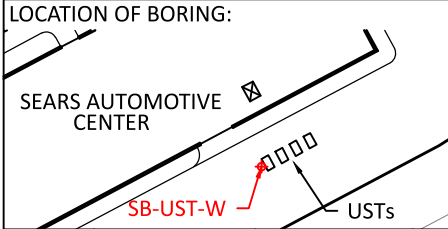
BORING NO.:
SB-UST-E

SHEET:
1 OF 1

DATE:
6/29/2017

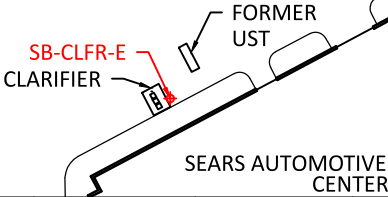
SAMPLE DEPTH	SAMPLE NAME	RECOVERY	DEPTH	DESCRIPTION	PID (PPM)	TIME
				4" ASPHALT		09:55
			1'	HAND AUGER TO 5 FT BGS NO RECOVERY		
			2'			
		6"	3'	CL - MOIST, VERY DARK GRAYISH BROWN, CLAY W/ SILT & SAND	1.8	09:35
			4'	NO RECOVERY		
	SB-USTE-5' 09:45	6"	5'	ML - MOIST, DARK GRAY, CLAYEY SILT W/ SAND		09:45
			6'	ML - MOIST, DARK GRAY, CLAYEY SILT W/ SAND	6.2	
			7'			
			8'	DRY, DARK GRAYISH BROWN, CLAYEY SHALE	5.2	
			9'			
	SB-USTE-10' 10:01	60"	10'	DRY, DARK GRAY, SHALE	6.3	10:01
			11'			
			12'	NO RECOVERY		
			13'			
			14'			
	SB-USTE-15' 10:26	6"	15'	DRY, GRAY, SHALE	2.2	10:26
			16'	REFUSAL; BOTTOM OF BORING @ 15 FT BGS NO FREE WATER ENCOUNTERED BORING ABANDONED WITH GROUT BACKFILL & CONCRETE CAP		
			17'			
			18'			
			19'			
			20'			

TÖR ENVIRONMENTAL, INC.

LOCATION OF BORING: 	JOB NO.: 254 - NORTHGATE MALL PHASE II 9000 NORTHGATE DRIVE, SAN RAFAEL, CA	LOCATION: SEARS AUTOMOTIVE CENTER WEST OF USTs SOUTH OF BUILDING	
	DRILLING METHOD: HAND AUGER & DIRECT PUSH - 2.25" DIAMETER		BORING NO.: SB-UST-W
	SAMPLING METHOD: GRAB SAMPLE; 8 OZ JARS		SHEET: 1 OF 1	DATE: 6/29/2017

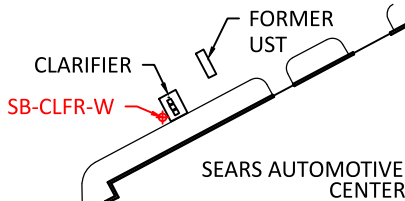
SAMPLE DEPTH	SAMPLE NAME	RECOVERY	DEPTH	DESCRIPTION	PID (PPM)	TIME	
		[Cross-hatch pattern]		4" ASPHALT		11:03	
			1'	HAND AUGER TO 5 FT BGS			
			2'	NO RECOVERY			
		[Diagonal lines pattern]	6"	3'	CL - MOIST, OLIVE BROWN, SILTY CLAY W/ SAND	2.5	11:04
			4'	NO RECOVERY			
	SB-USTW-5' 11:08	[Dotted pattern]	6"	5'	SW - MOIST, DARK OLIVE GRAY, SAND & FILL W/ GRAVEL	3.8	11:08
				DIRECT PUSH STARTED AT 5 FT BGS			
			6'	DRY, DARK GRAY, SHALE	10.2		
			7'				
			8'	MOIST, DARK GRAYISH BROWN, SHALE	13.1		
			9'				
	SB-USTW-10' 11:22	[Horizontal lines pattern]	60"	10'	DRY, DARK GRAY, SHALE	2.4	11:22
			11'	MOIST, DARK GRAYISH BROWN, SHALE	3.4		
			12'				
	SB-USTW-13' 11:35	[Vertical lines pattern]	36"	13'	DRY, DARK GRAY, SILTY SHALE	5.3	11:35
				REFUSAL; BOTTOM OF BORING @ 13 FT BGS			
				NO FREE WATER ENCOUNTERED			
				BORING ABANDONED WITH GROUT BACKFILL & CONCRETE CAP			
			14'				
			15'				
			16'				
			17'				
			18'				
			19'				
			20'				

TÖR ENVIRONMENTAL, INC.

LOCATION OF BORING: 	JOB NO.: 254 - NORTHGATE MALL PHASE II 9000 NORTHGATE DRIVE, SAN RAFAEL, CA	LOCATION: SEARS AUTOMOTIVE CENTER, EAST OF CLARIFIER, NORTH OF BUILDING	
	DRILLING METHOD: HAND AUGER & DIRECT PUSH - 2.25" DIAMETER	BORING NO.: SB-CLFR-E	
	SAMPLING METHOD: GRAB SAMPLE; 8 OZ JARS	SHEET: 1 OF 1	DATE: 6/29/2017

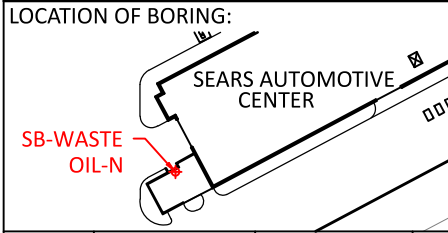
SAMPLE DEPTH	SAMPLE NAME	RECOVERY	DEPTH	DESCRIPTION	PID (PPM)	TIME	
				4" ASPHALT		14:34	
			1'	HAND AUGER TO 5 FT BGS			
			2'	NO RECOVERY			
		6"	3'	CL - MOIST, DARK GRAYISH BROWN, CLAY	9.5		
			4'	NO RECOVERY			
	SB-CLFRE-5' 14:30	6"	5'	CL - DRY, OLIVE BROWN, SANDY CLAY	11.3	14:30	
			5'	CL - DRY, OLIVE BROWN, SANDY CLAY	13.6		
			6"	6'	CL - MOIST, DARK GRAYISH BROWN, CLAY		9.3
				7'	CL - MOIST, DARK GRAY MOTTLED, SANDY CLAY		9.8
				8'	CL - MOIST, DARK GRAYISH BROWN, CLAY		10.9
	SB-CLFRE-10' 14:35	60"	9'	CL - WET, DARK GRAYISH BROWN, SANDY CLAY	53.1	14:35	
			10'	NO RECOVERY			
				11'	CL - MOIST, DARK GRAYISH BROWN, SANDY CLAY		33.9
				12'	CL - WET, OLIVE, CLAY		16.4
				13'	CL - WET, BROWN, SANDY CLAY		27.1
	SB-CLFRE-15' 14:41	50"	14'	CL - MOIST, DARK YELLOWISH BROWN, SANDY CLAY	0.6	14:41	
			15'	REFUSAL; BOTTOM OF BORING @ 15 FT BGS			
				16'	NO FREE WATER ENCOUNTERED		
				17'	BORING ABANDONED WITH GROUT BACKFILL & CONCRETE CAP		
				18'			
				19'			
				20'			

TÖR ENVIRONMENTAL, INC.

<p>LOCATION OF BORING:</p>  <p style="text-align: center;">SEARS AUTOMOTIVE CENTER</p>	<p>JOB NO.: 254 - NORTHGATE MALL PHASE II 9000 NORTHGATE DRIVE, SAN RAFAEL, CA</p>	<p>LOCATION: SEARS AUTOMOTIVE CENTER, WEST OF CLARIFIER, NORTH OF BUILDING</p>
	<p>DRILLING METHOD: HAND AUGER & DIRECT PUSH - 2.25" DIAMETER</p>	<p>BORING NO.: SB-CLFR-W</p>
	<p>SAMPLING METHOD: GRAB SAMPLE; 8 OZ JARS</p>	<p>SHEET: 1 OF 1 DATE: 6/29/2017</p>

SAMPLE DEPTH	SAMPLE NAME	RECOVERY	DEPTH	DESCRIPTION	PID (PPM)	TIME
		[Cross-hatched]		4" ASPHALT		13:45
			1'	HAND AUGER TO 5 FT BGS		
			2'	NO RECOVERY		
			3'	CL - MOIST, DARK GRAYISH BROWN, SILTY CLAY W/ SAND & GRAVEL	15.1	13:50
		[Diagonal lines]	4'	CL - MOIST, BROWN, SILTY CLAY	6.8	
[Diagonal lines]	SB-CLFRW-5' 14:00	17"	5'			14:00
			6'			
			7'	POOR RECOVERY, SAMPLE TUBE BLOCKED BY COBBLES		
			8'			
			9'			
[Diagonal lines]	SB-CLFRW-10' 14:03	8"	10'	CL - MOIST, MOTTLED DARK OLIVE GRAY TO OLIVE BROWN, CLAY	3.7	14:03
			11'	CL - MOIST, OLIVE BROWN, SILTY CLAY	15.2	
			12'			
			13'	CL - DRY, MOTTLED DARK YELLOWISH BROWN W/ BLACK, CLAY	16.1	
			14'			
[Diagonal lines]	SB-CLFRW-15' 14:06	60"	15'	CL - MOIST, DARK GRAYISH BROWN, SANDY CLAY	4.3	14:06
			16'	REFUSAL; BOTTOM OF BORING @ 15 FT BGS NO FREE WATER ENCOUNTERED BORING ABANDONED WITH GROUT BACKFILL & CONCRETE CAP		
			17'			
			18'			
			19'			
			20'			

TÖR ENVIRONMENTAL, INC.



JOB NO.: 254 - NORTHGATE MALL PHASE II
9000 NORTHGATE DRIVE, SAN RAFAEL, CA

DRILLING METHOD:
HAND AUGER & DIRECT PUSH - 2.25" DIAMETER

SAMPLING METHOD:
GRAB SAMPLE; 8 OZ JARS

LOCATION: SEARS AUTOMOTIVE CENTER,
NORTH BORING WITHIN USED
OIL AREA, WEST OF BUILDING

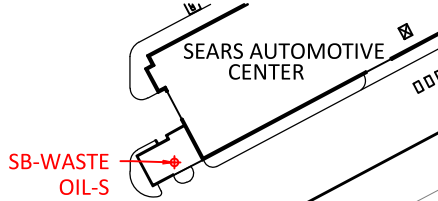
BORING NO.:
SB-WASTE OIL-N

SHEET:
1 OF 1

DATE:
6/30/2017

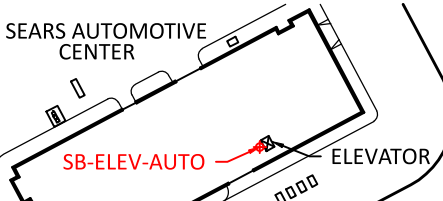
SAMPLE DEPTH	SAMPLE NAME	RECOVERY	DEPTH	DESCRIPTION	PID (PPM)	TIME
			0"	4" CONCRETE		09:32
			1'	HAND AUGER TO 3 FT BGS, UNABLE TO HAND AUGER DEEPER		
			2'	NO RECOVERY		
		0"	3'	NO RECOVERY		09:40
			4'	ML - DRY, DARK GRAYISH BROWN, SANDY SILT W/ CLAY	11.3	
			5'	ML - DRY, OLIVE BROWN, SANDY SILT W/ CLAY	16.9	
	SB-WASTE OIL-N-5' 10:01	31"	6'	MOIST, OLIVE BROWN, CLAYEY SHALE	8.1	10:01
			7'	NO RECOVERY		
			8'	CL - MOIST, DARK GRAYISH BROWN, CLAY W/ SAND	13.1	
			9'	CL - MOIST, DARK GRAY, CLAY W/ SAND & GRAVEL	5.6	
	SB-WASTE OIL-N-10' 10:10	39"	10'	CL - MOIST, DARK GRAYISH OLIVE, CLAY	11.6	10:10
			11'	CL - MOIST, DARK GRAYISH OLIVE, CLAY	11.6	
	SB-WASTE OIL-N-12' 10:21	15"	12'	REFUSAL; BOTTOM OF BORING @ 11.75 FT BGS NO FREE WATER ENCOUNTERED BORING ABANDONED WITH GROUT BACKFILL & CONCRETE CAP		10:21
			13'			
			14'			
			15'			
			16'			
			17'			
			18'			
			19'			
			20'			

TÖR ENVIRONMENTAL, INC.

LOCATION OF BORING: 	JOB NO.: 254 - NORTHGATE MALL PHASE II 9000 NORTHGATE DRIVE, SAN RAFAEL, CA	LOCATION: SEARS AUTOMOTIVE CENTER, SOUTH BORING WITHIN USED OIL AREA, WEST OF BUILDING
	DRILLING METHOD: HAND AUGER & DIRECT PUSH - 2.25" DIAMETER	BORING NO.: SB-WASTE OIL-S
	SAMPLING METHOD: GRAB SAMPLE; 8 OZ JARS	SHEET: 1 OF 1 DATE: 6/30/2017

SAMPLE DEPTH	SAMPLE NAME	RECOVERY	DEPTH	DESCRIPTION	PID (PPM)	TIME
				6" CONCRETE		10:28
			1'	HAND AUGER TO 3 FT BGS, UNABLE TO HAND AUGER DEEPER		
			2'	NO RECOVERY DRY, OLIVE BROWN, SANDY SHALE		
			3'			
			4'	DRY, DARK GRAYISH BROWN, SANDY SHALE (SILT)	5.7	10:40
			4'	DRY, BROWN, SANDY SHALE (ML-SILT W/ CLAY)	8.6	
	SB-WASTE OIL-S-5' 11:15	24"	5'	REFUSAL; BOTTOM OF BORING @ 5 FT BGS NO FREE WATER ENCOUNTERED BORING ABANDONED WITH GROUT BACKFILL & CONCRETE CAP		11:15
			6'			
			7'			
			8'			
			9'			
			10'			
			11'			
			12'			
			13'			
			14'			
			15'			
			16'			
			17'			
			18'			
			19'			
			20'			

TÖR ENVIRONMENTAL, INC.

LOCATION OF BORING: SEARS AUTOMOTIVE CENTER 	JOB NO.: 254 - NORTHGATE MALL PHASE II 9000 NORTHGATE DRIVE, SAN RAFAEL, CA	LOCATION: SEARS AUTOMOTIVE CENTER INTERIOR, WEST OF ELEVATOR	
	DRILLING METHOD: HAND AUGER & DIRECT PUSH - 2.25" DIAMETER	BORING NO.: SB-ELEV-AUTO	
	SAMPLING METHOD: GRAB SAMPLE; 8 OZ JARS	SHEET: 1 OF 1	DATE: 6/30/2017

SAMPLE DEPTH	SAMPLE NAME	RECOVERY	DEPTH	DESCRIPTION	PID (PPM)	TIME
	SB-ELEV-AUTO-5' 09:16	12"	0'	8" CONCRETE		
			1'	HAND AUGER TO 4 FT BGS, UNABLE TO HAND AUGER DEEPER		
				NO RECOVERY		
			2'			
			3'	ML - DRY, DARK GRAYISH BROWN, SANDY SILT W/ GRAVEL	6.6	08:45
				NO RECOVERY		
			4'	CL - MOIST, DARK YELLOWISH BROWN, SANDY CLAY W/ GRAVEL	5.3	
			5'	CL - MOIST, DARK GRAYISH BROWN, CLAY	1.9	
			6'	CL - MOIST, BROWN, CLAY	11.7	09:16
			7'	NO RECOVERY		
		7'	CL - MOIST, BROWN MOTTLED, CLAY	3.7	09:20	
			REFUSAL; BOTTOM OF BORING @ 7.5 FT BGS NO FREE WATER ENCOUNTERED BORING ABANDONED WITH GROUT BACKFILL & CONCRETE CAP			
			8'			
			9'			
			10'			
			11'			
			12'			
			13'			
			14'			
			15'			
			16'			
			17'			
			18'			
			19'			
			20'			

TÖR ENVIRONMENTAL, INC.

LOCATION OF BORING:



JOB NO.: 254 - NORTHGATE MALL PHASE II
9000 NORTHGATE DRIVE, SAN RAFAEL, CA

LOCATION:
SEARS DEPT STORE, BASEMENT DIRECTLY
UNDER PASSENGER ELEVATOR #1

DRILLING METHOD:
HAND AUGER

BORING NO.:
SB-ELEV-P1

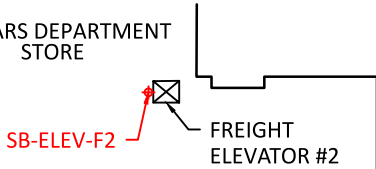
SAMPLING METHOD:
GRAB SAMPLE; 8 OZ JARS

SHEET:
1 OF 1

DATE:
6/30/2017

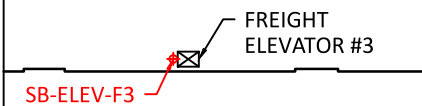
SAMPLE DEPTH	SAMPLE NAME	RECOVERY	DEPTH	DESCRIPTION	PID (PPM)	TIME
				8" CONCRETE GP - GRAVEL (NO RECOVERY)		14:24
	SOIL: SB-ELEV-P1-1' 14:50		1'	CL - MOIST, DARK GRAY OLIVE, CLAY	4.6	
	GW SAMPLE: SB-ELEV P1 16:30		2'	CL - SATURATED, OLIVE, SANDY CLAY W/ GRAVEL	14.1	
	SOIL: SB-ELEV-P1-3' 15:02	24"	3'	REFUSAL; BOTTOM OF BORING @ 3 FT BGS WATER ENCOUNTERED @ 1.5 FT BGS BORING ABANDONED WITH GROUT BACKFILL & CONCRETE CAP SOIL SAMPLE SB-ELEV-P1-3' WAS SATURATED & NOT ANALYZED		15:07
			4'			
			5'			
			6'			
			7'			
			8'			
			9'			
			10'			
			11'			
			12'			
			13'			
			14'			
			15'			
			16'			
			17'			
			18'			
			19'			
			20'			

TÖR ENVIRONMENTAL, INC.

LOCATION OF BORING: SEARS DEPARTMENT STORE 	JOB NO.: 254 - NORTHGATE MALL PHASE II 9000 NORTHGATE DRIVE, SAN RAFAEL, CA DRILLING METHOD: HAND AUGER SAMPLING METHOD: GRAB SAMPLE; 8 OZ JARS	LOCATION: SEARS DEPARTMENT STORE, INTERIOR, WEST OF FREIGHT ELEVATOR #2 BORING NO.: SB-ELEV-F2 SHEET: 1 OF 1 DATE: 6/30/2017
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SAMPLE DEPTH	SAMPLE NAME	RECOVERY	DEPTH	DESCRIPTION	PID (PPM)	TIME
				8" CONCRETE		15:11
			1'	GP - GRAVEL NO RECOVERY	N/A	16:00
	GW SAMPLE: SB-ELEV F2 17:00	0"	2'	REFUSAL; BOTTOM OF BORING @ 2 FT BGS WATER ENCOUNTERED @ 1.5 FT BGS BORING ABANDONED WITH GROUT BACKFILL & CONCRETE CAP		
			3'			
			4'			
			5'			
			6'			
			7'			
			8'			
			9'			
			10'			
			11'			
			12'			
			13'			
			14'			
			15'			
			16'			
			17'			
			18'			
			19'			
			20'			

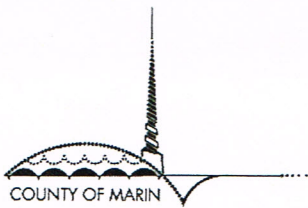
TÖR ENVIRONMENTAL, INC.

LOCATION OF BORING: SEARS DEPARTMENT STORE 	JOB NO.: 254 - NORTHGATE MALL PHASE II 9000 NORTHGATE DRIVE, SAN RAFAEL, CA	LOCATION: SEARS DEPARTMENT STORE, INTERIOR, WEST OF FREIGHT ELEVATOR #3
	DRILLING METHOD: HAND AUGER	BORING NO.: SB-ELEV-F3
	SAMPLING METHOD: GRAB SAMPLE; 8 OZ JARS	SHEET: 1 OF 1 DATE: 6/30/2017

SAMPLE DEPTH	SAMPLE NAME	RECOVERY	DEPTH	DESCRIPTION	PID (PPM)	TIME
				8" CONCRETE		13:54
			1'			
	NO GW SAMPLE	0"	2'	GP - GRAVEL NO RECOVERY	N/A	14:10
	NO SOIL SAMPLE		3'	REFUSAL; BOTTOM OF BORING @ 2 FT BGS WATER ENCOUNTERED @ 1.75 FT BGS GW SAMPLE ATTEMPTED, INSUFFICIENT WATER BORING ABANDONED WITH GROUT BACKFILL & CONCRETE CAP		
			4'			
			5'			
			6'			
			7'			
			8'			
			9'			
			10'			
			11'			
			12'			
			13'			
			14'			
			15'			
			16'			
			17'			
			18'			
			19'			
			20'			

Appendix B

Permit to Drill Test Holes/Soil Borings – Marin County Environmental Health Services



PERMIT FOR TEST HOLES / SOIL BORINGS

Date of Issuance: June 28, 2017
Date of Expiration: June 27, 2018

To: Merlone Geier Partners
425 California St., Tenth Floor
San Francisco, CA 94104

Permit No.: TH B12679 (10)
Street Address: 9000 Northgate Mall Dr.
City: San Rafael
Assessor's Parcel Number: 175-060-40

Driller: Cascade Drilling, 1961 Meeker Avenue, Richmond, CA 94804


Your application and plans have been reviewed for compliance with relevant California State and Marin County regulations. Permission is hereby granted to perform the stated work at the above, designated site.

In order to provide the necessary inspections and/or to prevent rescheduling the well driller, the consultant or the well driller shall notify this office at least **two business days** in advance of drilling the well. Also, **contact the office on the day of the drilling.** The grout shall not be placed until approval from Environmental Health Services is granted. If arrangements other than an inspection are made and approved before drilling, then documentation on the methods and materials used to destroy the hole shall be submitted within 30 days of drilling.

CONDITIONS:

1. Construction and destruction criteria shall meet all applicable sections of the current State of California Water Well Standards Bulletin 74 (as revised).
2. Unless approved by EHS beforehand, the well driller shall seal with a cement grout and have a pump and tremie system available in the event that groundwater is discovered.
3. The holes shall be sealed ASAP, especially in the event of rain, to prevent contamination of the groundwater by surface water.
4. If the boring is drilled on property owned by a party other than the applicant, this permit is not valid until applicable local encroachment permits or permissions are first obtained. Please contact the appropriate landowner, city, county, park or special district agencies to obtain permissions.
5. The Marin County CUPA (Office of Waste Management, Department of Public Works) or the local L.P.A. shall be notified whenever test results from sampling demonstrate chemical contamination or leakage of underground storage tanks.
6. It is the responsibility of the driller and project consultant to locate all underground utilities which may be impacted by drilling activities.

This permit is valid for twelve months from the date of issuance. If work has not commenced prior to the expiration date, an additional application and the associated fee shall be required.

Issued by,

Scott Callow, Senior R.E.H.S.

c: TOR Environmental, Inc. PO Box 73626, San Clemente, CA 92673
CUPA

OFFICE USE ONLY

1. Number of holes to be drilled 10
2. Destruction docs submitted _____
3. Project completed _____

***Soil & Concrete Samples
Laboratory Analytical Reports and
Chain-of-Custody Forms***

December 22, 2016

Jeff Borum
TOR Environmental
P.O. Box 73626
San Clemente, CA 92673

RE: Project: Northgate Sears
Pace Project No.: 1280627

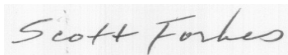
Dear Jeff Borum:

Enclosed are the analytical results for sample(s) received by the laboratory on December 16, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Scott M Forbes
scott.forbes@pacelabs.com
Project Manager

Enclosures

cc: M Litzenberg, TOR Environmental



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Northgate Sears
Pace Project No.: 1280627

Davis Certification IDs

2795 Second Street Suite 300 Davis, CA 95618
North Dakota Certification #: R-214
Oregon Certification #: CA300002
Washington Certification #: C926-15a

California Certification #: 08263CA
Minnesota Department of Health Certification #: 006-999-465

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Northgate Sears

Pace Project No.: 1280627

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1280627001	1SAC10	Solid	12/16/16 08:30	12/16/16 18:55
1280627002	2SAC10	Solid	12/16/16 09:30	12/16/16 18:55
1280627003	3SAC10	Solid	12/16/16 10:30	12/16/16 18:55
1280627004	4SAC10	Solid	12/16/16 12:00	12/16/16 18:55
1280627005	5SAC10	Solid	12/16/16 13:00	12/16/16 18:55
1280627006	1BATSAC	Solid	12/16/16 14:20	12/16/16 18:55
1280627007	1SEARS1	Solid	12/16/16 15:08	12/16/16 18:55

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Northgate Sears

Pace Project No.: 1280627

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
1280627001	1SAC10	EPA 8015B	JSD	3	PASI-DAV
		EPA 8260B	JCP	67	PASI-DAV
1280627002	2SAC10	EPA 8015B	JSD	3	PASI-DAV
		EPA 8260B	JCP	67	PASI-DAV
1280627003	3SAC10	EPA 8015B	JSD	3	PASI-DAV
		EPA 8260B	JCP	67	PASI-DAV
1280627004	4SAC10	EPA 8015B	JSD	3	PASI-DAV
		EPA 8260B	JCP	67	PASI-DAV
1280627005	5SAC10	EPA 8015B	JSD	3	PASI-DAV
		EPA 8260B	JCP	67	PASI-DAV
1280627007	1SEARS1	EPA 8015B	JSD	3	PASI-DAV
		EPA 8260B	JCP	67	PASI-DAV

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Northgate Sears

Pace Project No.: 1280627

Sample: 1SAC10 **Lab ID: 1280627001** Collected: 12/16/16 08:30 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS Soil		Analytical Method: EPA 8015B Preparation Method: 89 CA LUFT						
TPH-DRO (C10-C28)	8.1	mg/kg	0.99	1	12/20/16 09:31	12/21/16 14:31		L2
TPH - Motor Oil	ND	mg/kg	9.9	1	12/20/16 09:31	12/21/16 14:31	64742-65-0	
Surrogates								
n-Octacosane (S)	49	%	62-137	1	12/20/16 09:31	12/21/16 14:31	630-02-4	S0
8260 MSV Low Soil		Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low						
Benzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	71-43-2	
Bromobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	108-86-1	
Bromochloromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	74-97-5	
Bromodichloromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	75-27-4	
Bromoform	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	75-25-2	
Bromomethane	ND	ug/kg	19.6	1	12/19/16 09:54	12/19/16 13:36	74-83-9	
n-Butylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	56-23-5	
Chlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	108-90-7	
Chloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	75-00-3	
Chloroform	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	67-66-3	
Chloromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	96-12-8	
Dibromochloromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	106-93-4	
Dibromomethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	10061-02-6	
Ethylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	87-68-3	
n-Hexane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	110-54-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	98-82-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Northgate Sears

Pace Project No.: 1280627

Sample: 1SAC10 **Lab ID: 1280627001** Collected: 12/16/16 08:30 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Soil Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low								
p-Isopropyltoluene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	99-87-6	
Methylene Chloride	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	75-09-2	
Naphthalene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	91-20-3	
n-Propylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	103-65-1	
Styrene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	79-34-5	
Tetrachloroethene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	127-18-4	
Toluene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	79-00-5	
Trichloroethene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	108-67-8	
2,2,4-Trimethylpentane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	540-84-1	
Vinyl chloride	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	75-01-4	
Xylene (Total)	ND	ug/kg	9.8	1	12/19/16 09:54	12/19/16 13:36	1330-20-7	
m&p-Xylene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	179601-23-1	
o-Xylene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 13:36	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	113	%	70-130	1	12/19/16 09:54	12/19/16 13:36	17060-07-0	
Toluene-d8 (S)	103	%	70-130	1	12/19/16 09:54	12/19/16 13:36	2037-26-5	
4-Bromofluorobenzene (S)	109	%	70-130	1	12/19/16 09:54	12/19/16 13:36	460-00-4	

Sample: 2SAC10 **Lab ID: 1280627002** Collected: 12/16/16 09:30 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS Soil Analytical Method: EPA 8015B Preparation Method: 89 CA LUFT								
TPH-DRO (C10-C28)	273	mg/kg	0.99	1	12/20/16 09:31	12/21/16 16:13		E,L2
TPH - Motor Oil	476	mg/kg	9.9	1	12/20/16 09:31	12/21/16 16:13	64742-65-0	E
Surrogates								
n-Octacosane (S)	68	%	62-137	1	12/20/16 09:31	12/21/16 16:13	630-02-4	
8260 MSV Low Soil Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low								
Benzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	71-43-2	
Bromobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	108-86-1	
Bromochloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	74-97-5	
Bromodichloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	75-27-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Northgate Sears

Pace Project No.: 1280627

Sample: 2SAC10 **Lab ID: 1280627002** Collected: 12/16/16 09:30 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Soil		Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low						
Bromoform	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	75-25-2	
Bromomethane	ND	ug/kg	19.8	1	12/19/16 09:54	12/19/16 13:56	74-83-9	
n-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	56-23-5	
Chlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	108-90-7	
Chloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	75-00-3	
Chloroform	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	67-66-3	
Chloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	96-12-8	
Dibromochloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	106-93-4	
Dibromomethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	156-60-5	
Dichlorofluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	75-43-4	
1,2-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	10061-02-6	
Ethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	87-68-3	
n-Hexane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	110-54-3	
Isopropylbenzene (Cumene)	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	99-87-6	
Methylene Chloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	75-09-2	
Naphthalene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	91-20-3	
n-Propylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	103-65-1	
Styrene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	79-34-5	
Tetrachloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	127-18-4	
Toluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Northgate Sears

Pace Project No.: 1280627

Sample: 2SAC10 **Lab ID: 1280627002** Collected: 12/16/16 09:30 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Soil Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low								
1,2,4-Trichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	79-00-5	
Trichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	108-67-8	
2,2,4-Trimethylpentane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	540-84-1	
Vinyl chloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	75-01-4	
Xylene (Total)	ND	ug/kg	9.9	1	12/19/16 09:54	12/19/16 13:56	1330-20-7	
m&p-Xylene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	179601-23-1	
o-Xylene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 13:56	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	112	%	70-130	1	12/19/16 09:54	12/19/16 13:56	17060-07-0	
Toluene-d8 (S)	103	%	70-130	1	12/19/16 09:54	12/19/16 13:56	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130	1	12/19/16 09:54	12/19/16 13:56	460-00-4	

Sample: 3SAC10 **Lab ID: 1280627003** Collected: 12/16/16 10:30 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS Soil Analytical Method: EPA 8015B Preparation Method: 89 CA LUFT								
TPH-DRO (C10-C28)	4.8	mg/kg	0.99	1	12/20/16 09:31	12/21/16 16:47		L2
TPH - Motor Oil	ND	mg/kg	9.9	1	12/20/16 09:31	12/21/16 16:47	64742-65-0	
Surrogates								
n-Octacosane (S)	77	%	62-137	1	12/20/16 09:31	12/21/16 16:47	630-02-4	
8260 MSV Low Soil Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low								
Benzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	71-43-2	
Bromobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	108-86-1	
Bromochloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	74-97-5	
Bromodichloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	75-27-4	
Bromoform	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	75-25-2	
Bromomethane	ND	ug/kg	20.0	1	12/19/16 09:54	12/19/16 14:16	74-83-9	
n-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	56-23-5	
Chlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	108-90-7	
Chloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	75-00-3	
Chloroform	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	67-66-3	
Chloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	74-87-3	

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ANALYTICAL RESULTS

Project: Northgate Sears

Pace Project No.: 1280627

Sample: 3SAC10 **Lab ID: 1280627003** Collected: 12/16/16 10:30 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Soil		Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low						
2-Chlorotoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	96-12-8	
Dibromochloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	106-93-4	
Dibromomethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	156-60-5	
Dichlorofluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	75-43-4	
1,2-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	10061-02-6	
Ethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	87-68-3	
n-Hexane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	110-54-3	
Isopropylbenzene (Cumene)	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	99-87-6	
Methylene Chloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	75-09-2	
Naphthalene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	91-20-3	
n-Propylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	103-65-1	
Styrene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	79-34-5	
Tetrachloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	127-18-4	
Toluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	79-00-5	
Trichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	108-67-8	
2,2,4-Trimethylpentane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	540-84-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Northgate Sears
Pace Project No.: 1280627

Sample: 3SAC10 **Lab ID: 1280627003** Collected: 12/16/16 10:30 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Soil Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low								
Vinyl chloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	75-01-4	
Xylene (Total)	ND	ug/kg	10	1	12/19/16 09:54	12/19/16 14:16	1330-20-7	
m&p-Xylene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	179601-23-1	
o-Xylene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:16	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%	70-130	1	12/19/16 09:54	12/19/16 14:16	17060-07-0	
Toluene-d8 (S)	103	%	70-130	1	12/19/16 09:54	12/19/16 14:16	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130	1	12/19/16 09:54	12/19/16 14:16	460-00-4	

Sample: 4SAC10 **Lab ID: 1280627004** Collected: 12/16/16 12:00 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS Soil Analytical Method: EPA 8015B Preparation Method: 89 CA LUFT								
TPH-DRO (C10-C28)	37.0	mg/kg	1.0	1	12/20/16 09:31	12/21/16 17:21		L2
TPH - Motor Oil	27.0	mg/kg	10	1	12/20/16 09:31	12/21/16 17:21	64742-65-0	
Surrogates								
n-Octacosane (S)	72	%	62-137	1	12/20/16 09:31	12/21/16 17:21	630-02-4	

8260 MSV Low Soil Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low

Benzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	71-43-2	
Bromobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	108-86-1	
Bromochloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	74-97-5	
Bromodichloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	75-27-4	
Bromoform	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	75-25-2	
Bromomethane	ND	ug/kg	20.0	1	12/19/16 09:54	12/19/16 14:36	74-83-9	
n-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	56-23-5	
Chlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	108-90-7	
Chloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	75-00-3	
Chloroform	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	67-66-3	
Chloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	96-12-8	
Dibromochloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	106-93-4	
Dibromomethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	75-71-8	

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ANALYTICAL RESULTS

Project: Northgate Sears
Pace Project No.: 1280627

Sample: 4SAC10 **Lab ID: 1280627004** Collected: 12/16/16 12:00 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Soil		Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low						
1,1-Dichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	156-60-5	
Dichlorofluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	75-43-4	
1,2-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	10061-02-6	
Ethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	87-68-3	
n-Hexane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	110-54-3	
Isopropylbenzene (Cumene)	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	99-87-6	
Methylene Chloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	75-09-2	
Naphthalene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	91-20-3	
n-Propylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	103-65-1	
Styrene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	79-34-5	
Tetrachloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	127-18-4	
Toluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	79-00-5	
Trichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	108-67-8	
2,2,4-Trimethylpentane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	540-84-1	
Vinyl chloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	75-01-4	
Xylene (Total)	ND	ug/kg	10	1	12/19/16 09:54	12/19/16 14:36	1330-20-7	
m&p-Xylene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	179601-23-1	
o-Xylene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 14:36	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	112	%	70-130	1	12/19/16 09:54	12/19/16 14:36	17060-07-0	
Toluene-d8 (S)	103	%	70-130	1	12/19/16 09:54	12/19/16 14:36	2037-26-5	
4-Bromofluorobenzene (S)	108	%	70-130	1	12/19/16 09:54	12/19/16 14:36	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Northgate Sears
Pace Project No.: 1280627

Sample: 5SAC10 **Lab ID: 1280627005** Collected: 12/16/16 13:00 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS Soil		Analytical Method: EPA 8015B Preparation Method: 89 CA LUFT						
TPH-DRO (C10-C28)	3.7	mg/kg	0.99	1	12/20/16 09:31	12/21/16 17:55		L2
TPH - Motor Oil	ND	mg/kg	9.9	1	12/20/16 09:31	12/21/16 17:55	64742-65-0	
Surrogates								
n-Octacosane (S)	72	%	62-137	1	12/20/16 09:31	12/21/16 17:55	630-02-4	
8260 MSV Low Soil		Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low						
Benzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	71-43-2	
Bromobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	108-86-1	
Bromochloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	74-97-5	
Bromodichloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	75-27-4	
Bromoform	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	75-25-2	
Bromomethane	ND	ug/kg	20.0	1	12/19/16 09:54	12/19/16 15:16	74-83-9	
n-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	56-23-5	
Chlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	108-90-7	
Chloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	75-00-3	
Chloroform	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	67-66-3	
Chloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	96-12-8	
Dibromochloromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	106-93-4	
Dibromomethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	156-60-5	
Dichlorofluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	75-43-4	
1,2-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	10061-02-6	
Ethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	87-68-3	
n-Hexane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	110-54-3	
Isopropylbenzene (Cumene)	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	98-82-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Northgate Sears
Pace Project No.: 1280627

Sample: 5SAC10 **Lab ID: 1280627005** Collected: 12/16/16 13:00 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Soil Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low								
p-Isopropyltoluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	99-87-6	
Methylene Chloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	75-09-2	
Naphthalene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	91-20-3	
n-Propylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	103-65-1	
Styrene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	79-34-5	
Tetrachloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	127-18-4	
Toluene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	79-00-5	
Trichloroethene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	108-67-8	
2,2,4-Trimethylpentane	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	540-84-1	
Vinyl chloride	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	75-01-4	
Xylene (Total)	ND	ug/kg	10.0	1	12/19/16 09:54	12/19/16 15:16	1330-20-7	
m&p-Xylene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	179601-23-1	
o-Xylene	ND	ug/kg	5.0	1	12/19/16 09:54	12/19/16 15:16	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	110	%	70-130	1	12/19/16 09:54	12/19/16 15:16	17060-07-0	
Toluene-d8 (S)	104	%	70-130	1	12/19/16 09:54	12/19/16 15:16	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130	1	12/19/16 09:54	12/19/16 15:16	460-00-4	

Sample: 1SEARS1 **Lab ID: 1280627007** Collected: 12/16/16 15:08 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS Soil Analytical Method: EPA 8015B Preparation Method: 89 CA LUFT								
TPH-DRO (C10-C28)	12.5	mg/kg	1.0	1	12/20/16 09:31	12/21/16 18:29		L2
TPH - Motor Oil	29.1	mg/kg	10	1	12/20/16 09:31	12/21/16 18:29	64742-65-0	
Surrogates								
n-Octacosane (S)	70	%	62-137	1	12/20/16 09:31	12/21/16 18:29	630-02-4	
8260 MSV Low Soil Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low								
Benzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	71-43-2	
Bromobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	108-86-1	
Bromochloromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	74-97-5	
Bromodichloromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	75-27-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Northgate Sears

Pace Project No.: 1280627

Sample: 1SEARS1 **Lab ID: 1280627007** Collected: 12/16/16 15:08 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Soil		Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low						
Bromoform	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	75-25-2	
Bromomethane	ND	ug/kg	19.5	1	12/19/16 09:54	12/19/16 15:55	74-83-9	
n-Butylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	56-23-5	
Chlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	108-90-7	
Chloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	75-00-3	
Chloroform	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	67-66-3	
Chloromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	96-12-8	
Dibromochloromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	106-93-4	
Dibromomethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	10061-02-6	
Ethylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	87-68-3	
n-Hexane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	110-54-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	99-87-6	
Methylene Chloride	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	75-09-2	
Naphthalene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	91-20-3	
n-Propylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	103-65-1	
Styrene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	79-34-5	
Tetrachloroethene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	127-18-4	
Toluene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Northgate Sears
Pace Project No.: 1280627

Sample: 1SEARS1 **Lab ID: 1280627007** Collected: 12/16/16 15:08 Received: 12/16/16 18:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Soil		Analytical Method: EPA 8260B Preparation Method: EPA 5030 Low						
1,2,4-Trichlorobenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	79-00-5	
Trichloroethene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	108-67-8	
2,2,4-Trimethylpentane	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	540-84-1	
Vinyl chloride	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	75-01-4	
Xylene (Total)	ND	ug/kg	9.8	1	12/19/16 09:54	12/19/16 15:55	1330-20-7	
m&p-Xylene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	179601-23-1	
o-Xylene	ND	ug/kg	4.9	1	12/19/16 09:54	12/19/16 15:55	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	109	%.	70-130	1	12/19/16 09:54	12/19/16 15:55	17060-07-0	
Toluene-d8 (S)	103	%.	70-130	1	12/19/16 09:54	12/19/16 15:55	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	70-130	1	12/19/16 09:54	12/19/16 15:55	460-00-4	

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QUALITY CONTROL DATA

Project: Northgate Sears

Pace Project No.: 1280627

QC Batch: 102529 Analysis Method: EPA 8015B
 QC Batch Method: 89 CA LUFT Analysis Description: 8015 GCS Soil
 Associated Lab Samples: 1280627001, 1280627002, 1280627003, 1280627004, 1280627005, 1280627007

METHOD BLANK: 407500 Matrix: Solid
 Associated Lab Samples: 1280627001, 1280627002, 1280627003, 1280627004, 1280627005, 1280627007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH - Motor Oil	mg/kg	ND	9.9	12/21/16 13:23	
TPH-DRO (C10-C28)	mg/kg	ND	0.99	12/21/16 13:23	
n-Octacosane (S)	%.	50	62-137	12/21/16 13:23	S0

LABORATORY CONTROL SAMPLE: 407501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C28)	mg/kg	19.9	12.0	60	72-125	L0
n-Octacosane (S)	%.			49	62-137	S0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 407502 407503

Parameter	Units	1280627001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO (C10-C28)	mg/kg	8.1	19.9	19.8	18.7	17.7	53	48	30-150	6	25	
n-Octacosane (S)	%.						77	64	62-137			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Northgate Sears
Pace Project No.: 1280627

QC Batch: 102450 Analysis Method: EPA 8260B
QC Batch Method: EPA 5030 Low Analysis Description: 8260 MSV Low Soil
Associated Lab Samples: 1280627001, 1280627002, 1280627003, 1280627004, 1280627005, 1280627007

METHOD BLANK: 407231 Matrix: Solid
Associated Lab Samples: 1280627001, 1280627002, 1280627003, 1280627004, 1280627005, 1280627007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	4.9	12/19/16 10:57	
1,1,1-Trichloroethane	ug/kg	ND	4.9	12/19/16 10:57	
1,1,2,2-Tetrachloroethane	ug/kg	ND	4.9	12/19/16 10:57	
1,1,2-Trichloroethane	ug/kg	ND	4.9	12/19/16 10:57	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	4.9	12/19/16 10:57	
1,1-Dichloroethane	ug/kg	ND	4.9	12/19/16 10:57	
1,1-Dichloroethene	ug/kg	ND	4.9	12/19/16 10:57	
1,1-Dichloropropene	ug/kg	ND	4.9	12/19/16 10:57	
1,2,3-Trichlorobenzene	ug/kg	ND	4.9	12/19/16 10:57	
1,2,3-Trichloropropane	ug/kg	ND	4.9	12/19/16 10:57	
1,2,4-Trichlorobenzene	ug/kg	ND	4.9	12/19/16 10:57	
1,2,4-Trimethylbenzene	ug/kg	ND	4.9	12/19/16 10:57	
1,2-Dibromo-3-chloropropane	ug/kg	ND	4.9	12/19/16 10:57	
1,2-Dibromoethane (EDB)	ug/kg	ND	4.9	12/19/16 10:57	
1,2-Dichlorobenzene	ug/kg	ND	4.9	12/19/16 10:57	
1,2-Dichloroethane	ug/kg	ND	4.9	12/19/16 10:57	
1,2-Dichloropropane	ug/kg	ND	4.9	12/19/16 10:57	
1,3,5-Trimethylbenzene	ug/kg	ND	4.9	12/19/16 10:57	
1,3-Dichlorobenzene	ug/kg	ND	4.9	12/19/16 10:57	
1,3-Dichloropropane	ug/kg	ND	4.9	12/19/16 10:57	
1,4-Dichlorobenzene	ug/kg	ND	4.9	12/19/16 10:57	
2,2,4-Trimethylpentane	ug/kg	ND	4.9	12/19/16 10:57	
2,2-Dichloropropane	ug/kg	ND	4.9	12/19/16 10:57	
2-Chlorotoluene	ug/kg	ND	4.9	12/19/16 10:57	
4-Chlorotoluene	ug/kg	ND	4.9	12/19/16 10:57	
Benzene	ug/kg	ND	4.9	12/19/16 10:57	
Bromobenzene	ug/kg	ND	4.9	12/19/16 10:57	
Bromochloromethane	ug/kg	ND	4.9	12/19/16 10:57	
Bromodichloromethane	ug/kg	ND	4.9	12/19/16 10:57	
Bromoform	ug/kg	ND	4.9	12/19/16 10:57	
Bromomethane	ug/kg	ND	19.7	12/19/16 10:57	
Carbon tetrachloride	ug/kg	ND	4.9	12/19/16 10:57	
Chlorobenzene	ug/kg	ND	4.9	12/19/16 10:57	
Chloroethane	ug/kg	ND	4.9	12/19/16 10:57	
Chloroform	ug/kg	ND	4.9	12/19/16 10:57	
Chloromethane	ug/kg	ND	4.9	12/19/16 10:57	
cis-1,2-Dichloroethene	ug/kg	ND	4.9	12/19/16 10:57	
cis-1,3-Dichloropropene	ug/kg	ND	4.9	12/19/16 10:57	
Dibromochloromethane	ug/kg	ND	4.9	12/19/16 10:57	
Dibromomethane	ug/kg	ND	4.9	12/19/16 10:57	
Dichlorodifluoromethane	ug/kg	ND	4.9	12/19/16 10:57	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Northgate Sears
Pace Project No.: 1280627

METHOD BLANK: 407231 Matrix: Solid
Associated Lab Samples: 1280627001, 1280627002, 1280627003, 1280627004, 1280627005, 1280627007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorofluoromethane	ug/kg	ND	4.9	12/19/16 10:57	
Ethylbenzene	ug/kg	ND	4.9	12/19/16 10:57	
Hexachloro-1,3-butadiene	ug/kg	ND	4.9	12/19/16 10:57	
Isopropylbenzene (Cumene)	ug/kg	ND	4.9	12/19/16 10:57	
m&p-Xylene	ug/kg	ND	4.9	12/19/16 10:57	
Methylene Chloride	ug/kg	ND	4.9	12/19/16 10:57	
n-Butylbenzene	ug/kg	ND	4.9	12/19/16 10:57	
n-Hexane	ug/kg	ND	4.9	12/19/16 10:57	
n-Propylbenzene	ug/kg	ND	4.9	12/19/16 10:57	
Naphthalene	ug/kg	ND	4.9	12/19/16 10:57	
o-Xylene	ug/kg	ND	4.9	12/19/16 10:57	
p-Isopropyltoluene	ug/kg	ND	4.9	12/19/16 10:57	
sec-Butylbenzene	ug/kg	ND	4.9	12/19/16 10:57	
Styrene	ug/kg	ND	4.9	12/19/16 10:57	
tert-Butylbenzene	ug/kg	ND	4.9	12/19/16 10:57	
Tetrachloroethene	ug/kg	ND	4.9	12/19/16 10:57	
Toluene	ug/kg	ND	4.9	12/19/16 10:57	
trans-1,2-Dichloroethene	ug/kg	ND	4.9	12/19/16 10:57	
trans-1,3-Dichloropropene	ug/kg	ND	4.9	12/19/16 10:57	
Trichloroethene	ug/kg	ND	4.9	12/19/16 10:57	
Trichlorofluoromethane	ug/kg	ND	4.9	12/19/16 10:57	
Vinyl chloride	ug/kg	ND	4.9	12/19/16 10:57	
Xylene (Total)	ug/kg	ND	9.9	12/19/16 10:57	
1,2-Dichloroethane-d4 (S)	%	113	70-130	12/19/16 10:57	
4-Bromofluorobenzene (S)	%	105	70-130	12/19/16 10:57	
Toluene-d8 (S)	%	104	70-130	12/19/16 10:57	

LABORATORY CONTROL SAMPLE & LCSD: 407232

Parameter	Units	407241							Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD		
1,1,1,2-Tetrachloroethane	ug/kg	39.9	35.8	36.2	90	91	72-125	1	25	
1,1,1-Trichloroethane	ug/kg	39.9	39.7	39.2	100	99	71-125	1	25	
1,1,2,2-Tetrachloroethane	ug/kg	39.9	36.7	36.0	92	91	75-125	2	25	
1,1,2-Trichloroethane	ug/kg	39.9	37.4	36.8	94	93	74-125	2	25	
1,1,2-Trichlorotrifluoroethane	ug/kg	39.9	39.9	39.3	100	99	68-125	1	25	
1,1-Dichloroethane	ug/kg	39.9	37.4	36.7	94	93	71-125	2	25	
1,1-Dichloroethene	ug/kg	39.9	37.8	36.7	95	93	72-125	3	25	
1,1-Dichloropropene	ug/kg	39.9	38.7	38.3	97	97	72-125	1	25	
1,2,3-Trichlorobenzene	ug/kg	39.9	36.1	35.8	90	90	69-125	1	25	
1,2,3-Trichloropropane	ug/kg	39.9	39.9	38.0	100	96	75-125	5	25	
1,2,4-Trichlorobenzene	ug/kg	39.9	35.5	35.5	89	89	66-125	0	25	
1,2,4-Trimethylbenzene	ug/kg	39.9	35.7	35.7	90	90	73-125	0	25	
1,2-Dibromo-3-chloropropane	ug/kg	99.8	100	93.3	100	94	59-138	7	25	
1,2-Dibromoethane (EDB)	ug/kg	39.9	39.9	38.7	100	97	73-125	3	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Northgate Sears

Pace Project No.: 1280627

LABORATORY CONTROL SAMPLE & LCSD: 407232		407241									
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
1,2-Dichlorobenzene	ug/kg	39.9	34.2	34.2	86	86	72-125	0	25		
1,2-Dichloroethane	ug/kg	39.9	39.5	38.8	99	98	67-125	2	25		
1,2-Dichloropropane	ug/kg	39.9	35.5	35.0	89	88	68-125	1	25		
1,3,5-Trimethylbenzene	ug/kg	39.9	36.3	36.3	91	92	74-125	0	25		
1,3-Dichlorobenzene	ug/kg	39.9	35.4	35.9	89	90	72-125	1	25		
1,3-Dichloropropane	ug/kg	39.9	36.9	36.2	93	91	70-125	2	25		
1,4-Dichlorobenzene	ug/kg	39.9	33.8	33.5	85	84	69-125	1	25		
2,2,4-Trimethylpentane	ug/kg	39.9	35.4	34.6	89	87	70-130	2	25		
2,2-Dichloropropane	ug/kg	39.9	35.0	35.1	88	88	70-125	0	25		
2-Chlorotoluene	ug/kg	39.9	36.1	35.8	90	90	74-125	1	25		
4-Chlorotoluene	ug/kg	39.9	36.3	35.9	91	90	72-125	1	25		
Benzene	ug/kg	39.9	34.7	34.1	87	86	69-125	2	25		
Bromobenzene	ug/kg	39.9	36.2	36.6	91	92	73-125	1	25		
Bromochloromethane	ug/kg	39.9	38.6	39.2	97	99	73-125	2	25		
Bromodichloromethane	ug/kg	39.9	40.2	39.6	101	100	70-125	2	25		
Bromoform	ug/kg	39.9	38.9	39.0	97	98	68-125	0	25		
Bromomethane	ug/kg	39.9	49.9	52.2	125	132	36-138	5	25		
Carbon tetrachloride	ug/kg	39.9	39.6	39.1	99	99	69-126	1	25		
Chlorobenzene	ug/kg	39.9	35.4	35.3	89	89	73-125	0	25		
Chloroethane	ug/kg	39.9	31.8	37.1	80	94	30-150	15	25		
Chloroform	ug/kg	39.9	38.7	37.7	97	95	71-125	3	25		
Chloromethane	ug/kg	39.9	37.6	37.7	94	95	53-125	0	25		
cis-1,2-Dichloroethene	ug/kg	39.9	36.3	36.3	91	92	72-125	0	25		
cis-1,3-Dichloropropene	ug/kg	39.9	37.4	36.9	94	93	71-125	1	25		
Dibromochloromethane	ug/kg	39.9	39.8	39.5	100	100	69-125	1	25		
Dibromomethane	ug/kg	39.9	39.2	38.9	98	98	72-125	1	25		
Dichlorodifluoromethane	ug/kg	39.9	46.3	45.2	116	114	46-125	2	25		
Dichlorofluoromethane	ug/kg	39.9	45.2	44.1	113	111	70-130	3	25		
Ethylbenzene	ug/kg	39.9	35.6	35.4	89	89	72-125	0	25		
Hexachloro-1,3-butadiene	ug/kg	39.9	38.2	37.0	96	93	67-125	3	25		
Isopropylbenzene (Cumene)	ug/kg	39.9	36.7	36.7	92	92	75-125	0	25		
m&p-Xylene	ug/kg	79.8	71.5	70.9	90	89	71-125	1	25		
Methylene Chloride	ug/kg	39.9	35.6	35.4	89	89	58-125	0	25		
n-Butylbenzene	ug/kg	39.9	35.0	34.8	88	88	67-125	1	25		
n-Hexane	ug/kg	99.8	92.4	90.2	93	91	70-130	2	25		
n-Propylbenzene	ug/kg	39.9	36.5	36.3	91	91	72-125	1	25		
Naphthalene	ug/kg	39.9	37.7	36.5	94	92	64-125	3	25		
o-Xylene	ug/kg	39.9	35.0	35.1	88	89	73-125	0	25		
p-Isopropyltoluene	ug/kg	39.9	37.0	37.1	93	93	67-125	0	25		
sec-Butylbenzene	ug/kg	39.9	36.8	36.4	92	92	74-125	1	25		
Styrene	ug/kg	39.9	35.8	36.2	90	91	71-125	1	25		
tert-Butylbenzene	ug/kg	39.9	36.4	36.1	91	91	74-125	1	25		
Tetrachloroethene	ug/kg	39.9	40.1	39.3	100	99	72-125	2	25		
Toluene	ug/kg	39.9	36.4	36.1	91	91	70-125	1	25		
trans-1,2-Dichloroethene	ug/kg	39.9	37.6	37.4	94	94	72-125	0	25		
trans-1,3-Dichloropropene	ug/kg	39.9	36.2	35.3	91	89	68-125	2	25		
Trichloroethene	ug/kg	39.9	38.8	38.2	97	96	73-125	1	25		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Northgate Sears

Pace Project No.: 1280627

Parameter	Units	LABORATORY CONTROL SAMPLE & LCSD: 407232		407241			% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec				
Trichlorofluoromethane	ug/kg	39.9	46.5	44.8	116	113	66-125	4	25	
Vinyl chloride	ug/kg	39.9	43.4	42.3	109	106	62-125	3	25	
Xylene (Total)	ug/kg	120	107	106	89	89	72-125	0	25	
1,2-Dichloroethane-d4 (S)	%				114	111	70-130			
4-Bromofluorobenzene (S)	%				110	108	70-130			
Toluene-d8 (S)	%				104	103	70-130			

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Northgate Sears

Pace Project No.: 1280627

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-DAV Pace Analytical Services - Davis

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

S0 Surrogate recovery outside laboratory control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Northgate Sears

Pace Project No.: 1280627

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1280627001	1SAC10	89 CA LUFT	102529	EPA 8015B	102548
1280627002	2SAC10	89 CA LUFT	102529	EPA 8015B	102548
1280627003	3SAC10	89 CA LUFT	102529	EPA 8015B	102548
1280627004	4SAC10	89 CA LUFT	102529	EPA 8015B	102548
1280627005	5SAC10	89 CA LUFT	102529	EPA 8015B	102548
1280627007	1SEARS1	89 CA LUFT	102529	EPA 8015B	102548
1280627001	1SAC10	EPA 5030 Low	102450	EPA 8260B	102455
1280627002	2SAC10	EPA 5030 Low	102450	EPA 8260B	102455
1280627003	3SAC10	EPA 5030 Low	102450	EPA 8260B	102455
1280627004	4SAC10	EPA 5030 Low	102450	EPA 8260B	102455
1280627005	5SAC10	EPA 5030 Low	102450	EPA 8260B	102455
1280627007	1SEARS1	EPA 5030 Low	102450	EPA 8260B	102455

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

Client Name: TOR Environmental

Project #:

WO#: 1280627



1280627

Courier: Fed Ex UPS USPS Client
 Commercial Pace OnTrac Other: _____
 Tracking Number: N/A

Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Optional: Proj. Due Date: _____ Proj. Name: _____

Packing Material: Bubble Wrap Bubble Bags None Other: _____ Temp Blank? Yes No

Thermom. Used: DA1434 DA2285 Type of Ice: Wet Blue Dry Ice None Samples on ice, cooling process has begun

Cooler Temp Read(°C): 17.2 Cooler Temp Corrected(°C): 17.8 Biological Tissue Frozen? Yes No N/A
 Temp should be above freezing to 6°C Correction Factor: +0.6 Date and Initials of Person Examining Contents: DSO 12/19/16

				Comments:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1. <u>No sample date and times</u>
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2. <u>for samples 006 and 007</u>
Chain of Custody Relinquished?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	3. <u>On COC.</u>
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	4. <u>Container dates and times</u>
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5. <u>are: 006 - 12/16/16 - Date</u>
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	6. <u>1420 - Time</u>
Rush Turn Around Time Requested?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7. <u>007 - 12/16/16 - Date</u>
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	8. <u>1508 - Time</u>
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: <u>WT</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	12.
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH >12 Cyanide)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		Initial when completed: _____ Lot # of added preservative: _____
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: _____ Date/Time: _____
 Comments/Resolution: _____

Project Manager Review: Scott Reuss Date: 12/19/16

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

SOIL CHECKLIST

To Be Completed by SR Staff:

Client: TOR ENV

Date: 12/19/16

Initials: DJD 12/19/16

Are any samples from a depth of ≤ 6 ft?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not indicated
Is sub any analysis requested?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If No to both questions, proceed with receipt, samples are not regulated.) *
Sample Origin (circle one):	FOREIGN <u>DOMESTIC</u>
<i>(Note: soil samples from Hawaii and Puerto Rico are considered to be of a Foreign Source)</i>	
If Foreign, list County of Origin:	
If Domestic, circle State of Origin:	AL AR AZ <u>CA</u> FL GA ID LA MS NC NM NY OK OR SC TN TX VA <input type="checkbox"/> NONE OF THE ABOVE (If None of the Above, proceed with receipt, samples are not regulated.)
If from a circled state above, County of Origin	<i>If unknown, contact PM. Project cannot be received until this is determined.</i> <u>Marin</u>
Is sample from a Regulated or Quarantined Zone?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If No, proceed with receipt, samples are not regulated.)

REQUIREMENT	ACTION	COMPLETED
Samples from a depth of > 6 feet are not regulated under APHIS / USDA guidelines	Were samples segregated by depth ≤ or > 6 feet? (If samples from > 6 feet were in direct contact with soil from ≤ 6 ft, all soils must be treated as regulated.)	YES NO <u>N/A</u>
	Samples from a depth of >6 feet are exempt from classification as regulated soil per California APHIS /USDA guidelines. For sub analyses, the receiving lab must confirm that the >6 feet exemption is allowable. Otherwise, treat the sub samples as regulated soil regardless of sample depth.	
Samples must be double contained to prevent accidental release.	Were there any signs of breakage or leakage (check for broken glass and/or loose soil in the cooler)?	YES <u>NO</u>
	<i>If NO, ice and melt water can be disposed of by normal process (down the drain).</i>	
	If YES, were ice and melt water separated from the cooler and disposed of properly?	YES NO <u>N/A</u>
Any broken glass and/or loose soil are to be bagged and placed in a USDA Regulated satellite container or active drum (see Waste Coordinator). Ice and melt water must be containerized and sterilized by adding enough bleach to achieve a 10% concentration and allowed to sit for ≥ 30 minutes before disposing.		
Samples must be segregated and stored in designated bins, shelves and coolers.	Were samples placed in a designated cooler, containers and shelves?	<u>YES</u> NO
Yellow stickers are to be placed on all regulated samples.	Did yellow stickers get placed on all sample containers?	<u>YES</u> NO
Equipment and supplies that have come into contact samples must be decontaminated.	Was the cooler(s) and/or countertop(s) decontaminated using a fresh 10% bleach solution? (Gloves and other lab supplies will be bagged and placed in the SR USDA Regulated satellite container).	<u>YES</u> NO

To Be Completed by PM/PC for Regulated Soils:

Sample Analysis to be conducted at (circle all that apply):

Davis

Subcontract Lab

Name of Subcontract Lab(s):

REQUIREMENT	ACTION	COMPLETED
USDA / APHIS rep must be informed by email prior to shipping untreated soil to any subcontract lab, including IR Pace Labs.	Anthony Jackson, USDA APHIS PPQ Tel.: (916) 930-5536 Email: Anthony.S.Jackson@aphis.usda.gov	<u>YES</u> NO N/A
Shipment must include a valid copy of the receiving lab's permit along with all required forms.	Is a copy of all needed paperwork included with the COC? Do NOT ship samples until all necessary paperwork is compiled.	YES NO <u>N/A</u>

Comments: Sub is on concrete dust not on soil

Project Manager Signature:

Scott Jensen

Date:

12/19/16



Calscience



WORK ORDER NUMBER: 16-12-1924

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Pace Analytical

Client Project Name: Northgate Sears / 1280627

Attention: Scott Forbes
2795 2nd Street
Suite 300
Davis, CA 95618-6505

Nicole Scott

Approved for release on 12/21/2016 by:
Nicole Scott
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



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Work Order Number: 16-12-1924

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 12/20/16. They were assigned to Work Order 16-12-1924.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.



Calscience

Analytical Report

Pace Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 12/20/16
Work Order: 16-12-1924
Preparation: EPA 3050B
Method: EPA 6010B
Units: mg/kg

Project: Northgate Sears / 1280627

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
1BATSAC	16-12-1924-1-A	12/16/16 14:20	Solid	ICP 7300	12/20/16	12/20/16 17:13	161219L10

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	3.68	0.739	0.985	
Barium	1290	0.493	0.985	
Beryllium	0.288	0.246	0.985	
Cadmium	0.529	0.493	0.985	
Chromium	40.7	0.246	0.985	
Cobalt	9.28	0.246	0.985	
Copper	23.6	0.493	0.985	
Lead	23.2	0.493	0.985	
Molybdenum	0.533	0.246	0.985	
Nickel	65.4	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	34.1	0.246	0.985	
Zinc	38.1	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Pace Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 12/20/16
Work Order: 16-12-1924
Preparation: EPA 3050B
Method: EPA 6010B
Units: mg/kg

Project: Northgate Sears / 1280627

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-23755	N/A	Solid	ICP 7300	12/19/16	12/20/16 10:51	161219L10

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.781	1.04	
Arsenic	ND	0.781	1.04	
Barium	ND	0.521	1.04	
Beryllium	ND	0.260	1.04	
Cadmium	ND	0.521	1.04	
Chromium	ND	0.260	1.04	
Cobalt	ND	0.260	1.04	
Copper	ND	0.521	1.04	
Lead	ND	0.521	1.04	
Molybdenum	ND	0.260	1.04	
Nickel	ND	0.260	1.04	
Selenium	ND	0.781	1.04	
Silver	ND	0.260	1.04	
Thallium	ND	0.781	1.04	
Vanadium	ND	0.260	1.04	
Zinc	ND	1.04	1.04	

Analytical Report

Pace Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 12/20/16
Work Order: 16-12-1924
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: Northgate Sears / 1280627

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
1BATSAC	16-12-1924-1-A	12/16/16 14:20	Solid	Mercury 07	12/20/16	12/20/16 15:56	161220L01A

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0847	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-272-2730	N/A	Solid	Mercury 07	12/20/16	12/20/16 12:56	161220L01A

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0833	1.00	



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Quality Control - Spike/Spike Duplicate

Pace Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 12/20/16
Work Order: 16-12-1924
Preparation: EPA 3050B
Method: EPA 6010B

Project: Northgate Sears / 1280627

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
16-12-1142-1	Sample	Solid	ICP 7300	12/19/16	12/20/16 11:12	161219S10				
16-12-1142-1	Matrix Spike	Solid	ICP 7300	12/19/16	12/20/16 11:13	161219S10				
16-12-1142-1	Matrix Spike Duplicate	Solid	ICP 7300	12/19/16	12/20/16 11:14	161219S10				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	21.14	85	22.16	89	50-115	5	0-20	
Arsenic	ND	25.00	23.46	94	22.93	92	75-125	2	0-20	
Barium	50.50	25.00	70.73	81	72.75	89	75-125	3	0-20	
Beryllium	ND	25.00	25.96	104	25.09	100	75-125	3	0-20	
Cadmium	ND	25.00	25.23	101	24.74	99	75-125	2	0-20	
Chromium	0.8698	25.00	26.66	103	25.96	100	75-125	3	0-20	
Cobalt	0.2398	25.00	25.74	102	25.20	100	75-125	2	0-20	
Copper	2.538	25.00	28.64	104	27.91	101	75-125	3	0-20	
Lead	ND	25.00	24.82	99	24.44	98	75-125	2	0-20	
Molybdenum	0.2483	25.00	24.93	99	24.89	99	75-125	0	0-20	
Nickel	2.769	25.00	27.87	100	27.29	98	75-125	2	0-20	
Selenium	ND	25.00	24.93	100	24.17	97	75-125	3	0-20	
Silver	ND	12.50	12.58	101	12.42	99	75-125	1	0-20	
Thallium	ND	25.00	20.41	82	21.40	86	75-125	5	0-20	
Vanadium	0.4903	25.00	25.79	101	25.22	99	75-125	2	0-20	
Zinc	5.819	25.00	31.04	101	30.66	99	75-125	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Pace Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 12/20/16
Work Order: 16-12-1924
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: Northgate Sears / 1280627

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-12-0667-1	Sample	Solid	Mercury 07	12/20/16	12/21/16 11:36	161220S01
16-12-0667-1	Matrix Spike	Solid	Mercury 07	12/20/16	12/21/16 11:33	161220S01
16-12-0667-1	Matrix Spike Duplicate	Solid	Mercury 07	12/20/16	12/21/16 11:31	161220S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	1.734	0.8350	2.728	119	2.825	131	71-137	3	0-14	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS

Pace Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 12/20/16
Work Order: 16-12-1924
Preparation: EPA 3050B
Method: EPA 6010B

Project: Northgate Sears / 1280627

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
097-01-002-23755	LCS	Solid	ICP 7300	12/19/16	12/20/16 10:52	161219L10	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Antimony		25.00	22.87	91	80-120	73-127	
Arsenic		25.00	23.48	94	80-120	73-127	
Barium		25.00	25.55	102	80-120	73-127	
Beryllium		25.00	24.33	97	80-120	73-127	
Cadmium		25.00	24.88	100	80-120	73-127	
Chromium		25.00	24.99	100	80-120	73-127	
Cobalt		25.00	25.24	101	80-120	73-127	
Copper		25.00	25.22	101	80-120	73-127	
Lead		25.00	25.25	101	80-120	73-127	
Molybdenum		25.00	23.92	96	80-120	73-127	
Nickel		25.00	25.27	101	80-120	73-127	
Selenium		25.00	23.04	92	80-120	73-127	
Silver		12.50	11.53	92	80-120	73-127	
Thallium		25.00	25.74	103	80-120	73-127	
Vanadium		25.00	24.00	96	80-120	73-127	
Zinc		25.00	24.45	98	80-120	73-127	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS

Pace Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 12/20/16
Work Order: 16-12-1924
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: Northgate Sears / 1280627

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-2730	LCS	Solid	Mercury 07	12/20/16	12/20/16 12:59	161220L01A
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Mercury		0.8350	0.8509	102	85-121	

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Calscience

Sample Analysis Summary Report

Work Order: 16-12-1924

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 6010B	EPA 3050B	935	ICP 7300	1
EPA 7471A	EPA 7471A Total	868	Mercury 07	1


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Glossary of Terms and Qualifiers

Work Order: 16-12-1924

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Chain of Custody



16-12-1924

Workorder: 1280627 Workorder Name: Northgate Sears Results Requested By: ~~12/16/2016~~

Scott M Forbes
 Pace Analytical Davis
 2795 Second Street
 Suite 300
 Davis, CA 95618
 Phone (530) 297-4800
 Email: scott.forbes@pacelabs.com

State of Sample Origin: CA P.O. 1280627

Transfers	Released By	Date/Time	Received By	Date/Time	Received on Ice	Y or N	Y or N	Y or N	Samples Intact	Y or N
1	<i>[Signature]</i>	12/16/2016 14:20	1280627006	12/20/16 10:40						
2										
3										
4										
5										

Preserver Container: Unpreserved
 1BATSAC 12/16/2016 14:20 1280627006 Solid X CAM 17

LAB USE ONLY

Due 12/21/16

Comments

Received on Ice Y or N Y or N Y or N Samples Intact Y or N





800.334.5000
ontrac.com



1924

D10011058958392

Date Printed 12/19/2016

Tracking#D10011058958392

Shipped From:
PACE ANALYTICAL
2795 2ND STREET 300
DAVIS, CA 95618

Sent By: SAMPLE RECEIVINGX125
Phone#: (530)297-4800
wgt(lbs): 10
Reference:
Reference 2:

<p><i>Ship To Company:</i> EUROFINS CALSCIENCE, INC. 7440 LINCOLN WAY GARDEN GROVE, CA 92841 SAMPLE RECEIVING (714)895-5494</p>	<p><i>Service:</i> SUNRISE <i>Sort Code:</i> ORG <i>Special Services:</i> Signature Required</p>
---	---

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SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Pace Analytical

DATE: 12 / 20 / 2016

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)
 Thermometer ID: SC3A (CF: 0.0°C); Temperature (w/o CF): 3-6 °C (w/ CF): 3-6 °C; Blank Sample
 Sample(s) outside temperature criteria (PM/APM contacted by: _____)
 Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling
 Sample(s) received at ambient temperature; placed on ice for transport by courier
 Ambient Temperature: Air Filter

Checked by: 876

CUSTODY SEAL:
 Cooler Present and Intact Present but Not Intact Not Present N/A
 Sample(s) Present and Intact Present but Not Intact Not Present N/A

Checked by: 876
Checked by: 876

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: VOA VOA_h VOA_{na2} 100PJ 100PJ_{na2} 125AGB 125AGB_h 125AGB_p 125PB
 125PB_{z_{na}} 250AGB 250CGB 250CGB_s 250PB 250PB_n 500AGB 500AGJ 500AGJ_s
 500PB 1AGB 1AGB_{na2} 1AGB_s 1PB 1PB_{na} _____ _____ _____ _____

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (_____) EnCores® (_____) TerraCores® (_____) _____

Air: Tedlar™ Canister Sorbent Tube PUF _____ **Other Matrix** (_____) _____ _____

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag
 Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄,
 s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, z_{na} = Zn (CH₃CO₂)₂ + NaOH

Labeled/Checked by: 876
Reviewed by: [Signature]





McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1706E27 **Amended:** 07/06/2017

Report Created for: TOR Environmental, Inc.

PO BOX 73626
San Clemente, CA 92673

Project Contact: Jeffrey Borum

Project P.O.:

Project Name: GW254; Northgate Mall Sears Auto

Project Received: 06/29/2017

Analytical Report reviewed & approved for release on 07/06/2017 by:

Angela Rydelius,
Laboratory Manager

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Glossary of Terms & Qualifier Definitions

Client: TOR Environmental, Inc.
Project: GW254; Northgate Mall Sears Auto
WorkOrder: 1706E27

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: TOR Environmental, Inc.
Project: GW254; Northgate Mall Sears Auto
WorkOrder: 1706E27

Analytical Qualifiers

d7 Strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
d9 No recognizable pattern
e2 Diesel range compounds are significant; no recognizable pattern
e7 Oil range compounds are significant
e11/e4 Pattern resembles stoddard solvent/mineral spirit; and/or Gasoline range compounds are significant.

Quality Control Qualifiers

F2 LCS/LCSD recovery and/or RPD is out of acceptance criteria.
F10 MS/MSD outside control limits. Physical or chemical interferences exist due to sample matrix.



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-5'	1706E27-001A	Soil	06/29/2017 09:45	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 12:46
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 12:46
Benzene	ND	0.0050	1	06/30/2017 12:46
Bromobenzene	ND	0.0050	1	06/30/2017 12:46
Bromochloromethane	ND	0.0050	1	06/30/2017 12:46
Bromodichloromethane	ND	0.0050	1	06/30/2017 12:46
Bromoform	ND	0.0050	1	06/30/2017 12:46
Bromomethane	ND	0.0050	1	06/30/2017 12:46
2-Butanone (MEK)	ND	0.020	1	06/30/2017 12:46
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 12:46
n-Butyl benzene	ND	0.0050	1	06/30/2017 12:46
sec-Butyl benzene	ND	0.0050	1	06/30/2017 12:46
tert-Butyl benzene	ND	0.0050	1	06/30/2017 12:46
Carbon Disulfide	ND	0.0050	1	06/30/2017 12:46
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 12:46
Chlorobenzene	ND	0.0050	1	06/30/2017 12:46
Chloroethane	ND	0.0050	1	06/30/2017 12:46
Chloroform	ND	0.0050	1	06/30/2017 12:46
Chloromethane	ND	0.0050	1	06/30/2017 12:46
2-Chlorotoluene	ND	0.0050	1	06/30/2017 12:46
4-Chlorotoluene	ND	0.0050	1	06/30/2017 12:46
Dibromochloromethane	ND	0.0050	1	06/30/2017 12:46
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 12:46
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 12:46
Dibromomethane	ND	0.0050	1	06/30/2017 12:46
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 12:46
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 12:46
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 12:46
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 12:46
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 12:46
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 12:46
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 12:46
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 12:46
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 12:46
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 12:46
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 12:46
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 12:46

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-5'	1706E27-001A	Soil	06/29/2017 09:45	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 12:46
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 12:46
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 12:46
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 12:46
Ethylbenzene	ND	0.0050	1	06/30/2017 12:46
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 12:46
Freon 113	ND	0.0050	1	06/30/2017 12:46
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 12:46
Hexachloroethane	ND	0.0050	1	06/30/2017 12:46
2-Hexanone	ND	0.0050	1	06/30/2017 12:46
Isopropylbenzene	ND	0.0050	1	06/30/2017 12:46
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 12:46
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 12:46
Methylene chloride	ND	0.0050	1	06/30/2017 12:46
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 12:46
Naphthalene	ND	0.0050	1	06/30/2017 12:46
n-Propyl benzene	ND	0.0050	1	06/30/2017 12:46
Styrene	ND	0.0050	1	06/30/2017 12:46
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 12:46
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 12:46
Tetrachloroethene	ND	0.0050	1	06/30/2017 12:46
Toluene	ND	0.0050	1	06/30/2017 12:46
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 12:46
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 12:46
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 12:46
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 12:46
Trichloroethene	ND	0.0050	1	06/30/2017 12:46
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 12:46
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 12:46
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 12:46
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 12:46
Vinyl Chloride	ND	0.0050	1	06/30/2017 12:46
Xylenes, Total	ND	0.0050	1	06/30/2017 12:46

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-5'	1706E27-001A	Soil	06/29/2017 09:45	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	115	70-130		06/30/2017 12:46
Toluene-d8	109	70-130		06/30/2017 12:46
4-BFB	116	70-130		06/30/2017 12:46
Benzene-d6	87	60-140		06/30/2017 12:46
Ethylbenzene-d10	100	60-140		06/30/2017 12:46
1,2-DCB-d4	75	60-140		06/30/2017 12:46

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-10'	1706E27-002A	Soil	06/29/2017 10:01	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 13:25
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 13:25
Benzene	ND	0.0050	1	06/30/2017 13:25
Bromobenzene	ND	0.0050	1	06/30/2017 13:25
Bromochloromethane	ND	0.0050	1	06/30/2017 13:25
Bromodichloromethane	ND	0.0050	1	06/30/2017 13:25
Bromoform	ND	0.0050	1	06/30/2017 13:25
Bromomethane	ND	0.0050	1	06/30/2017 13:25
2-Butanone (MEK)	ND	0.020	1	06/30/2017 13:25
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 13:25
n-Butyl benzene	ND	0.0050	1	06/30/2017 13:25
sec-Butyl benzene	ND	0.0050	1	06/30/2017 13:25
tert-Butyl benzene	ND	0.0050	1	06/30/2017 13:25
Carbon Disulfide	ND	0.0050	1	06/30/2017 13:25
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 13:25
Chlorobenzene	ND	0.0050	1	06/30/2017 13:25
Chloroethane	ND	0.0050	1	06/30/2017 13:25
Chloroform	ND	0.0050	1	06/30/2017 13:25
Chloromethane	ND	0.0050	1	06/30/2017 13:25
2-Chlorotoluene	ND	0.0050	1	06/30/2017 13:25
4-Chlorotoluene	ND	0.0050	1	06/30/2017 13:25
Dibromochloromethane	ND	0.0050	1	06/30/2017 13:25
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 13:25
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 13:25
Dibromomethane	ND	0.0050	1	06/30/2017 13:25
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 13:25
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 13:25
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 13:25
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 13:25
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 13:25
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 13:25
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 13:25
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 13:25
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 13:25
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 13:25
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 13:25
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 13:25

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-10'	1706E27-002A	Soil	06/29/2017 10:01	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 13:25
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 13:25
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 13:25
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 13:25
Ethylbenzene	ND	0.0050	1	06/30/2017 13:25
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 13:25
Freon 113	ND	0.0050	1	06/30/2017 13:25
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 13:25
Hexachloroethane	ND	0.0050	1	06/30/2017 13:25
2-Hexanone	ND	0.0050	1	06/30/2017 13:25
Isopropylbenzene	ND	0.0050	1	06/30/2017 13:25
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 13:25
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 13:25
Methylene chloride	ND	0.0050	1	06/30/2017 13:25
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 13:25
Naphthalene	ND	0.0050	1	06/30/2017 13:25
n-Propyl benzene	ND	0.0050	1	06/30/2017 13:25
Styrene	ND	0.0050	1	06/30/2017 13:25
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 13:25
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 13:25
Tetrachloroethene	ND	0.0050	1	06/30/2017 13:25
Toluene	ND	0.0050	1	06/30/2017 13:25
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 13:25
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 13:25
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 13:25
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 13:25
Trichloroethene	ND	0.0050	1	06/30/2017 13:25
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 13:25
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 13:25
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 13:25
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 13:25
Vinyl Chloride	ND	0.0050	1	06/30/2017 13:25
Xylenes, Total	ND	0.0050	1	06/30/2017 13:25

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-10'	1706E27-002A	Soil	06/29/2017 10:01	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	114	70-130		06/30/2017 13:25
Toluene-d8	109	70-130		06/30/2017 13:25
4-BFB	118	70-130		06/30/2017 13:25
Benzene-d6	83	60-140		06/30/2017 13:25
Ethylbenzene-d10	97	60-140		06/30/2017 13:25
1,2-DCB-d4	74	60-140		06/30/2017 13:25

Analyst(s): JEM



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-15'	1706E27-003A	Soil	06/29/2017 10:26	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 16:52
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 16:52
Benzene	ND	0.0050	1	06/30/2017 16:52
Bromobenzene	ND	0.0050	1	06/30/2017 16:52
Bromochloromethane	ND	0.0050	1	06/30/2017 16:52
Bromodichloromethane	ND	0.0050	1	06/30/2017 16:52
Bromoform	ND	0.0050	1	06/30/2017 16:52
Bromomethane	ND	0.0050	1	06/30/2017 16:52
2-Butanone (MEK)	ND	0.020	1	06/30/2017 16:52
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 16:52
n-Butyl benzene	ND	0.0050	1	06/30/2017 16:52
sec-Butyl benzene	ND	0.0050	1	06/30/2017 16:52
tert-Butyl benzene	ND	0.0050	1	06/30/2017 16:52
Carbon Disulfide	ND	0.0050	1	06/30/2017 16:52
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 16:52
Chlorobenzene	ND	0.0050	1	06/30/2017 16:52
Chloroethane	ND	0.0050	1	06/30/2017 16:52
Chloroform	ND	0.0050	1	06/30/2017 16:52
Chloromethane	ND	0.0050	1	06/30/2017 16:52
2-Chlorotoluene	ND	0.0050	1	06/30/2017 16:52
4-Chlorotoluene	ND	0.0050	1	06/30/2017 16:52
Dibromochloromethane	ND	0.0050	1	06/30/2017 16:52
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 16:52
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 16:52
Dibromomethane	ND	0.0050	1	06/30/2017 16:52
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 16:52
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 16:52
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 16:52
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 16:52
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 16:52
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 16:52
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 16:52
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 16:52
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 16:52
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 16:52
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 16:52
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 16:52

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-15'	1706E27-003A	Soil	06/29/2017 10:26	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 16:52
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 16:52
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 16:52
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 16:52
Ethylbenzene	ND	0.0050	1	06/30/2017 16:52
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 16:52
Freon 113	ND	0.0050	1	06/30/2017 16:52
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 16:52
Hexachloroethane	ND	0.0050	1	06/30/2017 16:52
2-Hexanone	ND	0.0050	1	06/30/2017 16:52
Isopropylbenzene	ND	0.0050	1	06/30/2017 16:52
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 16:52
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 16:52
Methylene chloride	ND	0.0050	1	06/30/2017 16:52
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 16:52
Naphthalene	0.0057	0.0050	1	06/30/2017 16:52
n-Propyl benzene	ND	0.0050	1	06/30/2017 16:52
Styrene	ND	0.0050	1	06/30/2017 16:52
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 16:52
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 16:52
Tetrachloroethene	ND	0.0050	1	06/30/2017 16:52
Toluene	ND	0.0050	1	06/30/2017 16:52
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 16:52
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 16:52
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 16:52
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 16:52
Trichloroethene	ND	0.0050	1	06/30/2017 16:52
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 16:52
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 16:52
1,2,4-Trimethylbenzene	0.011	0.0050	1	06/30/2017 16:52
1,3,5-Trimethylbenzene	0.0076	0.0050	1	06/30/2017 16:52
Vinyl Chloride	ND	0.0050	1	06/30/2017 16:52
Xylenes, Total	0.011	0.0050	1	06/30/2017 16:52

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-15'	1706E27-003A	Soil	06/29/2017 10:26	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	116	70-130		06/30/2017 16:52
Toluene-d8	110	70-130		06/30/2017 16:52
4-BFB	126	70-130		06/30/2017 16:52
Benzene-d6	86	60-140		06/30/2017 16:52
Ethylbenzene-d10	97	60-140		06/30/2017 16:52
1,2-DCB-d4	74	60-140		06/30/2017 16:52

Analyst(s): JEM



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-5'	1706E27-004A	Soil	06/29/2017 11:08	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 12:56
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 12:56
Benzene	ND	0.0050	1	06/30/2017 12:56
Bromobenzene	ND	0.0050	1	06/30/2017 12:56
Bromochloromethane	ND	0.0050	1	06/30/2017 12:56
Bromodichloromethane	ND	0.0050	1	06/30/2017 12:56
Bromoform	ND	0.0050	1	06/30/2017 12:56
Bromomethane	ND	0.0050	1	06/30/2017 12:56
2-Butanone (MEK)	ND	0.020	1	06/30/2017 12:56
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 12:56
n-Butyl benzene	ND	0.0050	1	06/30/2017 12:56
sec-Butyl benzene	ND	0.0050	1	06/30/2017 12:56
tert-Butyl benzene	ND	0.0050	1	06/30/2017 12:56
Carbon Disulfide	ND	0.0050	1	06/30/2017 12:56
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 12:56
Chlorobenzene	ND	0.0050	1	06/30/2017 12:56
Chloroethane	ND	0.0050	1	06/30/2017 12:56
Chloroform	ND	0.0050	1	06/30/2017 12:56
Chloromethane	ND	0.0050	1	06/30/2017 12:56
2-Chlorotoluene	ND	0.0050	1	06/30/2017 12:56
4-Chlorotoluene	ND	0.0050	1	06/30/2017 12:56
Dibromochloromethane	ND	0.0050	1	06/30/2017 12:56
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 12:56
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 12:56
Dibromomethane	ND	0.0050	1	06/30/2017 12:56
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 12:56
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 12:56
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 12:56
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 12:56
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 12:56
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 12:56
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 12:56
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 12:56
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 12:56
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 12:56
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 12:56
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 12:56

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-5'	1706E27-004A	Soil	06/29/2017 11:08	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 12:56
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 12:56
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 12:56
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 12:56
Ethylbenzene	ND	0.0050	1	06/30/2017 12:56
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 12:56
Freon 113	ND	0.0050	1	06/30/2017 12:56
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 12:56
Hexachloroethane	ND	0.0050	1	06/30/2017 12:56
2-Hexanone	ND	0.0050	1	06/30/2017 12:56
Isopropylbenzene	ND	0.0050	1	06/30/2017 12:56
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 12:56
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 12:56
Methylene chloride	ND	0.0050	1	06/30/2017 12:56
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 12:56
Naphthalene	ND	0.0050	1	06/30/2017 12:56
n-Propyl benzene	ND	0.0050	1	06/30/2017 12:56
Styrene	ND	0.0050	1	06/30/2017 12:56
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 12:56
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 12:56
Tetrachloroethene	ND	0.0050	1	06/30/2017 12:56
Toluene	ND	0.0050	1	06/30/2017 12:56
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 12:56
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 12:56
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 12:56
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 12:56
Trichloroethene	ND	0.0050	1	06/30/2017 12:56
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 12:56
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 12:56
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 12:56
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 12:56
Vinyl Chloride	ND	0.0050	1	06/30/2017 12:56
Xylenes, Total	ND	0.0050	1	06/30/2017 12:56

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-5'	1706E27-004A	Soil	06/29/2017 11:08	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	109	70-130		06/30/2017 12:56
Toluene-d8	111	70-130		06/30/2017 12:56
4-BFB	93	70-130		06/30/2017 12:56
Benzene-d6	82	60-140		06/30/2017 12:56
Ethylbenzene-d10	93	60-140		06/30/2017 12:56
1,2-DCB-d4	70	60-140		06/30/2017 12:56

Analyst(s): HK



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-10'	1706E27-005A	Soil	06/29/2017 11:22	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 13:38
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 13:38
Benzene	ND	0.0050	1	06/30/2017 13:38
Bromobenzene	ND	0.0050	1	06/30/2017 13:38
Bromochloromethane	ND	0.0050	1	06/30/2017 13:38
Bromodichloromethane	ND	0.0050	1	06/30/2017 13:38
Bromoform	ND	0.0050	1	06/30/2017 13:38
Bromomethane	ND	0.0050	1	06/30/2017 13:38
2-Butanone (MEK)	ND	0.020	1	06/30/2017 13:38
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 13:38
n-Butyl benzene	ND	0.0050	1	06/30/2017 13:38
sec-Butyl benzene	ND	0.0050	1	06/30/2017 13:38
tert-Butyl benzene	ND	0.0050	1	06/30/2017 13:38
Carbon Disulfide	ND	0.0050	1	06/30/2017 13:38
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 13:38
Chlorobenzene	ND	0.0050	1	06/30/2017 13:38
Chloroethane	ND	0.0050	1	06/30/2017 13:38
Chloroform	ND	0.0050	1	06/30/2017 13:38
Chloromethane	ND	0.0050	1	06/30/2017 13:38
2-Chlorotoluene	ND	0.0050	1	06/30/2017 13:38
4-Chlorotoluene	ND	0.0050	1	06/30/2017 13:38
Dibromochloromethane	ND	0.0050	1	06/30/2017 13:38
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 13:38
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 13:38
Dibromomethane	ND	0.0050	1	06/30/2017 13:38
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 13:38
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 13:38
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 13:38
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 13:38
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 13:38
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 13:38
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 13:38
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 13:38
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 13:38
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 13:38
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 13:38
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 13:38

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-10'	1706E27-005A	Soil	06/29/2017 11:22	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 13:38
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 13:38
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 13:38
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 13:38
Ethylbenzene	ND	0.0050	1	06/30/2017 13:38
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 13:38
Freon 113	ND	0.0050	1	06/30/2017 13:38
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 13:38
Hexachloroethane	ND	0.0050	1	06/30/2017 13:38
2-Hexanone	ND	0.0050	1	06/30/2017 13:38
Isopropylbenzene	ND	0.0050	1	06/30/2017 13:38
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 13:38
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 13:38
Methylene chloride	ND	0.0050	1	06/30/2017 13:38
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 13:38
Naphthalene	ND	0.0050	1	06/30/2017 13:38
n-Propyl benzene	ND	0.0050	1	06/30/2017 13:38
Styrene	ND	0.0050	1	06/30/2017 13:38
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 13:38
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 13:38
Tetrachloroethene	ND	0.0050	1	06/30/2017 13:38
Toluene	ND	0.0050	1	06/30/2017 13:38
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 13:38
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 13:38
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 13:38
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 13:38
Trichloroethene	ND	0.0050	1	06/30/2017 13:38
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 13:38
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 13:38
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 13:38
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 13:38
Vinyl Chloride	ND	0.0050	1	06/30/2017 13:38
Xylenes, Total	ND	0.0050	1	06/30/2017 13:38

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-10'	1706E27-005A	Soil	06/29/2017 11:22	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	109	70-130		06/30/2017 13:38
Toluene-d8	111	70-130		06/30/2017 13:38
4-BFB	94	70-130		06/30/2017 13:38
Benzene-d6	82	60-140		06/30/2017 13:38
Ethylbenzene-d10	93	60-140		06/30/2017 13:38
1,2-DCB-d4	69	60-140		06/30/2017 13:38

Analyst(s): HK



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-13'	1706E27-006A	Soil	06/29/2017 11:35	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 13:31
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 13:31
Benzene	ND	0.0050	1	06/30/2017 13:31
Bromobenzene	ND	0.0050	1	06/30/2017 13:31
Bromochloromethane	ND	0.0050	1	06/30/2017 13:31
Bromodichloromethane	ND	0.0050	1	06/30/2017 13:31
Bromoform	ND	0.0050	1	06/30/2017 13:31
Bromomethane	ND	0.0050	1	06/30/2017 13:31
2-Butanone (MEK)	ND	0.020	1	06/30/2017 13:31
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 13:31
n-Butyl benzene	ND	0.0050	1	06/30/2017 13:31
sec-Butyl benzene	ND	0.0050	1	06/30/2017 13:31
tert-Butyl benzene	ND	0.0050	1	06/30/2017 13:31
Carbon Disulfide	ND	0.0050	1	06/30/2017 13:31
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 13:31
Chlorobenzene	ND	0.0050	1	06/30/2017 13:31
Chloroethane	ND	0.0050	1	06/30/2017 13:31
Chloroform	ND	0.0050	1	06/30/2017 13:31
Chloromethane	ND	0.0050	1	06/30/2017 13:31
2-Chlorotoluene	ND	0.0050	1	06/30/2017 13:31
4-Chlorotoluene	ND	0.0050	1	06/30/2017 13:31
Dibromochloromethane	ND	0.0050	1	06/30/2017 13:31
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 13:31
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 13:31
Dibromomethane	ND	0.0050	1	06/30/2017 13:31
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 13:31
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 13:31
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 13:31
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 13:31
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 13:31
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 13:31
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 13:31
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 13:31
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 13:31
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 13:31
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 13:31
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 13:31

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-13'	1706E27-006A	Soil	06/29/2017 11:35	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 13:31
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 13:31
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 13:31
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 13:31
Ethylbenzene	ND	0.0050	1	06/30/2017 13:31
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 13:31
Freon 113	ND	0.0050	1	06/30/2017 13:31
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 13:31
Hexachloroethane	ND	0.0050	1	06/30/2017 13:31
2-Hexanone	ND	0.0050	1	06/30/2017 13:31
Isopropylbenzene	ND	0.0050	1	06/30/2017 13:31
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 13:31
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 13:31
Methylene chloride	ND	0.0050	1	06/30/2017 13:31
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 13:31
Naphthalene	ND	0.0050	1	06/30/2017 13:31
n-Propyl benzene	ND	0.0050	1	06/30/2017 13:31
Styrene	ND	0.0050	1	06/30/2017 13:31
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 13:31
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 13:31
Tetrachloroethene	ND	0.0050	1	06/30/2017 13:31
Toluene	ND	0.0050	1	06/30/2017 13:31
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 13:31
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 13:31
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 13:31
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 13:31
Trichloroethene	ND	0.0050	1	06/30/2017 13:31
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 13:31
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 13:31
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 13:31
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 13:31
Vinyl Chloride	ND	0.0050	1	06/30/2017 13:31
Xylenes, Total	ND	0.0050	1	06/30/2017 13:31

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-13'	1706E27-006A	Soil	06/29/2017 11:35	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	117	70-130		06/30/2017 13:31
Toluene-d8	111	70-130		06/30/2017 13:31
4-BFB	105	70-130		06/30/2017 13:31
Benzene-d6	88	60-140		06/30/2017 13:31
Ethylbenzene-d10	105	60-140		06/30/2017 13:31
1,2-DCB-d4	73	60-140		06/30/2017 13:31

Analyst(s): HK



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-5'	1706E27-007A	Soil	06/29/2017 14:00	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 04:29
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 04:29
Benzene	ND	0.0050	1	06/30/2017 04:29
Bromobenzene	ND	0.0050	1	06/30/2017 04:29
Bromochloromethane	ND	0.0050	1	06/30/2017 04:29
Bromodichloromethane	ND	0.0050	1	06/30/2017 04:29
Bromoform	ND	0.0050	1	06/30/2017 04:29
Bromomethane	ND	0.0050	1	06/30/2017 04:29
2-Butanone (MEK)	ND	0.020	1	06/30/2017 04:29
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 04:29
n-Butyl benzene	ND	0.0050	1	06/30/2017 04:29
sec-Butyl benzene	ND	0.0050	1	06/30/2017 04:29
tert-Butyl benzene	ND	0.0050	1	06/30/2017 04:29
Carbon Disulfide	ND	0.0050	1	06/30/2017 04:29
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 04:29
Chlorobenzene	ND	0.0050	1	06/30/2017 04:29
Chloroethane	ND	0.0050	1	06/30/2017 04:29
Chloroform	ND	0.0050	1	06/30/2017 04:29
Chloromethane	ND	0.0050	1	06/30/2017 04:29
2-Chlorotoluene	ND	0.0050	1	06/30/2017 04:29
4-Chlorotoluene	ND	0.0050	1	06/30/2017 04:29
Dibromochloromethane	ND	0.0050	1	06/30/2017 04:29
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 04:29
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 04:29
Dibromomethane	ND	0.0050	1	06/30/2017 04:29
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 04:29
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 04:29
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 04:29
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 04:29
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 04:29
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 04:29
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 04:29
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 04:29
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 04:29
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 04:29
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 04:29
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 04:29

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-5'	1706E27-007A	Soil	06/29/2017 14:00	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 04:29
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 04:29
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 04:29
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 04:29
Ethylbenzene	ND	0.0050	1	06/30/2017 04:29
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 04:29
Freon 113	ND	0.0050	1	06/30/2017 04:29
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 04:29
Hexachloroethane	ND	0.0050	1	06/30/2017 04:29
2-Hexanone	ND	0.0050	1	06/30/2017 04:29
Isopropylbenzene	ND	0.0050	1	06/30/2017 04:29
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 04:29
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 04:29
Methylene chloride	ND	0.0050	1	06/30/2017 04:29
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 04:29
Naphthalene	ND	0.0050	1	06/30/2017 04:29
n-Propyl benzene	ND	0.0050	1	06/30/2017 04:29
Styrene	ND	0.0050	1	06/30/2017 04:29
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 04:29
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 04:29
Tetrachloroethene	ND	0.0050	1	06/30/2017 04:29
Toluene	ND	0.0050	1	06/30/2017 04:29
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 04:29
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 04:29
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 04:29
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 04:29
Trichloroethene	ND	0.0050	1	06/30/2017 04:29
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 04:29
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 04:29
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 04:29
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 04:29
Vinyl Chloride	ND	0.0050	1	06/30/2017 04:29
Xylenes, Total	ND	0.0050	1	06/30/2017 04:29

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-5'	1706E27-007A	Soil	06/29/2017 14:00	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	117	70-130		06/30/2017 04:29
Toluene-d8	112	70-130		06/30/2017 04:29
4-BFB	100	70-130		06/30/2017 04:29
Benzene-d6	100	60-140		06/30/2017 04:29
Ethylbenzene-d10	122	60-140		06/30/2017 04:29
1,2-DCB-d4	81	60-140		06/30/2017 04:29

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-10'	1706E27-008A	Soil	06/29/2017 14:03	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 05:08
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 05:08
Benzene	ND	0.0050	1	06/30/2017 05:08
Bromobenzene	ND	0.0050	1	06/30/2017 05:08
Bromochloromethane	ND	0.0050	1	06/30/2017 05:08
Bromodichloromethane	ND	0.0050	1	06/30/2017 05:08
Bromoform	ND	0.0050	1	06/30/2017 05:08
Bromomethane	ND	0.0050	1	06/30/2017 05:08
2-Butanone (MEK)	ND	0.020	1	06/30/2017 05:08
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 05:08
n-Butyl benzene	ND	0.0050	1	06/30/2017 05:08
sec-Butyl benzene	ND	0.0050	1	06/30/2017 05:08
tert-Butyl benzene	ND	0.0050	1	06/30/2017 05:08
Carbon Disulfide	ND	0.0050	1	06/30/2017 05:08
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 05:08
Chlorobenzene	ND	0.0050	1	06/30/2017 05:08
Chloroethane	ND	0.0050	1	06/30/2017 05:08
Chloroform	ND	0.0050	1	06/30/2017 05:08
Chloromethane	ND	0.0050	1	06/30/2017 05:08
2-Chlorotoluene	ND	0.0050	1	06/30/2017 05:08
4-Chlorotoluene	ND	0.0050	1	06/30/2017 05:08
Dibromochloromethane	ND	0.0050	1	06/30/2017 05:08
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 05:08
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 05:08
Dibromomethane	ND	0.0050	1	06/30/2017 05:08
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 05:08
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 05:08
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 05:08
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 05:08
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 05:08
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 05:08
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 05:08
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 05:08
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 05:08
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 05:08
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 05:08
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 05:08

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-10'	1706E27-008A	Soil	06/29/2017 14:03	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 05:08
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 05:08
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 05:08
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 05:08
Ethylbenzene	ND	0.0050	1	06/30/2017 05:08
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 05:08
Freon 113	ND	0.0050	1	06/30/2017 05:08
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 05:08
Hexachloroethane	ND	0.0050	1	06/30/2017 05:08
2-Hexanone	ND	0.0050	1	06/30/2017 05:08
Isopropylbenzene	ND	0.0050	1	06/30/2017 05:08
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 05:08
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 05:08
Methylene chloride	ND	0.0050	1	06/30/2017 05:08
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 05:08
Naphthalene	ND	0.0050	1	06/30/2017 05:08
n-Propyl benzene	ND	0.0050	1	06/30/2017 05:08
Styrene	ND	0.0050	1	06/30/2017 05:08
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 05:08
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 05:08
Tetrachloroethene	ND	0.0050	1	06/30/2017 05:08
Toluene	ND	0.0050	1	06/30/2017 05:08
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 05:08
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 05:08
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 05:08
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 05:08
Trichloroethene	ND	0.0050	1	06/30/2017 05:08
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 05:08
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 05:08
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 05:08
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 05:08
Vinyl Chloride	ND	0.0050	1	06/30/2017 05:08
Xylenes, Total	ND	0.0050	1	06/30/2017 05:08

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-10'	1706E27-008A	Soil	06/29/2017 14:03	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	117	70-130		06/30/2017 05:08
Toluene-d8	113	70-130		06/30/2017 05:08
4-BFB	102	70-130		06/30/2017 05:08
Benzene-d6	101	60-140		06/30/2017 05:08
Ethylbenzene-d10	126	60-140		06/30/2017 05:08
1,2-DCB-d4	80	60-140		06/30/2017 05:08

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-15'	1706E27-009A	Soil	06/29/2017 14:06	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 05:48
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 05:48
Benzene	ND	0.0050	1	06/30/2017 05:48
Bromobenzene	ND	0.0050	1	06/30/2017 05:48
Bromochloromethane	ND	0.0050	1	06/30/2017 05:48
Bromodichloromethane	ND	0.0050	1	06/30/2017 05:48
Bromoform	ND	0.0050	1	06/30/2017 05:48
Bromomethane	ND	0.0050	1	06/30/2017 05:48
2-Butanone (MEK)	ND	0.020	1	06/30/2017 05:48
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 05:48
n-Butyl benzene	ND	0.0050	1	06/30/2017 05:48
sec-Butyl benzene	ND	0.0050	1	06/30/2017 05:48
tert-Butyl benzene	ND	0.0050	1	06/30/2017 05:48
Carbon Disulfide	ND	0.0050	1	06/30/2017 05:48
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 05:48
Chlorobenzene	ND	0.0050	1	06/30/2017 05:48
Chloroethane	ND	0.0050	1	06/30/2017 05:48
Chloroform	ND	0.0050	1	06/30/2017 05:48
Chloromethane	ND	0.0050	1	06/30/2017 05:48
2-Chlorotoluene	ND	0.0050	1	06/30/2017 05:48
4-Chlorotoluene	ND	0.0050	1	06/30/2017 05:48
Dibromochloromethane	ND	0.0050	1	06/30/2017 05:48
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 05:48
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 05:48
Dibromomethane	ND	0.0050	1	06/30/2017 05:48
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 05:48
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 05:48
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 05:48
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 05:48
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 05:48
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 05:48
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 05:48
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 05:48
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 05:48
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 05:48
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 05:48
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 05:48

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-15'	1706E27-009A	Soil	06/29/2017 14:06	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 05:48
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 05:48
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 05:48
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 05:48
Ethylbenzene	ND	0.0050	1	06/30/2017 05:48
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 05:48
Freon 113	ND	0.0050	1	06/30/2017 05:48
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 05:48
Hexachloroethane	ND	0.0050	1	06/30/2017 05:48
2-Hexanone	ND	0.0050	1	06/30/2017 05:48
Isopropylbenzene	ND	0.0050	1	06/30/2017 05:48
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 05:48
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 05:48
Methylene chloride	ND	0.0050	1	06/30/2017 05:48
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 05:48
Naphthalene	ND	0.0050	1	06/30/2017 05:48
n-Propyl benzene	ND	0.0050	1	06/30/2017 05:48
Styrene	ND	0.0050	1	06/30/2017 05:48
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 05:48
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 05:48
Tetrachloroethene	ND	0.0050	1	06/30/2017 05:48
Toluene	ND	0.0050	1	06/30/2017 05:48
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 05:48
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 05:48
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 05:48
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 05:48
Trichloroethene	ND	0.0050	1	06/30/2017 05:48
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 05:48
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 05:48
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 05:48
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 05:48
Vinyl Chloride	ND	0.0050	1	06/30/2017 05:48
Xylenes, Total	ND	0.0050	1	06/30/2017 05:48

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-15'	1706E27-009A	Soil	06/29/2017 14:06	GC10	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	118	70-130		06/30/2017 05:48
Toluene-d8	112	70-130		06/30/2017 05:48
4-BFB	98	70-130		06/30/2017 05:48
Benzene-d6	96	60-140		06/30/2017 05:48
Ethylbenzene-d10	112	60-140		06/30/2017 05:48
1,2-DCB-d4	78	60-140		06/30/2017 05:48

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-5'	1706E27-010A	Soil	06/29/2017 14:30	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 05:40
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 05:40
Benzene	ND	0.0050	1	06/30/2017 05:40
Bromobenzene	ND	0.0050	1	06/30/2017 05:40
Bromochloromethane	ND	0.0050	1	06/30/2017 05:40
Bromodichloromethane	ND	0.0050	1	06/30/2017 05:40
Bromoform	ND	0.0050	1	06/30/2017 05:40
Bromomethane	ND	0.0050	1	06/30/2017 05:40
2-Butanone (MEK)	ND	0.020	1	06/30/2017 05:40
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 05:40
n-Butyl benzene	ND	0.0050	1	06/30/2017 05:40
sec-Butyl benzene	ND	0.0050	1	06/30/2017 05:40
tert-Butyl benzene	ND	0.0050	1	06/30/2017 05:40
Carbon Disulfide	ND	0.0050	1	06/30/2017 05:40
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 05:40
Chlorobenzene	ND	0.0050	1	06/30/2017 05:40
Chloroethane	ND	0.0050	1	06/30/2017 05:40
Chloroform	ND	0.0050	1	06/30/2017 05:40
Chloromethane	ND	0.0050	1	06/30/2017 05:40
2-Chlorotoluene	ND	0.0050	1	06/30/2017 05:40
4-Chlorotoluene	ND	0.0050	1	06/30/2017 05:40
Dibromochloromethane	ND	0.0050	1	06/30/2017 05:40
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 05:40
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 05:40
Dibromomethane	ND	0.0050	1	06/30/2017 05:40
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 05:40
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 05:40
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 05:40
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 05:40
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 05:40
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 05:40
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 05:40
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 05:40
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 05:40
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 05:40
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 05:40
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 05:40

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-5'	1706E27-010A	Soil	06/29/2017 14:30	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 05:40
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 05:40
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 05:40
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 05:40
Ethylbenzene	ND	0.0050	1	06/30/2017 05:40
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 05:40
Freon 113	ND	0.0050	1	06/30/2017 05:40
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 05:40
Hexachloroethane	ND	0.0050	1	06/30/2017 05:40
2-Hexanone	ND	0.0050	1	06/30/2017 05:40
Isopropylbenzene	ND	0.0050	1	06/30/2017 05:40
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 05:40
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 05:40
Methylene chloride	ND	0.0050	1	06/30/2017 05:40
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 05:40
Naphthalene	ND	0.0050	1	06/30/2017 05:40
n-Propyl benzene	ND	0.0050	1	06/30/2017 05:40
Styrene	ND	0.0050	1	06/30/2017 05:40
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 05:40
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 05:40
Tetrachloroethene	ND	0.0050	1	06/30/2017 05:40
Toluene	ND	0.0050	1	06/30/2017 05:40
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 05:40
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 05:40
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 05:40
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 05:40
Trichloroethene	ND	0.0050	1	06/30/2017 05:40
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 05:40
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 05:40
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 05:40
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 05:40
Vinyl Chloride	ND	0.0050	1	06/30/2017 05:40
Xylenes, Total	ND	0.0050	1	06/30/2017 05:40

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-5'	1706E27-010A	Soil	06/29/2017 14:30	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	108	70-130		06/30/2017 05:40
Toluene-d8	114	70-130		06/30/2017 05:40
4-BFB	94	70-130		06/30/2017 05:40
Benzene-d6	84	60-140		06/30/2017 05:40
Ethylbenzene-d10	95	60-140		06/30/2017 05:40
1,2-DCB-d4	69	60-140		06/30/2017 05:40

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-10'	1706E27-011A	Soil	06/29/2017 14:35	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 06:20
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 06:20
Benzene	ND	0.0050	1	06/30/2017 06:20
Bromobenzene	ND	0.0050	1	06/30/2017 06:20
Bromochloromethane	ND	0.0050	1	06/30/2017 06:20
Bromodichloromethane	ND	0.0050	1	06/30/2017 06:20
Bromoform	ND	0.0050	1	06/30/2017 06:20
Bromomethane	ND	0.0050	1	06/30/2017 06:20
2-Butanone (MEK)	ND	0.020	1	06/30/2017 06:20
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 06:20
n-Butyl benzene	ND	0.0050	1	06/30/2017 06:20
sec-Butyl benzene	ND	0.0050	1	06/30/2017 06:20
tert-Butyl benzene	ND	0.0050	1	06/30/2017 06:20
Carbon Disulfide	ND	0.0050	1	06/30/2017 06:20
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 06:20
Chlorobenzene	ND	0.0050	1	06/30/2017 06:20
Chloroethane	ND	0.0050	1	06/30/2017 06:20
Chloroform	ND	0.0050	1	06/30/2017 06:20
Chloromethane	ND	0.0050	1	06/30/2017 06:20
2-Chlorotoluene	ND	0.0050	1	06/30/2017 06:20
4-Chlorotoluene	ND	0.0050	1	06/30/2017 06:20
Dibromochloromethane	ND	0.0050	1	06/30/2017 06:20
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 06:20
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 06:20
Dibromomethane	ND	0.0050	1	06/30/2017 06:20
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 06:20
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 06:20
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 06:20
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 06:20
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 06:20
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 06:20
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 06:20
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 06:20
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 06:20
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 06:20
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 06:20
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 06:20

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-10'	1706E27-011A	Soil	06/29/2017 14:35	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 06:20
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 06:20
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 06:20
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 06:20
Ethylbenzene	ND	0.0050	1	06/30/2017 06:20
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 06:20
Freon 113	ND	0.0050	1	06/30/2017 06:20
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 06:20
Hexachloroethane	ND	0.0050	1	06/30/2017 06:20
2-Hexanone	ND	0.0050	1	06/30/2017 06:20
Isopropylbenzene	ND	0.0050	1	06/30/2017 06:20
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 06:20
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 06:20
Methylene chloride	ND	0.0050	1	06/30/2017 06:20
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 06:20
Naphthalene	ND	0.0050	1	06/30/2017 06:20
n-Propyl benzene	ND	0.0050	1	06/30/2017 06:20
Styrene	ND	0.0050	1	06/30/2017 06:20
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 06:20
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 06:20
Tetrachloroethene	ND	0.0050	1	06/30/2017 06:20
Toluene	ND	0.0050	1	06/30/2017 06:20
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 06:20
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 06:20
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 06:20
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 06:20
Trichloroethene	ND	0.0050	1	06/30/2017 06:20
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 06:20
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 06:20
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 06:20
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 06:20
Vinyl Chloride	ND	0.0050	1	06/30/2017 06:20
Xylenes, Total	ND	0.0050	1	06/30/2017 06:20

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-10'	1706E27-011A	Soil	06/29/2017 14:35	GC16	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	107	70-130		06/30/2017 06:20
Toluene-d8	115	70-130		06/30/2017 06:20
4-BFB	83	70-130		06/30/2017 06:20
Benzene-d6	91	60-140		06/30/2017 06:20
Ethylbenzene-d10	101	60-140		06/30/2017 06:20
1,2-DCB-d4	77	60-140		06/30/2017 06:20

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-15'	1706E27-012A	Soil	06/29/2017 14:41	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/30/2017 04:34
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/30/2017 04:34
Benzene	ND	0.0050	1	06/30/2017 04:34
Bromobenzene	ND	0.0050	1	06/30/2017 04:34
Bromochloromethane	ND	0.0050	1	06/30/2017 04:34
Bromodichloromethane	ND	0.0050	1	06/30/2017 04:34
Bromoform	ND	0.0050	1	06/30/2017 04:34
Bromomethane	ND	0.0050	1	06/30/2017 04:34
2-Butanone (MEK)	ND	0.020	1	06/30/2017 04:34
t-Butyl alcohol (TBA)	ND	0.050	1	06/30/2017 04:34
n-Butyl benzene	ND	0.0050	1	06/30/2017 04:34
sec-Butyl benzene	ND	0.0050	1	06/30/2017 04:34
tert-Butyl benzene	ND	0.0050	1	06/30/2017 04:34
Carbon Disulfide	ND	0.0050	1	06/30/2017 04:34
Carbon Tetrachloride	ND	0.0050	1	06/30/2017 04:34
Chlorobenzene	ND	0.0050	1	06/30/2017 04:34
Chloroethane	ND	0.0050	1	06/30/2017 04:34
Chloroform	ND	0.0050	1	06/30/2017 04:34
Chloromethane	ND	0.0050	1	06/30/2017 04:34
2-Chlorotoluene	ND	0.0050	1	06/30/2017 04:34
4-Chlorotoluene	ND	0.0050	1	06/30/2017 04:34
Dibromochloromethane	ND	0.0050	1	06/30/2017 04:34
1,2-Dibromo-3-chloropropane	ND	0.0040	1	06/30/2017 04:34
1,2-Dibromoethane (EDB)	ND	0.0040	1	06/30/2017 04:34
Dibromomethane	ND	0.0050	1	06/30/2017 04:34
1,2-Dichlorobenzene	ND	0.0050	1	06/30/2017 04:34
1,3-Dichlorobenzene	ND	0.0050	1	06/30/2017 04:34
1,4-Dichlorobenzene	ND	0.0050	1	06/30/2017 04:34
Dichlorodifluoromethane	ND	0.0050	1	06/30/2017 04:34
1,1-Dichloroethane	ND	0.0050	1	06/30/2017 04:34
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	06/30/2017 04:34
1,1-Dichloroethene	ND	0.0050	1	06/30/2017 04:34
cis-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 04:34
trans-1,2-Dichloroethene	ND	0.0050	1	06/30/2017 04:34
1,2-Dichloropropane	ND	0.0050	1	06/30/2017 04:34
1,3-Dichloropropane	ND	0.0050	1	06/30/2017 04:34
2,2-Dichloropropane	ND	0.0050	1	06/30/2017 04:34

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-15'	1706E27-012A	Soil	06/29/2017 14:41	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/30/2017 04:34
cis-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 04:34
trans-1,3-Dichloropropene	ND	0.0050	1	06/30/2017 04:34
Diisopropyl ether (DIPE)	ND	0.0050	1	06/30/2017 04:34
Ethylbenzene	ND	0.0050	1	06/30/2017 04:34
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/30/2017 04:34
Freon 113	ND	0.0050	1	06/30/2017 04:34
Hexachlorobutadiene	ND	0.0050	1	06/30/2017 04:34
Hexachloroethane	ND	0.0050	1	06/30/2017 04:34
2-Hexanone	ND	0.0050	1	06/30/2017 04:34
Isopropylbenzene	ND	0.0050	1	06/30/2017 04:34
4-Isopropyl toluene	ND	0.0050	1	06/30/2017 04:34
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/30/2017 04:34
Methylene chloride	ND	0.0050	1	06/30/2017 04:34
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/30/2017 04:34
Naphthalene	ND	0.0050	1	06/30/2017 04:34
n-Propyl benzene	ND	0.0050	1	06/30/2017 04:34
Styrene	ND	0.0050	1	06/30/2017 04:34
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 04:34
1,1,2,2-Tetrachloroethane	ND	0.0050	1	06/30/2017 04:34
Tetrachloroethene	ND	0.0050	1	06/30/2017 04:34
Toluene	ND	0.0050	1	06/30/2017 04:34
1,2,3-Trichlorobenzene	ND	0.0050	1	06/30/2017 04:34
1,2,4-Trichlorobenzene	ND	0.0050	1	06/30/2017 04:34
1,1,1-Trichloroethane	ND	0.0050	1	06/30/2017 04:34
1,1,2-Trichloroethane	ND	0.0050	1	06/30/2017 04:34
Trichloroethene	ND	0.0050	1	06/30/2017 04:34
Trichlorofluoromethane	ND	0.0050	1	06/30/2017 04:34
1,2,3-Trichloropropane	ND	0.0050	1	06/30/2017 04:34
1,2,4-Trimethylbenzene	ND	0.0050	1	06/30/2017 04:34
1,3,5-Trimethylbenzene	ND	0.0050	1	06/30/2017 04:34
Vinyl Chloride	ND	0.0050	1	06/30/2017 04:34
Xylenes, Total	ND	0.0050	1	06/30/2017 04:34

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-15'	1706E27-012A	Soil	06/29/2017 14:41	GC18	141315

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	114	70-130		06/30/2017 04:34
Toluene-d8	110	70-130		06/30/2017 04:34
4-BFB	120	70-130		06/30/2017 04:34
Benzene-d6	87	60-140		06/30/2017 04:34
Ethylbenzene-d10	103	60-140		06/30/2017 04:34
1,2-DCB-d4	75	60-140		06/30/2017 04:34

Analyst(s): JEM



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 7/6/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: E9071B
Analytical Method: E9071B
Unit: mg/Kg

Hexane Extractable Material with Silica Gel Treatment

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-5'	1706E27-001A	Soil	06/29/2017 09:45	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 12:30

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-10'	1706E27-002A	Soil	06/29/2017 10:01	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 12:35

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-15'	1706E27-003A	Soil	06/29/2017 10:26	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 12:40

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-5'	1706E27-004A	Soil	06/29/2017 11:08	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	53	50	1	07/06/2017 12:45

Analyst(s): HN

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 7/6/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: E9071B
Analytical Method: E9071B
Unit: mg/Kg

Hexane Extractable Material with Silica Gel Treatment

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-10'	1706E27-005A	Soil	06/29/2017 11:22	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 12:50

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-13'	1706E27-006A	Soil	06/29/2017 11:35	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 12:55

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-5'	1706E27-007A	Soil	06/29/2017 14:00	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 13:00

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-10'	1706E27-008A	Soil	06/29/2017 14:03	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 13:05

Analyst(s): HN

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 7/6/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: E9071B
Analytical Method: E9071B
Unit: mg/Kg

Hexane Extractable Material with Silica Gel Treatment

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-15'	1706E27-009A	Soil	06/29/2017 14:06	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 13:10

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-5'	1706E27-010A	Soil	06/29/2017 14:30	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 13:15

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-10'	1706E27-011A	Soil	06/29/2017 14:35	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 13:20

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-15'	1706E27-012A	Soil	06/29/2017 14:41	O&G	141562

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/06/2017 12:15

Analyst(s): HN

 Angela Rydelius, Lab Manager



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17-6/30/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-5'	1706E27-007A	Soil	06/29/2017 14:00	ICP-MS2	141283

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/30/2017 11:43
Arsenic	4.3	0.50	1	06/30/2017 11:43
Barium	110	5.0	1	06/30/2017 11:43
Beryllium	ND	0.50	1	06/30/2017 11:43
Cadmium	ND	0.25	1	06/30/2017 11:43
Chromium	54	0.50	1	06/30/2017 11:43
Cobalt	16	0.50	1	06/30/2017 11:43
Copper	15	0.50	1	06/30/2017 11:43
Lead	9.1	0.50	1	06/30/2017 11:43
Mercury	0.35	0.050	1	06/30/2017 11:43
Molybdenum	ND	0.50	1	06/30/2017 11:43
Nickel	36	0.50	1	06/30/2017 11:43
Selenium	ND	0.50	1	06/30/2017 11:43
Silver	ND	0.50	1	06/30/2017 11:43
Thallium	ND	0.50	1	06/30/2017 11:43
Vanadium	41	0.50	1	06/30/2017 11:43
Zinc	22	5.0	1	06/30/2017 11:43

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	100	70-130	06/30/2017 11:43

Analyst(s): JC



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17-6/30/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-10'	1706E27-008A	Soil	06/29/2017 14:03	ICP-MS2	141283

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/30/2017 11:50
Arsenic	7.9	0.50	1	06/30/2017 11:50
Barium	110	5.0	1	06/30/2017 11:50
Beryllium	0.68	0.50	1	06/30/2017 11:50
Cadmium	ND	0.25	1	06/30/2017 11:50
Chromium	64	0.50	1	06/30/2017 11:50
Cobalt	25	0.50	1	06/30/2017 11:50
Copper	19	0.50	1	06/30/2017 11:50
Lead	14	0.50	1	06/30/2017 11:50
Mercury	0.27	0.050	1	06/30/2017 11:50
Molybdenum	0.64	0.50	1	06/30/2017 11:50
Nickel	52	0.50	1	06/30/2017 11:50
Selenium	ND	0.50	1	06/30/2017 11:50
Silver	ND	0.50	1	06/30/2017 11:50
Thallium	ND	0.50	1	06/30/2017 11:50
Vanadium	60	0.50	1	06/30/2017 11:50
Zinc	32	5.0	1	06/30/2017 11:50

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	100	70-130	06/30/2017 11:50

Analyst(s): JC



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17-6/30/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-5'	1706E27-010A	Soil	06/29/2017 14:30	ICP-MS1	141283

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.55	0.50	1	06/30/2017 16:29
Arsenic	7.2	0.50	1	06/30/2017 16:29
Barium	160	5.0	1	06/30/2017 16:29
Beryllium	0.57	0.50	1	06/30/2017 16:29
Cadmium	ND	0.25	1	06/30/2017 16:29
Chromium	42	0.50	1	06/30/2017 16:29
Cobalt	21	0.50	1	06/30/2017 16:29
Copper	35	0.50	1	06/30/2017 16:29
Lead	13	0.50	1	06/30/2017 16:29
Mercury	0.10	0.050	1	06/30/2017 16:29
Molybdenum	0.57	0.50	1	06/30/2017 16:29
Nickel	61	0.50	1	06/30/2017 16:29
Selenium	ND	0.50	1	06/30/2017 16:29
Silver	ND	0.50	1	06/30/2017 16:29
Thallium	ND	0.50	1	06/30/2017 16:29
Vanadium	46	0.50	1	06/30/2017 16:29
Zinc	58	5.0	1	06/30/2017 16:29

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	96	70-130	06/30/2017 16:29

Analyst(s): ND



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17-6/30/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-10'	1706E27-011A	Soil	06/29/2017 14:35	ICP-MS1	141338

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/30/2017 15:02
Arsenic	5.4	0.50	1	06/30/2017 15:02
Barium	100	5.0	1	06/30/2017 15:02
Beryllium	0.55	0.50	1	06/30/2017 15:02
Cadmium	ND	0.25	1	06/30/2017 15:02
Chromium	51	0.50	1	06/30/2017 15:02
Cobalt	15	0.50	1	06/30/2017 15:02
Copper	15	0.50	1	06/30/2017 15:02
Lead	8.8	0.50	1	06/30/2017 15:02
Mercury	0.17	0.050	1	06/30/2017 15:02
Molybdenum	ND	0.50	1	06/30/2017 15:02
Nickel	41	0.50	1	06/30/2017 15:02
Selenium	ND	0.50	1	06/30/2017 15:02
Silver	ND	0.50	1	06/30/2017 15:02
Thallium	ND	0.50	1	06/30/2017 15:02
Vanadium	42	0.50	1	06/30/2017 15:02
Zinc	22	5.0	1	06/30/2017 15:02

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	108	70-130	06/30/2017 15:02

Analyst(s): ND



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-5'	1706E27-001A	Soil	06/29/2017 09:45	GC3	141279

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/30/2017 09:32
MTBE	---	0.050	1	06/30/2017 09:32
Benzene	---	0.0050	1	06/30/2017 09:32
Toluene	---	0.0050	1	06/30/2017 09:32
Ethylbenzene	---	0.0050	1	06/30/2017 09:32
Xylenes	---	0.015	1	06/30/2017 09:32

Surrogates	REC (%)	Limits
2-Fluorotoluene	93	62-126

Analyst(s): LT

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-10'	1706E27-002A	Soil	06/29/2017 10:01	GC19	141279

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/30/2017 02:05
MTBE	---	0.050	1	06/30/2017 02:05
Benzene	---	0.0050	1	06/30/2017 02:05
Toluene	---	0.0050	1	06/30/2017 02:05
Ethylbenzene	---	0.0050	1	06/30/2017 02:05
Xylenes	---	0.015	1	06/30/2017 02:05

Surrogates	REC (%)	Limits
2-Fluorotoluene	95	62-126

Analyst(s): HD



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-15'	1706E27-003A	Soil	06/29/2017 10:26	GC19	141279

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	2.3	1.0	1	06/30/2017 04:06
MTBE	---	0.050	1	06/30/2017 04:06
Benzene	---	0.0050	1	06/30/2017 04:06
Toluene	---	0.0050	1	06/30/2017 04:06
Ethylbenzene	---	0.0050	1	06/30/2017 04:06
Xylenes	---	0.015	1	06/30/2017 04:06

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	62-126	06/30/2017 04:06

Analyst(s): HD

Analytical Comments: d7,d9

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-5'	1706E27-004A	Soil	06/29/2017 11:08	GC19	141279

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/30/2017 04:36
MTBE	---	0.050	1	06/30/2017 04:36
Benzene	---	0.0050	1	06/30/2017 04:36
Toluene	---	0.0050	1	06/30/2017 04:36
Ethylbenzene	---	0.0050	1	06/30/2017 04:36
Xylenes	---	0.015	1	06/30/2017 04:36

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	88	62-126	06/30/2017 04:36

Analyst(s): HD



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-10'	1706E27-005A	Soil	06/29/2017 11:22	GC19	141279

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/30/2017 05:06
MTBE	---	0.050	1	06/30/2017 05:06
Benzene	---	0.0050	1	06/30/2017 05:06
Toluene	---	0.0050	1	06/30/2017 05:06
Ethylbenzene	---	0.0050	1	06/30/2017 05:06
Xylenes	---	0.015	1	06/30/2017 05:06

Surrogates	REC (%)	Limits
2-Fluorotoluene	92	62-126

Analyst(s): HD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-13'	1706E27-006A	Soil	06/29/2017 11:35	GC19	141279

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/30/2017 05:36
MTBE	---	0.050	1	06/30/2017 05:36
Benzene	---	0.0050	1	06/30/2017 05:36
Toluene	---	0.0050	1	06/30/2017 05:36
Ethylbenzene	---	0.0050	1	06/30/2017 05:36
Xylenes	---	0.015	1	06/30/2017 05:36

Surrogates	REC (%)	Limits
2-Fluorotoluene	91	62-126

Analyst(s): HD



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-5'	1706E27-007A	Soil	06/29/2017 14:00	GC19	141279

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/30/2017 06:06
MTBE	---	0.050	1	06/30/2017 06:06
Benzene	---	0.0050	1	06/30/2017 06:06
Toluene	---	0.0050	1	06/30/2017 06:06
Ethylbenzene	---	0.0050	1	06/30/2017 06:06
Xylenes	---	0.015	1	06/30/2017 06:06

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	90	62-126	06/30/2017 06:06

Analyst(s): HD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-10'	1706E27-008A	Soil	06/29/2017 14:03	GC19	141279

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/30/2017 06:36
MTBE	---	0.050	1	06/30/2017 06:36
Benzene	---	0.0050	1	06/30/2017 06:36
Toluene	---	0.0050	1	06/30/2017 06:36
Ethylbenzene	---	0.0050	1	06/30/2017 06:36
Xylenes	---	0.015	1	06/30/2017 06:36

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	87	62-126	06/30/2017 06:36

Analyst(s): HD



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-15'	1706E27-009A	Soil	06/29/2017 14:06	GC19	141323

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/30/2017 07:06
MTBE	---	0.050	1	06/30/2017 07:06
Benzene	---	0.0050	1	06/30/2017 07:06
Toluene	---	0.0050	1	06/30/2017 07:06
Ethylbenzene	---	0.0050	1	06/30/2017 07:06
Xylenes	---	0.015	1	06/30/2017 07:06

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	62-126	06/30/2017 07:06

Analyst(s): HD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-5'	1706E27-010A	Soil	06/29/2017 14:30	GC19	141323

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/30/2017 07:37
MTBE	---	0.050	1	06/30/2017 07:37
Benzene	---	0.0050	1	06/30/2017 07:37
Toluene	---	0.0050	1	06/30/2017 07:37
Ethylbenzene	---	0.0050	1	06/30/2017 07:37
Xylenes	---	0.015	1	06/30/2017 07:37

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	88	62-126	06/30/2017 07:37

Analyst(s): HD



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-10'	1706E27-011A	Soil	06/29/2017 14:35	GC19	141323

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	27	1.0	1	06/30/2017 08:07
MTBE	---	0.050	1	06/30/2017 08:07
Benzene	---	0.0050	1	06/30/2017 08:07
Toluene	---	0.0050	1	06/30/2017 08:07
Ethylbenzene	---	0.0050	1	06/30/2017 08:07
Xylenes	---	0.015	1	06/30/2017 08:07

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	69	62-126	06/30/2017 08:07

Analyst(s): HD

Analytical Comments: d7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-15'	1706E27-012A	Soil	06/29/2017 14:41	GC19	141323

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/30/2017 08:37
MTBE	---	0.050	1	06/30/2017 08:37
Benzene	---	0.0050	1	06/30/2017 08:37
Toluene	---	0.0050	1	06/30/2017 08:37
Ethylbenzene	---	0.0050	1	06/30/2017 08:37
Xylenes	---	0.015	1	06/30/2017 08:37

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	88	62-126	06/30/2017 08:37

Analyst(s): HD



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-5'	1706E27-001A	Soil	06/29/2017 09:45	GC9a	141322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/30/2017 00:29
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/30/2017 00:29

Surrogates	REC (%)	Limits	Date Analyzed
C9	104	78-109	06/30/2017 00:29

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-10'	1706E27-002A	Soil	06/29/2017 10:01	GC9a	141322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/30/2017 06:57
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/30/2017 06:57

Surrogates	REC (%)	Limits	Date Analyzed
C9	103	78-109	06/30/2017 06:57

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTE-15'	1706E27-003A	Soil	06/29/2017 10:26	GC9b	141322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	3.0	1.0	1	06/30/2017 08:54
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/30/2017 08:54

Surrogates	REC (%)	Limits	Date Analyzed
C9	89	78-109	06/30/2017 08:54

Analyst(s): TK

Analytical Comments: e2

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-5'	1706E27-004A	Soil	06/29/2017 11:08	GC9a	141322
<u>Analytes</u>					
	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	2.6		2.0	2	06/30/2017 10:11
TPH-Motor Oil (C18-C36)	40		10	2	06/30/2017 10:11
<u>Surrogates</u>					
	<u>REC (%)</u>		<u>Limits</u>		
C9	100		78-109		06/30/2017 10:11
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e7,e2		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-10'	1706E27-005A	Soil	06/29/2017 11:22	GC9b	141322
<u>Analytes</u>					
	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		1.0	1	06/30/2017 10:11
TPH-Motor Oil (C18-C36)	ND		5.0	1	06/30/2017 10:11
<u>Surrogates</u>					
	<u>REC (%)</u>		<u>Limits</u>		
C9	88		78-109		06/30/2017 10:11
<u>Analyst(s):</u> TK					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-USTW-13'	1706E27-006A	Soil	06/29/2017 11:35	GC9b	141322
<u>Analytes</u>					
	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		1.0	1	06/30/2017 07:36
TPH-Motor Oil (C18-C36)	ND		5.0	1	06/30/2017 07:36
<u>Surrogates</u>					
	<u>REC (%)</u>		<u>Limits</u>		
C9	89		78-109		06/30/2017 07:36
<u>Analyst(s):</u> TK					

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-5'	1706E27-007A	Soil	06/29/2017 14:00	GC9b	141322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/30/2017 03:43
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/30/2017 03:43

Surrogates	REC (%)	Limits	Date Analyzed
C9	88	78-109	06/30/2017 03:43

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-10'	1706E27-008A	Soil	06/29/2017 14:03	GC9b	141322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/29/2017 22:33
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/29/2017 22:33

Surrogates	REC (%)	Limits	Date Analyzed
C9	90	78-109	06/29/2017 22:33

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRW-15'	1706E27-009A	Soil	06/29/2017 14:06	GC9b	141322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/29/2017 23:50
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/29/2017 23:50

Surrogates	REC (%)	Limits	Date Analyzed
C9	88	78-109	06/29/2017 23:50

Analyst(s): TK

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/29/17 19:19
Date Prepared: 6/29/17
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-5'	1706E27-010A	Soil	06/29/2017 14:30	GC9b	141322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/30/2017 01:08
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/30/2017 01:08

Surrogates	REC (%)	Limits	Date Analyzed
C9	89	78-109	06/30/2017 01:08

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-10'	1706E27-011A	Soil	06/29/2017 14:35	GC9b	141322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	14	1.0	1	06/30/2017 02:26
TPH-Motor Oil (C18-C36)	46	5.0	1	06/30/2017 02:26

Surrogates	REC (%)	Limits	Date Analyzed
C9	90	78-109	06/30/2017 02:26

Analyst(s): TK

Analytical Comments: e7,e2,e11/e4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-CLFRE-15'	1706E27-012A	Soil	06/29/2017 14:41	GC9b	141322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/30/2017 06:18
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/30/2017 06:18

Surrogates	REC (%)	Limits	Date Analyzed
C9	89	78-109	06/30/2017 06:18

Analyst(s): TK



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: GC16
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141315
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-141315

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	0.897	0.10	1	-	90	72-156
tert-Amyl methyl ether (TAME)	ND	0.0430	0.0050	0.050	-	86	53-116
Benzene	ND	0.0513	0.0050	0.050	-	103	63-137
Bromobenzene	ND	0.0494	0.0050	0.050	-	99	68-126
Bromochloromethane	ND	0.0496	0.0050	0.050	-	99	72-126
Bromodichloromethane	ND	0.0441	0.0050	0.050	-	88	61-127
Bromoform	ND	0.0374	0.0050	0.050	-	75	49-100
Bromomethane	ND	0.0303	0.0050	0.050	-	61	40-161
2-Butanone (MEK)	ND	0.179	0.020	0.20	-	89	43-157
t-Butyl alcohol (TBA)	ND	0.168	0.050	0.20	-	84	41-135
n-Butyl benzene	ND	0.0728	0.0050	0.050	-	146	102-160
sec-Butyl benzene	ND	0.0690	0.0050	0.050	-	138	74-168
tert-Butyl benzene	ND	0.0588	0.0050	0.050	-	118	88-157
Carbon Disulfide	ND	0.0495	0.0050	0.050	-	99	42-151
Carbon Tetrachloride	ND	0.0510	0.0050	0.050	-	102	49-149
Chlorobenzene	ND	0.0494	0.0050	0.050	-	99	77-121
Chloroethane	ND	0.0409	0.0050	0.050	-	82	41-134
Chloroform	ND	0.0501	0.0050	0.050	-	100	69-133
Chloromethane	ND	0.0399	0.0050	0.050	-	80	31-119
2-Chlorotoluene	ND	0.0608	0.0050	0.050	-	122	79-139
4-Chlorotoluene	ND	0.0583	0.0050	0.050	-	117	77-138
Dibromochloromethane	ND	0.0430	0.0050	0.050	-	86	58-121
1,2-Dibromo-3-chloropropane	ND	0.0120	0.0040	0.020	-	60	39-115
1,2-Dibromoethane (EDB)	ND	0.0456	0.0040	0.050	-	91	67-119
Dibromomethane	ND	0.0449	0.0050	0.050	-	90	66-117
1,2-Dichlorobenzene	ND	0.0445	0.0050	0.050	-	89	59-109
1,3-Dichlorobenzene	ND	0.0572	0.0050	0.050	-	114	75-130
1,4-Dichlorobenzene	ND	0.0515	0.0050	0.050	-	103	71-122
Dichlorodifluoromethane	ND	0.0208	0.0050	0.050	-	42, F2	43-68
1,1-Dichloroethane	ND	0.0487	0.0050	0.050	-	97	62-139
1,2-Dichloroethane (1,2-DCA)	ND	0.0428	0.0040	0.050	-	86	58-135
1,1-Dichloroethene	ND	0.0483	0.0050	0.050	-	97	42-145
cis-1,2-Dichloroethene	ND	0.0501	0.0050	0.050	-	100	67-129
trans-1,2-Dichloroethene	ND	0.0503	0.0050	0.050	-	101	54-139
1,2-Dichloropropane	ND	0.0471	0.0050	0.050	-	94	68-125
1,3-Dichloropropane	ND	0.0464	0.0050	0.050	-	93	65-125
2,2-Dichloropropane	ND	0.0475	0.0050	0.050	-	95	45-151

(Cont.)



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: GC16
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141315
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-141315

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	0.0496	0.0050	0.050	-	99	64-138
cis-1,3-Dichloropropene	ND	0.0475	0.0050	0.050	-	95	62-134
trans-1,3-Dichloropropene	ND	0.0463	0.0050	0.050	-	93	59-128
Diisopropyl ether (DIPE)	ND	0.0446	0.0050	0.050	-	89	52-129
Ethylbenzene	ND	0.0538	0.0050	0.050	-	108	74-142
Ethyl tert-butyl ether (ETBE)	ND	0.0464	0.0050	0.050	-	93	53-125
Freon 113	ND	0.0451	0.0050	0.050	-	90	51-126
Hexachlorobutadiene	ND	0.0618	0.0050	0.050	-	124	70-158
Hexachloroethane	ND	0.0620	0.0050	0.050	-	124	80-160
2-Hexanone	ND	0.0326	0.0050	0.050	-	65	41-116
Isopropylbenzene	ND	0.0551	0.0050	0.050	-	110	77-146
4-Isopropyl toluene	ND	0.0688	0.0050	0.050	-	138	96-159
Methyl-t-butyl ether (MTBE)	ND	0.0461	0.0050	0.050	-	92	58-122
Methylene chloride	ND	0.0475	0.0050	0.050	-	95	58-135
4-Methyl-2-pentanone (MIBK)	ND	0.0337	0.0050	0.050	-	67	40-112
Naphthalene	ND	0.0224	0.0050	0.050	-	45	23-73
n-Propyl benzene	ND	0.0660	0.0050	0.050	-	132	82-160
Styrene	ND	0.0471	0.0050	0.050	-	94	68-124
1,1,1,2-Tetrachloroethane	ND	0.0488	0.0050	0.050	-	98	70-128
1,1,2,2-Tetrachloroethane	ND	0.0391	0.0050	0.050	-	78	57-111
Tetrachloroethene	ND	0.0520	0.0050	0.050	-	104	73-145
Toluene	ND	0.0516	0.0050	0.050	-	103	76-130
1,2,3-Trichlorobenzene	ND	0.0280	0.0050	0.050	-	56	43-72
1,2,4-Trichlorobenzene	ND	0.0349	0.0050	0.050	-	70	47-95
1,1,1-Trichloroethane	ND	0.0484	0.0050	0.050	-	97	60-141
1,1,2-Trichloroethane	ND	0.0456	0.0050	0.050	-	91	62-118
Trichloroethene	ND	0.0515	0.0050	0.050	-	103	72-132
Trichlorofluoromethane	ND	0.0449	0.0050	0.050	-	90	43-135
1,2,3-Trichloropropane	ND	0.0454	0.0050	0.050	-	91	57-122
1,2,4-Trimethylbenzene	ND	0.0625	0.0050	0.050	-	125	81-152
1,3,5-Trimethylbenzene	ND	0.0649	0.0050	0.050	-	130	78-160
Vinyl Chloride	ND	0.0392	0.0050	0.050	-	78	42-131
Xylenes, Total	ND	0.158	0.0050	0.15	-	105	70-130

(Cont.)



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: GC16
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141315
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-141315

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.1352	0.137		0.12	108	109	70-130
Toluene-d8	0.1407	0.139		0.12	113	111	70-130
4-BFB	0.01227	0.0126		0.012	98	101	70-130
Benzene-d6	0.09554	0.0976		0.10	96	98	60-140
Ethylbenzene-d10	0.1085	0.108		0.10	109	108	60-140
1,2-DCB-d4	0.07666	0.0857		0.10	77	86	60-140



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 7/6/17
Date Analyzed: 7/6/17
Instrument: O&G
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141562
Extraction Method: E9071B
Analytical Method: E9071B
Unit: mg/Kg
Sample ID: MB/LCS-141562
 1706E27-012AMS/MSD

QC Summary Report for E9071B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
SGT-HEM	ND	1870	50	2000	-	93	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
SGT-HEM	1910	1810	2000	ND	95	91	70-130	5.02	30

QA/QC Officer



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: ICP-MS2, ICP-MS3
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141283
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-141283
 1706E08-002AMS/MSD
 1706E08-002APDS

QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	48.6	0.50	50	-	97	75-125
Arsenic	ND	48.9	0.50	50	-	98	75-125
Barium	ND	478	5.0	500	-	96	75-125
Beryllium	ND	47.4	0.50	50	-	95	75-125
Cadmium	ND	48.0	0.25	50	-	96	75-125
Chromium	ND	47.4	0.50	50	-	95	75-125
Cobalt	ND	45.9	0.50	50	-	92	75-125
Copper	ND	48.5	0.50	50	-	97	75-125
Lead	ND	46.8	0.50	50	-	94	75-125
Mercury	ND	1.21	0.050	1.25	-	97	75-125
Molybdenum	ND	48.8	0.50	50	-	98	75-125
Nickel	ND	48.4	0.50	50	-	97	75-125
Selenium	ND	47.8	0.50	50	-	96	75-125
Silver	ND	47.9	0.50	50	-	96	75-125
Thallium	ND	46.0	0.50	50	-	92	75-125
Vanadium	ND	46.9	0.50	50	-	94	75-125
Zinc	ND	485	5.0	500	-	97	75-125
Surrogate Recovery							
Terbium	484.7	482		500	97	96	70-130



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: ICP-MS2, ICP-MS3
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141283
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-141283
 1706E08-002AMS/MSD
 1706E08-002APDS

QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	52.2	52.7	50	ND	104	105	75-125	0.972	20
Arsenic	55.9	58.1	50	8.953	94	98	75-125	3.88	20
Barium	504	506	500	18.66	97	97	75-125	0	20
Beryllium	48.7	48.6	50	ND	97	97	75-125	0	20
Cadmium	50.1	50.5	50	ND	100	101	75-125	0.676	20
Chromium	92.5	96.9	50	35.11	115	124	75-125	4.66	20
Cobalt	56.2	57.6	50	8.172	96	99	75-125	2.58	20
Copper	56.4	57.1	50	7.197	98	100	75-125	1.23	20
Lead	57.2	57.0	50	5.453	103	103	75-125	0	20
Mercury	1.31	1.36	1.25	ND	103	107	75-125	3.45	20
Molybdenum	51.4	51.9	50	ND	102	103	75-125	1.10	20
Nickel	88.4	123	50	37.18	102	172,F10	75-125	33,F10	20
Selenium	48.9	49.3	50	ND	98	99	75-125	0.753	20
Silver	50.2	50.3	50	ND	100	101	75-125	0.199	20
Thallium	47.1	46.8	50	ND	94	94	75-125	0	20
Vanadium	82.9	85.2	50	31.51	103	107	75-125	2.80	20
Zinc	522	522	500	27.91	99	99	75-125	0	20

Surrogate Recovery

Terbium	496	502	500		99	100	70-130	1.12	20
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Analyte	PDS Result	SPK Val	SPKRef Val	PDS %REC	PDS Limits
Nickel	90.9	50	37.18	107	75-125

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Antimony	ND<2.5	ND	-	-
Arsenic	8.17	8.953	8.75	-
Barium	ND<25	18.66	-	-
Beryllium	ND<2.5	ND	-	-
Cadmium	ND<1.2	ND	-	-
Chromium	36.2	35.11	3.10	20
Cobalt	8.68	8.172	6.22	-
Copper	6.94	7.197	3.57	-

(Cont.)



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: ICP-MS2, ICP-MS3
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141283
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-141283
 1706E08-002AMS/MSD
 1706E08-002APDS

QC Summary Report for Metals

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	5.65	5.453	3.61	-
Mercury	ND<0.25	ND	-	-
Molybdenum	ND<2.5	ND	-	-
Nickel	38.2	37.18	2.74	20
Selenium	ND<2.5	ND	-	-
Silver	ND<2.5	ND	-	-
Thallium	ND<2.5	ND	-	-
Vanadium	32.2	31.51	2.19	20
Zinc	28.3	27.91	1.40	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: ICP-MS1
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141338
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-141338
 1706E35-005AMS/MSD
 1706E35-005APDS

QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	53.6	0.50	50	-	107	75-125
Arsenic	ND	52.6	0.50	50	-	105	75-125
Barium	ND	534	5.0	500	-	107	75-125
Beryllium	ND	52.0	0.50	50	-	104	75-125
Cadmium	ND	52.1	0.25	50	-	104	75-125
Chromium	ND	53.2	0.50	50	-	106	75-125
Cobalt	ND	50.8	0.50	50	-	102	75-125
Copper	ND	51.8	0.50	50	-	104	75-125
Lead	ND	53.1	0.50	50	-	106	75-125
Mercury	ND	1.31	0.050	1.25	-	105	75-125
Molybdenum	ND	53.0	0.50	50	-	106	75-125
Nickel	ND	52.6	0.50	50	-	105	75-125
Selenium	ND	52.5	0.50	50	-	105	75-125
Silver	ND	52.8	0.50	50	-	106	75-125
Thallium	ND	49.7	0.50	50	-	99	75-125
Vanadium	ND	53.0	0.50	50	-	106	75-125
Zinc	ND	518	5.0	500	-	104	75-125
Surrogate Recovery							
Terbium	490.6	538		500	98	108	70-130



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: ICP-MS1
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141338
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-141338
 1706E35-005AMS/MSD
 1706E35-005APDS

QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	56.6	56.4	50	ND	112	112	75-125	0	20
Arsenic	61.2	58.9	50	3.8	115	110	75-125	3.75	20
Barium	729	706	500	150	116	111	75-125	3.12	20
Beryllium	51.7	51.8	50	0.53	102	102	75-125	0	20
Cadmium	54.6	54.9	50	0.3246	108	109	75-125	0.548	20
Chromium	115	116	50	61.13	107	110	75-125	1.13	20
Cobalt	67.4	60.0	50	13	109	95	75-125	11.5	20
Copper	77.3	74.0	50	21	113	106	75-125	4.38	20
Lead	64.9	62.2	50	7.384	115	110	75-125	4.14	20
Mercury	1.39	1.44	1.25	0.052	107	111	75-125	3.46	20
Molybdenum	56.4	55.7	50	0.61	112	110	75-125	1.25	20
Nickel	135	124	50	74.68	121	99	75-125	8.41	20
Selenium	52.6	53.5	50	ND	105	107	75-125	1.58	20
Silver	55.6	55.2	50	ND	111	110	75-125	0.794	20
Thallium	52.8	52.4	50	ND	105	105	75-125	0	20
Vanadium	101	94.2	50	38	126,F10	112	75-125	6.75	20
Zinc	600	595	500	65.10	107	106	75-125	0.787	20

Surrogate Recovery

Terbium	574	576	500		115	115	70-130	0	20
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Analyte	PDS Result	SPK Val	SPKRef Val	PDS %REC	PDS Limits
Vanadium	88.7	50	38	101	75-125

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Antimony	ND<2.5	ND	-	-
Arsenic	3.74	3.8	1.58	-
Barium	140	150	6.67	20
Beryllium	ND<2.5	0.53	-	-
Cadmium	ND<1.2	0.3246	-	-
Chromium	62.9	61.13	2.90	20
Cobalt	12.6	13	3.08	20
Copper	21.1	21	0.476	20

(Cont.)



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: ICP-MS1
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141338
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-141338
 1706E35-005AMS/MSD
 1706E35-005APDS

QC Summary Report for Metals

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	6.98	7.384	5.47	-
Mercury	ND<0.25	0.052	-	-
Molybdenum	ND<2.5	0.61	-	-
Nickel	76.2	74.68	2.04	20
Selenium	ND<2.5	ND	-	-
Silver	ND<2.5	ND	-	-
Thallium	ND<2.5	ND	-	-
Vanadium	40.0	38	5.26	20
Zinc	67.2	65.10	3.23	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: GC7
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141279
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS-141279

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.567	0.40	0.60	-	95	82-118
MTBE	ND	0.0776	0.050	0.10	-	78	61-119
Benzene	ND	0.102	0.0050	0.10	-	102	77-128
Toluene	ND	0.104	0.0050	0.10	-	104	74-132
Ethylbenzene	ND	0.108	0.0050	0.10	-	108	84-127
Xylenes	ND	0.332	0.015	0.30	-	111	86-129
Surrogate Recovery							
2-Fluorotoluene	0.09553	0.0939		0.10	96	94	75-134



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/29/17 - 6/30/17
Instrument: GC7
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141323
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS-141323
 1706E27-009AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.585	0.40	0.60	-	98	82-118
MTBE	ND	0.0908	0.050	0.10	-	91	61-119
Benzene	ND	0.0973	0.0050	0.10	-	97	77-128
Toluene	ND	0.100	0.0050	0.10	-	100	74-132
Ethylbenzene	ND	0.105	0.0050	0.10	-	105	84-127
Xylenes	ND	0.326	0.015	0.30	-	109	86-129
Surrogate Recovery							
2-Fluorotoluene	0.09066	0.0873		0.10	91	87	75-134

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.549	0.562	0.60	ND	91	94	58-129	2.27	20
MTBE	0.0859	0.0850	0.10	ND	86	85	47-118	1.15	20
Benzene	0.0879	0.0916	0.10	ND	88	92	55-129	4.08	20
Toluene	0.0905	0.0958	0.10	ND	90	96	56-130	5.73	20
Ethylbenzene	0.0969	0.101	0.10	ND	97	101	63-129	3.76	20
Xylenes	0.303	0.320	0.30	ND	101	107	64-131	5.20	20
Surrogate Recovery									
2-Fluorotoluene	0.0828	0.0838	0.10		83	84	62-126	1.18	20



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/29/17 - 6/30/17
Instrument: GC9a
Matrix: Soil
Project: GW254; Northgate Mall Sears Auto

WorkOrder: 1706E27
BatchID: 141322
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-141322
 1706E27-001AMS/MSD

QC Report for SW8015B w/ Silica Gel Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	40.4	1.0	40	-	101	79-133
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	25.98	26.1		25	104	104	77-109

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	45.7	51.1	40	ND	114	128	59-150	11.1	30
Surrogate Recovery									
C9	26.3	26.2	25		105	105	78-109	0	30



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1706E27

ClientCode: TORE

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Jeffrey Borum
TOR Environmental, Inc.
PO BOX 73626
San Clemente, CA 92673
(949) 498-1450 FAX:

Email: jborum@torenvironmental.com
cc/3rd Party:
PO:
ProjectNo: GW254; Northgate Mall Sears Auto

Bill to:

Jeffrey Borum
TOR Environmental, Inc.
PO BOX 73626
San Clemente, CA 92673

Requested TAT: 1 day;

Date Received: 06/29/2017

Date Logged: 06/29/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1706E27-001	SB-USTE-5'	Soil	6/29/2017 09:45	<input type="checkbox"/>	A	A		A	A	A						
1706E27-002	SB-USTE-10'	Soil	6/29/2017 10:01	<input type="checkbox"/>	A	A		A		A						
1706E27-003	SB-USTE-15'	Soil	6/29/2017 10:26	<input type="checkbox"/>	A	A		A		A						
1706E27-004	SB-USTW-5'	Soil	6/29/2017 11:08	<input type="checkbox"/>	A	A		A		A						
1706E27-005	SB-USTW-10'	Soil	6/29/2017 11:22	<input type="checkbox"/>	A	A		A		A						
1706E27-006	SB-USTW-13'	Soil	6/29/2017 11:35	<input type="checkbox"/>	A	A		A		A						
1706E27-007	SB-CLFRW-5'	Soil	6/29/2017 14:00	<input type="checkbox"/>	A	A	A	A		A						
1706E27-008	SB-CLFRW-10'	Soil	6/29/2017 14:03	<input type="checkbox"/>	A	A	A	A		A						
1706E27-009	SB-CLFRW-15'	Soil	6/29/2017 14:06	<input type="checkbox"/>	A	A		A		A						
1706E27-010	SB-CLFRE-5'	Soil	6/29/2017 14:30	<input type="checkbox"/>	A	A	A	A		A						
1706E27-011	SB-CLFRE-10'	Soil	6/29/2017 14:35	<input type="checkbox"/>	A	A	A	A		A						
1706E27-012	SB-CLFRE-15'	Soil	6/29/2017 14:41	<input type="checkbox"/>	A	A		A		A						

Test Legend:

1	8260B_S	2	9071B_SG_S	3	CAM17MS_TTLC_S	4	G-MBTEX_S
5	PREDF REPORT	6	TPH(DMO)WSG_S	7		8	
9		10		11		12	

Prepared by: Agustina Venegas

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A contain testgroup Multi RangeWSG_S.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TOR ENVIRONMENTAL, INC.

Project: GW254; Northgate Mall Sears Auto

Work Order: 1706E27

Client Contact: Jeffrey Borum

QC Level: LEVEL 2

Contact's Email: jborum@torenvironmental.com

Comments:

Date Logged: 6/29/2017

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1706E27-001A	SB-USTE-5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 9:45	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E27-002A	SB-USTE-10'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 10:01	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E27-003A	SB-USTE-15'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 10:26	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E27-004A	SB-USTW-5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 11:08	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E27-005A	SB-USTW-10'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 11:22	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: TOR ENVIRONMENTAL, INC.

Project: GW254; Northgate Mall Sears Auto

Work Order: 1706E27

Client Contact: Jeffrey Borum

QC Level: LEVEL 2

Contact's Email: jborum@torenvironmental.com

Comments:

Date Logged: 6/29/2017

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1706E27-006A	SB-USTW-13'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 11:35	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E27-007A	SB-CLFRW-5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 14:00	1 day		<input type="checkbox"/>			
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E27-008A	SB-CLFRW-10'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 14:03	1 day		<input type="checkbox"/>			
			SW6020 (CAM 17)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E27-009A	SB-CLFRW-15'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 14:06	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E27-010A	SB-CLFRE-5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 14:30	1 day		<input type="checkbox"/>			

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: TOR ENVIRONMENTAL, INC.

Project: GW254; Northgate Mall Sears Auto

Work Order: 1706E27

Client Contact: Jeffrey Borum

QC Level: LEVEL 2

Contact's Email: jborum@torenvironmental.com

Comments:

Date Logged: 6/29/2017

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1706E27-010A	SB-CLFRE-5'	Soil	SW6020 (CAM 17)	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 14:30	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E27-011A	SB-CLFRE-10'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 14:35	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E27-012A	SB-CLFRE-15'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	8OZ GJ	<input type="checkbox"/>	6/29/2017 14:41	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

RUSH

McCAMPBELL ANALYTICAL, INC.
 1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
 Telephone: (877) 252-9262 / Fax: (925) 252-9269
 www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush <input checked="" type="checkbox"/>	2 Day Rush	3 Day Rush	STD	Quote #
J-Flag / MDL	ESL	Cleanup Approved	Bottle Order #	
Delivery Format: GeoTracker EDF <input checked="" type="checkbox"/>	PDF <input checked="" type="checkbox"/>	EDD <input checked="" type="checkbox"/>	Write On (DW)	EQuIS

Report To: Jeffrey Borum Bill To: Jeffrey Borum
 Company: TOR Environmental, Inc.
 Email: jborum@torenvironmental.com
 Alt Email: msauenwein@torenvironmental.com Tele: (949) 370-2046
 Project Name/ #: LW 254
 Project Location: Northridge Mall Sears Auto PO #
 Sampler Signature: Michael Sauerwein

Analysis Requested

SAMPLE ID Location / Field Point	Sampling		#Containers	Matrix	Preservative	BTEX & TPH as Gas (8021/8015) MTBE Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel <u>Estrold Range HC</u>	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 (2600) (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Bylands Requirements	Lab to filter sample for dissolved metals analysis
	Date	Time																		
SB-OSTE-5'	6/29/17	0945	1	soil	ice	X	X	X					*	X						
SB-USTE-10'		1001																		
SB-USTE-15'		1026																		
SB-USTW-5'		1108																		
SB-USTW-10'		1122																		
SB-USTW-13'		1135																		
SB-CLFRW-5'		1400															X			
SB-CLFRW-10'		1403															X			
SB-CLFRW-15'		1406																		
SB-CLFRE-5'		1430															X			

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.
 Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
<u>Michael Sauerwein / TOR Environmental</u>	<u>6/29/17</u>	<u>19:19</u>	<u>[Signature]</u>	<u>6/29/17</u>	<u>19:19</u>

Comments / Instructions
* Run PCBs if TAH detection
Conditional!

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other
 Preservative Code: 1=4°C 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=ZnOAc/NaOH 7=None
 Temp 8.2°C Initials _____



Sample Receipt Checklist

Client Name: **TOR Environmental, Inc.**
 Project Name: **GW254; Northgate Mall Sears Auto**
 WorkOrder No: **1706E27** Matrix: Soil
 Carrier: Client Drop-In

Date and Time Received: **6/29/2017 19:19**
 Date Logged: **6/29/2017**
 Received by: **Kena Ponce**
 Logged by: **Agustina Venegas**

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No NA
 Sample/Temp Blank temperature Temp: 8.2°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No NA
 Sample labels checked for correct preservation? Yes No
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes No NA
 Samples Received on Ice? Yes No
 (Ice Type: WET ICE)

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes No NA
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes No NA

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1706E89

Report Created for: TOR Environmental, Inc.

PO BOX 73626
San Clemente, CA 92673

Project Contact: Jeffrey Borum

Project P.O.:

Project Name: GW253; Northgate Mall Sears Auto

Project Received: 06/30/2017

Analytical Report reviewed & approved for release on 07/03/2017 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: TOR Environmental, Inc.
Project: GW253; Northgate Mall Sears Auto
WorkOrder: 1706E89

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: TOR Environmental, Inc.
Project: GW253; Northgate Mall Sears Auto
WorkOrder: 1706E89

Analytical Qualifiers

e2 Diesel range compounds are significant; no recognizable pattern
e7 Oil range compounds are significant

Quality Control Qualifiers

F2 LCS/LCSD recovery and/or RPD is out of acceptance criteria.



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev Auto-5.5'	1706E89-001A	Soil	06/30/2017 09:16	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	07/01/2017 02:57
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/01/2017 02:57
Benzene	ND	0.0050	1	07/01/2017 02:57
Bromobenzene	ND	0.0050	1	07/01/2017 02:57
Bromochloromethane	ND	0.0050	1	07/01/2017 02:57
Bromodichloromethane	ND	0.0050	1	07/01/2017 02:57
Bromoform	ND	0.0050	1	07/01/2017 02:57
Bromomethane	ND	0.0050	1	07/01/2017 02:57
2-Butanone (MEK)	ND	0.020	1	07/01/2017 02:57
t-Butyl alcohol (TBA)	ND	0.050	1	07/01/2017 02:57
n-Butyl benzene	ND	0.0050	1	07/01/2017 02:57
sec-Butyl benzene	ND	0.0050	1	07/01/2017 02:57
tert-Butyl benzene	ND	0.0050	1	07/01/2017 02:57
Carbon Disulfide	ND	0.0050	1	07/01/2017 02:57
Carbon Tetrachloride	ND	0.0050	1	07/01/2017 02:57
Chlorobenzene	ND	0.0050	1	07/01/2017 02:57
Chloroethane	ND	0.0050	1	07/01/2017 02:57
Chloroform	ND	0.0050	1	07/01/2017 02:57
Chloromethane	ND	0.0050	1	07/01/2017 02:57
2-Chlorotoluene	ND	0.0050	1	07/01/2017 02:57
4-Chlorotoluene	ND	0.0050	1	07/01/2017 02:57
Dibromochloromethane	ND	0.0050	1	07/01/2017 02:57
1,2-Dibromo-3-chloropropane	ND	0.0040	1	07/01/2017 02:57
1,2-Dibromoethane (EDB)	ND	0.0040	1	07/01/2017 02:57
Dibromomethane	ND	0.0050	1	07/01/2017 02:57
1,2-Dichlorobenzene	ND	0.0050	1	07/01/2017 02:57
1,3-Dichlorobenzene	ND	0.0050	1	07/01/2017 02:57
1,4-Dichlorobenzene	ND	0.0050	1	07/01/2017 02:57
Dichlorodifluoromethane	ND	0.0050	1	07/01/2017 02:57
1,1-Dichloroethane	ND	0.0050	1	07/01/2017 02:57
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	07/01/2017 02:57
1,1-Dichloroethene	ND	0.0050	1	07/01/2017 02:57
cis-1,2-Dichloroethene	ND	0.0050	1	07/01/2017 02:57
trans-1,2-Dichloroethene	ND	0.0050	1	07/01/2017 02:57
1,2-Dichloropropane	ND	0.0050	1	07/01/2017 02:57
1,3-Dichloropropane	ND	0.0050	1	07/01/2017 02:57
2,2-Dichloropropane	ND	0.0050	1	07/01/2017 02:57

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev Auto-5.5'	1706E89-001A	Soil	06/30/2017 09:16	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	07/01/2017 02:57
cis-1,3-Dichloropropene	ND	0.0050	1	07/01/2017 02:57
trans-1,3-Dichloropropene	ND	0.0050	1	07/01/2017 02:57
Diisopropyl ether (DIPE)	ND	0.0050	1	07/01/2017 02:57
Ethylbenzene	ND	0.0050	1	07/01/2017 02:57
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/01/2017 02:57
Freon 113	ND	0.0050	1	07/01/2017 02:57
Hexachlorobutadiene	ND	0.0050	1	07/01/2017 02:57
Hexachloroethane	ND	0.0050	1	07/01/2017 02:57
2-Hexanone	ND	0.0050	1	07/01/2017 02:57
Isopropylbenzene	ND	0.0050	1	07/01/2017 02:57
4-Isopropyl toluene	ND	0.0050	1	07/01/2017 02:57
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/01/2017 02:57
Methylene chloride	ND	0.0050	1	07/01/2017 02:57
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	07/01/2017 02:57
Naphthalene	ND	0.0050	1	07/01/2017 02:57
n-Propyl benzene	ND	0.0050	1	07/01/2017 02:57
Styrene	ND	0.0050	1	07/01/2017 02:57
1,1,1,2-Tetrachloroethane	ND	0.0050	1	07/01/2017 02:57
1,1,2,2-Tetrachloroethane	ND	0.0050	1	07/01/2017 02:57
Tetrachloroethene	ND	0.0050	1	07/01/2017 02:57
Toluene	ND	0.0050	1	07/01/2017 02:57
1,2,3-Trichlorobenzene	ND	0.0050	1	07/01/2017 02:57
1,2,4-Trichlorobenzene	ND	0.0050	1	07/01/2017 02:57
1,1,1-Trichloroethane	ND	0.0050	1	07/01/2017 02:57
1,1,2-Trichloroethane	ND	0.0050	1	07/01/2017 02:57
Trichloroethene	ND	0.0050	1	07/01/2017 02:57
Trichlorofluoromethane	ND	0.0050	1	07/01/2017 02:57
1,2,3-Trichloropropane	ND	0.0050	1	07/01/2017 02:57
1,2,4-Trimethylbenzene	ND	0.0050	1	07/01/2017 02:57
1,3,5-Trimethylbenzene	ND	0.0050	1	07/01/2017 02:57
Vinyl Chloride	ND	0.0050	1	07/01/2017 02:57
Xylenes, Total	ND	0.0050	1	07/01/2017 02:57

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev Auto-5.5'	1706E89-001A	Soil	06/30/2017 09:16	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	120	70-130		07/01/2017 02:57
Toluene-d8	111	70-130		07/01/2017 02:57
4-BFB	99	70-130		07/01/2017 02:57
Benzene-d6	109	60-140		07/01/2017 02:57
Ethylbenzene-d10	132	60-140		07/01/2017 02:57
1,2-DCB-d4	87	60-140		07/01/2017 02:57

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-5'	1706E89-002A	Soil	06/30/2017 10:01	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	07/01/2017 03:37
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/01/2017 03:37
Benzene	ND	0.0050	1	07/01/2017 03:37
Bromobenzene	ND	0.0050	1	07/01/2017 03:37
Bromochloromethane	ND	0.0050	1	07/01/2017 03:37
Bromodichloromethane	ND	0.0050	1	07/01/2017 03:37
Bromoform	ND	0.0050	1	07/01/2017 03:37
Bromomethane	ND	0.0050	1	07/01/2017 03:37
2-Butanone (MEK)	ND	0.020	1	07/01/2017 03:37
t-Butyl alcohol (TBA)	ND	0.050	1	07/01/2017 03:37
n-Butyl benzene	ND	0.0050	1	07/01/2017 03:37
sec-Butyl benzene	ND	0.0050	1	07/01/2017 03:37
tert-Butyl benzene	ND	0.0050	1	07/01/2017 03:37
Carbon Disulfide	ND	0.0050	1	07/01/2017 03:37
Carbon Tetrachloride	ND	0.0050	1	07/01/2017 03:37
Chlorobenzene	ND	0.0050	1	07/01/2017 03:37
Chloroethane	ND	0.0050	1	07/01/2017 03:37
Chloroform	ND	0.0050	1	07/01/2017 03:37
Chloromethane	ND	0.0050	1	07/01/2017 03:37
2-Chlorotoluene	ND	0.0050	1	07/01/2017 03:37
4-Chlorotoluene	ND	0.0050	1	07/01/2017 03:37
Dibromochloromethane	ND	0.0050	1	07/01/2017 03:37
1,2-Dibromo-3-chloropropane	ND	0.0040	1	07/01/2017 03:37
1,2-Dibromoethane (EDB)	ND	0.0040	1	07/01/2017 03:37
Dibromomethane	ND	0.0050	1	07/01/2017 03:37
1,2-Dichlorobenzene	ND	0.0050	1	07/01/2017 03:37
1,3-Dichlorobenzene	ND	0.0050	1	07/01/2017 03:37
1,4-Dichlorobenzene	ND	0.0050	1	07/01/2017 03:37
Dichlorodifluoromethane	ND	0.0050	1	07/01/2017 03:37
1,1-Dichloroethane	ND	0.0050	1	07/01/2017 03:37
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	07/01/2017 03:37
1,1-Dichloroethene	ND	0.0050	1	07/01/2017 03:37
cis-1,2-Dichloroethene	ND	0.0050	1	07/01/2017 03:37
trans-1,2-Dichloroethene	ND	0.0050	1	07/01/2017 03:37
1,2-Dichloropropane	ND	0.0050	1	07/01/2017 03:37
1,3-Dichloropropane	ND	0.0050	1	07/01/2017 03:37
2,2-Dichloropropane	ND	0.0050	1	07/01/2017 03:37

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-5'	1706E89-002A	Soil	06/30/2017 10:01	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	07/01/2017 03:37
cis-1,3-Dichloropropene	ND	0.0050	1	07/01/2017 03:37
trans-1,3-Dichloropropene	ND	0.0050	1	07/01/2017 03:37
Diisopropyl ether (DIPE)	ND	0.0050	1	07/01/2017 03:37
Ethylbenzene	ND	0.0050	1	07/01/2017 03:37
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/01/2017 03:37
Freon 113	ND	0.0050	1	07/01/2017 03:37
Hexachlorobutadiene	ND	0.0050	1	07/01/2017 03:37
Hexachloroethane	ND	0.0050	1	07/01/2017 03:37
2-Hexanone	ND	0.0050	1	07/01/2017 03:37
Isopropylbenzene	ND	0.0050	1	07/01/2017 03:37
4-Isopropyl toluene	ND	0.0050	1	07/01/2017 03:37
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/01/2017 03:37
Methylene chloride	ND	0.0050	1	07/01/2017 03:37
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	07/01/2017 03:37
Naphthalene	ND	0.0050	1	07/01/2017 03:37
n-Propyl benzene	ND	0.0050	1	07/01/2017 03:37
Styrene	ND	0.0050	1	07/01/2017 03:37
1,1,1,2-Tetrachloroethane	ND	0.0050	1	07/01/2017 03:37
1,1,2,2-Tetrachloroethane	ND	0.0050	1	07/01/2017 03:37
Tetrachloroethene	ND	0.0050	1	07/01/2017 03:37
Toluene	ND	0.0050	1	07/01/2017 03:37
1,2,3-Trichlorobenzene	ND	0.0050	1	07/01/2017 03:37
1,2,4-Trichlorobenzene	ND	0.0050	1	07/01/2017 03:37
1,1,1-Trichloroethane	ND	0.0050	1	07/01/2017 03:37
1,1,2-Trichloroethane	ND	0.0050	1	07/01/2017 03:37
Trichloroethene	ND	0.0050	1	07/01/2017 03:37
Trichlorofluoromethane	ND	0.0050	1	07/01/2017 03:37
1,2,3-Trichloropropane	ND	0.0050	1	07/01/2017 03:37
1,2,4-Trimethylbenzene	ND	0.0050	1	07/01/2017 03:37
1,3,5-Trimethylbenzene	ND	0.0050	1	07/01/2017 03:37
Vinyl Chloride	ND	0.0050	1	07/01/2017 03:37
Xylenes, Total	ND	0.0050	1	07/01/2017 03:37

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-5'	1706E89-002A	Soil	06/30/2017 10:01	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	119	70-130		07/01/2017 03:37
Toluene-d8	112	70-130		07/01/2017 03:37
4-BFB	95	70-130		07/01/2017 03:37
Benzene-d6	107	60-140		07/01/2017 03:37
Ethylbenzene-d10	127	60-140		07/01/2017 03:37
1,2-DCB-d4	84	60-140		07/01/2017 03:37

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-10'	1706E89-003A	Soil	06/30/2017 10:10	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	07/01/2017 04:16
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/01/2017 04:16
Benzene	ND	0.0050	1	07/01/2017 04:16
Bromobenzene	ND	0.0050	1	07/01/2017 04:16
Bromochloromethane	ND	0.0050	1	07/01/2017 04:16
Bromodichloromethane	ND	0.0050	1	07/01/2017 04:16
Bromoform	ND	0.0050	1	07/01/2017 04:16
Bromomethane	ND	0.0050	1	07/01/2017 04:16
2-Butanone (MEK)	ND	0.020	1	07/01/2017 04:16
t-Butyl alcohol (TBA)	ND	0.050	1	07/01/2017 04:16
n-Butyl benzene	ND	0.0050	1	07/01/2017 04:16
sec-Butyl benzene	ND	0.0050	1	07/01/2017 04:16
tert-Butyl benzene	ND	0.0050	1	07/01/2017 04:16
Carbon Disulfide	ND	0.0050	1	07/01/2017 04:16
Carbon Tetrachloride	ND	0.0050	1	07/01/2017 04:16
Chlorobenzene	ND	0.0050	1	07/01/2017 04:16
Chloroethane	ND	0.0050	1	07/01/2017 04:16
Chloroform	ND	0.0050	1	07/01/2017 04:16
Chloromethane	ND	0.0050	1	07/01/2017 04:16
2-Chlorotoluene	ND	0.0050	1	07/01/2017 04:16
4-Chlorotoluene	ND	0.0050	1	07/01/2017 04:16
Dibromochloromethane	ND	0.0050	1	07/01/2017 04:16
1,2-Dibromo-3-chloropropane	ND	0.0040	1	07/01/2017 04:16
1,2-Dibromoethane (EDB)	ND	0.0040	1	07/01/2017 04:16
Dibromomethane	ND	0.0050	1	07/01/2017 04:16
1,2-Dichlorobenzene	ND	0.0050	1	07/01/2017 04:16
1,3-Dichlorobenzene	ND	0.0050	1	07/01/2017 04:16
1,4-Dichlorobenzene	ND	0.0050	1	07/01/2017 04:16
Dichlorodifluoromethane	ND	0.0050	1	07/01/2017 04:16
1,1-Dichloroethane	ND	0.0050	1	07/01/2017 04:16
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	07/01/2017 04:16
1,1-Dichloroethene	ND	0.0050	1	07/01/2017 04:16
cis-1,2-Dichloroethene	ND	0.0050	1	07/01/2017 04:16
trans-1,2-Dichloroethene	ND	0.0050	1	07/01/2017 04:16
1,2-Dichloropropane	ND	0.0050	1	07/01/2017 04:16
1,3-Dichloropropane	ND	0.0050	1	07/01/2017 04:16
2,2-Dichloropropane	ND	0.0050	1	07/01/2017 04:16

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-10'	1706E89-003A	Soil	06/30/2017 10:10	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	07/01/2017 04:16
cis-1,3-Dichloropropene	ND	0.0050	1	07/01/2017 04:16
trans-1,3-Dichloropropene	ND	0.0050	1	07/01/2017 04:16
Diisopropyl ether (DIPE)	ND	0.0050	1	07/01/2017 04:16
Ethylbenzene	ND	0.0050	1	07/01/2017 04:16
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/01/2017 04:16
Freon 113	ND	0.0050	1	07/01/2017 04:16
Hexachlorobutadiene	ND	0.0050	1	07/01/2017 04:16
Hexachloroethane	ND	0.0050	1	07/01/2017 04:16
2-Hexanone	ND	0.0050	1	07/01/2017 04:16
Isopropylbenzene	ND	0.0050	1	07/01/2017 04:16
4-Isopropyl toluene	ND	0.0050	1	07/01/2017 04:16
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/01/2017 04:16
Methylene chloride	ND	0.0050	1	07/01/2017 04:16
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	07/01/2017 04:16
Naphthalene	ND	0.0050	1	07/01/2017 04:16
n-Propyl benzene	ND	0.0050	1	07/01/2017 04:16
Styrene	ND	0.0050	1	07/01/2017 04:16
1,1,1,2-Tetrachloroethane	ND	0.0050	1	07/01/2017 04:16
1,1,2,2-Tetrachloroethane	ND	0.0050	1	07/01/2017 04:16
Tetrachloroethene	ND	0.0050	1	07/01/2017 04:16
Toluene	ND	0.0050	1	07/01/2017 04:16
1,2,3-Trichlorobenzene	ND	0.0050	1	07/01/2017 04:16
1,2,4-Trichlorobenzene	ND	0.0050	1	07/01/2017 04:16
1,1,1-Trichloroethane	ND	0.0050	1	07/01/2017 04:16
1,1,2-Trichloroethane	ND	0.0050	1	07/01/2017 04:16
Trichloroethene	ND	0.0050	1	07/01/2017 04:16
Trichlorofluoromethane	ND	0.0050	1	07/01/2017 04:16
1,2,3-Trichloropropane	ND	0.0050	1	07/01/2017 04:16
1,2,4-Trimethylbenzene	ND	0.0050	1	07/01/2017 04:16
1,3,5-Trimethylbenzene	ND	0.0050	1	07/01/2017 04:16
Vinyl Chloride	ND	0.0050	1	07/01/2017 04:16
Xylenes, Total	ND	0.0050	1	07/01/2017 04:16

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-10'	1706E89-003A	Soil	06/30/2017 10:10	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	119		70-130	07/01/2017 04:16
Toluene-d8	112		70-130	07/01/2017 04:16
4-BFB	95		70-130	07/01/2017 04:16
Benzene-d6	108		60-140	07/01/2017 04:16
Ethylbenzene-d10	128		60-140	07/01/2017 04:16
1,2-DCB-d4	85		60-140	07/01/2017 04:16

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-12'	1706E89-004A	Soil	06/30/2017 10:21	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	07/01/2017 04:55
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/01/2017 04:55
Benzene	ND	0.0050	1	07/01/2017 04:55
Bromobenzene	ND	0.0050	1	07/01/2017 04:55
Bromochloromethane	ND	0.0050	1	07/01/2017 04:55
Bromodichloromethane	ND	0.0050	1	07/01/2017 04:55
Bromoform	ND	0.0050	1	07/01/2017 04:55
Bromomethane	ND	0.0050	1	07/01/2017 04:55
2-Butanone (MEK)	ND	0.020	1	07/01/2017 04:55
t-Butyl alcohol (TBA)	ND	0.050	1	07/01/2017 04:55
n-Butyl benzene	ND	0.0050	1	07/01/2017 04:55
sec-Butyl benzene	ND	0.0050	1	07/01/2017 04:55
tert-Butyl benzene	ND	0.0050	1	07/01/2017 04:55
Carbon Disulfide	ND	0.0050	1	07/01/2017 04:55
Carbon Tetrachloride	ND	0.0050	1	07/01/2017 04:55
Chlorobenzene	ND	0.0050	1	07/01/2017 04:55
Chloroethane	ND	0.0050	1	07/01/2017 04:55
Chloroform	ND	0.0050	1	07/01/2017 04:55
Chloromethane	ND	0.0050	1	07/01/2017 04:55
2-Chlorotoluene	ND	0.0050	1	07/01/2017 04:55
4-Chlorotoluene	ND	0.0050	1	07/01/2017 04:55
Dibromochloromethane	ND	0.0050	1	07/01/2017 04:55
1,2-Dibromo-3-chloropropane	ND	0.0040	1	07/01/2017 04:55
1,2-Dibromoethane (EDB)	ND	0.0040	1	07/01/2017 04:55
Dibromomethane	ND	0.0050	1	07/01/2017 04:55
1,2-Dichlorobenzene	ND	0.0050	1	07/01/2017 04:55
1,3-Dichlorobenzene	ND	0.0050	1	07/01/2017 04:55
1,4-Dichlorobenzene	ND	0.0050	1	07/01/2017 04:55
Dichlorodifluoromethane	ND	0.0050	1	07/01/2017 04:55
1,1-Dichloroethane	ND	0.0050	1	07/01/2017 04:55
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	07/01/2017 04:55
1,1-Dichloroethene	ND	0.0050	1	07/01/2017 04:55
cis-1,2-Dichloroethene	ND	0.0050	1	07/01/2017 04:55
trans-1,2-Dichloroethene	ND	0.0050	1	07/01/2017 04:55
1,2-Dichloropropane	ND	0.0050	1	07/01/2017 04:55
1,3-Dichloropropane	ND	0.0050	1	07/01/2017 04:55
2,2-Dichloropropane	ND	0.0050	1	07/01/2017 04:55

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-12'	1706E89-004A	Soil	06/30/2017 10:21	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	07/01/2017 04:55
cis-1,3-Dichloropropene	ND	0.0050	1	07/01/2017 04:55
trans-1,3-Dichloropropene	ND	0.0050	1	07/01/2017 04:55
Diisopropyl ether (DIPE)	ND	0.0050	1	07/01/2017 04:55
Ethylbenzene	ND	0.0050	1	07/01/2017 04:55
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/01/2017 04:55
Freon 113	ND	0.0050	1	07/01/2017 04:55
Hexachlorobutadiene	ND	0.0050	1	07/01/2017 04:55
Hexachloroethane	ND	0.0050	1	07/01/2017 04:55
2-Hexanone	ND	0.0050	1	07/01/2017 04:55
Isopropylbenzene	ND	0.0050	1	07/01/2017 04:55
4-Isopropyl toluene	ND	0.0050	1	07/01/2017 04:55
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/01/2017 04:55
Methylene chloride	ND	0.0050	1	07/01/2017 04:55
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	07/01/2017 04:55
Naphthalene	ND	0.0050	1	07/01/2017 04:55
n-Propyl benzene	ND	0.0050	1	07/01/2017 04:55
Styrene	ND	0.0050	1	07/01/2017 04:55
1,1,1,2-Tetrachloroethane	ND	0.0050	1	07/01/2017 04:55
1,1,2,2-Tetrachloroethane	ND	0.0050	1	07/01/2017 04:55
Tetrachloroethene	ND	0.0050	1	07/01/2017 04:55
Toluene	ND	0.0050	1	07/01/2017 04:55
1,2,3-Trichlorobenzene	ND	0.0050	1	07/01/2017 04:55
1,2,4-Trichlorobenzene	ND	0.0050	1	07/01/2017 04:55
1,1,1-Trichloroethane	ND	0.0050	1	07/01/2017 04:55
1,1,2-Trichloroethane	ND	0.0050	1	07/01/2017 04:55
Trichloroethene	ND	0.0050	1	07/01/2017 04:55
Trichlorofluoromethane	ND	0.0050	1	07/01/2017 04:55
1,2,3-Trichloropropane	ND	0.0050	1	07/01/2017 04:55
1,2,4-Trimethylbenzene	ND	0.0050	1	07/01/2017 04:55
1,3,5-Trimethylbenzene	ND	0.0050	1	07/01/2017 04:55
Vinyl Chloride	ND	0.0050	1	07/01/2017 04:55
Xylenes, Total	ND	0.0050	1	07/01/2017 04:55

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-12'	1706E89-004A	Soil	06/30/2017 10:21	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	119		70-130	07/01/2017 04:55
Toluene-d8	111		70-130	07/01/2017 04:55
4-BFB	98		70-130	07/01/2017 04:55
Benzene-d6	106		60-140	07/01/2017 04:55
Ethylbenzene-d10	126		60-140	07/01/2017 04:55
1,2-DCB-d4	83		60-140	07/01/2017 04:55

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil S-5'	1706E89-005A	Soil	06/30/2017 11:15	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	07/01/2017 05:35
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/01/2017 05:35
Benzene	ND	0.0050	1	07/01/2017 05:35
Bromobenzene	ND	0.0050	1	07/01/2017 05:35
Bromochloromethane	ND	0.0050	1	07/01/2017 05:35
Bromodichloromethane	ND	0.0050	1	07/01/2017 05:35
Bromoform	ND	0.0050	1	07/01/2017 05:35
Bromomethane	ND	0.0050	1	07/01/2017 05:35
2-Butanone (MEK)	ND	0.020	1	07/01/2017 05:35
t-Butyl alcohol (TBA)	ND	0.050	1	07/01/2017 05:35
n-Butyl benzene	ND	0.0050	1	07/01/2017 05:35
sec-Butyl benzene	ND	0.0050	1	07/01/2017 05:35
tert-Butyl benzene	ND	0.0050	1	07/01/2017 05:35
Carbon Disulfide	ND	0.0050	1	07/01/2017 05:35
Carbon Tetrachloride	ND	0.0050	1	07/01/2017 05:35
Chlorobenzene	ND	0.0050	1	07/01/2017 05:35
Chloroethane	ND	0.0050	1	07/01/2017 05:35
Chloroform	ND	0.0050	1	07/01/2017 05:35
Chloromethane	ND	0.0050	1	07/01/2017 05:35
2-Chlorotoluene	ND	0.0050	1	07/01/2017 05:35
4-Chlorotoluene	ND	0.0050	1	07/01/2017 05:35
Dibromochloromethane	ND	0.0050	1	07/01/2017 05:35
1,2-Dibromo-3-chloropropane	ND	0.0040	1	07/01/2017 05:35
1,2-Dibromoethane (EDB)	ND	0.0040	1	07/01/2017 05:35
Dibromomethane	ND	0.0050	1	07/01/2017 05:35
1,2-Dichlorobenzene	ND	0.0050	1	07/01/2017 05:35
1,3-Dichlorobenzene	ND	0.0050	1	07/01/2017 05:35
1,4-Dichlorobenzene	ND	0.0050	1	07/01/2017 05:35
Dichlorodifluoromethane	ND	0.0050	1	07/01/2017 05:35
1,1-Dichloroethane	ND	0.0050	1	07/01/2017 05:35
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	07/01/2017 05:35
1,1-Dichloroethene	ND	0.0050	1	07/01/2017 05:35
cis-1,2-Dichloroethene	ND	0.0050	1	07/01/2017 05:35
trans-1,2-Dichloroethene	ND	0.0050	1	07/01/2017 05:35
1,2-Dichloropropane	ND	0.0050	1	07/01/2017 05:35
1,3-Dichloropropane	ND	0.0050	1	07/01/2017 05:35
2,2-Dichloropropane	ND	0.0050	1	07/01/2017 05:35

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil S-5'	1706E89-005A	Soil	06/30/2017 11:15	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	07/01/2017 05:35
cis-1,3-Dichloropropene	ND	0.0050	1	07/01/2017 05:35
trans-1,3-Dichloropropene	ND	0.0050	1	07/01/2017 05:35
Diisopropyl ether (DIPE)	ND	0.0050	1	07/01/2017 05:35
Ethylbenzene	ND	0.0050	1	07/01/2017 05:35
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/01/2017 05:35
Freon 113	ND	0.0050	1	07/01/2017 05:35
Hexachlorobutadiene	ND	0.0050	1	07/01/2017 05:35
Hexachloroethane	ND	0.0050	1	07/01/2017 05:35
2-Hexanone	ND	0.0050	1	07/01/2017 05:35
Isopropylbenzene	ND	0.0050	1	07/01/2017 05:35
4-Isopropyl toluene	ND	0.0050	1	07/01/2017 05:35
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/01/2017 05:35
Methylene chloride	ND	0.0050	1	07/01/2017 05:35
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	07/01/2017 05:35
Naphthalene	ND	0.0050	1	07/01/2017 05:35
n-Propyl benzene	ND	0.0050	1	07/01/2017 05:35
Styrene	ND	0.0050	1	07/01/2017 05:35
1,1,1,2-Tetrachloroethane	ND	0.0050	1	07/01/2017 05:35
1,1,2,2-Tetrachloroethane	ND	0.0050	1	07/01/2017 05:35
Tetrachloroethene	ND	0.0050	1	07/01/2017 05:35
Toluene	ND	0.0050	1	07/01/2017 05:35
1,2,3-Trichlorobenzene	ND	0.0050	1	07/01/2017 05:35
1,2,4-Trichlorobenzene	ND	0.0050	1	07/01/2017 05:35
1,1,1-Trichloroethane	ND	0.0050	1	07/01/2017 05:35
1,1,2-Trichloroethane	ND	0.0050	1	07/01/2017 05:35
Trichloroethene	ND	0.0050	1	07/01/2017 05:35
Trichlorofluoromethane	ND	0.0050	1	07/01/2017 05:35
1,2,3-Trichloropropane	ND	0.0050	1	07/01/2017 05:35
1,2,4-Trimethylbenzene	ND	0.0050	1	07/01/2017 05:35
1,3,5-Trimethylbenzene	ND	0.0050	1	07/01/2017 05:35
Vinyl Chloride	ND	0.0050	1	07/01/2017 05:35
Xylenes, Total	ND	0.0050	1	07/01/2017 05:35

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil S-5'	1706E89-005A	Soil	06/30/2017 11:15	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	118	70-130		07/01/2017 05:35
Toluene-d8	111	70-130		07/01/2017 05:35
4-BFB	96	70-130		07/01/2017 05:35
Benzene-d6	108	60-140		07/01/2017 05:35
Ethylbenzene-d10	127	60-140		07/01/2017 05:35
1,2-DCB-d4	84	60-140		07/01/2017 05:35

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S-Elev P1-1'	1706E89-006A	Soil	06/30/2017 14:50	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	07/03/2017 12:50
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/03/2017 12:50
Benzene	ND	0.0050	1	07/03/2017 12:50
Bromobenzene	ND	0.0050	1	07/03/2017 12:50
Bromochloromethane	ND	0.0050	1	07/03/2017 12:50
Bromodichloromethane	ND	0.0050	1	07/03/2017 12:50
Bromoform	ND	0.0050	1	07/03/2017 12:50
Bromomethane	ND	0.0050	1	07/03/2017 12:50
2-Butanone (MEK)	ND	0.020	1	07/03/2017 12:50
t-Butyl alcohol (TBA)	ND	0.050	1	07/03/2017 12:50
n-Butyl benzene	ND	0.0050	1	07/03/2017 12:50
sec-Butyl benzene	ND	0.0050	1	07/03/2017 12:50
tert-Butyl benzene	ND	0.0050	1	07/03/2017 12:50
Carbon Disulfide	ND	0.0050	1	07/03/2017 12:50
Carbon Tetrachloride	ND	0.0050	1	07/03/2017 12:50
Chlorobenzene	ND	0.0050	1	07/03/2017 12:50
Chloroethane	ND	0.0050	1	07/03/2017 12:50
Chloroform	ND	0.0050	1	07/03/2017 12:50
Chloromethane	ND	0.0050	1	07/03/2017 12:50
2-Chlorotoluene	ND	0.0050	1	07/03/2017 12:50
4-Chlorotoluene	ND	0.0050	1	07/03/2017 12:50
Dibromochloromethane	ND	0.0050	1	07/03/2017 12:50
1,2-Dibromo-3-chloropropane	ND	0.0040	1	07/03/2017 12:50
1,2-Dibromoethane (EDB)	ND	0.0040	1	07/03/2017 12:50
Dibromomethane	ND	0.0050	1	07/03/2017 12:50
1,2-Dichlorobenzene	ND	0.0050	1	07/03/2017 12:50
1,3-Dichlorobenzene	ND	0.0050	1	07/03/2017 12:50
1,4-Dichlorobenzene	ND	0.0050	1	07/03/2017 12:50
Dichlorodifluoromethane	ND	0.0050	1	07/03/2017 12:50
1,1-Dichloroethane	ND	0.0050	1	07/03/2017 12:50
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	07/03/2017 12:50
1,1-Dichloroethene	ND	0.0050	1	07/03/2017 12:50
cis-1,2-Dichloroethene	ND	0.0050	1	07/03/2017 12:50
trans-1,2-Dichloroethene	ND	0.0050	1	07/03/2017 12:50
1,2-Dichloropropane	ND	0.0050	1	07/03/2017 12:50
1,3-Dichloropropane	ND	0.0050	1	07/03/2017 12:50
2,2-Dichloropropane	ND	0.0050	1	07/03/2017 12:50

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S-Elev P1-1'	1706E89-006A	Soil	06/30/2017 14:50	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	07/03/2017 12:50
cis-1,3-Dichloropropene	ND	0.0050	1	07/03/2017 12:50
trans-1,3-Dichloropropene	ND	0.0050	1	07/03/2017 12:50
Diisopropyl ether (DIPE)	ND	0.0050	1	07/03/2017 12:50
Ethylbenzene	ND	0.0050	1	07/03/2017 12:50
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/03/2017 12:50
Freon 113	ND	0.0050	1	07/03/2017 12:50
Hexachlorobutadiene	ND	0.0050	1	07/03/2017 12:50
Hexachloroethane	ND	0.0050	1	07/03/2017 12:50
2-Hexanone	ND	0.0050	1	07/03/2017 12:50
Isopropylbenzene	ND	0.0050	1	07/03/2017 12:50
4-Isopropyl toluene	ND	0.0050	1	07/03/2017 12:50
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/03/2017 12:50
Methylene chloride	ND	0.0050	1	07/03/2017 12:50
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	07/03/2017 12:50
Naphthalene	ND	0.0050	1	07/03/2017 12:50
n-Propyl benzene	ND	0.0050	1	07/03/2017 12:50
Styrene	ND	0.0050	1	07/03/2017 12:50
1,1,1,2-Tetrachloroethane	ND	0.0050	1	07/03/2017 12:50
1,1,2,2-Tetrachloroethane	ND	0.0050	1	07/03/2017 12:50
Tetrachloroethene	ND	0.0050	1	07/03/2017 12:50
Toluene	ND	0.0050	1	07/03/2017 12:50
1,2,3-Trichlorobenzene	ND	0.0050	1	07/03/2017 12:50
1,2,4-Trichlorobenzene	ND	0.0050	1	07/03/2017 12:50
1,1,1-Trichloroethane	ND	0.0050	1	07/03/2017 12:50
1,1,2-Trichloroethane	ND	0.0050	1	07/03/2017 12:50
Trichloroethene	ND	0.0050	1	07/03/2017 12:50
Trichlorofluoromethane	ND	0.0050	1	07/03/2017 12:50
1,2,3-Trichloropropane	ND	0.0050	1	07/03/2017 12:50
1,2,4-Trimethylbenzene	ND	0.0050	1	07/03/2017 12:50
1,3,5-Trimethylbenzene	ND	0.0050	1	07/03/2017 12:50
Vinyl Chloride	ND	0.0050	1	07/03/2017 12:50
Xylenes, Total	ND	0.0050	1	07/03/2017 12:50

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S-Elev P1-1'	1706E89-006A	Soil	06/30/2017 14:50	GC10	141388

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	100		70-130	07/03/2017 12:50
Toluene-d8	102		70-130	07/03/2017 12:50
4-BFB	109		70-130	07/03/2017 12:50
Benzene-d6	76		60-140	07/03/2017 12:50
Ethylbenzene-d10	73		60-140	07/03/2017 12:50
1,2-DCB-d4	67		60-140	07/03/2017 12:50

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/3/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: E9071B
Analytical Method: E9071B
Unit: mg/Kg

Hexane Extractable Material with Silica Gel Treatment

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev Auto-5.5'	1706E89-001A	Soil	06/30/2017 09:16	O&G	141460

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/03/2017 17:45

Analyst(s): VP

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-5'	1706E89-002A	Soil	06/30/2017 10:01	O&G	141460

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/03/2017 17:50

Analyst(s): VP

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-10'	1706E89-003A	Soil	06/30/2017 10:10	O&G	141460

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/03/2017 18:05

Analyst(s): VP

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-12'	1706E89-004A	Soil	06/30/2017 10:21	O&G	141460

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	ND	50	1	07/03/2017 18:10

Analyst(s): VP

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/3/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: E9071B
Analytical Method: E9071B
Unit: mg/Kg

Hexane Extractable Material with Silica Gel Treatment

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil S-5'	1706E89-005A	Soil	06/30/2017 11:15	O&G	141460

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	58	50	1	07/03/2017 18:15

Analyst(s): VP

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S-Elev P1-1'	1706E89-006A	Soil	06/30/2017 14:50	O&G	141460

Analytes	Result	RL	DF	Date Analyzed
SGT-HEM	13	2.4	0.049	07/03/2017 18:20

Analyst(s): VP

 Angela Rydelius, Lab Manager



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev Auto-5.5'	1706E89-001A	Soil	06/30/2017 09:16	GC7	141399

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	07/01/2017 03:20
MTBE	---	0.050	1	07/01/2017 03:20
Benzene	---	0.0050	1	07/01/2017 03:20
Toluene	---	0.0050	1	07/01/2017 03:20
Ethylbenzene	---	0.0050	1	07/01/2017 03:20
Xylenes	---	0.015	1	07/01/2017 03:20
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	78	62-126		07/01/2017 03:20

Analyst(s): LT

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-5'	1706E89-002A	Soil	06/30/2017 10:01	GC7	141399

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	07/01/2017 03:49
MTBE	---	0.050	1	07/01/2017 03:49
Benzene	---	0.0050	1	07/01/2017 03:49
Toluene	---	0.0050	1	07/01/2017 03:49
Ethylbenzene	---	0.0050	1	07/01/2017 03:49
Xylenes	---	0.015	1	07/01/2017 03:49
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	81	62-126		07/01/2017 03:49

Analyst(s): LT



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-10'	1706E89-003A	Soil	06/30/2017 10:10	GC7	141399

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	07/01/2017 05:19
MTBE	---	0.050	1	07/01/2017 05:19
Benzene	---	0.0050	1	07/01/2017 05:19
Toluene	---	0.0050	1	07/01/2017 05:19
Ethylbenzene	---	0.0050	1	07/01/2017 05:19
Xylenes	---	0.015	1	07/01/2017 05:19
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	88	62-126		07/01/2017 05:19

Analyst(s): LT

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-12'	1706E89-004A	Soil	06/30/2017 10:21	GC7	141399

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	07/01/2017 05:49
MTBE	---	0.050	1	07/01/2017 05:49
Benzene	---	0.0050	1	07/01/2017 05:49
Toluene	---	0.0050	1	07/01/2017 05:49
Ethylbenzene	---	0.0050	1	07/01/2017 05:49
Xylenes	---	0.015	1	07/01/2017 05:49
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	86	62-126		07/01/2017 05:49

Analyst(s): LT



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil S-5'	1706E89-005A	Soil	06/30/2017 11:15	GC7	141399

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	07/01/2017 06:18
MTBE	---	0.050	1	07/01/2017 06:18
Benzene	---	0.0050	1	07/01/2017 06:18
Toluene	---	0.0050	1	07/01/2017 06:18
Ethylbenzene	---	0.0050	1	07/01/2017 06:18
Xylenes	---	0.015	1	07/01/2017 06:18
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	88	62-126		07/01/2017 06:18

Analyst(s): LT

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S-Elev P1-1'	1706E89-006A	Soil	06/30/2017 14:50	GC3	141399

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	07/01/2017 20:18
MTBE	---	0.050	1	07/01/2017 20:18
Benzene	---	0.0050	1	07/01/2017 20:18
Toluene	---	0.0050	1	07/01/2017 20:18
Ethylbenzene	---	0.0050	1	07/01/2017 20:18
Xylenes	---	0.015	1	07/01/2017 20:18
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	96	62-126		07/01/2017 20:18

Analyst(s): DP



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev Auto-5.5'	1706E89-001A	Soil	06/30/2017 09:16	GC39A	141336

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	07/03/2017 11:58
TPH-Motor Oil (C18-C36)	ND	5.0	1	07/03/2017 11:58

Surrogates	REC (%)	Limits	Date Analyzed
C9	97	78-109	07/03/2017 11:58

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-5'	1706E89-002A	Soil	06/30/2017 10:01	GC11A	141336

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	07/01/2017 14:27
TPH-Motor Oil (C18-C36)	ND	5.0	1	07/01/2017 14:27

Surrogates	REC (%)	Limits	Date Analyzed
C9	98	78-109	07/01/2017 14:27

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-10'	1706E89-003A	Soil	06/30/2017 10:10	GC11A	141336

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	07/01/2017 11:49
TPH-Motor Oil (C18-C36)	ND	5.0	1	07/01/2017 11:49

Surrogates	REC (%)	Limits	Date Analyzed
C9	95	78-109	07/01/2017 11:49

Analyst(s): TK

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil N-12'	1706E89-004A	Soil	06/30/2017 10:21	GC11A	141336

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	07/01/2017 13:08
TPH-Motor Oil (C18-C36)	ND	5.0	1	07/01/2017 13:08

Surrogates	REC (%)	Limits	Date Analyzed
C9	97	78-109	07/01/2017 13:08

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Waste oil S-5'	1706E89-005A	Soil	06/30/2017 11:15	GC6B	141336

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	07/01/2017 15:02
TPH-Motor Oil (C18-C36)	ND	5.0	1	07/01/2017 15:02

Surrogates	REC (%)	Limits	Date Analyzed
C9	97	78-109	07/01/2017 15:02

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S-Elev P1-1'	1706E89-006A	Soil	06/30/2017 14:50	GC11A	141336

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	560	10	10	07/01/2017 20:25
TPH-Motor Oil (C18-C36)	1800	50	10	07/01/2017 20:25

Surrogates	REC (%)	Limits	Date Analyzed
C9	92	78-109	07/01/2017 20:25

Analyst(s): TK

Analytical Comments: e7,e2



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/30/17
Date Analyzed: 7/3/17
Instrument: GC16, GC18
Matrix: Soil
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
BatchID: 141388
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-141388

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	0.868	0.10	1	-	87	72-156
tert-Amyl methyl ether (TAME)	ND	0.0406	0.0050	0.050	-	81	53-116
Benzene	ND	0.0483	0.0050	0.050	-	97	63-137
Bromobenzene	ND	0.0420	0.0050	0.050	-	84	68-126
Bromochloromethane	ND	0.0465	0.0050	0.050	-	93	72-126
Bromodichloromethane	ND	0.0416	0.0050	0.050	-	83	61-127
Bromoform	ND	0.0391	0.0050	0.050	-	78	49-100
Bromomethane	ND	0.0353	0.0050	0.050	-	71	40-161
2-Butanone (MEK)	ND	0.172	0.020	0.20	-	86	43-157
t-Butyl alcohol (TBA)	ND	0.160	0.050	0.20	-	80	41-135
n-Butyl benzene	ND	0.0697	0.0050	0.050	-	139	102-160
sec-Butyl benzene	ND	0.0647	0.0050	0.050	-	129	74-168
tert-Butyl benzene	ND	0.0544	0.0050	0.050	-	109	88-157
Carbon Disulfide	ND	0.0456	0.0050	0.050	-	91	42-151
Carbon Tetrachloride	ND	0.0480	0.0050	0.050	-	96	49-149
Chlorobenzene	ND	0.0472	0.0050	0.050	-	94	77-121
Chloroethane	ND	0.0339	0.0050	0.050	-	68	41-134
Chloroform	ND	0.0471	0.0050	0.050	-	94	69-133
Chloromethane	ND	0.0354	0.0050	0.050	-	71	31-119
2-Chlorotoluene	ND	0.0563	0.0050	0.050	-	113	79-139
4-Chlorotoluene	ND	0.0552	0.0050	0.050	-	110	77-138
Dibromochloromethane	ND	0.0439	0.0050	0.050	-	88	58-121
1,2-Dibromo-3-chloropropane	ND	0.0116	0.0040	0.020	-	58	39-115
1,2-Dibromoethane (EDB)	ND	0.0475	0.0040	0.050	-	95	67-119
Dibromomethane	ND	0.0426	0.0050	0.050	-	85	66-117
1,2-Dichlorobenzene	ND	0.0440	0.0050	0.050	-	88	59-109
1,3-Dichlorobenzene	ND	0.0546	0.0050	0.050	-	109	75-130
1,4-Dichlorobenzene	ND	0.0505	0.0050	0.050	-	101	71-122
Dichlorodifluoromethane	ND	0.0200	0.0050	0.050	-	40, F2	43-68
1,1-Dichloroethane	ND	0.0457	0.0050	0.050	-	91	62-139
1,2-Dichloroethane (1,2-DCA)	ND	0.0403	0.0040	0.050	-	81	58-135
1,1-Dichloroethene	ND	0.0456	0.0050	0.050	-	91	42-145
cis-1,2-Dichloroethene	ND	0.0471	0.0050	0.050	-	94	67-129
trans-1,2-Dichloroethene	ND	0.0481	0.0050	0.050	-	96	54-139
1,2-Dichloropropane	ND	0.0446	0.0050	0.050	-	89	68-125
1,3-Dichloropropane	ND	0.0478	0.0050	0.050	-	96	65-125
2,2-Dichloropropane	ND	0.0449	0.0050	0.050	-	90	45-151

(Cont.)



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/30/17
Date Analyzed: 7/3/17
Instrument: GC16, GC18
Matrix: Soil
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
BatchID: 141388
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-141388

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	0.0464	0.0050	0.050	-	93	64-138
cis-1,3-Dichloropropene	ND	0.0481	0.0050	0.050	-	96	62-134
trans-1,3-Dichloropropene	ND	0.0467	0.0050	0.050	-	93	59-128
Diisopropyl ether (DIPE)	ND	0.0419	0.0050	0.050	-	84	52-129
Ethylbenzene	ND	0.0488	0.0050	0.050	-	98	74-142
Ethyl tert-butyl ether (ETBE)	ND	0.0437	0.0050	0.050	-	87	53-125
Freon 113	ND	0.0430	0.0050	0.050	-	86	51-126
Hexachlorobutadiene	ND	0.0602	0.0050	0.050	-	120	70-158
Hexachloroethane	ND	0.0529	0.0050	0.050	-	106	80-160
2-Hexanone	ND	0.0335	0.0050	0.050	-	67	41-116
Isopropylbenzene	ND	0.0509	0.0050	0.050	-	102	77-146
4-Isopropyl toluene	ND	0.0642	0.0050	0.050	-	128	96-159
Methyl-t-butyl ether (MTBE)	ND	0.0437	0.0050	0.050	-	87	58-122
Methylene chloride	ND	0.0444	0.0050	0.050	-	89	58-135
4-Methyl-2-pentanone (MIBK)	ND	0.0347	0.0050	0.050	-	69	40-112
Naphthalene	ND	0.0213	0.0050	0.050	-	43	23-73
n-Propyl benzene	ND	0.0611	0.0050	0.050	-	122	82-160
Styrene	ND	0.0452	0.0050	0.050	-	90	68-124
1,1,1,2-Tetrachloroethane	ND	0.0502	0.0050	0.050	-	100	70-128
1,1,2,2-Tetrachloroethane	ND	0.0370	0.0050	0.050	-	74	57-111
Tetrachloroethene	ND	0.0532	0.0050	0.050	-	106	73-145
Toluene	ND	0.0509	0.0050	0.050	-	102	76-130
1,2,3-Trichlorobenzene	ND	0.0272	0.0050	0.050	-	54	43-72
1,2,4-Trichlorobenzene	ND	0.0350	0.0050	0.050	-	70	47-95
1,1,1-Trichloroethane	ND	0.0459	0.0050	0.050	-	92	60-141
1,1,2-Trichloroethane	ND	0.0472	0.0050	0.050	-	94	62-118
Trichloroethene	ND	0.0494	0.0050	0.050	-	99	72-132
Trichlorofluoromethane	ND	0.0424	0.0050	0.050	-	85	43-135
1,2,3-Trichloropropane	ND	0.0437	0.0050	0.050	-	87	57-122
1,2,4-Trimethylbenzene	ND	0.0584	0.0050	0.050	-	117	81-152
1,3,5-Trimethylbenzene	ND	0.0604	0.0050	0.050	-	121	78-160
Vinyl Chloride	ND	0.0360	0.0050	0.050	-	72	42-131
Xylenes, Total	ND	0.151	0.0050	0.15	-	101	70-130

(Cont.)



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/30/17
Date Analyzed: 7/3/17
Instrument: GC16, GC18
Matrix: Soil
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
BatchID: 141388
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-141388

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.1422	0.136		0.12	114	109	70-130
Toluene-d8	0.1348	0.143		0.12	108	114	70-130
4-BFB	0.01567	0.0115		0.012	125	92	70-130
Benzene-d6	0.07933	0.0940		0.10	79	94	60-140
Ethylbenzene-d10	0.09634	0.100		0.10	96	100	60-140
1,2-DCB-d4	0.07398	0.0870		0.10	74	87	60-140



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 7/3/17
Date Analyzed: 7/3/17
Instrument: O&G
Matrix: Soil
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
BatchID: 141460
Extraction Method: E9071B
Analytical Method: E9071B
Unit: mg/Kg
Sample ID: MB/LCS-141460
 1706E89-002AMS/MSD

QC Summary Report for E9071B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
SGT-HEM	ND	2190	50	2000	-	110	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
SGT-HEM	2140	2320	2000	ND	107	116	70-130	7.98	30

QA/QC Officer



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/30/17
Date Analyzed: 7/2/17 - 7/3/17
Instrument: GC19
Matrix: Soil
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
BatchID: 141399
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS-141399

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.584	0.40	0.60	-	97	82-118
MTBE	ND	0.0917	0.050	0.10	-	92	61-119
Benzene	ND	0.114	0.0050	0.10	-	115	77-128
Toluene	ND	0.117	0.0050	0.10	-	117	74-132
Ethylbenzene	ND	0.115	0.0050	0.10	-	115	84-127
Xylenes	ND	0.326	0.015	0.30	-	109	86-129
Surrogate Recovery							
2-Fluorotoluene	0.09133	0.104		0.10	91	104	75-134



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/29/17
Date Analyzed: 6/30/17
Instrument: GC9b
Matrix: Soil
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E89
BatchID: 141336
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-141336

QC Report for SW8015B w/ Silica Gel Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	38.3	1.0	40	-	96	79-133
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	22.39	22.2		25	90	89	77-109

1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262



CHAIN-OF-CUSTODY RECORD

WorkOrder: 1706E89

ClientCode: TORE

WaterTrax
 WriteOn
 EDF
 Excel
 EQulS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
Jeffrey Borum
TOR Environmental, Inc.
PO BOX 73626
San Clemente, CA 92673
(949) 498-1450 FAX:

Email: jborum@toreenvironmental.com
cc/3rd Party:
PO:
ProjectNo: GW253; Northgate Mall Sears Auto

Bill to:
Jeffrey Borum
TOR Environmental, Inc.
PO BOX 73626
San Clemente, CA 92673

Requested TAT: 1 day;

Date Received: 06/30/2017
Date Logged: 06/30/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1706E89-001	SB-Elev Auto-5.5'	Soil	6/30/2017 09:16	<input type="checkbox"/>	A	A	A	A									
1706E89-002	SB-Waste oil N-5'	Soil	6/30/2017 10:01	<input type="checkbox"/>	A	A	A	A									
1706E89-003	SB-Waste oil N-10'	Soil	6/30/2017 10:10	<input type="checkbox"/>	A	A	A	A									
1706E89-004	SB-Waste oil N-12'	Soil	6/30/2017 10:21	<input type="checkbox"/>	A	A	A	A									
1706E89-005	SB-Waste oil S-5'	Soil	6/30/2017 11:15	<input type="checkbox"/>	A	A	A	A									
1706E89-006	S-Elev P1-1'	Soil	6/30/2017 14:50	<input type="checkbox"/>	A	A	A	A									

Test Legend:

1	8260B_S	2	9071B_SG_S	3	G-MBTEx_S	4	TPH(DMO)WSG_S
5		6		7		8	
9		10		11		12	

Prepared by: Kena Ponce

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A contain testgroup Multi RangeWSG_S.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TOR ENVIRONMENTAL, INC.

Project: GW253; Northgate Mall Sears Auto

Work Order: 1706E89

Client Contact: Jeffrey Borum

QC Level: LEVEL 2

Contact's Email: jborum@torenvironmental.com

Comments:

Date Logged: 6/30/2017

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1706E89-001A	SB-Elev Auto-5.5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	16OZ GJ	<input type="checkbox"/>	6/30/2017 9:16	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E89-002A	SB-Waste oil N-5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	16OZ GJ	<input type="checkbox"/>	6/30/2017 10:01	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E89-003A	SB-Waste oil N-10'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	16OZ GJ	<input type="checkbox"/>	6/30/2017 10:10	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E89-004A	SB-Waste oil N-12'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	16OZ GJ	<input type="checkbox"/>	6/30/2017 10:21	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
1706E89-005A	SB-Waste oil S-5'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	16OZ GJ	<input type="checkbox"/>	6/30/2017 11:15	1 day		<input type="checkbox"/>			
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>						1 day	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						1 day	<input type="checkbox"/>

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: TOR ENVIRONMENTAL, INC.

Project: GW253; Northgate Mall Sears Auto

Work Order: 1706E89

Client Contact: Jeffrey Borum

QC Level: LEVEL 2

Contact's Email: jborum@torenvironmental.com

Comments:

Date Logged: 6/30/2017

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706E89-006A	S-Elev P1-1'	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	16OZ GJ	<input type="checkbox"/>	6/30/2017 14:50	1 day		<input type="checkbox"/>	
			E9071B (O&G w/ S.G. Clean-up)			<input type="checkbox"/>		1 day		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		1 day		<input type="checkbox"/>	
1706E89-007A	S-Elev P1-3'	Soil		1	16OZ GJ	<input type="checkbox"/>	6/30/2017 15:02				<input checked="" type="checkbox"/>

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

RUSH

MAI Work Order #

1706E89



McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
 Telephone: (877) 252-9262 / Fax: (925) 252-9269
 www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD							
Turn Around Time: 1 Day Rush	<input checked="" type="checkbox"/>	2 Day Rush	<input type="checkbox"/>	3 Day Rush	<input type="checkbox"/>	STD	Quote #
J-Flag / MDL	<input type="checkbox"/>	ESL	<input type="checkbox"/>	Cleanup Approved	<input type="checkbox"/>	Bottle Order #	
Delivery Format:	PDF	<input checked="" type="checkbox"/>	GeoTracker EDF	<input checked="" type="checkbox"/>	EDD	<input checked="" type="checkbox"/>	Write On (DW)
				EQuIS			

Report To: Jeffrey Borum Bill To: Jeffrey Borum
 Company: TOR Environmental, Inc.
 Email: jborum@torenvironmental.com
 Alt Email: msauerwein@torenvironmental.com Tele: (949) 370-2046
 Project Name: Northgate Mall Seals Area Project #: GW253
 Project Location: 9000 Northgate, San Rafael PO #
 Sampler Signature: Michael Sauerwein

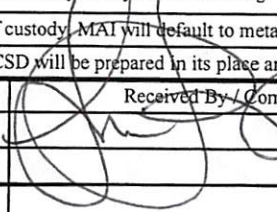
Analysis Requested

SAMPLE ID Location / Field Point	Sampling		#Containers	Matrix	Preservative	BTX & TPH as GAs (8021/8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - OH & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's, Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNA's)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis	
	Date	Time																			
SB-Elev Auto-55'	4/30/17	0916	1	S	1	X		X		X			*	X							
SB-Waste Oil N-5'		1001	1	S	1																
SB-Waste Oil N-10'		1010	4	S	1																
SB-Waste Oil N-12'		1021	1	S	1																
SB-Waste Oil S-5'		1115	1	S	1																
SB-Elev P1-1'		1450	1	S	1																
SB-Elev P1-3'		1502	1	S	1																

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
<u>Michael Sauerwein / TOR Environmental, Inc</u>	<u>4/30/17</u>	<u>19</u>		<u>6/20/17</u>	<u>18:34</u>

Comments / Instructions

* Run PCBs if TPH detection

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other
 Preservative Code: 1=4°C 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=ZnOAc/NaOH 7=None

Temp 9.8 °C Initials _____



Sample Receipt Checklist

Client Name: **TOR Environmental, Inc.**
 Project Name: **GW253; Northgate Mall Sears Auto**
 WorkOrder No: **1706E89** Matrix: Soil
 Carrier: Client Drop-In

Date and Time Received: **6/30/2017 19:34**
 Date Logged: **6/30/2017**
 Received by: **Alexandra Iniguez**
 Logged by: **Kena Ponce**

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No NA
 Sample/Temp Blank temperature Temp: 9.8°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No NA
 Sample labels checked for correct preservation? Yes No
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes No NA
 Samples Received on Ice? Yes No
 (Ice Type: WET ICE)

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes No NA
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes No NA

Comments:

***Groundwater Samples
Laboratory Analytical Reports and
Chain-of-Custody Forms***



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1706E92

Report Created for: TOR Environmental, Inc.

PO BOX 73626
San Clemente, CA 92673

Project Contact: Jeffrey Borum

Project P.O.:

Project Name: GW253; Northgate Mall Sears Auto

Project Received: 06/30/2017

Analytical Report reviewed & approved for release on 07/03/2017 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: TOR Environmental, Inc.
Project: GW253; Northgate Mall Sears Auto
WorkOrder: 1706E92

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: TOR Environmental, Inc.
Project: GW253; Northgate Mall Sears Auto
WorkOrder: 1706E92

Analytical Qualifiers

S Surrogate spike recovery outside accepted recovery limits
b1 Aqueous sample that contains greater than ~1 vol. % sediment
c2 Surrogate recovery outside of the control limits due to matrix interference.
d6 One to a few isolated non-target peaks present in the TPH(g) chromatogram
e2 Diesel range compounds are significant; no recognizable pattern
e7 Oil range compounds are significant

Quality Control Qualifiers

F2 LCS/LCSD recovery and/or RPD is out of acceptance criteria.



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/3/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: E418.1
Analytical Method: E418.1
Unit: mg/L

Total Recoverable Petroleum Hydrocarbons with Silica Gel Clean-Up by IR Spectrometry

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
West Wall	1706E92-001C	Water	06/30/2017	O&G	141447

Analytes	Result	RL	DF	Date Analyzed
TRPH	ND	1.0	1	07/03/2017 01:24

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
MAI-SS	1070	S	70-130	07/03/2017 01:24

Analyst(s): DP

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
East Well	1706E92-002C	Water	06/30/2017 12:20	O&G	141447

Analytes	Result	RL	DF	Date Analyzed
TRPH	6.9	1.0	1	07/03/2017 01:29

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
MAI-SS	1070	S	70-130	07/03/2017 01:29

Analyst(s): DP

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev P1	1706E92-003C	Water	06/30/2017 16:30	O&G	141447

Analytes	Result	RL	DF	Date Analyzed
TRPH	99	10	10	07/03/2017 01:39

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
MAI-SS	927	S	70-130	07/03/2017 01:39

Analyst(s): DP

Analytical Comments: b1



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
West Wall	1706E92-001D	Water	06/30/2017	GC18	141363

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	07/01/2017 00:49
tert-Amyl methyl ether (TAME)	ND	0.50	1	07/01/2017 00:49
Benzene	ND	0.50	1	07/01/2017 00:49
Bromobenzene	ND	0.50	1	07/01/2017 00:49
Bromochloromethane	ND	0.50	1	07/01/2017 00:49
Bromodichloromethane	ND	0.50	1	07/01/2017 00:49
Bromoform	ND	0.50	1	07/01/2017 00:49
Bromomethane	ND	0.50	1	07/01/2017 00:49
2-Butanone (MEK)	ND	2.0	1	07/01/2017 00:49
t-Butyl alcohol (TBA)	ND	2.0	1	07/01/2017 00:49
n-Butyl benzene	ND	0.50	1	07/01/2017 00:49
sec-Butyl benzene	ND	0.50	1	07/01/2017 00:49
tert-Butyl benzene	ND	0.50	1	07/01/2017 00:49
Carbon Disulfide	ND	0.50	1	07/01/2017 00:49
Carbon Tetrachloride	ND	0.50	1	07/01/2017 00:49
Chlorobenzene	ND	0.50	1	07/01/2017 00:49
Chloroethane	ND	0.50	1	07/01/2017 00:49
Chloroform	ND	0.50	1	07/01/2017 00:49
Chloromethane	ND	0.50	1	07/01/2017 00:49
2-Chlorotoluene	ND	0.50	1	07/01/2017 00:49
4-Chlorotoluene	ND	0.50	1	07/01/2017 00:49
Dibromochloromethane	ND	0.50	1	07/01/2017 00:49
1,2-Dibromo-3-chloropropane	ND	0.20	1	07/01/2017 00:49
1,2-Dibromoethane (EDB)	ND	0.50	1	07/01/2017 00:49
Dibromomethane	ND	0.50	1	07/01/2017 00:49
1,2-Dichlorobenzene	ND	0.50	1	07/01/2017 00:49
1,3-Dichlorobenzene	ND	0.50	1	07/01/2017 00:49
1,4-Dichlorobenzene	ND	0.50	1	07/01/2017 00:49
Dichlorodifluoromethane	ND	0.50	1	07/01/2017 00:49
1,1-Dichloroethane	ND	0.50	1	07/01/2017 00:49
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	07/01/2017 00:49
1,1-Dichloroethene	ND	0.50	1	07/01/2017 00:49
cis-1,2-Dichloroethene	ND	0.50	1	07/01/2017 00:49
trans-1,2-Dichloroethene	ND	0.50	1	07/01/2017 00:49
1,2-Dichloropropane	ND	0.50	1	07/01/2017 00:49
1,3-Dichloropropane	ND	0.50	1	07/01/2017 00:49
2,2-Dichloropropane	ND	0.50	1	07/01/2017 00:49

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
West Wall	1706E92-001D	Water	06/30/2017	GC18	141363

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	07/01/2017 00:49
cis-1,3-Dichloropropene	ND	0.50	1	07/01/2017 00:49
trans-1,3-Dichloropropene	ND	0.50	1	07/01/2017 00:49
Diisopropyl ether (DIPE)	ND	0.50	1	07/01/2017 00:49
Ethylbenzene	ND	0.50	1	07/01/2017 00:49
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	07/01/2017 00:49
Freon 113	ND	0.50	1	07/01/2017 00:49
Hexachlorobutadiene	ND	0.50	1	07/01/2017 00:49
Hexachloroethane	ND	0.50	1	07/01/2017 00:49
2-Hexanone	ND	0.50	1	07/01/2017 00:49
Isopropylbenzene	ND	0.50	1	07/01/2017 00:49
4-Isopropyl toluene	ND	0.50	1	07/01/2017 00:49
Methyl-t-butyl ether (MTBE)	ND	0.50	1	07/01/2017 00:49
Methylene chloride	ND	0.50	1	07/01/2017 00:49
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	07/01/2017 00:49
Naphthalene	ND	0.50	1	07/01/2017 00:49
n-Propyl benzene	ND	0.50	1	07/01/2017 00:49
Styrene	ND	0.50	1	07/01/2017 00:49
1,1,1,2-Tetrachloroethane	ND	0.50	1	07/01/2017 00:49
1,1,2,2-Tetrachloroethane	ND	0.50	1	07/01/2017 00:49
Tetrachloroethene	ND	0.50	1	07/01/2017 00:49
Toluene	ND	0.50	1	07/01/2017 00:49
1,2,3-Trichlorobenzene	ND	0.50	1	07/01/2017 00:49
1,2,4-Trichlorobenzene	ND	0.50	1	07/01/2017 00:49
1,1,1-Trichloroethane	ND	0.50	1	07/01/2017 00:49
1,1,2-Trichloroethane	ND	0.50	1	07/01/2017 00:49
Trichloroethene	ND	0.50	1	07/01/2017 00:49
Trichlorofluoromethane	ND	0.50	1	07/01/2017 00:49
1,2,3-Trichloropropane	ND	0.50	1	07/01/2017 00:49
1,2,4-Trimethylbenzene	ND	0.50	1	07/01/2017 00:49
1,3,5-Trimethylbenzene	ND	0.50	1	07/01/2017 00:49
Vinyl Chloride	ND	0.50	1	07/01/2017 00:49
Xylenes, Total	ND	0.50	1	07/01/2017 00:49

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
West Wall	1706E92-001D	Water	06/30/2017	GC18	141363

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	120	70-130		07/01/2017 00:49
Toluene-d8	100	70-130		07/01/2017 00:49
4-BFB	117	70-130		07/01/2017 00:49

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
East Well	1706E92-002D	Water	06/30/2017 12:20	GC18	141363

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	07/01/2017 01:28
tert-Amyl methyl ether (TAME)	ND	0.50	1	07/01/2017 01:28
Benzene	ND	0.50	1	07/01/2017 01:28
Bromobenzene	ND	0.50	1	07/01/2017 01:28
Bromochloromethane	ND	0.50	1	07/01/2017 01:28
Bromodichloromethane	ND	0.50	1	07/01/2017 01:28
Bromoform	ND	0.50	1	07/01/2017 01:28
Bromomethane	ND	0.50	1	07/01/2017 01:28
2-Butanone (MEK)	ND	2.0	1	07/01/2017 01:28
t-Butyl alcohol (TBA)	ND	2.0	1	07/01/2017 01:28
n-Butyl benzene	ND	0.50	1	07/01/2017 01:28
sec-Butyl benzene	ND	0.50	1	07/01/2017 01:28
tert-Butyl benzene	ND	0.50	1	07/01/2017 01:28
Carbon Disulfide	ND	0.50	1	07/01/2017 01:28
Carbon Tetrachloride	ND	0.50	1	07/01/2017 01:28
Chlorobenzene	ND	0.50	1	07/01/2017 01:28
Chloroethane	ND	0.50	1	07/01/2017 01:28
Chloroform	ND	0.50	1	07/01/2017 01:28
Chloromethane	ND	0.50	1	07/01/2017 01:28
2-Chlorotoluene	ND	0.50	1	07/01/2017 01:28
4-Chlorotoluene	ND	0.50	1	07/01/2017 01:28
Dibromochloromethane	ND	0.50	1	07/01/2017 01:28
1,2-Dibromo-3-chloropropane	ND	0.20	1	07/01/2017 01:28
1,2-Dibromoethane (EDB)	ND	0.50	1	07/01/2017 01:28
Dibromomethane	ND	0.50	1	07/01/2017 01:28
1,2-Dichlorobenzene	ND	0.50	1	07/01/2017 01:28
1,3-Dichlorobenzene	ND	0.50	1	07/01/2017 01:28
1,4-Dichlorobenzene	ND	0.50	1	07/01/2017 01:28
Dichlorodifluoromethane	ND	0.50	1	07/01/2017 01:28
1,1-Dichloroethane	ND	0.50	1	07/01/2017 01:28
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	07/01/2017 01:28
1,1-Dichloroethene	ND	0.50	1	07/01/2017 01:28
cis-1,2-Dichloroethene	ND	0.50	1	07/01/2017 01:28
trans-1,2-Dichloroethene	ND	0.50	1	07/01/2017 01:28
1,2-Dichloropropane	ND	0.50	1	07/01/2017 01:28
1,3-Dichloropropane	ND	0.50	1	07/01/2017 01:28
2,2-Dichloropropane	ND	0.50	1	07/01/2017 01:28

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
East Well	1706E92-002D	Water	06/30/2017 12:20	GC18	141363

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	07/01/2017 01:28
cis-1,3-Dichloropropene	ND	0.50	1	07/01/2017 01:28
trans-1,3-Dichloropropene	ND	0.50	1	07/01/2017 01:28
Diisopropyl ether (DIPE)	ND	0.50	1	07/01/2017 01:28
Ethylbenzene	ND	0.50	1	07/01/2017 01:28
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	07/01/2017 01:28
Freon 113	ND	0.50	1	07/01/2017 01:28
Hexachlorobutadiene	ND	0.50	1	07/01/2017 01:28
Hexachloroethane	ND	0.50	1	07/01/2017 01:28
2-Hexanone	ND	0.50	1	07/01/2017 01:28
Isopropylbenzene	ND	0.50	1	07/01/2017 01:28
4-Isopropyl toluene	ND	0.50	1	07/01/2017 01:28
Methyl-t-butyl ether (MTBE)	ND	0.50	1	07/01/2017 01:28
Methylene chloride	ND	0.50	1	07/01/2017 01:28
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	07/01/2017 01:28
Naphthalene	ND	0.50	1	07/01/2017 01:28
n-Propyl benzene	ND	0.50	1	07/01/2017 01:28
Styrene	ND	0.50	1	07/01/2017 01:28
1,1,1,2-Tetrachloroethane	ND	0.50	1	07/01/2017 01:28
1,1,2,2-Tetrachloroethane	ND	0.50	1	07/01/2017 01:28
Tetrachloroethene	ND	0.50	1	07/01/2017 01:28
Toluene	ND	0.50	1	07/01/2017 01:28
1,2,3-Trichlorobenzene	ND	0.50	1	07/01/2017 01:28
1,2,4-Trichlorobenzene	ND	0.50	1	07/01/2017 01:28
1,1,1-Trichloroethane	ND	0.50	1	07/01/2017 01:28
1,1,2-Trichloroethane	ND	0.50	1	07/01/2017 01:28
Trichloroethene	ND	0.50	1	07/01/2017 01:28
Trichlorofluoromethane	ND	0.50	1	07/01/2017 01:28
1,2,3-Trichloropropane	ND	0.50	1	07/01/2017 01:28
1,2,4-Trimethylbenzene	ND	0.50	1	07/01/2017 01:28
1,3,5-Trimethylbenzene	ND	0.50	1	07/01/2017 01:28
Vinyl Chloride	ND	0.50	1	07/01/2017 01:28
Xylenes, Total	ND	0.50	1	07/01/2017 01:28

(Cont.)



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
East Well	1706E92-002D	Water	06/30/2017 12:20	GC18	141363

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	121	70-130		07/01/2017 01:28
Toluene-d8	99	70-130		07/01/2017 01:28
4-BFB	114	70-130		07/01/2017 01:28

Analyst(s): KF



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev P1	1706E92-003D	Water	06/30/2017 16:30	GC18	141363

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	07/01/2017 02:07
tert-Amyl methyl ether (TAME)	ND	0.50	1	07/01/2017 02:07
Benzene	ND	0.50	1	07/01/2017 02:07
Bromobenzene	ND	0.50	1	07/01/2017 02:07
Bromochloromethane	ND	0.50	1	07/01/2017 02:07
Bromodichloromethane	ND	0.50	1	07/01/2017 02:07
Bromoform	ND	0.50	1	07/01/2017 02:07
Bromomethane	ND	0.50	1	07/01/2017 02:07
2-Butanone (MEK)	ND	2.0	1	07/01/2017 02:07
t-Butyl alcohol (TBA)	ND	2.0	1	07/01/2017 02:07
n-Butyl benzene	ND	0.50	1	07/01/2017 02:07
sec-Butyl benzene	ND	0.50	1	07/01/2017 02:07
tert-Butyl benzene	ND	0.50	1	07/01/2017 02:07
Carbon Disulfide	ND	0.50	1	07/01/2017 02:07
Carbon Tetrachloride	ND	0.50	1	07/01/2017 02:07
Chlorobenzene	ND	0.50	1	07/01/2017 02:07
Chloroethane	ND	0.50	1	07/01/2017 02:07
Chloroform	ND	0.50	1	07/01/2017 02:07
Chloromethane	ND	0.50	1	07/01/2017 02:07
2-Chlorotoluene	ND	0.50	1	07/01/2017 02:07
4-Chlorotoluene	ND	0.50	1	07/01/2017 02:07
Dibromochloromethane	ND	0.50	1	07/01/2017 02:07
1,2-Dibromo-3-chloropropane	ND	0.20	1	07/01/2017 02:07
1,2-Dibromoethane (EDB)	ND	0.50	1	07/01/2017 02:07
Dibromomethane	ND	0.50	1	07/01/2017 02:07
1,2-Dichlorobenzene	ND	0.50	1	07/01/2017 02:07
1,3-Dichlorobenzene	ND	0.50	1	07/01/2017 02:07
1,4-Dichlorobenzene	ND	0.50	1	07/01/2017 02:07
Dichlorodifluoromethane	ND	0.50	1	07/01/2017 02:07
1,1-Dichloroethane	ND	0.50	1	07/01/2017 02:07
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	07/01/2017 02:07
1,1-Dichloroethene	ND	0.50	1	07/01/2017 02:07
cis-1,2-Dichloroethene	ND	0.50	1	07/01/2017 02:07
trans-1,2-Dichloroethene	ND	0.50	1	07/01/2017 02:07
1,2-Dichloropropane	ND	0.50	1	07/01/2017 02:07
1,3-Dichloropropane	ND	0.50	1	07/01/2017 02:07
2,2-Dichloropropane	ND	0.50	1	07/01/2017 02:07

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev P1	1706E92-003D	Water	06/30/2017 16:30	GC18	141363

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	07/01/2017 02:07
cis-1,3-Dichloropropene	ND	0.50	1	07/01/2017 02:07
trans-1,3-Dichloropropene	ND	0.50	1	07/01/2017 02:07
Diisopropyl ether (DIPE)	ND	0.50	1	07/01/2017 02:07
Ethylbenzene	ND	0.50	1	07/01/2017 02:07
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	07/01/2017 02:07
Freon 113	ND	0.50	1	07/01/2017 02:07
Hexachlorobutadiene	ND	0.50	1	07/01/2017 02:07
Hexachloroethane	ND	0.50	1	07/01/2017 02:07
2-Hexanone	ND	0.50	1	07/01/2017 02:07
Isopropylbenzene	ND	0.50	1	07/01/2017 02:07
4-Isopropyl toluene	ND	0.50	1	07/01/2017 02:07
Methyl-t-butyl ether (MTBE)	ND	0.50	1	07/01/2017 02:07
Methylene chloride	ND	0.50	1	07/01/2017 02:07
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	07/01/2017 02:07
Naphthalene	ND	0.50	1	07/01/2017 02:07
n-Propyl benzene	ND	0.50	1	07/01/2017 02:07
Styrene	ND	0.50	1	07/01/2017 02:07
1,1,1,2-Tetrachloroethane	ND	0.50	1	07/01/2017 02:07
1,1,2,2-Tetrachloroethane	ND	0.50	1	07/01/2017 02:07
Tetrachloroethene	ND	0.50	1	07/01/2017 02:07
Toluene	ND	0.50	1	07/01/2017 02:07
1,2,3-Trichlorobenzene	ND	0.50	1	07/01/2017 02:07
1,2,4-Trichlorobenzene	ND	0.50	1	07/01/2017 02:07
1,1,1-Trichloroethane	ND	0.50	1	07/01/2017 02:07
1,1,2-Trichloroethane	ND	0.50	1	07/01/2017 02:07
Trichloroethene	ND	0.50	1	07/01/2017 02:07
Trichlorofluoromethane	ND	0.50	1	07/01/2017 02:07
1,2,3-Trichloropropane	ND	0.50	1	07/01/2017 02:07
1,2,4-Trimethylbenzene	ND	0.50	1	07/01/2017 02:07
1,3,5-Trimethylbenzene	ND	0.50	1	07/01/2017 02:07
Vinyl Chloride	ND	0.50	1	07/01/2017 02:07
Xylenes, Total	ND	0.50	1	07/01/2017 02:07

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Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev P1	1706E92-003D	Water	06/30/2017 16:30	GC18	141363

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	117	70-130		07/01/2017 02:07
Toluene-d8	100	70-130		07/01/2017 02:07
4-BFB	116	70-130		07/01/2017 02:07
<u>Analyst(s):</u> KF		<u>Analytical Comments:</u> b1		



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
West Wall	1706E92-001A	Water	06/30/2017	GC3	141421

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	---	50	1	07/01/2017 04:13
MTBE	ND	5.0	1	07/01/2017 04:13
Benzene	ND	0.50	1	07/01/2017 04:13
Toluene	ND	0.50	1	07/01/2017 04:13
Ethylbenzene	ND	0.50	1	07/01/2017 04:13
Xylenes	ND	1.5	1	07/01/2017 04:13
Surrogates	REC (%)	Limits		
aaa-TFT	101	89-115		07/01/2017 04:13

Analyst(s): LT

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
East Well	1706E92-002A	Water	06/30/2017 12:20	GC3	141421

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	---	50	1	07/01/2017 04:43
MTBE	ND	5.0	1	07/01/2017 04:43
Benzene	ND	0.50	1	07/01/2017 04:43
Toluene	ND	0.50	1	07/01/2017 04:43
Ethylbenzene	ND	0.50	1	07/01/2017 04:43
Xylenes	ND	1.5	1	07/01/2017 04:43
Surrogates	REC (%)	Limits		
aaa-TFT	99	89-115		07/01/2017 04:43

Analyst(s): LT



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 7/1/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev P1	1706E92-003A	Water	06/30/2017 16:30	GC3	141421

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	---	50	1	07/01/2017 18:12
MTBE	ND	5.0	1	07/01/2017 18:12
Benzene	ND	0.50	1	07/01/2017 18:12
Toluene	ND	0.50	1	07/01/2017 18:12
Ethylbenzene	ND	0.50	1	07/01/2017 18:12
Xylenes	ND	1.5	1	07/01/2017 18:12

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	113	89-115	07/01/2017 18:12

Analyst(s): DP

Analytical Comments: d6,b1



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
West Wall	1706E92-001B	Water	06/30/2017	GC9b	141351

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	100	50	1	07/03/2017 12:07
TPH-Motor Oil (C18-C36)	ND	250	1	07/03/2017 12:07

Surrogates	REC (%)	Limits	Date Analyzed
C9	92	66-138	07/03/2017 12:07

Analyst(s): TK Analytical Comments: e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
East Well	1706E92-002B	Water	06/30/2017 12:20	GC9b	141351

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	07/03/2017 12:46
TPH-Motor Oil (C18-C36)	ND	250	1	07/03/2017 12:46

Surrogates	REC (%)	Limits	Date Analyzed
C9	91	66-138	07/03/2017 12:46

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev P1	1706E92-003B	Water	06/30/2017 16:30	GC9b	141351

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	38,000	5000	100	07/03/2017 14:15
TPH-Motor Oil (C18-C36)	120,000	25,000	100	07/03/2017 14:15

Surrogates	REC (%)	Limits	Date Analyzed
C9	137	66-138	07/03/2017 14:15

Analyst(s): TK Analytical Comments: e7,e2,c2,b1



Analytical Report

Client: TOR Environmental, Inc.
Date Received: 6/30/17 19:34
Date Prepared: 6/30/17
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-Elev F2	1706E92-004A	Water	06/30/2017 17:00	GC11A	141351

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	140	50	1	07/01/2017 18:27
TPH-Hydraulic Oil (C18-C36)	590	250	1	07/01/2017 18:27

Surrogates	REC (%)	Limits	Date Analyzed
C9	102	66-138	07/01/2017 18:27

Analyst(s): TK **Analytical Comments:** e7,e2,b1



Quality Control Report

Client: TOR Environmental, Inc.	WorkOrder: 1706E92
Date Prepared: 7/3/17	BatchID: 141447
Date Analyzed: 7/3/17	Extraction Method: E418.1
Instrument: O&G	Analytical Method: E418.1
Matrix: Water	Unit: mg/L
Project: GW253; Northgate Mall Sears Auto	Sample ID: MB/LCS/LCSD-141447

QC Summary Report for E418.1

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TRPH	ND	1.0	-	-	-
Surrogate Recovery					
MAI-SS	112		100	112	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TRPH	11.8	11.5	11.85	99	97	70-130	2.01	20
Surrogate Recovery								
MAI-SS	113	110	100	113	110	70-130	2.69	20



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/30/17
Date Analyzed: 6/30/17
Instrument: GC18
Matrix: Water
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
BatchID: 141363
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-141363

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	10	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.50	-	-	-
Benzene	ND	0.50	-	-	-
Bromobenzene	ND	0.50	-	-	-
Bromochloromethane	ND	0.50	-	-	-
Bromodichloromethane	ND	0.50	-	-	-
Bromoform	ND	0.50	-	-	-
Bromomethane	ND	0.50	-	-	-
2-Butanone (MEK)	ND	2.0	-	-	-
t-Butyl alcohol (TBA)	ND	2.0	-	-	-
n-Butyl benzene	ND	0.50	-	-	-
sec-Butyl benzene	ND	0.50	-	-	-
tert-Butyl benzene	ND	0.50	-	-	-
Carbon Disulfide	ND	0.50	-	-	-
Carbon Tetrachloride	ND	0.50	-	-	-
Chlorobenzene	ND	0.50	-	-	-
Chloroethane	ND	0.50	-	-	-
Chloroform	ND	0.50	-	-	-
Chloromethane	ND	0.50	-	-	-
2-Chlorotoluene	ND	0.50	-	-	-
4-Chlorotoluene	ND	0.50	-	-	-
Dibromochloromethane	ND	0.50	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.20	-	-	-
1,2-Dibromoethane (EDB)	ND	0.50	-	-	-
Dibromomethane	ND	0.50	-	-	-
1,2-Dichlorobenzene	ND	0.50	-	-	-
1,3-Dichlorobenzene	ND	0.50	-	-	-
1,4-Dichlorobenzene	ND	0.50	-	-	-
Dichlorodifluoromethane	ND	0.50	-	-	-
1,1-Dichloroethane	ND	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.50	-	-	-
1,1-Dichloroethene	ND	0.50	-	-	-
cis-1,2-Dichloroethene	ND	0.50	-	-	-
trans-1,2-Dichloroethene	ND	0.50	-	-	-
1,2-Dichloropropane	ND	0.50	-	-	-
1,3-Dichloropropane	ND	0.50	-	-	-
2,2-Dichloropropane	ND	0.50	-	-	-
1,1-Dichloropropene	ND	0.50	-	-	-
cis-1,3-Dichloropropene	ND	0.50	-	-	-

(Cont.)



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/30/17
Date Analyzed: 6/30/17
Instrument: GC18
Matrix: Water
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
BatchID: 141363
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-141363

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
trans-1,3-Dichloropropene	ND	0.50	-	-	-
Diisopropyl ether (DIPE)	ND	0.50	-	-	-
Ethylbenzene	ND	0.50	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.50	-	-	-
Freon 113	ND	0.50	-	-	-
Hexachlorobutadiene	ND	0.50	-	-	-
Hexachloroethane	ND	0.50	-	-	-
2-Hexanone	ND	0.50	-	-	-
Isopropylbenzene	ND	0.50	-	-	-
4-Isopropyl toluene	ND	0.50	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.50	-	-	-
Methylene chloride	ND	0.50	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.50	-	-	-
Naphthalene	ND	0.50	-	-	-
n-Propyl benzene	ND	0.50	-	-	-
Styrene	ND	0.50	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.50	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.50	-	-	-
Tetrachloroethene	ND	0.50	-	-	-
Toluene	ND	0.50	-	-	-
1,2,3-Trichlorobenzene	ND	0.50	-	-	-
1,2,4-Trichlorobenzene	ND	0.50	-	-	-
1,1,1-Trichloroethane	ND	0.50	-	-	-
1,1,2-Trichloroethane	ND	0.50	-	-	-
Trichloroethene	ND	0.50	-	-	-
Trichlorofluoromethane	ND	0.50	-	-	-
1,2,3-Trichloropropane	ND	0.50	-	-	-
1,2,4-Trimethylbenzene	ND	0.50	-	-	-
1,3,5-Trimethylbenzene	ND	0.50	-	-	-
Vinyl Chloride	ND	0.50	-	-	-
Xylenes, Total	ND	0.50	-	-	-

Surrogate Recovery

Dibromofluoromethane	29.32		25	117	70-130
Toluene-d8	25.13		25	101	70-130
4-BFB	2.861		2.5	114	70-130

(Cont.)



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/30/17
Date Analyzed: 6/30/17
Instrument: GC18
Matrix: Water
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
BatchID: 141363
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-141363

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	165	221	200	82	111	46-155	29.2,F2	20
tert-Amyl methyl ether (TAME)	8.43	9.64	10	84	96	54-140	13.4	20
Benzene	9.62	9.96	10	96	100	47-158	3.54	20
Bromobenzene	9.84	10.4	10	98	104	50-155	5.61	20
Bromochloromethane	9.94	10.6	10	99	106	48-160	6.31	20
Bromodichloromethane	9.62	10.1	10	96	101	60-156	5.22	20
Bromoform	8.02	9.54	10	80	95	43-149	17.4	20
Bromomethane	7.77	7.58	10	78	76	61-159	2.43	20
2-Butanone (MEK)	32.8	45.7	40	82	114	61-124	32.7,F2	20
t-Butyl alcohol (TBA)	25.3	39.8	40	63	100	42-140	44.7,F2	20
n-Butyl benzene	9.83	9.96	10	98	100	74-138	1.28	20
sec-Butyl benzene	9.88	10.0	10	99	100	72-142	1.17	20
tert-Butyl benzene	9.49	9.73	10	95	97	74-140	2.45	20
Carbon Disulfide	10.3	10.7	10	103	107	64-127	3.89	20
Carbon Tetrachloride	10.6	10.7	10	106	107	61-158	0.251	20
Chlorobenzene	9.98	10.2	10	100	102	43-157	2.45	20
Chloroethane	9.84	9.63	10	98	96	50-127	2.11	20
Chloroform	10.2	10.5	10	102	105	56-154	2.93	20
Chloromethane	9.95	8.88	10	99	89	41-132	11.4	20
2-Chlorotoluene	9.18	9.62	10	92	96	50-155	4.60	20
4-Chlorotoluene	9.42	9.91	10	94	99	53-153	5.05	20
Dibromochloromethane	9.70	10.6	10	97	106	49-156	8.55	20
1,2-Dibromo-3-chloropropane	3.41	4.77	4	85	119	46-149	33.1,F2	20
1,2-Dibromoethane (EDB)	9.61	11.0	10	96	110	44-155	13.9	20
Dibromomethane	9.66	11.0	10	97	110	50-157	12.6	20
1,2-Dichlorobenzene	10.1	10.6	10	101	106	48-156	5.11	20
1,3-Dichlorobenzene	9.43	9.75	10	94	98	49-159	3.39	20
1,4-Dichlorobenzene	9.82	10.2	10	98	102	51-151	3.76	20
Dichlorodifluoromethane	12.5	11.7	10	125, F2	117	61-117	6.62	20
1,1-Dichloroethane	10.4	10.7	10	104	107	53-153	3.66	20
1,2-Dichloroethane (1,2-DCA)	10.2	11.2	10	102	112	66-125	8.91	20
1,1-Dichloroethene	10.4	10.7	10	104	107	47-149	3.28	20
cis-1,2-Dichloroethene	10.3	10.7	10	103	107	54-155	3.82	20
trans-1,2-Dichloroethene	10.2	10.6	10	102	106	46-151	3.85	20
1,2-Dichloropropane	10.1	10.6	10	101	106	54-153	5.45	20
1,3-Dichloropropane	9.66	10.8	10	97	108	49-150	11.3	20
2,2-Dichloropropane	10.1	10.3	10	101	103	74-147	2.18	20
1,1-Dichloropropene	10.2	10.5	10	102	105	54-150	2.94	20
cis-1,3-Dichloropropene	9.85	10.4	10	98	104	55-159	5.46	20

(Cont.)



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/30/17
Date Analyzed: 6/30/17
Instrument: GC18
Matrix: Water
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
BatchID: 141363
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-141363

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	9.12	9.97	10	91	100	74-131	8.87	20
Diisopropyl ether (DIPE)	9.45	9.81	10	94	98	57-136	3.78	20
Ethylbenzene	9.66	9.85	10	97	98	60-152	1.91	20
Ethyl tert-butyl ether (ETBE)	8.96	9.82	10	90	98	55-137	9.16	20
Freon 113	11.2	11.3	10	112	113	47-138	1.10	20
Hexachlorobutadiene	11.3	11.4	10	113	114	66-160	0.712	20
Hexachloroethane	9.67	9.80	10	97	98	75-130	1.37	20
2-Hexanone	7.87	10.7	10	79	107	70-115	30.7,F2	20
Isopropylbenzene	9.66	9.84	10	97	98	59-156	1.86	20
4-Isopropyl toluene	9.80	9.77	10	98	98	75-138	0	20
Methyl-t-butyl ether (MTBE)	8.78	10.4	10	88	104	53-139	17.2	20
Methylene chloride	10.3	11.0	10	103	110	66-127	6.56	20
4-Methyl-2-pentanone (MIBK)	8.21	11.0	10	82	110	42-153	29.0,F2	20
Naphthalene	8.88	12.1	10	89	121	66-127	31.0,F2	20
n-Propyl benzene	9.58	9.93	10	96	99	54-155	3.54	20
Styrene	8.53	9.18	10	85	92	51-152	7.35	20
1,1,1,2-Tetrachloroethane	10.4	10.7	10	104	107	58-159	2.81	20
1,1,2,2-Tetrachloroethane	8.68	10.8	10	87	108	51-150	21.7,F2	20
Tetrachloroethene	10.5	10.6	10	105	106	55-145	0.985	20
Toluene	9.03	9.13	10	90	91	52-137	1.05	20
1,2,3-Trichlorobenzene	11.2	14.1	10	112	141, F2	70-136	23.0,F2	20
1,2,4-Trichlorobenzene	10.4	12.3	10	105	123	74-137	16.1	20
1,1,1-Trichloroethane	10.4	10.5	10	104	105	57-156	0.418	20
1,1,2-Trichloroethane	9.46	10.6	10	95	106	51-150	11.3	20
Trichloroethene	10.8	11.1	10	108	111	43-157	3.07	20
Trichlorofluoromethane	12.6	12.7	10	126	127	50-147	0.398	20
1,2,3-Trichloropropane	8.72	11.0	10	87	110	41-152	22.7,F2	20
1,2,4-Trimethylbenzene	9.35	9.49	10	93	95	57-157	1.52	20
1,3,5-Trimethylbenzene	9.43	9.53	10	94	95	56-159	1.01	20
Vinyl Chloride	11.3	10.9	10	113	109	42-137	4.05	20
Xylenes, Total	26.6	27.9	30	89	93	70-130	4.88	20
Surrogate Recovery								
Dibromofluoromethane	29.1	29.2	25	116	117	70-130	0.341	20
Toluene-d8	25.9	25.8	25	103	103	70-130	0	20
4-BFB	3.01	3.08	2.5	120	123	70-130	2.52	20



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/30/17
Date Analyzed: 6/30/17
Instrument: GC3
Matrix: Water
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
BatchID: 141421
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L
Sample ID: MB/LCS-141421
 1706D67-009AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	59.2	40	60	-	99	78-116
MTBE	ND	8.84	5.0	10	-	88	72-122
Benzene	ND	8.60	0.50	10	-	86	81-123
Toluene	ND	9.06	0.50	10	-	91	83-129
Ethylbenzene	ND	9.51	0.50	10	-	95	88-126
Xylenes	ND	29.8	1.5	30	-	99	87-131
Surrogate Recovery							
aaa-TFT	9.802	9.71		10	98	97	89-116

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	52.6	59.6	60	ND	88	99	63-133	12.5	20
MTBE	9.02	9.34	10	ND	85	89	69-122	3.51	20
Benzene	8.59	8.42	10	ND	86	84	84-125	2.04	20
Toluene	9.06	8.91	10	ND	91	89	87-131	1.67	20
Ethylbenzene	9.38	9.32	10	ND	94	93	92-126	0.730	20
Xylenes	29.5	29.1	30	ND	98	97	88-132	1.60	20
Surrogate Recovery									
aaa-TFT	10.1	9.54	10		101	95	90-117	5.69	20



Quality Control Report

Client: TOR Environmental, Inc.	WorkOrder: 1706E92
Date Prepared: 6/30/17	BatchID: 141351
Date Analyzed: 7/3/17	Extraction Method: SW3510C
Instrument: GC39A	Analytical Method: SW8015B
Matrix: Water	Unit: µg/L
Project: GW253; Northgate Mall Sears Auto	Sample ID: MB/LCS/LCSD-141351

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	250	-	-	-
Surrogate Recovery					
C9	621.2		625	99	79-111

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1090	1090	1000	109	109	88-134	0	30
Surrogate Recovery								
C9	622	619	625	100	99	79-111	0.438	30



Quality Control Report

Client: TOR Environmental, Inc.
Date Prepared: 6/30/17
Date Analyzed: 7/3/17
Instrument: GC39A
Matrix: Water
Project: GW253; Northgate Mall Sears Auto

WorkOrder: 1706E92
BatchID: 141351
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L
Sample ID: MB/LCS/LCSD-141351

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	250	-	-	-

Surrogate Recovery

C9	621.2		625	99	79-111
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1090	1090	1000	109	109	88-134	0	30
Surrogate Recovery								
C9	622	619	625	100	99	79-111	0.438	30



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1706E92

ClientCode: TORE

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Jeffrey Borum
 TOR Environmental, Inc.
 PO BOX 73626
 San Clemente, CA 92673
 (949) 498-1450 FAX:

Email: jborum@torenvironmental.com
 cc/3rd Party:
 PO:
 ProjectNo: GW253; Northgate Mall Sears Auto

Bill to:
 Jeffrey Borum
 TOR Environmental, Inc.
 PO BOX 73626
 San Clemente, CA 92673

Requested TAT: 1 day;

Date Received: 06/30/2017
Date Logged: 06/30/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1706E92-001	West Wall	Water	6/30/2017 00:00	<input type="checkbox"/>	C	D	A	B									
1706E92-002	East Well	Water	6/30/2017 12:20	<input type="checkbox"/>	C	D	A	B									
1706E92-003	SB-Elev P1	Water	6/30/2017 16:30	<input type="checkbox"/>	C	D	A	B									
1706E92-004	SB-Elev F2	Water	6/30/2017 17:00	<input type="checkbox"/>					A								

Test Legend:

1	418_SG_W	2	8260B_W	3	G-MBTX_W	4	TPH(DMO)_W
5	TPH_W	6		7		8	
9		10		11		12	

Prepared by: Kena Ponce

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TOR ENVIRONMENTAL, INC.

Project: GW253; Northgate Mall Sears Auto

Work Order: 1706E92

Client Contact: Jeffrey Borum

QC Level: LEVEL 2

Contact's Email: jborum@torenvironmental.com

Comments:

Date Logged: 6/30/2017

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag


Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706E92-001A	West Wall	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	6/30/2017	1 day	Present	<input type="checkbox"/>	
1706E92-001B	West Wall	Water	SW8015B (Diesel & Motor Oil)	1	aVOA	<input type="checkbox"/>	6/30/2017	1 day	Present	<input type="checkbox"/>	
1706E92-001C	West Wall	Water	E418.1 (TRPH w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	6/30/2017	1 day	Present	<input type="checkbox"/>	
1706E92-001D	West Wall	Water	SW8260B (VOCs)	1	VOA w/ HCl	<input type="checkbox"/>	6/30/2017	1 day	Present	<input type="checkbox"/>	
1706E92-002A	East Well	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	6/30/2017 12:20	1 day	Present	<input type="checkbox"/>	
1706E92-002B	East Well	Water	SW8015B (Diesel & Motor Oil)	1	aVOA	<input type="checkbox"/>	6/30/2017 12:20	1 day	Present	<input type="checkbox"/>	
1706E92-002C	East Well	Water	E418.1 (TRPH w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	6/30/2017 12:20	1 day	Present	<input type="checkbox"/>	
1706E92-002D	East Well	Water	SW8260B (VOCs)	1	VOA w/ HCl	<input type="checkbox"/>	6/30/2017 12:20	1 day	Present	<input type="checkbox"/>	
1706E92-003A	SB-Elev P1	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	6/30/2017 16:30	1 day	1%+	<input type="checkbox"/>	
1706E92-003B	SB-Elev P1	Water	SW8015B (Diesel & Motor Oil)	1	aVOA	<input type="checkbox"/>	6/30/2017 16:30	1 day	1%+	<input type="checkbox"/>	
1706E92-003C	SB-Elev P1	Water	E418.1 (TRPH w/ S.G. Clean-Up)	2	VOA w/ HCl	<input type="checkbox"/>	6/30/2017 16:30	1 day	1%+	<input type="checkbox"/>	
1706E92-003D	SB-Elev P1	Water	SW8260B (VOCs)	1	VOA w/ HCl	<input type="checkbox"/>	6/30/2017 16:30	1 day	1%+	<input type="checkbox"/>	
1706E92-004A	SB-Elev F2	Water	SW8015B (TEPHs) <TPH-Diesel (C10-C23), TPH-Hydraulic Fluid (C18-C36), TPH-Hydraulic Oil (C18-C36)>	1	VOA w/ HCl	<input type="checkbox"/>	6/30/2017 17:00	1 day	1%+	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

RUSH

MAI Work Order # 1700E92

 <p>McCAMPBELL ANALYTICAL, INC. 1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701 Telephone: (877) 252-9262 / Fax: (925) 252-9269 www.mccampbell.com main@mccampbell.com</p>	CHAIN OF CUSTODY RECORD							
	Turn Around Time: 1 Day Rush <input checked="" type="checkbox"/>	2 Day Rush <input type="checkbox"/>	3 Day Rush <input type="checkbox"/>	STD <input type="checkbox"/>	Quote # <input type="checkbox"/>			
	J-Flag / MDL <input type="checkbox"/>	ESL <input type="checkbox"/>	Cleanup Approved <input type="checkbox"/>	Bottle Order # <input type="checkbox"/>				
	Delivery Format: PDF <input checked="" type="checkbox"/>	GeoTracker EDF <input checked="" type="checkbox"/>	EDD <input checked="" type="checkbox"/>	Write On (DW) <input type="checkbox"/>	EQuIS <input type="checkbox"/>			

Report To: Jeffrey Borum Bill To: Jeffrey Borum
 Company: TOR Environmental, Inc
 Email: jborum@torenvironmental.com
 Alt Email: msauerwein@torenvironmental.com Tele: (949) 370-2046
 Project Name: Northgate Mall Sewer Audit Project #: GW253
 Project Location: 9000 Northgate, San Rafael PO #
 Sampler Signature: Metal Resources

SAMPLE ID Location / Field Point	Sampling		#Containers	Matrix	Preservative	Analysis Requested																																		
	Date	Time				BTEX & TPH as Gas (802/14/8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel <u>Expanded Range 10</u>	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel <u>418</u>	Total Petroleum Hydrocarbons (418.1) With Silica Gel <u>418</u>	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / <u>8082 PCBs</u> ; Aroclors only	EPA 524.2 / 624 / <u>8260 (VOCs)</u>	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNA)s	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis	<u>TPH as Diesel 8015 Hydraulic Fluid + Oil</u>																			
* West Well	6/30/17	1210	6	GW	1,2	X		X	X			X																												
* East Well	6/30/17	1220	6	GW	1,2	X		X	X			X																												
* SB-Elev P1	6/30/17	1630	6	GW	1,2	X		X	X			X																												
* SB-Elev F2	6/30/17	1700	1	GW	1,2																																			

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time	Comments / Instructions * Run PCBs if TPH detection * per client since we didnt receive enough sample running 418 instead of 1664
<u>Metal Resources / TOR Environmental, Inc</u>	<u>6/30/17</u>	<u>19</u>	<u>[Signature]</u>	<u>6/30/17</u>	<u>19:34</u>	

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other
 Preservative Code: 1=4°C 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=ZnOAc/NaOH 7=None

Temp _____ °C Initials _____



Sample Receipt Checklist

Client Name: **TOR Environmental, Inc.**
 Project Name: **GW253; Northgate Mall Sears Auto**
 WorkOrder No: **1706E92** Matrix: Water
 Carrier: Client Drop-In

Date and Time Received: **6/30/2017 19:34**
 Date Logged: **6/30/2017**
 Received by: **Kena Ponce**
 Logged by: **Kena Ponce**

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No NA
 Sample/Temp Blank temperature Temp: 9.8°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No NA
 Sample labels checked for correct preservation? Yes No
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes No NA
 Samples Received on Ice? Yes No
 (Ice Type: WET ICE)

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes No NA
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes No NA

Comments:

***Soil Gas Samples
Laboratory Analytical Reports and
Chain-of-Custody Forms***



INVOICE

TEG - Northern California, Inc. Tax ID# 68-0308348

INVOICE #
61215F

INVOICE DATE
1/3/17

CLIENT JOB #
GW240

BILL TO: TOR Environmental, Inc.
3442 Bumann Road
Encinitas, CA 92024

ATTN: Mr. Jeff Borum

PROJECT: 9000 Northgate Drive, San Rafael, California

DATE	QUANTITY	DESCRIPTION	UNIT COST	TOTAL
12/15 - 12/16/16	2 days	Strataprobe / soil & soil vapor sampling	\$2,095.00	\$4,190.00
	2 days	Mobile Lab (EPA 8260) - soil vapor	\$1,995.00	\$3,990.00
	1	Mobilization / Demobilization - Mobile lab	\$500.00	\$500.00
	1	Mobilization / Demobilization - Strataprobe	\$500.00	\$500.00
	2 days	Per Diem (2 persons)	\$300.00	\$600.00
TOTAL AMOUNT DUE				\$9,780.00

PLEASE SEND REMITTANCE TO THE ADDRESS BELOW
TERMS ARE NET 30 DAYS FROM INVOICE DATE



3 January 2017

Mr. Jeff Borum
TOR Environmental, Inc.
3442 Bumann Road
Encinitas, CA 92024

**SUBJECT: DATA REPORT - TOR Environmental, Inc. Project #GW240
9000 Northgate Drive, San Rafael, California**

TEG Project # 61215F

Mr. Borum:

Please find enclosed a data report for the samples analyzed from the above referenced project for TOR Environmental, Inc. The samples were analyzed on site in TEG's mobile laboratory. TEG conducted a total of 9 analyses on 9 soil vapor samples.

-- 9 analyses on soil vapors for volatile organic hydrocarbons by EPA method 8260B.

The results of the analyses are summarized in the enclosed tables. Applicable detection limits and calibration data are included in the tables.

TEG appreciates the opportunity to have provided analytical services to TOR Environmental, Inc. on this project. If you have any further questions relating to these data or report, please do not hesitate to contact us.

Sincerely,

Mark Jerpbak
Director, TEG-Northern California



TOR Environmental Project # GW240
 Northgate GW240
 9000 Northgate Drive
 San Rafael, California

TEG Project #61215F

EPA Method 8260B VOC Analyses of SOIL VAPOR in micrograms per cubic meter of Vapor

SAMPLE NUMBER:	Probe	1SAC5	1SAC10	2SAC5	3SAC5
	Blank				
SAMPLE DEPTH (feet):		5.0	10.0	5.0	5.0
PURGE VOLUME:		3	3	3	3
COLLECTION DATE:	12/16/16	12/16/16	12/16/16	12/16/16	12/16/16
COLLECTION TIME:	9:47	11:14	10:43	11:54	12:48
DILUTION FACTOR:	1	1	1	1	1
	RL				
<hr/>					
Dichlorodifluoromethane	100	nd	nd	nd	nd
Vinyl Chloride	100	nd	nd	nd	nd
Chloroethane	100	nd	nd	nd	nd
Trichlorofluoromethane	100	nd	nd	nd	nd
1,1-Dichloroethene	100	nd	nd	nd	nd
1,1,2-Trichloro-trifluoroethane	100	nd	nd	nd	nd
Methylene Chloride	100	nd	nd	nd	nd
trans-1,2-Dichloroethene	100	nd	nd	nd	nd
1,1-Dichloroethane	100	nd	nd	nd	nd
cis-1,2-Dichloroethene	100	nd	nd	nd	nd
Chloroform	100	nd	nd	nd	nd
1,1,1-Trichloroethane	100	nd	nd	nd	nd
Carbon Tetrachloride	100	nd	nd	nd	nd
1,2-Dichloroethane	100	nd	nd	nd	nd
Benzene	80	nd	nd	nd	nd
Trichloroethene	100	nd	nd	nd	nd
Toluene	200	nd	nd	nd	nd
1,1,2-Trichloroethane	100	nd	nd	nd	nd
Tetrachloroethene	100	nd	nd	170	nd
Ethylbenzene	100	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	100	nd	nd	nd	nd
m,p-Xylene	200	nd	nd	nd	nd
o-Xylene	100	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	100	nd	nd	nd	nd
TPH (gasoline range)	10000	nd	nd	nd	nd
<hr/>					
1,1 Difluoroethane (leak check)	10000	nd	nd	nd	nd
<hr/>					
Surrogate Recovery (DBFM)		110%	111%	110%	99%
Surrogate Recovery (1,2-DCA-d4)		111%	108%	107%	106%
Surrogate Recovery (1,4-BFB)		96%	104%	107%	94%

'RL' Indicates reporting limit at a dilution factor of 1
 'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab
 Analyses performed by: Ms. Lorena Williams



TOR Environmental Project # GW240
 Northgate GW240
 9000 Northgate Drive
 San Rafael, California

TEG Project #61215F

EPA Method 8260B VOC Analyses of SOIL VAPOR in micrograms per cubic meter of Vapor

SAMPLE NUMBER:		3SAC5	4SAC5	5SAC5	5SAC10	6SAC1
		dup				
SAMPLE DEPTH (feet):		5.0	5.0	5.0	10.0	1.0
PURGE VOLUME:		3	3	3	3	3
COLLECTION DATE:		12/16/16	12/16/16	12/16/16	12/16/16	12/16/16
COLLECTION TIME:		12:48	14:22	15:37	15:10	16:07
DILUTION FACTOR:		1	1	1	1	1
	RL					
Dichlorodifluoromethane	100	nd	nd	nd	nd	nd
Vinyl Chloride	100	nd	nd	nd	nd	nd
Chloroethane	100	nd	nd	nd	nd	nd
Trichlorofluoromethane	100	nd	nd	nd	nd	nd
1,1-Dichloroethene	100	nd	nd	nd	nd	nd
1,1,2-Trichloro-trifluoroethane	100	nd	nd	nd	nd	nd
Methylene Chloride	100	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	100	nd	nd	nd	nd	nd
1,1-Dichloroethane	100	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	100	nd	nd	nd	nd	nd
Chloroform	100	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	100	nd	nd	nd	nd	nd
Carbon Tetrachloride	100	nd	nd	nd	nd	nd
1,2-Dichloroethane	100	nd	nd	nd	nd	nd
Benzene	80	nd	nd	nd	nd	nd
Trichloroethene	100	nd	nd	nd	nd	nd
Toluene	200	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	100	nd	nd	nd	nd	nd
Tetrachloroethene	100	nd	nd	290	nd	130
Ethylbenzene	100	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	100	nd	nd	nd	nd	nd
m,p-Xylene	200	nd	nd	nd	nd	nd
o-Xylene	100	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	100	nd	nd	nd	nd	nd
TPH (gasoline range)	10000	nd	nd	nd	nd	nd
1,1 Difluoroethane (leak check)	10000	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)		101%	109%	101%	104%	111%
Surrogate Recovery (1,2-DCA-d4)		108%	109%	106%	106%	105%
Surrogate Recovery (1,4-BFB)		99%	100%	93%	97%	95%

'RL' Indicates reporting limit at a dilution factor of 1
 'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab
 Analyses performed by: Ms. Lorena Williams



TOR Environmental Project # GW240
Northgate GW240
9000 Northgate Drive
San Rafael, California

TEG Project #61215F

CALIBRATION DATA - Calibration Check Compounds

	<i>Vinyl Chloride</i>	<i>1,1 DCE</i>	<i>Chloroform</i>	<i>1,2 DCP</i>	<i>Toluene</i>	<i>Ethylbenzene</i>
<i>Midpoint</i>	10.0	10.0	10.0	10.0	10.0	10.0

Continuing Calibration - Midpoint

12/15/16	11.8 118%	11.1 111%	11.4 114%	9.6 96%	10.7 107%	9.5 95%
12/16/16	10.8 108%	10.4 104%	11.0 110%	11.1 111%	10.6 106%	8.3 83%



Wood Environment & Infrastructure Solutions, Inc.
1670 Corporate Circle
Suite 101
Petaluma, California 94954
USA

June 29, 2018

Ms. Patricia Feeley
Manager, Environmental Affairs/Legal Dept.
Sears Holdings Management Corporation
3333 Beverly Road
Hoffman Estates, IL 60179

RE: Subsurface Assessment Report
Sears Retail Store #1528
9000 Northgate Mall
San Rafael, California 94903

Dear Ms. Feeley:

Wood Environment & Infrastructure Solutions, Inc. (Wood), is pleased to present this Subsurface Assessment Report to Sears Holdings Management Corporation (Sears) for Sears Store #1528, located at 9000 Northgate Mall, San Rafael, California, hereafter referred to as the Site.

Please contact us if you have any questions.

Sincerely,
Wood Environment & Infrastructure Solutions, Inc.

A handwritten signature in blue ink that reads "Craig T. Cabrera".

Craig T. Cabrera
Principal Scientist

A handwritten signature in blue ink that reads "Gary A. Lieberman".

Gary A. Lieberman
Associate Geology Professional/Project
Manager

Enclosure



SUBSURFACE ASSESSMENT REPORT

Sears Retail Store #1528
9000 Northgate Drive
San Rafael, CA

Prepared for:

Sears Holdings Management Corporation
3333 Beverly Road
Hoffman Estates, Illinois 60179

Prepared by:

Wood Environment & Infrastructure Solutions, Inc.
1670 Corporate Circle, Suite 101
Petaluma, California 94954

Wood Project No.: 3205181652.01

June 29, 2018

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1. INTRODUCTION

Wood Environment & Infrastructure Solutions, Inc. (Wood) is pleased to submit this subsurface assessment report for the Sears #1528 at 9000 Northgate Drive, San Rafael, California, hereafter referred to as the Site. The scope of work for this assessment addresses the retail store passenger elevator and suspect underground storage tanks (USTs) located outside of the auto center building as previously identified in the *Limited Phase II Soil, Soil Gas, and Groundwater Assessment* report dated August 22, 2017 by TOR Environmental, Inc (TOR).

1.1 Background

At the direction of Sears, Wood completed a site reconnaissance on April 18, 2018 to determine if there was visible oil in the passenger and freight elevator's mechanical rooms located in the basement of the former retail store; to confirm the previous consultant boring locations; and to view the paved drive areas near the auto center to assess for evidence of possible USTs. Upon completion of the reconnaissance, Wood provided Sears an update of the findings which included apparent hydraulic fluid from the elevator mechanics in the passenger elevator mechanical room; evidence of previous soil borings; and no indication of USTs outside of the auto center. The hydraulic fluid was from an oil drip pan beneath the mechanical equipment and the oil has been cleaned up by Sears. Sears requested Wood to assess the subsurface area near the elevators; complete a records review for information regarding the suspect USTs; complete a geophysical assessment in the area of the suspect USTs; and to complete hand augers into the area of the suspect USTs to confirm or deny their presence. A site location map is included as **Figure 1**. Photographic documentation of the field work is provided in **Appendix B**.

Wood also contacted Marin County on April 30, 2018, as directed by Sears, to report a potential release based on the previous 2017 report by TOR, regarding the boring sample results collected near the passenger elevator in the retail store mechanical room.

2. INVESTIGATION TASKS

The investigation consisted of a records review for information regarding the suspect USTs, a geophysical survey near the former auto center, a utility survey in the passenger elevator mechanical room, and a subsurface soil and groundwater investigation in the vicinity of the passenger elevator hydraulic piston and mechanicals in the basement. The following sections detail the completion of each of these tasks.

2.1 Records Review

On April 24, 2018, Wood reviewed files at the County of Marin Department of Public Works (DPW). Results of the file review identified the following two reports:

-) Phase II Environmental Site Assessment, Sears Automotive Center Northgate Mall, 9000 Northgate Mall, San Rafael, California 94903 prepared by Sigma Engineering, Inc. (SEI) and dated October 20, 1999.
-) Review for Closure, Sears, Roebuck & Co. Automotive Center No. 1528, 9000 Northgate Mall, San Rafael, California prepared by the San Rafael Department and dated November 16, 1999.

In addition, there were DPW files relative to hazardous materials storage including an e-mail dated March 8, 2017 that references three outside ASTs.

SEI Phase II dated October 20, 1999

According to the SEI report, investigation was conducted on two suspect areas of the existing Sears Automotive Center to respond to past fire department requests for additional site assessment in an attempt to achieve site closure. The two areas were the former fueling area (former tanks and pump islands) on the north side of the building and the existing auto repair shop, including hydraulic lifts, trench drain and three-stage clarifier. Neither of these areas correspond with the location of the four oil USTs. With the exception of a historical reference in the report indicating "According to a November 1999 San Rafael Fire Department (SRFD) letter to Sears, Roebuck and Co, up to eight gasoline, waste oil and/or new oil underground storage tanks (USTs) were associated with the onsite Sears Automotive Center and were reportedly removed from the subject property in 1985 and 1987" there was no reference made to the oil USTs made in the report.

Based on field observations and laboratory analytical results for the former UST investigation, SEI concluded that soil in this area had not been significantly impacted and that no concentrations of hydrocarbons above regulatory screening levels were detected. They further concluded that the presence of tight clayey soil conditions at the site would mitigate any significant contaminant migration.

Based on field observations and laboratory analytical results for the active automotive service area SEI concluded that no concentrations of hydrocarbons above regulatory screening levels were detected and that the tight clayey soil conditions at the Site were not conducive to significant contaminant migration.

San Rafael Fire Department (SRFD) letter dated November 16, 1999

According to the SRFD letter, there was adequate documentation that site investigation and remediation activities conducted between November 1994 and May 1995 associated with the removal of the dispenser islands and product lines had been completed to the satisfaction of the SRFD. However, the SRFD indicated there was insufficient documentation for the site investigation and remediation activities associated with the removal of eight USTs conducted in 1985 and 1987 and requested documentation of the 1987 removal of one 1,000-gallon waste oil UST and two 530-gallon bulk oil USTs. There were no maps depicting the location of the USTs and is therefore unknown if the 530-gallon bulk oil USTs are the same USTs as the four oil USTs suspected to be on the south side of the building where investigation was performed by TOR Environmental in August 2017.

DPW files e-mail dated March 8, 2017

This document is an e-mail from Sears to the DPW providing a summary of the facilities waste storage inventory and references three outside 500-gallon ASTs which were “split storage” tanks that were used to store new motor oil. There are no maps associated with the DPW files that indicate the location of these ASTs and the inventory records make no mention of any oil storage USTs at the site.

Based on Wood’s review of available files and report, it appears there were up to eight gasoline, waste oil and/or new oil USTs associated with Sears Automotive Center. Records document the removal of the gasoline USTs, the waste oil UST, and the clarifier associated with the facility; however, there are no records to indicate removal of four 500-gallon oil USTs from the site. It should be noted there were no maps or site plans available in DPW records indicating the location of these oil USTs. The records review was not conclusive regarding the presence or absence of USTs south of the auto center.

2.2 Utility Clearance and Geophysical Survey

A geophysical survey was conducted south of the auto center on May 30, 2018 to investigate the area identified as the location of the former suspect USTs and to identify underground utilities in the investigation areas. The survey was conducted by Advanced Geological Services (AGS) of Moraga, California. AGS used an electromagnetic (EM) metal detector, ground-penetrating radar (GPR), and a radio-frequency (RF) pipe detector for the survey. Subsurface utilities located during the survey were field marked.

Using the suspected former UST location as the center-point of the survey area, AGS marked out a 5 foot by 5 foot grid to provide horizontal control for the GPR survey. AGS then surveyed the area with the GPR along north-south and east-west lines paced 5 feet apart. AGS first conducted the GPR survey using a 400-MHz antenna, then used a 270-MHz antenna. The 400-MHz antenna provides higher resolution imaging than the 270-MHz antenna and was used to look for small-scale changes in subsurface conditions that might indicate the former UST location (e.g., excavation sidewalls, pea-gravel fill vs. more fine-grained fill or native soil). The 270-MHz antenna was used to achieve a greater investigation depth.

AGS then performed an EM survey by wheeling a cart-mounted EM detector along north-south and east-west survey lines spaced approximately five feet apart. The EM61 was programmed to automatically obtain four readings per second, which corresponds to approximately one reading per foot along each survey line.

AGS also mapped the locations of large surface metal objects; e.g., parked vehicles and traffic bollards, so the associated geophysical responses would not be mistaken for indications of a UST or other large buried metal objects.

AGS noted areas of disturbed soil that appeared to be a backfilled excavation area in the vicinity of the suspect USTs, but no large metal anomalies or buried objects that could indicate a UST were noted.

In addition, AGS performed a utility survey in the passenger elevator mechanical room, located in the basement of the former Sears store, to identify potential subsurface utilities in the vicinity of the proposed soil borings locations. Utility corridors and areas of disturbed soil located during the survey were field marked. Underground Service Alert (USA North) was also contacted to locate publicly maintained underground utilities.

2.2.1 Test Borings in Suspect UST Location

On June 4, 2018, Wood supervised the advancement of two hand auger borings to approximately six feet below ground surface (bgs) in the areas of disturbed soil identified by AGS during the geophysical survey activities near the former auto shop. A figure showing the test boring locations is included as **Figure 2**. The hand augers were advanced by Cascade Drilling LP (Cascade) of Concord, California.

Test boring, TB-1, was placed in the center of the zone of disturbed soil and TB-2 was placed in the center of the area showing a strong buried surface change. No USTs or foreign objects were encountered in either test boring. Subsurface fill consisted of gravelly and clayey sands to a depth of 4 feet bgs and sands from 4 to 6 feet bgs at the two boring locations.

After advancing the test borings, the boreholes were backfilled with the soil cuttings removed from each respective borehole and capped with concrete, dyed to match the surrounding asphalt surface.

2.3 Subsurface Investigation in Passenger Elevator Mechanical Room

Wood supervised the advancement and sampling of three environmental soil borings (designated EB-1, EB-2, and EB-4) at the Site on June 4, 2018. A fourth boring (EB-3) was attempted, but abandoned due to an abundance of underground utilities and the close confines of the work area. A figure depicting the soil boring locations is included as **Figure 3**. The drilling was conducted by Cascade Drilling LP (Cascade) from Concord, California.

The soil boring locations were selected based on the June 2017 soil boring location and results described in the August 22, 2017 *Limited Phase II Soil, Soil Gas, and Groundwater Assessment* (Phase II) by TOR Environmental, Inc. (TOR, 2017) and the results of utility survey conducted on May 30, 2018. The soil borings were placed surrounding and close to the passenger elevator hydraulic piston and the associated hydraulic machinery.

2.3.1 Soil Investigation

Soil borings were advanced by Cascade by coring the concrete pad and advancing a 4-inch diameter hand auger to final depth or refusal. Soil cuttings were collected and logged by a qualified geologist in accordance with the Unified Soil Classification System (USCS), and screened at approximately 1-foot intervals for the presence of volatile organic compounds (VOCs) using a properly calibrated photo-ionization detector (PID). PID screening results are included on the field soil boring logs included in **Appendix A**. Soil Boring EB-1 was advanced to approximately 4.5 feet bgs, where subsurface groundwater was located beneath the basement floor. Soil boring EB-2 was advanced to approximately 4 feet bgs and EB-4 was advanced to approximately 3 feet bgs, before meeting refusal. The basement floor was placed at approximately 15 feet below ground surface. Soil boring EB-3 encountered two utilities during hand auguring and was abandoned due to the abundance of utilities in the area and the close confines of the elevator mechanical room (**Figure 3**).

Soils encountered during hand auguring activities for this investigation consisted of sandy lean clays and sandy silts beneath the gravel baserock in the basement of the main retail building. Water was encountered at approximately 4.5 feet below the floor level of the basement or at approximately 19.5 feet bgs.

Soil samples were collected from native soils directly beneath the fill materials at depths ranging from 1.5 to 2.5 feet below the basement floor. There were no elevated PID readings recorded, and no visual or olfactory indications of impact detected.

The soil samples were submitted to ESC Lab Sciences (ESC) of Mount Juliet, Tennessee for chemical analyses. The soil samples were analyzed for diesel and oil range organics (DRO and ORO) by USEPA SW-846 Method 8015B.

2.3.2 Groundwater Investigation

Upon completion of the soil borings, a temporary slotted polyvinyl chloride (PVC) casing was installed in EB-1 for the purpose of collecting a groundwater sample. A water sample was collected using new tubing and a check valve to draw water to the surface and fill the appropriate certified clean sample containers provided by the laboratory. The samples were then immediately placed on ice pending being shipped to the laboratory. The water sample was analyzed for diesel and oil range organics (DRO and ORO) by USEPA SW-846 Method 8015B.

The boring EB-1 was chosen for groundwater sampling based on its location between the hydraulic cylinder and hydraulic equipment used for the passenger elevator, which was in the area showing the most surface staining on the concrete.

Following completion of sampling activities, each soil boring location was backfilled with bentonite and capped with concrete to match the surrounding surface. The soil cuttings were placed in a steel 55-gallon drum with lid and staged onsite pending profiling, transportation and disposal.

3. ANALYTICAL RESULTS

The following sections summarize the soil and groundwater analytical results for the soil borings placed in the vicinity of the passenger elevator hydraulic cylinder and mechanicals completed in June 2018.

3.1 Selection of a Standard

The concentration of detected constituents were compared to the current California Environmental Screening Levels (ESLs); Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Tables S-1 and GW-1, Water Board February 2016. The ESLs are guidance issued by the Water Board to assess whether investigation or remediation is warranted for a site or whether a potential risk to human health or the environment is present for a site. For soil and groundwater, Direct Exposure Human Health Risk Levels and Gross Contamination Levels were compared to the results provided by the laboratory.

3.2 Soil Analytical Results

No elevated PID readings were detected in the soil samples from the surface through boring termination. A total of three soil samples were submitted for analysis of DRO and ORO by EPA Method 8015B. A copy of the laboratory analytical report is provided in **Appendix C**.

A summary of constituents detected in soil are compiled in **Table 1**. DRO and ORO were detected at concentrations between 6.92 and 64.2 milligrams per kilogram (mg/kg). None of the constituents analyzed for were detected at or above the direct exposure human health risk levels.

3.3 Groundwater Analytical Results

One grab groundwater sample was submitted for analysis of DRO and ORO by EPA Method 8015B. A copy of the laboratory analytical report is provided in **Appendix C**.

A summary of constituents detected in groundwater are compiled in **Table 2**. The results indicated that the concentrations of DRO (703 µg/L) and ORO (645 µg/L) were above the direct exposure ESL of 150 µg/L. However, these concentrations are well below the gross contamination ESL of 2,500 µg/L and 50,000 µg/L, respectively.

4. CONCLUSIONS

Wood completed the assessment field activities on May 30 and June 4, 2018. The field activities consisted of a geophysical (GPR/EM) survey and completion of two test borings to determine the presence or absence of suspect USTs near the automotive shop, the completion of three environmental soil borings in the vicinity of the passenger elevator hydraulic equipment, and the collection of three soil and one groundwater samples. All samples were analyzed for DRO and ORO by EPA Method 8015B.

Results of the GPR/EM survey identified an area of disturbed soil with no indications of any anomalies characteristic of a UST. The GPR/EM survey and hand auger sampling did not find indications of USTs present. If USTs were previously present in this area, it appears that the USTs have been removed. Soils encountered in the vicinity of the suspected USTs at the former auto shop, consisted of sands and gravels, possibly indicating backfill of a former UST excavation. Soils encountered in the passenger elevator mechanical room consisted of a 5 to 6-inch thick concrete pad, underlain by 2 to 18-inches of gravel fill, and then lean clay and sandy silts to the total depth explored. No elevated soil PID readings were detected from the surface through boring termination at either location. Groundwater was encountered at approximately 4.5 feet below the basement floor surface, which was approximately 15 feet bgs (giving a total groundwater level of approximately 19.5 feet bgs).

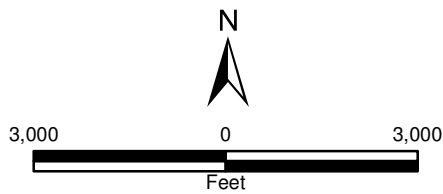
The laboratory sample results from the three soil samples and one groundwater sample collected in the vicinity of the passenger elevator hydraulic equipment were compared to the current California ESLs. No analytes were detected in soil samples above the ESLs, suggesting no indications of a release to the soils in the tested locations. In the one groundwater sample at EB-1, the DRO and ORO results of 703 µg/L and 645 µg/L, respectively, were reported above the direct exposure level of 150 µg/L for groundwater. It should be noted that this ESL is based on a direct exposure scenario, but is well below the DRO and ORO ESLs for gross contamination of 5,500 µg/L and 50,000 µg/L, respectively, which would drive additional investigation or remediation at a site. It should also be noted there are no cleanup goals (Maximum Contaminant Levels [MCLs]) for DRO or ORO in California. The groundwater sample concentrations do not suggest remedial action is warranted. The concentrations are also significantly lower than the previous TPH sample results (38,000 to 120,000 µg/L) collected by TOR.

Wood recommends that this report be shared with Marin County with a request for closure of the incident. On behalf of Sears, an incident was called in by Wood on April 30th, 2018, based on the landlord request to Sears and the previous investigation report completed by TOR.

Subsurface Assessment Report
Sears #1528
9000 Northgate Drive
San Rafael, CA



FIGURES



Source: Novato and San Rafael Quadrangles (USGS 1:24,000 Sheets)

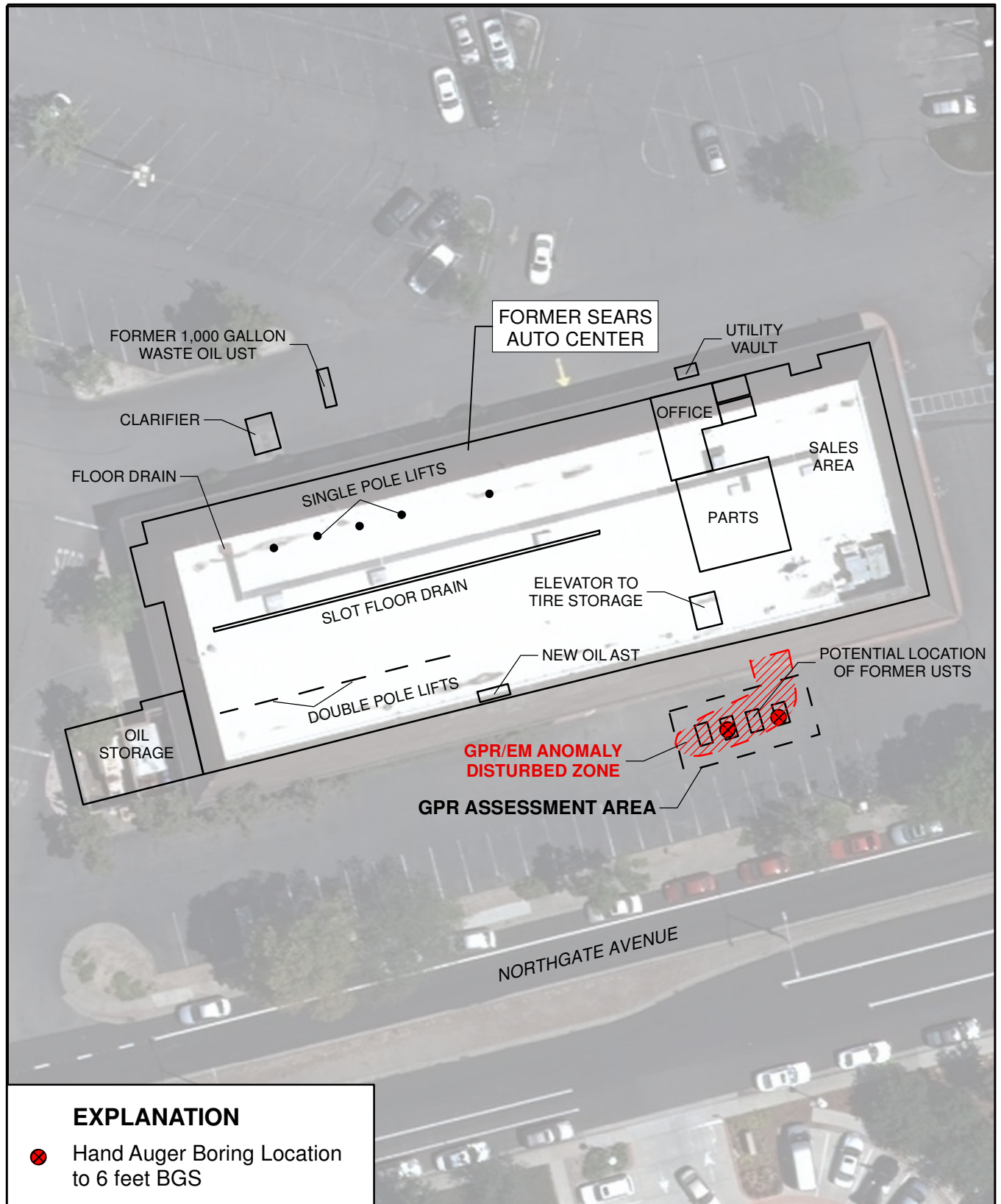
SITE LOCATION MAP
 Geophysical and Soil Boring Assessment
 Sears #1528
 9000 Northgate Drive
 San Rafael, California



By: TJH
 Date: 06/25/2018

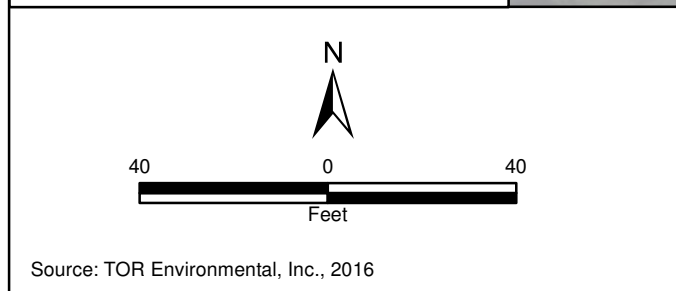
Proj. No. 3205181652.01

Figure **1**



EXPLANATION

⊗ Hand Auger Boring Location to 6 feet BGS

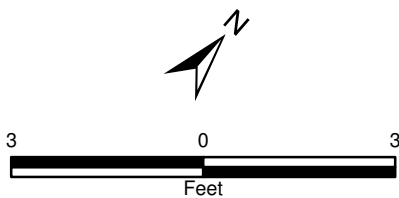
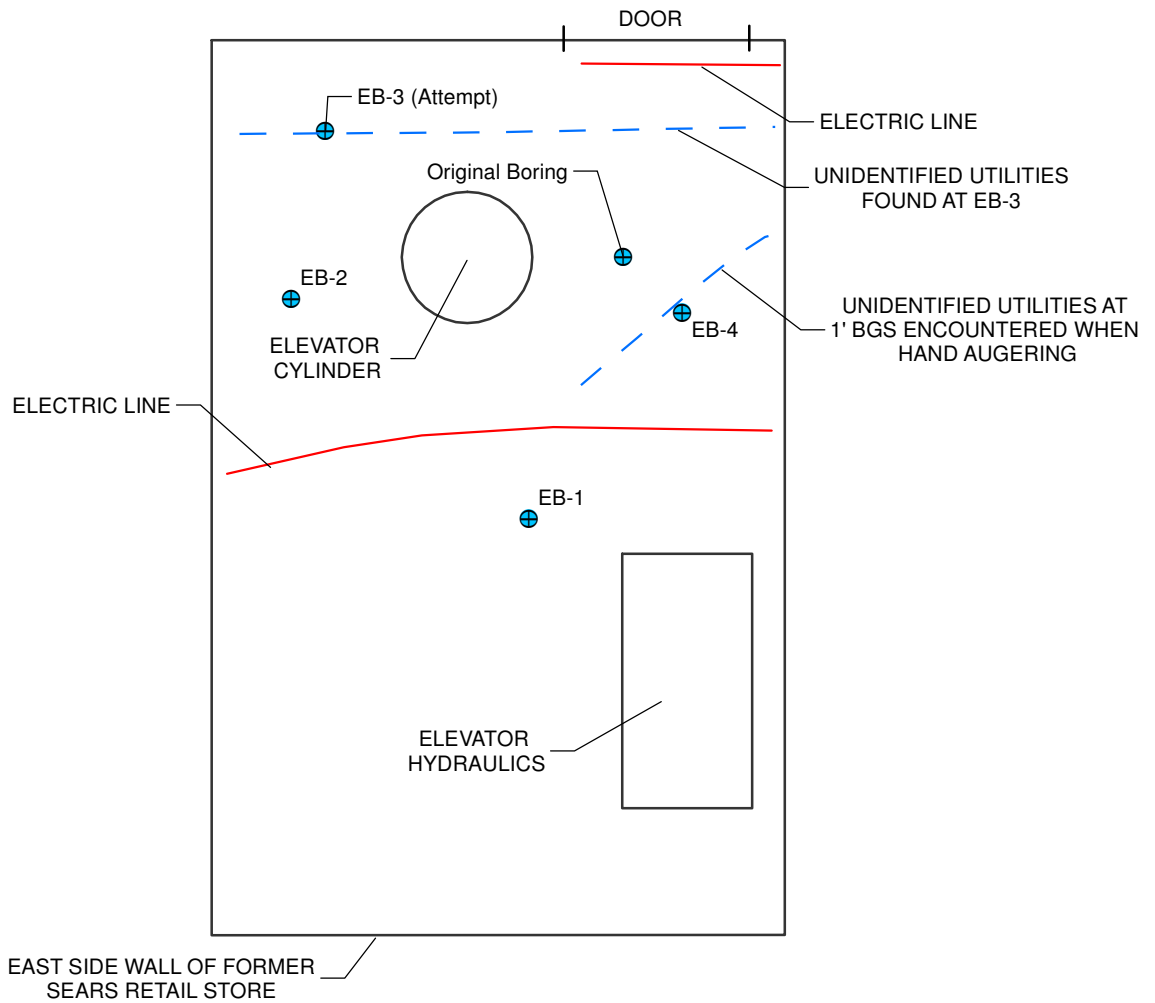


TEST BORING LOCATIONS FOR SUSPECT USTs
 FORMER SEARS AUTO CENTER
 Geophysical and Soil Boring Assessment
 Sears #1528
 9000 Northgate Drive, San Rafael, California

wood.	By: TJH	Proj. No. 3205181652.01
	Date: 06/27/2018	Figure 2



INSET: 1" = 200 Feet



SOIL BORING LOCATIONS
 PASSENGER ELEVATOR MECHANICAL ROOM
 Geophysical and Soil Boring Assessment
 Sears #1528
 9000 Northgate Drive, San Rafael, California

wood.

By: TJH

Date: 06/27/2018

Proj. No. 3205181652.01

Figure **3**

Subsurface Assessment Report
Sears #1528
9000 Northgate Drive
San Rafael, CA



TABLES

Table 1. Summary of Constituents Detected in Soil
Subsurface Assessment
 Sears Retail Store #1528
 San Rafael, California

Sample Location	Sample Date	Sample Depth (feet bgs)	C12-C22 Hydrocarbon (mg/kg)	C22-C32 Hydrocarbons (mg/kg)	C32-C40 Hydrocarbons (mg/kg)
EB-1	06/04/18	2 - 2.5	2.76 J	7.40	2.95 J
EB-2	06/04/18	1 - 1.5	7	30.8	7.70
EB-3	06/04/18	--	--	--	--
EB-4	06/04/18	1.5 - 2	12.1	64.2	12.8
Screening Level					
Environmental Screening Levels ¹			11,000	11,000	11,000
Environmental Screening Levels ²			5,100	5,100	5,100

Abbreviations:

feet bgs = feet below ground surface

µg/L = micrograms per liter

C12-C22 Hydrocarbon = Total petroleum hydrocarbons, diesel range organics analyzed by EPA method 8015B.

C22-C32 and C32-C40 Hydrocarbons = Total petroleum hydrocarbons, lubricating and heavy oil organics analyzed by EPA method 8015B.

ND = Not detected above the laboratory detection limit (in parenthesis)

J = The identification of the analyte is acceptable, the reporting value is an estimate.

1 = Direct Exposure Human Health Risk Levels (Table S-1) - Human Health Risk Based Only; Water Board February 2016

2 = Gross Contamination Level (Table S-3); Water Board February 2016

**Table 2. Summary of Constituents Detected in Groundwater
Subsurface Assessment
Sears Retail Store #1528
San Rafael, California**

Sample Location	Sample Date	Sample Depth (feet bbg)	C12-C22 Hydrocarbons (µg/L)	C22-C32 Hydrocarbon (µg/L)	C32-C40 Hydrocarbon (µg/L)
EB-1	06/04/18	5	703	645	40.3 J
Environmental Screening Levels ¹					
Direct Exposure			150	150	150
Gross Contamination			2,500	50,000	50,000

Abbreviations:

feet bbg = feet below basement ground surface

µg/L = micrograms per liter

C12-C22 Hydrocarbon = Total petroleum hydrocarbons, diesel range organics analyzed by EPA method 8015B.

C22-C32 and C32-C40 Hydrocarbons = Total petroleum hydrocarbons, lubricating and heavy oil organics analyzed by EPA method 8015B.

ND = Not detected above the laboratory detection limit (in parenthesis)

J = The identification of the analyte is acceptable, the reporting value is an estimate.

1 = Direct Exposure Human Health Risk Levels (Table GW-1) - Human Health Risk Based Only; Water Board February 2016

1 =Gross Contamination Level (Table GW-4); Water Board February 2016

Bolded text indicates detection above Environmental Screening Levels

Subsurface Assessment Report
Sears #1528
9000 Northgate Drive
San Rafael, CA



APPENDIX A

Soil Boring Logs



1670 Corporate Circle, Suite 101
Petaluma, California 94954

TEST BORING RECORD

CLIENT:	Sears	SITE:	Sears Store #1528
BORING NO:	EB-1		9000 Northgate Drive
DATE:	6/4/2018		San Rafael, CA
LOGGED BY:	Scott Graham	DRILLED BY:	Cascade Drilling
DRILLING METHOD:	Hand Auger	SAMPLING METHOD:	Hand Auger

BORING LOCATION:	Passenger Elevator Mechanical Room	HOLE DIA.:	2 inches
WOOD PROJECT NUMBER:	3205181652	TOTAL DEPTH:	4.5'

DEPTH	SAMPLE	PID READING (PPM)	MOISTURE CONTENT	LITHOLOGY	REMARKS
0				0 - 0.5' Concrete	
1		0.1	dry	0.5 - 2.0' FILL: Poorly graded gravel with rounded gravel to 2" diam, 95% gravel, 5% fines	
2	x	0.2	moist	2.0 - 3.5' Yellowish brown lean clay (CL) soft, moist, 95% fines, 5% fine sand	Soil sample EB-1 collected at 2.5 feet bgs
3					
4		0	moist	3.5 - 4.5' Yellowish brown sandy silt (ML) soft, moist, 70% fines, 25% fine sand, 5% gravel	Soil sample collected and archived at the lab
5	x			Hardpan & water at 4.5'	Groundwater sample collected
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					



1670 Corporate Circle, Suite 101
Petaluma, California 94954

TEST BORING RECORD

CLIENT: Sears	SITE: Sears Store #1528
BORING NO: EB-2	9000 Northgate Drive
DATE: 6/4/2018	San Rafael, CA
LOGGED BY: Scott Graham	DRILLED BY: Cascade Drilling
DRILLING METHOD: Hand Auger	SAMPLING METHOD: Hand Auger

BORING LOCATION: **Passenger Elevator Mechanical Room** HOLE DIA.: **2 inches**

WOOD PROJECT NUMBER: **3205181652** TOTAL DEPTH: **4.0'**

DEPTH	SAMPLE	PID READING (PPM)	MOISTURE CONTENT	LITHOLOGY	REMARKS
0				0 - 0.5' Concrete	
1	X	0.2	moist	0.5 - 2.5' Yellowish brown sandy lean clay (CL) soft, moist, 60% fines, 30% fine sand, 10% gravel	Soil sample EB-2 collected at 1.5 feet bgs
2					
3		0	moist	2.5 - 4.0' Yellowish brown sandy silt (ML) soft, moist, 60% fines, 35% fine sand, 5% gravel	Soil sample collected and archived at the lab
4					
5				Hardpan at 4.0'	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					



1670 Corporate Circle, Suite 101
Petaluma, California 94954

TEST BORING RECORD

CLIENT:	Sears	SITE:	Sears Store #1528
BORING NO:	EB-3		9000 Northgate Drive
DATE:	6/4/2018		San Rafael, CA
LOGGED BY:	Scott Graham	DRILLED BY:	Cascade Drilling
DRILLING METHOD:	Hand Auger	SAMPLING METHOD:	Hand Auger

BORING LOCATION: Passenger Elevator Mechanical Room HOLE DIA.: 2 inches

WOOD PROJECT NUMBER: 3205181652 TOTAL DEPTH: 0.5'

DEPTH	SAMPLE	PID READING (PPM)	MOISTURE CONTENT	LITHOLOGY	REMARKS
0				0 - 0.5' Concrete	
1				Subsurface utility lines encountered and boring discontinued	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					



1670 Corporate Circle, Suite 101
Petaluma, California 94954

TEST BORING RECORD

CLIENT:	Sears	SITE:	Sears Store #1528
BORING NO:	EB-4		9000 Northgate Drive
DATE:	6/4/2018		San Rafael, CA
LOGGED BY:	Scott Graham	DRILLED BY:	Cascade Drilling
DRILLING METHOD:	Hand Auger	SAMPLING METHOD:	Hand Auger

BORING LOCATION: Passenger Elevator Mechanical Room HOLE DIA.: 2 inches

WOOD PROJECT NUMBER: 3205181652 TOTAL DEPTH: 3.0'


DEPTH	SAMPLE	PID READING (PPM)	MOISTURE CONTENT	LITHOLOGY	REMARKS
0				0 - 0.5' Concrete	
1	X	0.2	moist	0.5 - 2.5' Brown lean clay (CL) soft, moist, 70% fines, 20% fine sand, 10% gravel	Soil sample EB-4 collected at 2 feet bgs
2					
3		0.1	moist	2.5 - 3.0' Yellowish brown sandy silt (ML), hard, moist	Soil sample collected and archived at the lab
4				Hardpan at 3.0'	
5					
6					
7					
8					
9					
10					
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25					

Subsurface Assessment Report
Sears #1528
9000 Northgate Drive
San Rafael, CA





APPENDIX B


Photographic Documentation


Photograph #1	Remarks
	<p>Geophysical markings over the suspect UST location outside the auto center.</p>


Photograph #2	Remarks
	<p>Additional view of the geophysical markings over the suspect UST location outside the auto center.</p>

Photograph #3	Remarks
	<p>Patched hand auger boring locations within the suspect UST location outside the auto center.</p>

Photograph #4	Remarks
	<p>Utility markings and proposed boring locations within the passenger elevator mechanical room.</p>

Photograph #5	Remarks
 A photograph of a utility room. On the left is a green electrical cabinet with orange safety handles. A large green pipe is on the right. The floor is concrete with white chalk circles and red spray-painted lines. In the background, there are buckets and other equipment.	<p>Additional view of the utility markings and proposed boring locations within the passenger elevator mechanical room.</p>

Photograph #6	Remarks
 A close-up photograph of a hand auger boring location. A hand auger is positioned in a hole on the floor. A large green pipe is on the left. The floor has red spray-painted lines and a piece of clear plastic sheeting is laid out nearby.	<p>Hand auger boring location within the passenger elevator mechanical room.</p>

Photograph #7	Remarks
	<p>Patched hand auger boring location within the passenger elevator mechanical room.</p>

Subsurface Assessment Report
Sears #1528
9000 Northgate Drive
San Rafael, CA



APPENDIX C

Laboratory Analytical Reports

June 14, 2018

Wood E&I Solutions Inc. - Petaluma, CA

Sample Delivery Group: L999480
Samples Received: 06/06/2018
Project Number: 3205181652.01
Description: Sears Northgate
Site: SEARS #1528
Report To: Gary Lieberman
1670 Corporate Circle
Suite 101
Petaluma, CA 94954

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	¹Cp
Tc: Table of Contents	2	²Tc
Ss: Sample Summary	3	³Ss
Cn: Case Narrative	4	⁴Cn
Sr: Sample Results	5	⁵Sr
EB-1-W L999480-01	5	
EB-2-1.5 L999480-02	6	
EB-1-2.5 L999480-03	7	
EB-4-2 L999480-04	8	
DRUM-1 L999480-05	9	⁶Qc
Qc: Quality Control Summary	10	⁷Gl
Total Solids by Method 2540 G-2011	10	
Mercury by Method 7471A	12	⁸Al
Metals (ICP) by Method 6010B	13	
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	16	
Semi-Volatile Organic Compounds (GC) by Method 8015	17	⁹Sc
Gl: Glossary of Terms	18	
Al: Accreditations & Locations	19	
Sc: Sample Chain of Custody	20	

SAMPLE SUMMARY

EB-1-W L999480-01 GW

Collected by
Scott Graham Collected date/time
06/04/18 13:30 Received date/time
06/06/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1121508	1.05	06/08/18 23:13	06/09/18 12:28	SHG

1
Cp

2
Tc

3
Ss

EB-2-1.5 L999480-02 Solid

Collected by
Scott Graham Collected date/time
06/04/18 11:35 Received date/time
06/06/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1122639	1	06/11/18 09:48	06/11/18 09:57	JD
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1122312	1	06/10/18 08:12	06/12/18 00:45	MTJ

4
Cn

5
Sr

6
Qc

EB-1-2.5 L999480-03 Solid

Collected by
Scott Graham Collected date/time
06/04/18 11:15 Received date/time
06/06/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1122639	1	06/11/18 09:48	06/11/18 09:57	JD
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1122312	1	06/10/18 08:12	06/12/18 00:58	MTJ

7
Gl

8
Al

EB-4-2 L999480-04 Solid

Collected by
Scott Graham Collected date/time
06/04/18 13:20 Received date/time
06/06/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1122641	1	06/11/18 09:37	06/11/18 09:44	JD
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1122312	1	06/10/18 08:12	06/12/18 01:10	MTJ

9
Sc

DRUM-1 L999480-05 Solid

Collected by
Scott Graham Collected date/time
06/04/18 13:35 Received date/time
06/06/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1122641	1	06/11/18 09:37	06/11/18 09:44	JD
Mercury by Method 7471A	WG1121496	1	06/07/18 19:05	06/08/18 11:22	ABL
Metals (ICP) by Method 6010B	WG1121432	1	06/08/18 12:38	06/09/18 19:06	WBD
Metals (ICP) by Method 6010B	WG1121432	1	06/08/18 12:38	06/10/18 15:26	CCE



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	703		34.6	105	1.05	06/09/2018 12:28	WG1121508
C22-C32 Hydrocarbons	645		34.6	105	1.05	06/09/2018 12:28	WG1121508
C32-C40 Hydrocarbons	40.3	J	34.6	105	1.05	06/09/2018 12:28	WG1121508
(S) o-Terphenyl	100			52.0-156		06/09/2018 12:28	WG1121508

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.6		1	06/11/2018 09:57	WG1122639

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	6.92		0.827	4.51	1	06/12/2018 00:45	WG1122312
C22-C32 Hydrocarbons	30.8		1.50	4.51	1	06/12/2018 00:45	WG1122312
C32-C40 Hydrocarbons	7.70		1.50	4.51	1	06/12/2018 00:45	WG1122312
(S) o-Terphenyl	79.6			18.0-148		06/12/2018 00:45	WG1122312

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.8		1	06/11/2018 09:57	WG1122639

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	2.76	J	0.874	4.77	1	06/12/2018 00:58	WG1122312
C22-C32 Hydrocarbons	7.40		1.59	4.77	1	06/12/2018 00:58	WG1122312
C32-C40 Hydrocarbons	2.95	J	1.59	4.77	1	06/12/2018 00:58	WG1122312
(S) o-Terphenyl	105			18.0-148		06/12/2018 00:58	WG1122312

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.7		1	06/11/2018 09:44	WG1122641

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	12.1		0.846	4.62	1	06/12/2018 01:10	WG1122312
C22-C32 Hydrocarbons	64.2		1.53	4.62	1	06/12/2018 01:10	WG1122312
C32-C40 Hydrocarbons	12.8		1.53	4.62	1	06/12/2018 01:10	WG1122312
(S) o-Terphenyl	72.8			18.0-148		06/12/2018 01:10	WG1122312

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.7		1	06/11/2018 09:44	WG1122641

1 Cp

2 Tc

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0348		0.00331	0.0236	1	06/08/2018 11:22	WG1121496

3 Ss

4 Cn

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	1.14	J	0.886	2.36	1	06/09/2018 19:06	WG1121432
Arsenic	6.51		0.768	2.36	1	06/09/2018 19:06	WG1121432
Barium	345		0.201	0.590	1	06/09/2018 19:06	WG1121432
Beryllium	0.979		0.0827	0.236	1	06/09/2018 19:06	WG1121432
Cadmium	U		0.0827	0.590	1	06/09/2018 19:06	WG1121432
Chromium	40.0		0.165	1.18	1	06/09/2018 19:06	WG1121432
Cobalt	28.8		0.272	1.18	1	06/09/2018 19:06	WG1121432
Copper	39.5		0.626	2.36	1	06/09/2018 19:06	WG1121432
Lead	10.8		0.224	0.590	1	06/09/2018 19:06	WG1121432
Molybdenum	U		0.189	0.590	1	06/09/2018 19:06	WG1121432
Nickel	66.3		0.579	2.36	1	06/09/2018 19:06	WG1121432
Selenium	U		0.874	2.36	1	06/09/2018 19:06	WG1121432
Silver	U		0.331	1.18	1	06/09/2018 19:06	WG1121432
Thallium	U		0.768	2.36	1	06/09/2018 19:06	WG1121432
Vanadium	68.4		0.283	2.36	1	06/10/2018 15:26	WG1121432
Zinc	60.4		0.697	5.90	1	06/09/2018 19:06	WG1121432

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3317087-1 06/11/18 09:57

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00100			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

L999471-01 Original Sample (OS) • Duplicate (DUP)

(OS) L999471-01 06/11/18 09:57 • (DUP) R3317087-3 06/11/18 09:57

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits
Total Solids	80.9	82.3	1	1.76		5

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3317087-2 06/11/18 09:57

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	100	85.0-115	



Method Blank (MB)

(MB) R3317086-1 06/11/18 09:44

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Total Solids	0.00100			

¹ Cp

² Tc

³ Ss

L999500-01 Original Sample (OS) • Duplicate (DUP)

(OS) L999500-01 06/11/18 09:44 • (DUP) R3317086-3 06/11/18 09:44

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	%	%		%		%
Total Solids	82.8	83.2	1	0.510		5

⁴ Cn

⁵ Sr

Laboratory Control Sample (LCS)

(LCS) R3317086-2 06/11/18 09:44

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3316458-1 06/08/18 10:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.00280	0.0200

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3316458-2 06/08/18 10:51 • (LCSD) R3316458-3 06/08/18 10:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Mercury	0.300	0.263	0.266	87.7	88.6	80.0-120			1.04	20

L999699-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L999699-01 06/08/18 10:56 • (MS) R3316458-4 06/08/18 10:58 • (MSD) R3316458-5 06/08/18 11:00

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	0.305	U	0.232	0.266	76.0	87.1	1	75.0-125			13.7	20

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3316699-1 06/09/18 17:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.750	2.00
Arsenic	U		0.650	2.00
Barium	U		0.170	0.500
Beryllium	U		0.0700	0.200
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Cobalt	U		0.230	1.00
Copper	U		0.530	2.00
Lead	0.252	J	0.190	0.500
Molybdenum	U		0.160	0.500
Nickel	U		0.490	2.00
Selenium	U		0.740	2.00
Silver	U		0.280	1.00
Thallium	U		0.650	2.00
Zinc	U		0.590	5.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Method Blank (MB)

(MB) R3316788-1 06/10/18 15:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Vanadium	U		0.240	2.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3316699-2 06/09/18 17:49 • (LCSD) R3316699-3 06/09/18 17:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Antimony	100	96.8	98.1	96.8	98.1	80.0-120			1.34	20
Arsenic	100	99.3	101	99.3	101	80.0-120			2.06	20
Barium	100	103	104	103	104	80.0-120			1.30	20
Beryllium	100	113	114	113	114	80.0-120			1.51	20
Cadmium	100	97.6	99.0	97.6	99.0	80.0-120			1.50	20
Chromium	100	98.9	99.2	98.9	99.2	80.0-120			0.303	20
Cobalt	100	103	104	103	104	80.0-120			0.860	20
Copper	100	103	104	103	104	80.0-120			1.78	20
Lead	100	101	102	101	102	80.0-120			0.981	20
Molybdenum	100	107	108	107	108	80.0-120			0.881	20
Nickel	100	103	105	103	105	80.0-120			1.76	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3316699-2 06/09/18 17:49 • (LCSD) R3316699-3 06/09/18 17:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Selenium	100	98.6	99.9	98.6	99.9	80.0-120			1.29	20
Silver	20.0	18.2	18.4	91.2	91.9	80.0-120			0.840	20
Thallium	100	99.7	101	99.7	101	80.0-120			1.11	20
Zinc	100	99.4	101	99.4	101	80.0-120			1.36	20

¹ Cp

² Tc

³ Ss

⁴ Cn

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3316788-2 06/10/18 15:04 • (LCSD) R3316788-3 06/10/18 15:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Vanadium	100	103	105	103	105	80.0-120			1.85	20

⁵ Sr

⁶ Qc

⁷ Gl

L999435-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L999435-01 06/09/18 17:54 • (MS) R3316699-6 06/09/18 18:01 • (MSD) R3316699-7 06/09/18 18:03

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Antimony	100	ND	58.0	60.0	57.2	59.2	1	75.0-125	<u>J6</u>	<u>J6</u>	3.40	20
Arsenic	100	3.76	102	103	98.2	99.2	1	75.0-125			1.01	20
Barium	100	33.7	145	154	111	120	1	75.0-125			6.48	20
Beryllium	100	0.578	117	116	116	115	1	75.0-125			0.543	20
Cadmium	100	ND	97.6	98.4	97.6	98.4	1	75.0-125			0.748	20
Chromium	100	14.5	112	110	97.7	95.5	1	75.0-125			1.96	20
Cobalt	100	5.02	113	112	108	107	1	75.0-125			0.763	20
Copper	100	7.46	115	113	107	106	1	75.0-125			1.41	20
Lead	100	7.05	112	110	105	103	1	75.0-125			1.26	20
Molybdenum	100	ND	102	106	101	106	1	75.0-125			4.60	20
Nickel	100	12.5	122	120	109	107	1	75.0-125			1.84	20
Selenium	100	ND	97.7	98.3	97.7	98.3	1	75.0-125			0.596	20
Silver	20.0	ND	18.0	18.1	89.8	90.6	1	75.0-125			0.869	20
Thallium	100	ND	100	100	100	100	1	75.0-125			0.0665	20
Zinc	100	32.2	132	128	100	95.4	1	75.0-125			3.70	20

⁸ Al

⁹ Sc



[L999480-05](#)

L999435-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L999435-01 06/10/18 15:10 • (MS) R3316788-6 06/10/18 15:19 • (MSD) R3316788-7 06/10/18 15:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Vanadium	100	27.0	130	126	103	98.6	1	75.0-125			3.50	20

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3316819-1 06/09/18 11:40

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
C12-C22 Hydrocarbons	U		33.0	100
C22-C32 Hydrocarbons	U		33.0	100
C32-C40 Hydrocarbons	U		33.0	100
(S) o-Terphenyl	99.4			52.0-156

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3316819-2 06/09/18 11:56 • (LCSD) R3316819-3 06/09/18 12:12

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C22-C32 Hydrocarbons	750	686	717	91.4	95.6	50.0-150			4.50	20
C12-C22 Hydrocarbons	750	876	881	117	117	50.0-150			0.542	20
(S) o-Terphenyl				106	107	52.0-156				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3316943-1 06/10/18 16:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C12-C22 Hydrocarbons	U		0.733	4.00
C22-C32 Hydrocarbons	U		1.33	4.00
C32-C40 Hydrocarbons	U		1.33	4.00
(S) o-Terphenyl	101			18.0-148

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3316943-2 06/10/18 16:15 • (LCSD) R3316943-3 06/10/18 16:30

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
C22-C32 Hydrocarbons	25.0	24.0	23.7	96.0	94.7	50.0-150			1.44	20
C12-C22 Hydrocarbons	25.0	21.0	21.1	83.8	84.4	50.0-150			0.742	20
(S) o-Terphenyl				96.5	99.4	18.0-148				

5 Sr

6 Qc

7 Gl

L1000382-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1000382-01 06/10/18 17:50 • (MS) R3316943-4 06/10/18 16:44 • (MSD) R3316943-5 06/10/18 16:58

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C22-C32 Hydrocarbons	29.2	3.90	23.5	22.5	67.3	63.9	1	50.0-150			4.30	20
C12-C22 Hydrocarbons	29.2	0.859	19.2	18.1	62.9	59.2	1	50.0-150			5.73	20
(S) o-Terphenyl					63.7	70.6		18.0-148				

8 Al

9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

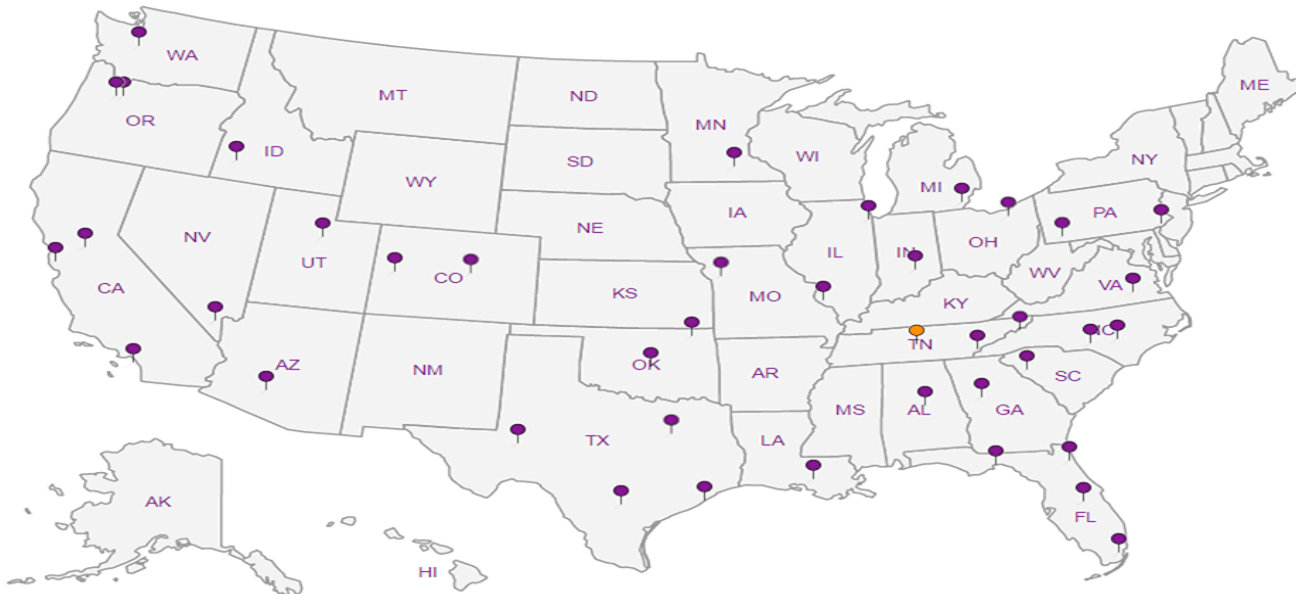
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



ESC Lab Sciences
Non-Conformance Form

Login #: L999480	Client: HARDNCA	Date: 6/6/18	Evaluated by: Troy Dunlap
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Non-Conformance (check applicable items)

Sample Integrity		Chain of Custody Clarification	
Parameter(s) past holding time		Login Clarification Needed	If Broken Container:
Improper temperature		Chain of custody is incomplete	Insufficient packing material around container
Improper container type	X	Please specify Metals requested.	Insufficient packing material inside cooler
Improper preservation		Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume.		Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.		Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.		Trip Blank not received.	If no Chain of Custody:
Broken container		Client did not "X" analysis.	Received by:
Broken container:		Chain of Custody is missing	Date/Time:
Sufficient sample remains			Temp./Cont. Rec./pH:
			Carrier:
			Tracking#

Login Comments: What metals for DRUM-1?

Client informed by:	Call	Email	X	Voice Mail	Date: 06/06/18	Time: 1730
TSR Initials: bjf	Client Contact: Gary Lieberman					

Login Instructions:

M6010CAM17

This E-mail and any attached files are confidential, and may be copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. If you have received this message in error, please contact the sender immediately and delete/destroy all information received.

Cabrera, Craig T

From: Lieberman, Gary A
Sent: Monday, July 02, 2018 1:36 PM
To: jbarnes@MARINCOUNTY.ORG
Subject: Submittal of Subsurface Assessment Report, Sears Retail Store #1528 9000 Northgate Drive San Rafael, CA
Attachments: 1528 San Rafael CA - Subsurface Assessment Report_6-29-18 - FINAL.pdf

Julia – on behalf of Sears Holdings Management Corporation (Sears), attached please find *Subsurface Assessment Report, Sears Retail Store #1528 9000 Northgate Drive San Rafael, CA*. This report details the results of the investigation to determine the lateral and vertical extent of the release in soil and groundwater in the basement area surrounding the elevator shaft. Based on the results of the additional investigation, Sears is requesting no further investigation associated with the release and closure for the site.

Please let us know if you have any questions or require a hard copy of the report. Gary

Gary A. Lieberman, CEM
Direct +01 (707) 793-3858 Mobile +01 (707) 888-1683

From: Lieberman, Gary A
Sent: Monday, April 30, 2018 8:49 AM
To: 'jbarnes@MARINCOUNTY.ORG' <jbarnes@MARINCOUNTY.ORG>
Cc: Kaye, Bruce <Bruce.Kaye@searshc.com>; Lundquist, Jacob <Jacob.Lundquist@searshc.com>; Lieberman, Gary A <gary.lieberman@woodplc.com>; 'Cabrera, Craig T' <craig.cabrera@woodplc.com>; 'Feeley, Patricia' <Patricia.Feeley@searshc.com>
Subject: Sears #1528 San Rafael CA - Potential Release

Julia – as a follow up to our discussion last Friday April 26, 2018, on behalf of Sears Holdings Management Corporation (Sears), this e-mail will serve as the official notification for a potential release at the above referenced site.

Wood is the consultant for Sears who is vacating the facility. On June 30, 2017, a consulting firm working on behalf of the property owner installed one boring (SB-Elev-P1) in the basement motor room below the passenger elevator (see below depiction) and a soil sample was collected at one foot below the concrete slab, immediately above encountered groundwater at this location. In addition a groundwater sample was also collected from this borehole location.



Results of the soil sampling detected total petroleum hydrocarbons (TPH) as diesel (TPHd) and TPH oil (TPHo) at concentrations of 560 and 1,800 milligrams per kilogram (mg/kg), respectively. Results of the groundwater sampling detected TPHd and TPHo at concentrations of 38,000 and 120,000 micrograms per liter ($\mu\text{g/L}$), respectively (see attached laboratory report). Based on the concentrations of TPH in soil and groundwater, there appears to be a potential release of oil from the hydraulic equipment.

At this time, Wood has been engaged by Sears to perform an investigation to determine the lateral and vertical extent of the release in soil and groundwater that includes installation of borings in the basement area

surrounding the elevator shaft. Upon completion of this investigation, the results of the investigation will formerly transmitted to the County of Marin Department of Public Works (DPW).

If you have any questions or require additional information, please feel free to contact Patricia Feeley with Sears via e-mail or at 847-286-2884.

Gary A. Lieberman, CEM

Wood Environment & Infrastructure Solutions, Inc.

Associate Geology Professional/Project Manager

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Gary.Lieberman@woodplc.com www.woodplc.com

The logo for Wood Environment & Infrastructure Solutions, Inc. features the word "wood." in a bold, lowercase, sans-serif font. The period at the end of the word is a small, solid dot.