



WD-40



MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Manufacturer:	WD-40 Company	Telephone:	
Address:	1061 Cudahy Place (92110) P.O. Box 80607 San Diego, California 92138-0607	Emergency only:	1-(800) 424-9300 (CHEMTREC)
		Information:	(619) 275-1400
		Chemical Name:	Organic Mixture
		Trade Name:	WD-40 Aerosol

II. HAZARDOUS INGREDIENTS

Chemical Name	CAS Number	%	Exposure Limit ACGIH/OSHA
Aliphatic Petroleum Distillates	8052-41-3	45-50	100 ppm PEL
Petroleum Base Oil	64742-65-0	15-25	5 mg/M ³ TWA (mist)
LVP Hydrocarbon Fluid	64742-47-8	12-18	1200 mg/M ³ TWA
Carbon Dioxide	124-38-9	2-3	5000 ppm PEL
Non-hazardous Ingredients		< 10	

III. PHYSICAL DATA

Boiling Point:	323°F (minimum)	Evaporation Rate:	Not determined
Vapor Density (air=1):	Greater than 1	Vapor Pressure:	110 ±5 PSI @ 70°F
Solubility in Water:	insoluble	Appearance:	Light amber
Specific Gravity (H ₂ O=1):	0.817 @ 72°F	Odor:	Characteristic odor
Percent Volatile (volume):	74%	VOC:	412 grams/liter (49.5%)

IV. FIRE AND EXPLOSION

Flash Point:	131°F Tag Closed Cup
Flammable Limits:	(Solvent Portion) [LeI] 1.0% [UeI] 6.0%
Extinguishing Media:	CO ₂ , Dry Chemical, Foam.
Special Fire Fighting Procedures:	Contents Under Pressure
Unusual Fire and Explosion Hazards:	FLAMMABLE - U.F.C. level 3 AEROSOL

V. HEALTH HAZARD / ROUTE(S) OF ENTRY

Threshold Limit Value	Aliphatic Petroleum Distillates (Stoddard Solvent) lowest TLV (ACGIH 100 ppm.)
Symptoms of Overexposure	
Inhalation (Breathing):	May cause anesthesia, headache, dizziness, nausea and upper respiratory irritation.
Skin contact:	May cause drying of skin and/or irritation.
Eye contact:	May cause irritation, tearing and redness.
Ingestion (Swallowed):	May caused irritation, nausea, vomiting and diarrhea.
First Aid Emergency Procedures	
Ingestion (Swallowed):	Do not induce vomiting, seek medical attention.
Eye Contact:	Immediately flush eyes with large amounts of water for 15 minutes.
Skin Contact:	Wash with soap and water.
Inhalation (Breathing):	Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
	Pre-existing medical conditions such as eye, skin and respiratory disorders may be aggravated by exposure.
DANGER!	
Aspiration Hazard:	If swallowed, can enter lungs and may cause chemical pneumonitis. Do not induce vomiting. Call Physician immediately.
Suspected Cancer Agent	The components in this mixture have been found to be noncarcinogenic by NTP, IARC and OSHA
Yes ___ No <u>X</u>	

VI. REACTIVITY DATA

Stability:	Stable <u>X</u>	Unstable _____
Conditions to avoid:	NA	
Incompatibility:	Strong oxidizing agents	
Hazardous decomposition products:	Thermal decomposition may yield carbon monoxide and/or carbon dioxide.	
Hazardous polymerization:	May occur _____	Will not occur <u>X</u>

VII. SPILL OR LEAK PROCEDURES

Spill Response Procedures

Spill unlikely from aerosol cans. Leaking cans should be placed in plastic bag or open pail until pressure has dissipated.

Waste Disposal Method

Empty aerosol cans should not be punctured or incinerated; bury in land fill. Liquid should be incinerated or buried in land fill. Dispose of in accordance with local, state and federal regulations.

VIII. SPECIAL HANDLING INFORMATION

Ventilation:	Sufficient to keep solvent vapor less than TLV.
Respiratory Protection:	Advised when concentrations exceed TLV.
Protective Gloves:	Advised to prevent possible skin irritation.
Eye Protection:	Approved eye protections to safeguard against potential eye contact, irritation or injury.
Other Protective Equipment:	None required.

IX. SPECIAL PRECAUTIONS

Keep from sources of ignition. Avoid excessive inhalation of spray particles, do not take internally. Do not puncture, incinerate or store container above 120°F. Exposure to heat may cause bursting. Keep can away from electrical current or battery terminals. Electrical arcing can cause burn-through (puncture) which may result in flash fire, causing serious injury. Keep from children.

X. TRANSPORTATION DATA (49 CFR 172.101)

Domestic Surface

Description:	Consumer Commodity
Hazard Class:	ORM-D
ID No:	None
Label Required:	Consumer commodity (ORM-D)

XI. REGULATORY INFORMATION

All ingredients for this product are listed on the TSCA inventory.

SARA Title III chemicals:	None
California Prop 65 chemicals:	None
CERCLA reportable quantity:	None
RCRA hazardous waste no:	D001 (Ignitable)

SIGNATURE: Peter Fougner  TITLE: Director of Global Quality Assurance

REVISION DATE: December, 2004 SUPERSEDES: November, 2003

NA: Not applicable NDA: No data available ‹ = Less than › = More than

We believe the statements, technical information and recommendations contained herein are reliable. However, the data is provided without warranty, expressed or implied. It is the user's responsibility both to determine safe conditions for use of this product and assume loss, damage or expense, direct or consequential, arising from its use. Before using product, read label.

MATERIAL SAFETY DATA SHEET

F.L.#2

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME Viscosity Oil (For OTC, Part No. 208629)	EMERGENCY TEL. (312) 847-	NE NO. 24
ADDRESS (Number, Street, City, State, and ZIP Code) 3200 S. Western Avenue Chicago, Illinois 60608		
CHEMICAL NAME AND SYNONYMS NA	TRADE NAME AND SYNONYM Calibration Fluid 14	
CHEMICAL FAMILY Petroleum Hydrocarbon	FORMULA Proprietary	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS.	%	TLV (Units)
PIGMENTS	-		BASE METAL	-	
CATALYST	-		ALLOYS	-	
VEHICLE	-		METALLIC COATINGS	-	
SOLVENTS		OSHA 500ppm	FILLER METAL PLUS COATING OR CORE FLUX	-	
ADDITIVES		(ACGIH: 200ppm) (CAS 8008-20-5)	OTHERS	-	
OTHERS	-				
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
Mineral Oil (CAS 64742-80-9)				20-40	5mg/M ³
Corrosion Inhibitor Blend (CAS: N.A.)				<50	N.A.
Anti-oxidant (CAS 128-37-0)				KI	10mg/M ³
Note: No ingredient is a carcinogen, as defined by 29CFR 1910.1200.					

SECTION III - PHYSICAL DATA

BOILING POINT (°F) Distillate	Wide Range	SPECIFIC GRAVITY (H ₂ O=1)	0.82
VAPOR PRESSURE (MM Hg.)	<1	PERCENT. VOLATILE BY VOLUME (%)	50-70
VAPOR DENSITY (AIR=1)	>>1	EVAPORATION RATE (ethyl ether =1)	<<<1
SOLUBILITY IN WATER	Insoluble		
APPEARANCE AND ODOR	Light amber liquid with mild odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) TCC: 167°F (75°C) min.	FLAMMABLE LIMITS	Lel	Uel
	Solvent	1.0	6.0
EXTINGUISHING MEDIA Foam, dry chemical, CO ₂			
SPECIAL FIRE FIGHTING PROCEDURES Self-contained breathing apparatus when fire fighting in confined areas. Use water to cool fire-exposed drums.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Do not use cutting or welding torches on drums (even when empty).			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
 Ingredient TLV's listed in Section II. No TLV established for product.

EFFECTS OF OVEREXPOSURE EYES: severe irritation. SKIN: may cause drying of
 prolonged or repeated contact may result in irritation. INHALATION: excess
 inhalation causes headache, dizziness and nausea.

EMERGENCY AND FIRST AID PROCEDURES
 EYES: Flush with water for 15 minutes. Contact a doctor. SKIN: wash well with
 soap and water. INHALATION: remove to fresh air area and avoid further inha on.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Avoid contact with oxidizing agents.			
HAZARDOUS DECOMPOSITION PRODUCTS Combustion: oxides of carbon, trace oxides of sulfur			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
 Avoid exposure to sparks, fire, hot metal surfaces or other sources of ignition.
 Absorb on suitable absorbants.

WASTE DISPOSAL METHOD
 In accordance with federal, state and local regulations. Can be incinerated under
 safe conditions or disposed in other suitable manner. Contains barium (0.07% wt),
 Hazardous Waste No. D005, US-EPA Resource Conservation and Recovery Act.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)
 Use NIOSH approved respiratory equipment when TLV is exceeded.

VENTILATION	LOCAL EXHAUST	Provide	SPECIAL
	MECHANICAL (General)		OTHER

PROTECTIVE GLOVES
 ImperVIOUS gloves

EYE PROTECTION
 Safety glasses or goggles

OTHER PROTECTIVE EQUIPMENT
 Eye bath and safety shower nearby.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 Keep away from heat, sparks and open flame. Use with adequate ventilation.

Avoid repeated or prolonged skin contact.

OTHER PRECAUTIONS

MATERIAL SAFETY DATA SHEET

Radiator Specialty Company

1400 W. INDEPENDENCE BLVD. • CHARLOTTE, N.C. 28208 • 704-377-6555

F.L.#7

MATERIAL SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration.
(Non-Mandatory Form) Form Approved OMB No. 1218-0072

SECTION I GENERAL INFORMATION

PRODUCT NAME SOLDER SEAL/GUNK FUEL INJECTOR CLEANER
PARTS NUMBER M49-12

NOTE: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

SECTION II HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

COMPONENT	WT.%	C.A.S. NO.	TLV (ACGIH XXXX OSHA <u> </u>)
Aliphatic Petroleum Distillate	66-67	8052-41-3	100ppm (Air)

Comments: National Toxicology Program (NTP)

Components not identified are non-hazardous according to 29 CFR 1910.1200

SECTION III PHYSICAL/CHEMICAL CHARACTERISTICS

Specific Gravity (H₂O = 1) 0.80-0.81 pH NDA
Solubility in Water Insoluble Solubility in Solvent Petroleum
Flash Point (Method) - F° 100°F (TCC) % Volatiles By Wt. Greater Than 90%
Melting Point - F° NDA Boiling Point - F° 300°F
Vapor Pressure (mmHg) N/A Vapor Density (Air = 1) N/A
Evaporation Rate (Butyl Acetate = 1) N/A
Appearance and Odor Dark liquid with relatively strong odor.

SECTION IV FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA: Caution: COMBUSTIBLE!!
Water Fog Foam XXX CO₂ XXX Dry Chemical XXX

SPECIAL FIRE FIGHTING PROCEDURES. Wear self-contained, positive pressure breathing apparatus and protective clothes.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapors heavier than air. Draft may move vapors toward remote ignition source.

Part: DC14 Line: SF Desc: DEEP CREEP

SEA FOAM SALES COMPANY DC-14

*** MATERIAL SAFETY DATA SHEET ***

SEA FOAM SALES COMPANY

P.O. BOX 5178

HOPKINS, MN 55343

(612)938-4811

DC-14

(PAGE 1)

DATE OF PREP: 12/07/99

***** SECTION I - MANUFACTURER IDENTIFICATION *****

MANUFACTURER'S NAME: HYDROSOL, INC.

ADDRESS : 8407 S. 77th Avenue
Bridgeview, IL 60455

EMERGENCY PHONE : 708-598-7100

INFORMATION PHONE : 708-598-7100

PRODUCT NAME: DEEP CREEP PENETRATING OIL

PRODUCT CODE: L-12749

***** SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION *****

REPORTABLE COMPONENTS	VAPOR PRESSURE		WEIGHT
	mm Hg @ TEMP		PERCENT
PALE OIL	.01	68	40-60%
NAPHTHA	10	68	25-35%
IPA	33	68	10-20%
CARBON DIOXIDE	38650	60	3-5%

*** No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present. ***

***** SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS *****

BOILING RANGE: 177 deg F - 500 deg F SPECIFIC GRAVITY (H2O=1): 0.85
VAPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE: SLOWER THAN ETHER
SOLUBILITY IN WATER: NIL

APPEARANCE AND ODOR: AEROSOL PRODUCT

***** SECTION IV - FIRE AND EXPLOSION HAZARD DATA *****

FLASH POINT: 55 deg F METHOD USED: TCC
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1 UPPER: 12

EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES

WATER SPRAY MAY BE INEFFECTIVE. WATER MAY BE USED TO COOL CONTAINERS TO PREVENT PRESSURE BUILD-UP AND EXPLOSION WHEN EXPOSED TO EXTREME HEAT. IF WATER IS USED, FOG NOZZLES PREFERRED. WEAR GOGGLES AND SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS

CLOSED CONTAINERS MAY EXPLODE FROM INTERNAL PRESSURE BUILD-UP WHEN EXPOSED TO EXTREME HEAT AND DISCHARGE CONTENTS. VAPOR ACCUMULATION CAN FLASH OR EXPLODE IF IGNITED. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE READILY APPARENT. OBTAIN MEDICAL ATTENTION.

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SEA FOAM SALES COMPANY

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SECTION V - REACTIVITY DATA
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STABILITY: STABLE
CONDITIONS TO AVOID
APPLICATION TO HOT SURFACES. STORAGE ABOVE 120 DEG F. EXPOSURE TO OPEN
FLAME.

INCOMPATIBILITY (MATERIALS TO AVOID)
STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS
MAY PRODUCE FUMES WHEN HEATED TO DECOMPOSITION. FUMES MAY CONTAIN CARBON
MONOXIDE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

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SECTION VI - HEALTH HAZARD DATA
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INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
RESPIRATORY IRRITATION, HEADACHE, NAUSEA, FATIGUE, DROWSINESS, IMPAIRED
CO-ORDINATION.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE
SKIN: CONTACT MAY DRY THE SKIN; PROLONGED CONTACT MAY CAUSE MODERATE
IRRITATION. EYES: LIQUID OR VAPOR CAN CAUSE MODERATE TO SEVERE IRRITATION.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
NOT EASILY ABSORBED. SOLVENT ACTION CAN DRY AND DEFAT THE SKIN CAUSING THE
SKIN TO CRACK, LEADING TO DERMATITIS.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
NOT A LIKELY ROUTE OF EXPOSURE. IF SWALLOWED, DO NOT INDUCE VOMITING. SEEK
IMMEDIATE MEDICAL ADVICE AND/OR ATTENTION.

HEALTH HAZARDS (ACUTE AND CHRONIC)
ACUTE: EYE IRRITANT. POSSIBLE SKIN IRRITANT. CHRONIC: NONE KNOWN.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSED
NONE KNOWN.

EMERGENCY AND FIRST AID PROCEDURES
INHALATION: REMOVE TO FRESH AIR. ADMINISTER OXYGEN IF NEEDED. APPLY
ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED. GET MEDICAL ATTENTION.
SKIN: WIPE OFF WITH TOWEL. WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION
IF IRRITATION PERSISTS.
EYES: WASH IMMEDIATELY WITH LARGE VOLUMES OF FRESH WATER FOR AT LEAST 15
MINUTES. GET MEDICAL ATTENTION.

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Part: DC14 Line: SF Desc: DEEP CREEP

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE ALL SOURCES OF IGNITION.
CLEAN UP AREA WITH ABSORBENT MATERIAL AND PLACE IN CLOSED CONTAINERS FOR
DISPOSAL.

WASTE DISPOSAL METHOD

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. BEFORE
ATTEMPTING CLEAN UP, REFER TO OTHER SECTIONS OF THIS MSDS FOR HAZARD CAUTION
INFORMATION.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

STORE AND USE IN COOL, DRY, WELL-VENTILATED AREAS. DO NOT STORE ABOVE 120
DEG F. DO NOT PUNCTURE OR INCINERATE (BURN) CANS. DO NOT STICK PIN, NAIL OR
ANY OTHER SHARP OBJECT INTO OPENING ON TOP OF CAN. DO NOT SPRAY IN EYES. DO
NOT TAKE INTERNALLY. SEE PRODUCT LABEL FOR ADDITIONAL INFORMATION.

OTHER PRECAUTIONS

SMALL PRESSURIZED CONTAINERS OF FLAMMABLE PRODUCTS MAY BE STORED IN AREAS
SUITABLE FOR ORDINARY COMBUSTIBLES WITH RESPECT TO CONSTRUCTION, DRAINAGE,
CONTROL OF IGNITION SOURCES, AND VENTILATION EXCEPT THAT THEY SHOULD NOT BE
STORED IN BASEMENTS.

===== SECTION VIII - CONTROL MEASURES =====

RESPIRATORY PROTECTION

NONE UNDER NORMAL USE. AVOID BREATHING VAPORS. IN RESTRICTED AREAS, USE
APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF
PARTICLES AND VAPOR. IN CONFINED AREAS, USE APPROVED AIR LINE TYPE
RESPIRATOR OR HOOD. SELF-CONTAINED BREATHING APPARATUS IS REQUIRED FOR VAPOR
CONCENTRATIONS ABOVE PEL/TLV LIMITS.

VENTILATION

SUFFICIENT TO PREVENT INHALATION OF SOLVENT VAPORS. GENERAL DILUTION AND/OR
LOCAL EXHAUST VENTILATION IN VOLUME OR PATTERN TO KEEP PEL/TLV OF MOST
HAZARDOUS INGREDIENT BELOW ACCEPTABLE LIMIT AND LEL BELOW STATED LIMIT.

PROTECTIVE GLOVES

NONE UNDER NORMAL USE. SOLVENT RESISTANT REQUIRED FOR PROLONGED OR REPEATED
CONTACT.

EYE PROTECTION

NONE UNDER NORMAL USE; HOWEVER, USE OF SAFETY GLASSES WITH SPLASH GUARDS OR
FULL FACE SHIELD IS RECOMMENDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

NONE UNDER NORMAL USE; HOWEVER, USE OF SOLVENT RESISTANT APRONS OR OTHER
CLOTHING IS RECOMMENDED.

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WORK/HYGIENIC PRACTICES

EYE WASHES AND SAFETY SHOWERS IN THE WORKPLACE ARE RECOMMENDED.

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SECTION IX - DISCLAIMER

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE.
HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THE

Part: DC14 Line: SF Desc: DEEP CREEP

INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL, WE ASSUME NO RESPONSIBILITY FOR ITS USE.

*** End of Report ***



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: SUPER LUBE MULTIPURPOSE AEROSOL WITH PTFE *

* For all aerosol products manufactured prior to January 1, 2003 with batch codes earlier than 3AZ-XXXX. Batch codes located on bottom of can.

Part Numbers: 31040, 31110, 32015

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: SYNCO CHEMICAL CORPORATION
ADDRESS: 24 DaVINCI DRIVE, BOHEMIA, NEW YORK 11716
EMERGENCY PHONE NUMBER: 800-424-9300 INFORMATION PHONE: 631-567-5300
DATE PREPARED: 02-13-1992
DATE ISSUED: 01-04-2010
REASON REVISED: update date

SECTION II - INGREDIENTS/SARA III INFORMATION

COMPONENTS	CAS #	OSHA PEL	WGT. %
SUPER LUBE GREASE			>20%
HEPTANE*	142-82-5	500 PPM	>70%
CARBON DIOXIDE	124-38-9	10000 PPM	> 2%

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT	Not applicable/is not a liquid
SPECIFIC GRAVITY: (25C)	0.8660
VAPOR DENSITY	Heavier than Air
VAPOR PRESSURE	80-90 psig @ 70 °F
EVAPORATION RATE	Slower than Ether
SOLUBILITY IN WATER	Nil
APPEARANCE AND COLOR	Aerosol Product
NFPA RATING	Level 3
VOC (g/L)	1.56
WATER CONTENT (%)	None det. <0.01
TOTAL VOLATILES (%)	0.18



SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT >200F **METHOD USED:** Pensky Martens Closed Cup
FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: N/D **UPPER:** N/D
EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO₂, DRY CHEMICAL, WATER FOG
SPECIAL FIREFIGHTING PROCEDURES: Water spray may be ineffective. Water may be used to cool containers to prevent pressure build-up and explosion when exposed to extreme heat. If water is used, fog nozzles preferred. Wear goggles and self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may explode from internal pressure build-up when exposed to extreme heat and discharge contents. Vapor accumulation can flash or explode if ignited. Overexposure to decomposition products may cause a health hazard. Symptoms may not be readily apparent. Obtain medical attention.

SECTION V - REACTIVITY DATA

STABILITY: Stable
CONDITIONS TO AVOID: Application to hot surfaces. Storage above 120 degrees F. Exposure to open flame.
INCOMPATIBILITY (Materials to avoid): Strong oxidizing agents
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: May produce fumes when heated to decomposition. Fumes may contain carbon monoxide.
HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Respiratory irritation, Headache, Nausea, Fatigue, Drowsiness, Impaired Coordination.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

SKIN: Contact may dry the skin; Prolonged contact may cause moderate irritation
EYES: Liquid or vapor can cause moderate to severe irritation

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Not easily absorbed. Solvent action can dry and defat the skin to crack, leading to dermatitis.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Not a likely route of exposure. If swallowed, do not induce vomiting. Seek medical advice and/or attention.

HEALTH HAZARDS (ACUTE AND CHRONIC)

ACUTE: Eye irritant. Possible skin irritant
CHRONIC: None Known

CARCINOGENICITY:

NTP? NO **IARC MONOGRAPHS?** NO **OSHA REGULATED?** NO

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None Known

EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Remove to fresh air. Administer oxygen if needed. Apply artificial respiration if breathing has stopped. Get medical attention.

SKIN: Wipe off towel. Wash with soap and water. Get medical attention if irritation persists

EYES: Wash immediately with large volumes of fresh water for at least 15 minutes. Get medical attention.



SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: AVOID BREATHING VAPORS. Ventilate areas. Remove all sources of ignition. Clean up area with absorbent material and place in closed containers for disposal.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State and Federal Regulations. Before attempting clean up, refer to other sections of the MSDS for hazard caution information.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Store In cool, dry, well-ventilated areas. Do not store above 120°F. Do not puncture or incinerate (burn) cans. Do not stick pin, nail or any other sharp object into opening on top of can. Do not spray in eyes. Do not take internally. See product label for additional information.

OTHER PRECAUTIONS

Small pressurized containers of flammable products may be stored in areas suitable for ordinary combustibles with respect to construction, drainage, control of ignition sources, and ventilation except that they should not be stored in basements.

SECTION VIII - Control Measures

RESPIRATORY PROTECTION: None under normal use. Avoid breathing vapors. In restricted areas, use approved chemical/mechanical filters designed to remove a combination of particles and vapor. In confined areas, use approved air line type respirator or hood. Self contained breathing apparatus is required for vapor concentrations above PEL/TLV limits.

VENTILATION: Sufficient to prevent inhalation of solvent vapors. General dilution and/or local exhaust ventilation in volume or pattern to keep PEL/TLV of most hazardous ingredient below acceptable limit and LEL below stated limit.

PROTECTIVE GLOVES: None under normal use. Solvent resist required for prolonged or repeated contact.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: None under normal use; however, use of safety glasses with splash guards or full face shield is recommended.

WORK/HYGENIC PRACTICES: Eye wash and safety showers in the work place are recommended.

SECTION IX - DISCLAIMER

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof. Because the information contained herein may be applied under conditions beyond our control, we assume no responsibility for its use.

HMS CODES:

FIRE:	3
HEALTH:	2
REACTANCE:	0
OTHER:	0

SLAWH960601.1

13119, 13203, 13204
Premium (High) Vacuum Pump Oil
Material Safety Data Sheet

SPX Corporation
 855 Eisenhower Drive
 Owatonna, MN 55080-0995 USA

MSDS No. 634103001
 Revision Date 2/10/2006

IMPORTANT: Read this MSDS before handling or disposing of this product and pass this information on to employees, customers and users of this product.

Hazard Rankings		
	HMIS	NFPA
Health Hazard	0	0
Fire Hazard	1	1
Reactivity	0	0

* = Chronic Health Hazard

Emergency Overview

Physical State Liquid.
Color Light amber **Odor** Mild petroleum odor

Protect eyes from misting or spraying material.
Protect exposed skin from repeated or prolonged exposure.
Do not store material in open or unmarked containers.
Spills may create a slipping hazard.

Protective Equipment

Minimum Recommended
 See Section 8 for Details



SECTION 1. PRODUCT IDENTIFICATION

Trade Name	Premium (High) Vacuum Pump Oil	Technical Contact	(800) 248-4684
Product Number	13119, 13203, 13204	Medical Emergency	(832) 486-4700
CAS Number	Mixture.	CHEMTREC Emergency (United States Only)	(800) 424-9300
Product Family	Industrial oil		
Synonyms	Lubricating oil High vacuum pump oil		

SECTION 2. COMPOSITION

Component Name(s)	CAS Registry No.	Concentration (%)
Distillates, petroleum, solvent-refined heavy paraffinic	64741-88-4	100

SECTION 3. HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

Major Route(s) of Entry Skin contact.

Signs and Symptoms of Acute Exposure

Inhalation At elevated temperatures or in enclosed spaces, product mist or vapors may irritate the mucous membranes of the nose, the throat, bronchi, and lungs.

Eye Contact This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists. Symptoms include stinging, watering, redness, and swelling.

Skin Contact This material can cause mild skin irritation from prolonged or repeated skin contact. Injection under the skin can cause inflammation and swelling. Injection of pressurized hydrocarbons can cause severe, permanent tissue damage. Initial symptoms may be minor. Injection of petroleum hydrocarbons requires immediate medical attention.

Ingestion If swallowed, large volumes of material can cause generalized depression, headache, drowsiness, nausea, vomiting and diarrhea. Smaller doses can cause a laxative effect. If aspirated into the lungs, liquid can cause lung damage.

Chronic Health Effects Summary This product contains a petroleum-based mineral oil. Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, (dermatitis) or oil acne. Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or other pulmonary effects.

Conditions Aggravated by Exposure Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin

Target Organs May cause damage to the following organs: skin.

Carcinogenic Potential This product is not known to contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC or NTP.

OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).

OSHA Health Hazard Classification				OSHA Physical Hazard Classification					
Irritant	<input type="checkbox"/>	Sensitizer	<input type="checkbox"/>	Combustible	<input type="checkbox"/>	Explosive	<input type="checkbox"/>	Pyrophoric	<input type="checkbox"/>
Toxic	<input type="checkbox"/>	Highly Toxic	<input type="checkbox"/>	Flammable	<input type="checkbox"/>	Oxidizer	<input type="checkbox"/>	Water-reactive	<input type="checkbox"/>
Corrosive	<input type="checkbox"/>	Carcinogenic	<input type="checkbox"/>	Compressed Gas	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>	Unstable	<input type="checkbox"/>

SECTION 4. FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

Inhalation Vaporization is not expected at ambient temperatures. This material is not expected to cause inhalation-related disorders under anticipated conditions of use. In case of overexposure, move the person to fresh air.

Eye Contact Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness, or pain persists.

Skin Contact If burned by hot material, cool skin by quenching with large amounts of cool water. For contact with product at ambient temperatures, remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Thoroughly clean contaminated clothing before reuse. Discard contaminated leather goods. If material is injected under the skin, seek medical attention immediately.

Ingestion Do not induce vomiting unless directed to by a physician. Do not give anything to drink unless directed to by a physician. Never give anything by mouth to a person who is not fully conscious. If significant amounts are swallowed or irritation or discomfort occurs, seek medical attention immediately.

Notes to Physician

SKIN: In the event of injection in underlying tissue, immediate treatment should include extensive incision, debridement and saline irrigation. Inadequate treatment can result in ischemia and gangrene. Early symptoms may be minimal.

INGESTION: The viscosity range of the product(s) represented by this MSDS is greater than 100 SUS at 100°F. There is a low risk of aspiration upon ingestion. Careful gastric lavage or emesis may be considered to evacuate large quantities of material.

SECTION 5. FIRE FIGHTING MEASURES

NFPA Flammability Classification	NFPA Class-IIIB combustible material.		
Flash Point	Closed cup: 208°C (406°F). (Pensky-Martens. (Minimum)) Open cup: 215°C (419°F) (Cleveland. (Minimum)).		
Lower Flammable Limit	No data.	Upper Flammable Limit	No data.
Autoignition Temperature	Not available.		
Hazardous Combustion Products	Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur and/or nitrogen.		
Special Properties	This material can burn but will not readily ignite. This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.		
Extinguishing Media	Use dry chemical, foam, Carbon Dioxide or water fog. Water or foam may cause frothing. Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces.		
Protection of Fire Fighters	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.		

SECTION 6. ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Contain large spills to maximize product recovery or disposal. Prevent entry into waterways or sewers. In urban area, cleanup spill as soon as possible. In natural environments, seek cleanup advice from specialists to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used. Comply with all laws and regulations.

SECTION 7. HANDLING AND STORAGE

- Handling** Avoid contamination and extreme temperatures to minimize product degradation. Empty containers may contain product residues that can ignite with explosive force. Do not pressurize, cut, weld, braze solder, drill, grind or expose containers to flames, sparks, heat or other potential ignition sources. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.
- Storage** Keep container closed. Do not store with strong oxidizing agents. Do not store at elevated temperatures. Avoid storing product in direct sunlight for extended periods of time. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Engineering Controls** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). An eye wash station and safety shower should be located near the work-station.
- Personal Protective Equipment** Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.



- Eye Protection** Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Wear goggles if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125°F (51°C). Have suitable eye wash water available.
- Hand Protection** Use gloves constructed of chemical resistant materials such as heavy nitrile rubber if frequent or prolonged contact is expected. Use heat-protective gloves when handling product at elevated temperatures.
- Body Protection** Use clean protective clothing if splashing or spraying conditions are present. Protective clothing may include long-sleeve outer garment, apron, or lab coat. If significant contact occurs, remove oil-contaminated clothing as soon as possible and promptly shower. Launder contaminated clothing before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.
- Respiratory Protection** The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

General Comments Use good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners. Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

Occupational Exposure Guidelines

Substance Oil Mist, Mineral	Applicable Workplace Exposure Levels ACGIH (United States). TWA: 5 mg/m ³ STEL: 10 mg/m ³ OSHA (United States). TWA: 5 mg/m ³
---------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

Physical State	Liquid.	Color	Light amber	Odor	Mild petroleum odor
Specific Gravity	0.87 (Water = 1)	pH	Not applicable	Vapor Density	>1 (Air = 1)
Boiling Range	Not available.			Melting/Freezing Point	Not available.
Vapor Pressure	<0.001 kPa (<0.01 mm Hg) (at 20°C)			Volatility	Negligible volatility.
Solubility in Water	Negligible solubility in cold water.			Viscosity (cSt @ 40°C)	31
Flash Point	Closed cup: 208°C (406°F). (Pensky-Martens. (Minimum)) Open cup: 215°C (419°F) (Cleveland. (Minimum)).				
Additional Properties	Gravity, °API (ASTM D287) = 31.1 @ 60° F Density = 7.25 Lbs/gal. Viscosity (ASTM D2161) = AP 150 SUS @ 100° F				

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable.	Hazardous Polymerization	Not expected to occur.
Conditions to Avoid	Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.		
Materials Incompatibility	Strong oxidizers.		
Hazardous Decomposition Products	No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.		

SECTION 11. TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

Toxicity Data**Distillates, petroleum, solvent-refined heavy paraffinic :**

ORAL (LD50): Acute: >5000 mg/kg [Rat].
 DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested. Analyses conducted by method IP 346 indicate that the concentration of DMSO extractables in this mineral oil is below 3.0 weight percent.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.

Environmental Fate

An environmental fate analysis is not available for this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact your regional US EPA office for guidance concerning case specific disposal issues.

SECTION 14. TRANSPORT INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

US DOT Status Not regulated by the U.S. Department of Transportation as a hazardous material.

Proper Shipping Name Not regulated.

Hazard Class Not regulated.

Packing Group(s) Not applicable.

UN/NA Number Not regulated.

Reportable Quantity A Reportable Quantity (RQ) has not been established for this material.

Placard(s)



Emergency Response
Guide No.

Not applicable.

MARPOL III Status

Not a DOT "Marine
Pollutant" per 49 CFR
171.8.

SECTION 15. REGULATORY INFORMATION

TSCA Inventory	This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
SARA 302/304 Emergency Planning and Notification	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.
SARA 311/312 Hazard Identification	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: No SARA 311/312 hazard categories identified.
SARA 313 Toxic Chemical Notification and Release Reporting	This product contains the following components in concentrations above de minimis levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: No components were identified.
CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. This product or refinery stream is not known to contain chemical substances subject to this statute. However, it is recommended that you contact state and local authorities to determine if there are any other reporting requirements in the event of a spill.
Clean Water Act (CWA)	This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.
California Proposition 65	This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5): Toluene: <0.002%
New Jersey Right-to-Know Label	Petroleum Oil
Additional Regulatory Remarks	No additional regulatory remarks.

SECTION 16. OTHER INFORMATION

Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

REVISION INFORMATION

Version Number 2.0
Revision Date 2/10/2006
Print Date Printed on 2/10/2006.

ABBREVIATIONS

AP: Approximately	EQ: Equal	>: Greater Than	<: Less Than	NA: Not Applicable	ND: No Data	NE: Not Established
ACGIH: American Conference of Governmental Industrial Hygienists				AIHA: American Industrial Hygiene Association		
IARC: International Agency for Research on Cancer				NTP: National Toxicology Program		
NIOSH: National Institute of Occupational Safety and Health				OSHA: Occupational Safety and Health Administration		
NPCA: National Paint and Coating Manufacturers Association				HMIS: Hazardous Materials Information System		
NFPA: National Fire Protection Association				EPA: US Environmental Protection Agency		

DISCLAIMER OF LIABILITY

THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED REGARDING ITS CORRECTNESS. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE SUBSTANCE ITSELF. THIS MSDS WAS PREPARED AND IS TO BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS MSDS INFORMATION MAY NOT BE APPLICABLE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR PRODUCTS FOR THEIR PARTICULAR PURPOSE.

THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

***** END OF MSDS *****

4325 P
PURPLE POWER

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard.
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 12180072

IDENTITY (As Used on Label and List)
AIKEN CLASSIC CAR WASH

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

Section I - Manufacturer

Manufacturer's Name
AIKEN CHEMICAL COMPANY

Emergency Telephone Number
1-800-922-1117; (864) 765-7359

Address (Number, Street, City, State and Zip Code)
P. O. Box 1904

Telephone Number for Information
(864) 968-1250; 1-800-828-1860

Greenville, SC 29602

Date Prepared: May 14, 1998
Revision # 1

12 Shelter Drive, Greer, SC 29650

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV	NIOSH REL	%
Sodium Hydroxide CAS # 1310-73-2	2mg/m ³	2mg/m ³		

TSCA Information:

All ingredients of this product are on the TSCA inventory.

Section III - Physical/Chemical Characteristics

Boiling Point	>212° F	Specific Gravity (H₂O = 1)	1.021
Vapor Pressure (mm Hg.)	Not Determined	Melting Point	32° F
Vapor Density (AIR=1)	Not Determined	Evaporation Rate (Butyl Acetate=1)	<1.0
Solubility in Water Complete		pH	9.5 - 10.5
Appearance and Odor Clear red liquid with cherry odor.			

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) >212° F (PPMC)	Flammable Limits Not Established	LEL N.D.	UEL N.D.
----------------------------------------------------	--------------------------------------------	--------------------	--------------------

Extinguishing Media

Carbon dioxide, dry chemical, alcohol foam and water spray.

Special Fire Fighting Procedures

Fire fighters wear self-contained breathing apparatus with full protective clothing.

Unusual Fire and Explosion Hazards

Water fog or foam may cause frothing of the product.

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	Strong oxidizing agents.

Incompatibility (Materials to Avoid)

Strong oxidizing agents.

Hazardous Decomposition or Byproducts

Carbon monoxide, carbon dioxide and various hydrocarbons.

Hazardous Polymerization

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	Excessive heat & oxidizing agents.

Section VI - Health Hazard Data

Routes of Entry:	Inhalation?	Eyes?	Skin?	Ingestion?
	No	Yes	Yes	Yes
Health Hazards (Acute and Chronic)	Chronic overexposure: No evidence of adverse effects from available information. For acute overexposure, see SECTION IX.			
Carcinogenicity:	NTP?	LARC Monographs?	OSHA Regulated?	
	No	No	No	
Signs and Symptoms of Exposure:	SEE SECTION IX (Acute Overexposure)			
Medical Conditions Generally Aggravated by Exposure:	None Known			
Emergency and First Aid Procedures	SEE SECTION IX			

Section VII - Precautions for Safe Handling and Use**Steps to Be Taken in Case Material is Released or Spilled**

Stop spill at source. Dike area of spill with soil (sand, clay) to prevent spreading. Remaining liquid may be pumped to a salvage container or taken up by an absorbent material & shoveled into salvage containers.

Waste Disposal Method

Dispose of in accordance with all local, state, and federal regulations.

Precautions to Be Taken in Handling and Storing

Spilled material is slippery on walkways & floors. Remove spills promptly. Foams profusely when hit with a stream of water.

Other Precautions:

Protect from freezing. Product will freeze at 32° F. Always use proper eye & skin protection.

Section VIII - Control Measures**Respiratory Protection (Specify Type)**

None

Ventilation	Local Exhaust	Special
	Acceptable	N/A
	Mechanical (General)	Other:
	N/A	N/A
Protective Gloves	Eye Protection	
Rubber gloves	Splash goggles or safety glasses.	
Other Protective Clothing or Equipment		

None Normally Needed

Work/Hygienic Practices Always use caution when working with chemicals.

Section IX - Routes and Effects of Overexposure:

SKIN:

Prolonged or repeated contact can cause irritation, defatting, dermatitis and possible stinging or itching.

EYES:

May cause watering, redness stinging and irritation; which may result in impairment of vision.

INGESTION:

Accidental ingestion may cause gastrointestinal irritation, nausea, and vomiting.

INHALATION:

The product is not volatile and as a result, inhalation is not seen as a potential hazard.

Emergency and First Aid Procedures:

SKIN:

Thoroughly wash all exposed areas with soap & water for at least 15 minutes. If itching and redness persist, seek medical attention.

EYES:

Immediately flush eyes with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. If irritation persists, seek medical attention.

INGESTION:

If accidentally swallowed, DO NOT induce vomiting. Give large amounts of water or milk. Seek medical attention immediately.

INHALATION:

The product is not volatile and as a result, inhalation is not seen as a potential hazard.

Toxic Substances Control Act (TSCA) Status:

The ingredients of this product are on the TSCA Inventory.

Permatex, Inc.
 10 Columbus Blvd.
 Hartford, CT 06106 USA
 Telephone: 1-87-Permatex
 (877) 376-2839
 Emergency: 800-255-3924

Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 127MA DISC BRAKE QUIET 9OZ AE
Item No: 80077
Product Type: Aerosol Conditioner

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Percent	ACGIH 8 Hr. TWA:	OSHA 8 Hr. TWA:
ACETONE 67-64-1	10-30	500 ppm TWA; 1188 mg/m ³ TWA	1000 ppm TWA; 2400 mg/m ³ TWA
PROPANE 74-98-6	15-40	simple asphyxiant; 2500 ppm TWA	1000 ppm TWA; 1800 mg/m ³ TWA
N-HEXANE 110-54-3	15-40	(50) ppm TWA; (176) mg/m ³ TWA	500 ppm TWA; 1800 mg/m ³ TWA
BUTANE [1], ISOBUTANE [2] 106-97-8	10-30	800 ppm TWA; 1900 mg/m ³ TWA	800 ppm TWA; 1900 mg/m ³ TWA
ETHYL ACETATE 141-78-6	1-10	400 ppm TWA	400 ppm TWA; 1400 mg/m ³ TWA
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPH. 64742-89-8	1-10	Not Listed	Not Listed

3. HAZARDS IDENTIFICATION

Toxicity: May cause eye, skin and respiratory irritation. Long term exposure to high concentrations of vapor may cause lung, liver or kidney damage. Aspiration hazard if swallowed. Ethyl acetate may cause anemia. n-Hexane may damage peripheral nerve tissue. Intentional misuse by concentrating and inhaling the vapor may be harmful or fatal.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation.

Signs and Symptoms of Exposure: Overexposure may cause eye and skin redness, difficulty breathing and vomiting. Excessive accidental exposure may cause headache, dizziness, nausea and mild respiratory irritation.

Ingredients	Percent	NTP:	ACGIH Carcinogens	IARC:
ACETONE 67-64-1	10-30	Not known	A4 - Not Classifiable as a Human Carcinogen	Not known
ETHYL ACETATE 141-78-6	1-10		A4 - Not Classifiable as a Human Carcinogen	

Medical Conditions Recognized as Being Aggravated by Exposure: None known

4. FIRST AID MEASURES

Ingestion: If swallowed, do NOT induce vomiting. Give victim two glasses of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

Inhalation: Move to fresh air in case of accidental inhalation of vapors. Oxygen or artificial respiration if needed. Obtain medical attention.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes if skin irritation persists, call a physician

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point (°F/C): -156 degrees F. Based on propellant

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Special Fire-Fighting Procedures: Keep containers cool. Use equipment or shielding required to protect against bursting or venting of containers.

Hazardous Products Formed by Fire or Thermal Decomposition:
Unusual Fire/Explosion Hazards:

Carbon monoxide, Carbon dioxide,
Contents under pressure. Exposure to temperatures over 120 degrees F. may cause bursting or venting. Do not puncture or incinerate container.

Lower Explosive Limit:
Upper Explosive Limit:

1.8
9.5

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

7. HANDLING AND STORAGE

Storage: Store away from heat, sparks or open flame. Do not store at temperatures above 120 degrees F. Exposure to high temperatures may cause container to burst. Store in accordance with NFPA 30B for Level 3 Aerosols

Handling: Do not use near heat, sparks or open flame. Do not puncture or incinerate container. Avoid contact with skin and eyes. Intentionally concentrating and inhaling the vapor may be harmful or fatal.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses.
Skin: Rubber or plastic gloves
Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits during the use of this product.
Respiratory Protection: An approved respirator (i.e. NIOSH, etc.) should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue liquid
Odor: SOLVENT
Boiling Point (°F): 133F
pH: Does not apply
Solubility in Water: Insoluble
Specific Gravity: 0.70 - 0.80
VOC Content(Wt.%): 59.5% by weight
Vapor Pressure: Not determined
Vapor Density (Air=1): Heavier than air
Evaporation Rate: >1 (butyl acetate = 1)

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal conditions
Hazardous Polymerization: WILL NOT OCCUR
Incompatibilities: Strong oxidizers.
Conditions to Avoid: Keep away from heat, sparks and open flame.
Hazardous Products Formed by Fire or Thermal Decomposition: Carbon monoxide, Carbon dioxide,

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations. This container may be recycled in aerosol recycling centers. Before offering for recycling, empty the can by using the product according to the label. If recycling is not available, wrap the container and discard in the trash.
US EPA Waste Number: D001 as per 40CFR 261.21

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

Domestic Ground Transport

Product name: 127MA DISC BRAKE QUIET 9OZ AE

Item 80077

DOT Shipping Name: CONSUMER COMMODITY
Hazard Class: ORM-D
UN/ID Number: None
Marine Pollutant: None

IATA

Proper Shipping Name: Consumer Commodity
Class or Division: Class 9
UN/NA Number: ID 8000

IMDG

Proper Shipping: Aerosols, Limited Quantity
Hazard Class: Class 2.1
UN Number: UN 1950

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

SARA 313 Information
N-HEXANE

CALIFORNIA PROP 65:

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA Inventory Status:

Listed on Inventory: YES All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 1, FLAMMABILITY 4, REACTIVITY 0

Estimated HMIS Classification: HEALTH 1, FLAMMABILITY 4, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn.

HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd, Health and Safety Manager
Company: Permatex, Inc. 10 Columbus Blvd. Hartford, CT USA
06106

Revision Date: 11/01/2002
Revision Number: 4

Telephone Number: 1-87-Permatex (877) 376-2839

ATTN: Randy

Material Safety Data Sheet

Date of Preparation: 11/23/04

MSDS No. 480UV

Section 1 – Chemical Product and Company Identification

Product Name: QUEST R134a UNIVERSAL PAG OIL W/UV DYE
Part Number(s): 765-6024 (480UV)
CAS Number: NOT APPLICABLE TO MIXTURES
Product Class: Automotive product

Manufacturer: E F Products, Inc. 1860 Crown Drive, Suite 1400, Dallas, TX 75234
Information Phone No.: 1-888-396-0422 Emergency Phone No.: 1-888-396-0422

Section 2 – Composition/ Information on Ingredients

Ingredient Name	CAS Number	OSHA TWA	ACGIH TLV
Polyoxalkylene Glycol	Proprietary	-	-
UV Dye	Proprietary	10ppm	10ppm
Proprietary Ingredients			

Section 3 – Physical and Chemical Properties

Physical State: Liquid
Appearance/Odor: Yellow/Hydrocarbon odor
% Volatile: N/A
Evaporation Rate: N/A
Boiling Range: Not determined
Vapor Density (Air=1): Heavier than air
Specific Gravity (@20 °C): 1.039
Vapor Pressure: 0.1 mm/Hg @ 20C

Section 4 – Fire Fighting Measures

Flash Point: 191C
Flash Point Method: Open Cup
LEL: N/A
Extinguishing Media: Water/ Dry chemicals/Foam
Unusual Fire or Explosion Hazards: N/A
Special Fire-Fighting Procedures: N/A

Section 5 – Stability and Reactivity

Stability: Stable
Polymerization: Will not occur
Incompatibilities & Conditions to Avoid: Strong Oxidizing Agents
Hazardous Decomposition Products: Highly unlikely under intended handling and use.

Section 6 – Health Hazard Information

Primary Entry Routes: Skin, dermal, Inhalation and Ingestion
Target Organs: Eyes, skin, respiratory system
Effects of Overexposure: Can cause eye burns. Prolonged and repeated contact can cause skin irritation. Possibly dermatitis.
Carcinogenicity: No components of the product are a carcinogen.
Chronic Effects: N/A

343-1306

ATTN: Kandy

11/23/04

MSDS No. 480UV

Section 6 – Health Hazard Information

Emergency and First Aid Procedures

Inhalation: Remove to fresh air. If a cough or other respiratory symptoms develop, consult medical personnel.

Eye Contact: Irrigate with eyewash solution or clean water, holding eyelids apart, for at least 10 minutes. If redness, itching or a burning sensation develops, have eyes examined and treated by medical personnel.

Skin Contact: Remove contaminated clothing. Wash material off of the skin with plenty of soap and water. If redness, itching, or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

Ingestion: Do NOT induce vomiting. Wash out mouth with water and give 1 or 2 glasses of water to drink. If gastrointestinal symptoms develop, consult medical personnel. (Never give anything by mouth to an unconscious person).

Section 7 – Spill, Leak, and Disposal Procedures

Wear skin protection during clean-up. Contain and absorb large spillages onto an inert, non-flammable absorbent carrier (such as earth or sand). Do not allow to enter drains, sewers or waterways. Shovel into a chemical waste container for disposal or recovery.

Section 8 – Exposure Controls / Personal Protection

Ventilation: No OSHA PELs or ACGIH TLVs have been assigned. Minimize exposure in accordance with good industrial hygiene practice.

Protective Clothing/Equipment: Wear ISGA standard goggles or face shield. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

Safety Stations: Provide eyewash station and safety shower in work area. Use ventilation adequate to maintain safe levels.

DOT Transportation Data

<u>PART NUMBER(S)</u>	<u>SHIPPING NAME</u>	<u>HAZARD CLASS IDNO.</u>	<u>PACKING GROUP</u>
480UV	Consumer Commodity	ORM-D N/A	N/A

Disclaimer: All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publications of use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Material Safety Data Sheet Part No. <u>CH990625</u> The MSDS was received as current from Gold Eagle on May 25, 2007.	International Truck and Engine Corporation 4201 Winfield Road Warrenville, IL 60555 USA
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SEC 1 - PRODUCT AND MANUFACTURER INFO SEC 9 - PHYS, CHEM PROPERTIES SEC 2 - COMPOSITION INFORMATION SEC 10 - STABILITY, REACTIVITY SEC 3 - HAZARDS IDENTIFICATION SEC 11 - TOXICOLOGY INFORMATION SEC 4 - FIRST AID MEASURES SEC 12 - ECOLOGICAL INFORMATION SEC 5 - FIRE FIGHTING MEASURES SEC 13 - DISPOSAL CONSIDERATIONS SEC 6 - ACCIDENTAL RELEASE MEASURES SEC 14 - TRANSPORT INFORMATION SEC 7 - HANDLING AND STORAGE SEC 15 - REGULATORY INFORMATION SEC 8 - EXPOSURE, PERS. PROTECTION SEC 16 - ADDITIONAL INFORMATION

****** SECTION 1 - CHEMICAL PRODUCT AND MANUFACTURER IDENTIFICATION ******

Product Name: NAVPFQ - Navistar Power Steering Fluid

Part Number:

Product CAS: (None)

Product Code: NAVPFQ

Synonyms: NAVPFQ - Navistar Power Steering Fluid

For part #
ch 990625

MANUFACTURER IDENTIFICATION

Name: Gold Eagle Company
Address: 4400 S. Kildare Blvd.
City: Chicago **State:** IL **Zip:** 60632-4372

For information call: 773-376-4400

Emergency Number: N/A

Emergency Agency: INFOTRAC

Agency Number: 1-800-535-5053

MSDS Effective Date: 8/21/2003

MSDS Supersedes Date: 3/31/2006

Miscellaneous:

Product CAS: Mixture

Brief Description: General purpose hydraulic fluid.

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****** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ******

Chemical Name	CAS	MIN	MAX
Refined Petroleum Oil	64742-65-0	95	95
Additive Package	(none)	5	5

Miscellaneous:

CHEMICAL NAME	LIMIT VALUES
Additive Package (CAS#:Mixture)	N/A
Refined Petroleum Oil	N/A

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****** SECTION 3 - HAZARDS IDENTIFICATION ******

EMERGENCY OVERVIEW:

FPA: Health: 0 Fire: 1 Reactivity: 0 Specific Hazard: None

HMIS: Health: 0 Flammability: 1 Reactivity: 0 PPE: B

Miscellaneous:

This product does not contain any components above de minimus concentrations that are considered carcinogenic by OSHA, IARC or NTP.

POTENTIAL HEALTH EFFECTS

Target Organs/Primary Route(s) of Entry:

Eye:

Mildly irritating.

Skin:

Mild irritant.

Ingestion:

Toxicity is relatively low, there is a risk of aspiration of product into the lungs. On ingestion of large quantities, slight GI discomfort, diarrhea, and headache may occur. Small doses may produce irritation and diarrhea.

Inhalation:

Low risk of inhalation. Mists above TLV may cause chemical pneumonitis.

Miscellaneous:

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****** SECTION 4 - FIRST AID MEASURES ******

Eye:

If the product contacts the eyes, immediately wash the eyes with large quantities of room temperature water for at least 15 minutes, occasionally lifting the lower and upper lids. Get medical attention immediately.

Skin:

If the product contacts the skin, promptly wash the contaminated skin with soap and water for at least 15 minutes. If this product penetrates the clothing, promptly remove the clothing and wash the skin with soap and water. Systemic effects may be delayed 18 to 72 hours, therefore keep individual under observation.

Ingestion:

Do not induce vomiting. Get immediate medical assistance.

Inhalation:

Move the exposed person to fresh air at once and call emergency medical care. If breathing has stopped, give artificial respiration. If breathing is difficult, give humidified oxygen.

Notes to Physician:

No data available.

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****** SECTION 5 - FIRE FIGHTING MEASURES ******

Flash Point: 392 F. (200 C.) TCC

AutoIgnition Temperature: N/A

Flammable Limits

Lower Limit: Explosive Limit (LEL): N/A

Upper Limit: Explosive Limit (UEL): N/A

Extinguishing Media:

Use carbon dioxide, dry chemical, foam and/or water fog as extinguishing media.

Unusual Fire and Explosion Hazards:

Water may cause frothing.

Special Fire Fighting Procedures:

None.

General Information:

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***** SECTION 6 - ACCIDENTAL RELEASE MEASURES *****

Small Spill: Remove sources of heat or ignition, provide adequate ventilation, contain leak using absorbent, inert, non-combustible material.

Large Spill: Contain spill, transfer to secure containers. In the event of an uncontrolled material release, the user should determine if release is reportable under applicable laws and regulations.

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****** SECTION 7 - HANDLING AND STORAGE ******

Handling:

See other sections of MSDS.

Storage:

See other sections of MSDS.

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****** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ******

GENERAL HYGIENE CONSIDERATIONS:

Use normal hygiene practices.

OTHER PRECAUTIONS:

Product is combustible, handle accordingly.

ENGINEERING CONTROLS:

Local Exhaust: Provide local ventilation to maintain exposure levels below recommended exposure limits. Mechanical (General): In confined spaces, mechanical ventilation may be required. Special Ventilation: OSHA TWA 5mg/m³ Oil Mist Other Ventilation: N/A

PERSONAL PROTECTIVE EQUIPMENT

Eyes/face:

Use safety goggles or chemical splash goggles as required.

Skin:

Use oil impervious gloves as required

Respirators:

Normally none required. If high vapor or mist concentrations are expected, use appropriate NIOSH approved respirator for organic vapors and mists.

Other Protective Clothing/Equipment:

If there is a possibility of exposure of an individual's body to lubricating oil, wear body covering work clothes to avoid prolonged or repeated exposure.

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****** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ******

Appearance/Odor:

Amber, oil type liquid

pH: N/A

Vapor Pressure: (MM HG): 0.1 mm Hg @20 C.

Vapor Density(Air=1): GT1.0

Evaporation Rate: N/A

Viscosity: N/A

Boiling Point: 665 F. (352 C.)

Freezing/Melting Point: N/A

Decomposition Temperature: N/A

Solubility in Water: Negligible

Specific Gravity: 0.872

Molecular Formula: N/A

Molecular Weight: N/A

VOC Coating (minus water): 0 Lbs/Gallon

Coating Density : 0 Lbs/Gallon

Solvent Density : 0 Lbs/Gallon

Percent Solvent (volume): 0

Percent Solids (volume): 0

Percent Water (volume): 0

Percent Volatile by Weight: 0

Miscellaneous :

% Volatile/Volume: Negligible

Percent Solvent (Volume): N/A

Percent Solids (Volume): N/A

Percent Water (Volume): N/A

Product is a combustible liquid. Keep away from heat and flames. Store below 150 °F. Do not apply high heat or flame to container. Keep separate from strong oxidizing agents. Empty containers may contain product residue which could include

flammable or explosive vapors.

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****** SECTION 10 - STABILITY AND REACTIVITY ******

Chemical Stability:

Stable: Yes

Conditions to Avoid:

Store below 150 F. Do not apply high heat or flame to container. Keep separate from strong oxidizing agents.

Incompatibilities with Other Materials:

Strong oxidants.

Hazardous Decomposition Products:

Carbon dioxide (Carbon monoxide under incomplete combustion).

Hazardous Polymerization:

Hazardous Polymerization May Occur: No

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****** SECTION 11 - TOXICOLOGICAL INFORMATION ******

No data available.

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****** SECTION 12 - ECOLOGICAL INFORMATION ******

No data available.

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****** SECTION 13 - DISPOSAL CONSIDERATIONS ******

Dispose of product in accordance with local, state, and federal regulations.
Before attempting clean up, refer to other sections of MSDS for hazard warning information.

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****** SECTION 14 - TRANSPORT INFORMATION ******

Transportation Information:

Shipping Information (CFR 49 and IMDG):

Proper Shipping Name: Lubricating Oil, N.O.I.
DOT Hazard Class: None required.
DOT UN Number: None required.
IMDG Shipping Name: Petroleum Lubricating Oil, N.O.I.
Flashpoint GT160 F.

Label Information:

No data available.

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****** SECTION 15 - REGULATORY INFORMATION ******

SARA Title III:

Section 302: None
Section 304: None
Section 311: Hazard categories-Fire Hazard-Yes
Section 313: None

CERCLA:

Section 311(b)(4): Requires discharges of crude oil and petroleum products in any kind or form to waters must immediately be reported to the National Response Center at (800) 424-8802.

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**** SECTION 16 - ADDITIONAL INFORMATION ****

Disclaimer: Information presented herein is believed to be factual, as it has been derived from the works and opinions of persons believed to be qualified experts. However, nothing contained in this information is to be taken as warranty or representation for which the Gold Eagle Co. bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

Prepared by: Mike Profetto

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ATTN: Randy

ASHLAND
SAFETY DATA SHEET

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Print Date: 1/2/2008
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Version: 1.4

NAPA® MPURP WHEEL BEARING
GREASE GREASE NP75601

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone number	1-800-ASHLAND (1-800-274-5263)

Product name	NAPA® MPURP WHEEL BEARING GREASE	
	GREASE	<i>NP</i>
Product code	NP75601	<i>75801 ALSO NAPA SAYS</i>
Product Use Description	No data	

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: solid, amber

CAUTION! Moderate skin irritant, Moderate eye irritant.

Potential Health Effects

Routes of exposure

Skin contact

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this

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material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea)

Target Organs

No data

Carcinogenicity

No data

Reproductive hazard.

No data

Other information

No data

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
PETROLEUM BASED GREASE		<=100%

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

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Do not induce vomiting. Give one glass of milk or water, and get medical attention immediately. If possible, do not leave victim unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

carbon dioxide (CO₂), dry chemical, foamcarbon dioxide (CO₂), dry chemical, foam

Hazardous combustion products

May form: carbon dioxide and carbon monoxide, various hydrocarbons

Precautions for fire-fighting

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid.

Flammability Class for Flammable Liquids

Combustible Liquid Class IIIB

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

No data

Environmental precautions

No data

Methods for cleaning up

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Shovel material into containers. Thoroughly sweep area of spill to clean up any residual material.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

No data

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Eye protection

Wear safety glasses in compliance with OSHA regulations. (Consult your safety representative.)

Skin and body protection

Wear normal work clothing covering arms and legs. Wear resistant gloves such as: Neoprene

Respiratory protection

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators

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NAPA® MPURP WHEEL BEARING
 GREASE GREASE NP75601

(negative pressure type) under specified conditions (see your industrial hygienist).
 Engineering or administrative controls should be implemented to reduce exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	solid
Form	Semisolid, gcl.
Colour	amber
Odour	No data
Boiling point/range	700.0 °F / 371.1 °C
pH	No data
Flash point	450 °F ; 232 °C
Evaporation rate	No data
Explosion limits	No data
Vapour pressure	No data
Vapour density	No data
Density	0.95 g/cm ³ @ 60.1 °F / 15.6 °C
	No data
Solubility	No data
Partition coefficient (n-octanol/water)	No data
Autoignition temperature	No data

10. STABILITY AND REACTIVITY

Stability

Stable

Conditions to avoid

None known.

Incompatible products

Avoid contact with:, strong oxidizing agents

Hazardous decomposition products

May form:, carbon dioxide and carbon monoxide, various hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

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SAFETY DATA SHEETNAPA® MPURP WHEEL BEARING
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Revision Date: 02/21/2007
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Version: 1.4**Thermal decomposition**
No data**11. TOXICOLOGICAL INFORMATION****Acute oral toxicity****Acute inhalation toxicity****Acute dermal toxicity****12. ECOLOGICAL INFORMATION****Aquatic toxicity****Acute and Prolonged Toxicity to Fish**
No data**Acute Toxicity to Aquatic Invertebrates**
No data**Environmental fate and pathways**
No data**13. DISPOSAL CONSIDERATIONS****Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

Dangerous goods descriptions may not reflect package size, quantity, end-use or region-specific exceptions that can be applied to shipments. Consult shipping documents for material-specific descriptions.

15. REGULATORY INFORMATION**California Prop. 65**

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SARA Hazard Classification Acute Health Hazard

SARA 313 Component(s)

OSHA Hazards Moderate skin irritant
Moderate eye irritant

	Health	Flammability	Reactivity	Other
HMIS				No data
NFPA	1	1	1	

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).



Material Safety Data Sheet

Section 1: Product & Company Identification

Product Name: NAPA/CRC® Power Lube® Multi-Purpose Lubricant (aerosol)

Product Number (s): 091839, 091848

Manufactured By:

CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com

General Information	(215) 674-4300
Technical Assistance	(800) 521-3168
Customer Service	(800) 272-8963
24-Hr Emergency (CHEMTREC)	(800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Amber liquid, pleasant odor

DANGER

Flammable. Harmful or Fatal if Swallowed. Contents Under Pressure.

As defined by OSHA's Hazard Communication Standard, this product is hazardous.

Potential Health Effects:

- EYE:** Contact may cause mild irritation including stinging, watering and redness.
- SKIN:** Contact may cause redness, itching, burning and skin damage. Prolonged or repeated contact can worsen irritation and lead to dermatitis. No harmful effects from skin absorption are expected.
- INHALATION:** Expected to have a low degree of toxicity by inhalation. High concentrations of vapors may be irritating to the respiratory tract, and may cause headaches, dizziness, anesthesia, drowsiness, and other central nervous system effects.
- INGESTION:** Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.
- CHRONIC EFFECTS:** None known
- TARGET ORGANS:** None known

Medical Conditions Aggravated by Exposure:

pre-existing dermatitis

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Product Name: NAPA/CRC® Power Lube® Multi-Purpose Lubricant (aerosol)
Product Number (s): 091839, 091848

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Hydrotreated light distillates	64742-47-8	65 - 75
Solvent-refined heavy paraffinic distillates	64741-88-4	15 - 25
Inhibitor blend	proprietary	5 - 15
Carbon dioxide	124-28-9	1 - 5

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: If swallowed, do NOT induce vomiting. Keep at rest. Get prompt medical attention.

Note to Physicians: This product is an aspiration hazard.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is flammable in accordance with aerosol flammability definitions (16 CFR 1500.3(c)(6)).

Flash Point:	165 F (TCC)	Upper Explosive Limit:	5.0
Autoignition Temperature:	ND	Lower Explosive Limit:	0.7

Suitable Extinguishing Media: Foam, dry chemical, carbon dioxide or water spray.

Products of Combustion: Oxides of carbon

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush

Product Name: NAPA/CRC® Power Lube® Multi-Purpose Lubricant (aerosol)

Product Number (s): 091839, 091848

into sewers or storm drains.

Methods for Containment & Clean-up: Remove sources of ignition. Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Do not use near an open flame, heat or other sources of ignition.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120 F to prevent cans from rupturing.

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Hydrotreated light distillates	NE	NE	NE	NE	1200	mfr	mg/m ³
Solvent-refined heavy paraffinic distillates	5*	NE	5*	10*	NE		mg/m ³
Inhibitor blend	NE	NE	NE	NE	NE		
Carbon dioxide	5000	30000(v)	5000	30,000	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated *- oil mist							

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile or neoprene. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: Liquid

Color: Amber

Product Name: NAPA/CRC® Power Lube® Multi-Purpose Lubricant (aerosol)

Product Number (s): 091839, 091848

Odor: Pleasant

Specific Gravity: 0.8223

Initial Boiling Point: 380 F

Freezing Point: ND

Vapor Pressure: ND

Vapor Density: > 1 (air = 1)

Evaporation Rate: ND (butyl acetate = 1)

Solubility: negligible in water

pH: NA

Volatile Organic Compounds: wt %: 39.3 g/L: 323.2 lbs./gal: 2.69

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Temperature extremes, sources of ignition

Incompatible Materials: Strong oxidizing agents

Hazardous Decomposition Products: Oxides of carbon, oxides of sulfur, hydrocarbons

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

ACUTE EFFECTS

<u>Component</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Hydrotreated light distillate	LD50	> 5 g/kg	Oral	Rat
Hydrotreated light distillate	LD50	> 2 g/kg	Dermal	Rabbit
Hydrotreated light distillate	LC50	> 5 mg/L/4H	Inhalation	Rat

CHRONIC EFFECTS

Carcinogenicity:

	<u>Component</u>	<u>Result</u>
OSHA:	None listed	
IARC:	None listed	
NTP:	None listed	

Other: Paraffinic distillates Product testing using IP 346 shows a DMSO PAH content of < 3% by weight.

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: No information available

Product Name: NAPA/CRC® Power Lube® Multi-Purpose Lubricant (aerosol)

Product Number (s): 091839, 091848

Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: Disposal Considerations

Disposal: The dispensed liquid product is not a RCRA hazardous waste. (See 40 CFR Part 261.20 – 261.33)
Aerosol containers should be fully emptied and depressurized before disposal. The empty container can be recycled.

All disposal activities must comply with federal, state and local regulations. Local regulations may be more stringent than state or national requirements.

Section 14: Transport Information

Proper shipping description:

US DOT (ground): Consumer Commodity, ORM-D

Special Provisions: None

Section 15: Regulatory Information

U.S. Federal

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: None

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:	Fire Hazard	Yes
	Reactive Hazard	No
	Release of Pressure	Yes
	Acute Health Hazard	Yes
	Chronic Health Hazard	No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
None

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

Product Name: NAPA/CRC® Power Lube® Multi-Purpose Lubricant (aerosol)

Product Number (s): 091839, 091848

State Regulations

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: NONE

State Right to Know:

New Jersey: None
Pennsylvania: None
Massachusetts: None
Rhode Island : None

Additional Regulatory Information: None

Section 16: Other Information

NFPA: Health: 1 Flammability: 2 Reactivity: 0
HMIS: Health: 1 Flammability: 2 Reactivity: 0 PPE: B

Prepared By: Michelle Rudnick
CRC #: 462D
Revision Date: 3/13/2007

Changes since last revision: MSDS reformatted in accordance with ANSI Z400.1-2004

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS:	Chemical Abstract Service	NA:	Not Applicable
ppm:	Parts per Million	ND:	Not Determined
TCC:	Tag Closed Cup	NE:	Not Established
PMCC:	Pensky-Martens Closed Cup	g/L:	grams per Liter
PPE:	Personal Protection Equipment	lbs./gal:	pounds per gallon
TWA:	Time Weighted Average	STEL:	Short Term Exposure Limit
OSHA:	Occupational Safety and Health Administration		
ACGIH	American Conference of Governmental Industrial Hygienists		
NIOSH	National Institute of Occupational Safety & Health		

MATERIAL SAFETY DATA SHEET

Trade Name: NAPA DOT 3 Brake Fluid 35-101
 MSDS NO.
 Revision Date:
 Date Printed 10/07/2004

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: NAPA DOT 3 Brake Fluid
 Chemical Family: GLYCOL ETHER
 Synonyms: None
 Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: NAPA, P. O. Box 421268, Indianapolis, IN 46241

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient/CAS No.	wt. %	OSHA PEL TWA	OSHA PEL Ceiling Limits	ACGIH TLV TWA	ACGIH TLV STEL
Diethylene Glycol 111-46-6	5-15	None Known	None Known	None Known	None Known
Diethylene Glycol Monobutyl Ether 112-34-5	5-20	None Known	None Known	None Known	None Known
Triethylene glycol monomethyl ether 112-35-6	6-25	None Known	None Known	None Known	None Known
Triethylene Glycol Monoethyl Ether 112-50-5	6-25	None Known	None Known	None Known	None Known
Triethylene glycol monobutyl ether 143-22-6	20-39	None Known	None Known	None Known	None Known
Tetraethylene Glycol Monobutyl Ether 1559-34-8	5-20	None Known	None Known	None Known	None Known
Polyalkylene Glycol Monomethyl Ether 23783-42-8	5-20	None Known	None Known	None Known	None Known
Polyethylene Glycol 25322-68-3	5-20	None Known	None Known	None Known	None Known
Polyethylene glycol monobutyl ether 9004-77-7	5-20	None Known	None Known	None Known	None Known
Polyalkylene Glycols 9038-95-3	5-20	None Known	None Known	None Known	None Known
Diethylene Glycol Monomethyl Ether 111-77-3	<5	None Known	None Known	None Known	None Known
Diethylene Glycol Monoethyl Ether 111-90-0	<5	None Known	None Known	None Known	None Known
Trade Secret : Trade Secret Inhibitor Package	<3	None Known	None Known	None Known	None Known

3. HAZARDS IDENTIFICATION

Emergency Overview: Danger: May be fatal if swallowed. This material is an eye irritant. May cause allergic skin reaction. Vapors are mildly to markedly irritating to the lungs depending on the exposure level. Ingestion may cause abdominal discomfort, nausea, and vomiting. May produce central nervous system depression and kidney damage.

HMIS Classification: Health: 2 Flammability: 1 Physical Hazard: 0
NFPA Rating: Health: 2 Flammability: 1 Reactivity: 0

4. FIRST AID MEASURES

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Ingestion: Induce vomiting immediately as directed by medical personnel. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention. Vapors or mists from this material can irritate the nose, throat and lungs, and cause signs and symptoms of central nervous system depression, depending on the concentration and duration of exposure.

Skin Contact: Wash with soap and water. Remove contaminated clothing and shoes, and launder before reuse. Get medical attention if

MATERIAL SAFETY DATA SHEET

Trade Name: NAPA DOT 3 Brake Fluid
MSDS NO.
Revision Date:
Date Printed 10/07/2004

irritation persists.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): >135C. (>275 F.)
Flash Point Method: TAG Closed Cup
Flammable Limits in Air - Lower (%): Not Determined
Flammable Limits in Air - Upper (%): Not Determined
Autoflammability Temperature °F(°C): Not Determined
Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical. DO NOT use straight water streams.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures:

Wear approved positive-pressure self-contained breathing apparatus and protective clothing. Do not re-allow runoff from fire control methods to sewers or waterways. Fight from a maximum distance or use unmanned hose holders or monitor nozzles. Containers can build up pressure if exposed to heat; cool with flooding quantities of water until well after the fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of vessel.

Hazardous Combustion Products:

Carbon Dioxide. Carbon Monoxide. Unidentified organic compounds.

Aerosol Comments:

Not Applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Wear appropriate protective clothing and equipment to prevent skin and eye contact.

Spill Procedures:

Avoid all sources of ignition; heat, sparks and open flames. Contain any liquid from leaking containers. Wear protective equipment specified. Ventilate spill area. Soak up material with absorbent and place in chemical waste container.
If clean-up is not immediate, cover spill with plastic or canvas to keep dry.

Environmental Precautions:

Do not allow to enter sanitary drains, sewer or surface and subsurface waters.

7. HANDLING AND STORAGE

Handling and Storage:

Do Not Swallow. Store in a cool, dry place. Use only in a well ventilated area. Keep container closed when not in use to prevent contact with acidic, basic or oxidizing materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Exhaust ventilation. Eyewash stations. Showers.

Eyes:

Chemical goggles; also wear a face shield if splashing hazard exists.

Skin Protection:

Avoid skin contact. Wear protective clothing and gloves. Rubber, Neoprene or Vinyl.

Respiratory Protection:

An approved respirator (i.e. NIOSH, etc.) should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Clear, yellow to amber colloidal liquid

Odor:

MILD

pH Value:

10 - 11.5

Vapor Pressure:

Not Determined

Vapor Density (Air=1):

Not Determined

Boiling Point (°F):

480 F. (249 C)

Melting/Freezing Point:

-58 F. (-50 C.)

Solubility in Water:

SOLUBLE Bulk Density at 20°C:

8.33 - 9.02 lb/gal

Molecular Weight:

Mixture Evaporation Rate: <.01

Viscosity:

Not determined.

Specific Gravity (H2O=1):

1.000 - 1.070 @ 4 C.

VOC Content(%):

Not determined.

Decomposition Temperature:

Not Known

10. STABILITY AND REACTIVITY

Chemical Stability:

STABLE.

Conditions to Avoid:

Keep away from heat, sparks and flame.

Materials to Avoid:

Avoid contact with acidic, basic or oxidizing agents.

Hazardous Decomposition Products:

Carbon monoxide. Carbon dioxide. Unknown organic compounds.

Hazardous Polymerization:

WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Ingredient/CAS No.	wt. %	Route	Species	Dose
Diethylene Glycol 111-46-6	5-15	Oral	Rats	LD50 12565 mg/kg
Diethylene Glycol Monobutyl Ether 112-34-5	5-20	Oral	Rats	LD50 5660 mg/kg
Triethylene glycol monomethyl ether 112-35-6	6-25	Oral	Rats	LD50 11300 uL/kg

MATERIAL SAFETY DATA SHEET

Trade Name: NAPA DOT 3 Brake Fluid

MSDS NO.

Revision Date:

Date Printed

10/07/2004

Ingredient/CAS No.	wt. %	Route	Species	Dose
Triethylene Glycol Monoethyl Ether 112-50-5	6-25	Oral	Rats	LD50 7750 mg/kg
Triethylene glycol monobutyl ether 143-22-6	20-39	Oral	Rats	LD50 5300 mg/kg
Tetraethylene Glycol Monobutyl Ether 1559-34-8	5-20	NA	NA	Not Known
Polyalkylene Glycol Monomethyl Ether 23783-42-8	5-20	NA	NA	NA
Polyethylene Glycol 25322-68-3	5-20	Oral	Rats	LD50 28 gm/kg
Polyethylene glycol monobutyl ether 9004-77-7	5-20	NA	NA	NA
Polyalkylene Glycols 9038-95-3	5-20	Oral	Rats	LD50 12300 uL/kg
Diethylene Glycol Monomethyl Ether 111-77-3	<5	Oral	Rats	LD50 4 mL/kg
Diethylene Glycol Monoethyl Ether 111-90-0	<5	Oral	Rats	LD50 5500 mg/kg
Trade Secret : Trade Secret Inhibitor Package	<3	Oral	Rats	>2000 mg/kg

Carcinogenicity:

Ingredient/CAS No.	wt. %	IARC	NTP	OSHA
Diethylene Glycol 111-46-6	5-15	Not Listed	Not Listed	Not Listed
Diethylene Glycol Monobutyl Ether 112-34-5	5-20	Not Listed	Not Listed	Not Listed
Triethylene glycol monomethyl ether 112-35-6	6-25	Not Listed	Not Listed	Not Listed
Triethylene Glycol Monoethyl Ether 112-50-5	6-25	Not Listed	Not Listed	Not Listed
Triethylene glycol monobutyl ether 143-22-6	20-39	Not Listed	Not Listed	Not Listed
Tetraethylene Glycol Monobutyl Ether 1559-34-8	5-20	Not Listed	Not Listed	Not Listed
Polyalkylene Glycol Monomethyl Ether 23783-42-8	5-20	Not Listed	Not Listed	Not Listed
Polyethylene Glycol 25322-68-3	5-20	Not Listed	Not Listed	Not Listed
Polyethylene glycol monobutyl ether 9004-77-7	5-20	Not Listed	Not Listed	Not Listed
Polyalkylene Glycols 9038-95-3	5-20	Not Listed	Not Listed	Not Listed
Diethylene Glycol Monomethyl Ether 111-77-3	<5	Not Listed	Not Listed	Not Listed
Diethylene Glycol Monoethyl Ether 111-90-0	<5	Not Listed	Not Listed	Not Listed
Trade Secret : Trade Secret Inhibitor Package	<3	Not Known	Not Known	Not Known

12. ECOLOGICAL INFORMATION

MATERIAL SAFETY DATA SHEET

Trade Name: NAPA DOT 3 Brake Fluid
 MSDS NO.
 Revision Date:
 Date Printed 10/07/2004

Ecological testing has not been conducted on this product.

14. TRANSPORTATION INFORMATION

U.S. DOT:
 Proper Shipping Name: Not Regulated
 Hazard Class: Not Regulated
 UN/NA Number: Not Applicable
 DOT Packing Group: Not Applicable

IMDG:
 Proper Shipping Name: Not Applicable
 Hazard Class: Non-Hazardous
 Hazard Subclass: Not Applicable
 UN No.: Not Applicable
 Packing Group: Not Applicable
 Marine Pollutant: No

15. REGULATORY INFORMATION

US Federal Regulations:

Ingredient/CAS No.	wt. %	SARA 313	SARA 302	RQ	TPQ
Diethylene Glycol 111-46-6	5-15	Not Listed	Not Listed	NA	NA
Diethylene Glycol Monobutyl Ether 112-34-5	5-20	Not Listed	Not Listed	NA	NA
Triethylene glycol monomethyl ether 112-35-6	6-25	Listed	Not Listed	NA	NA
Triethylene Glycol Monoethyl Ether 112-50-5	6-25	Not Listed	Not Listed	NA	NA
Triethylene glycol monobutyl ether 143-22-6	20-39	Listed	Not Listed	NA	NA
Tetraethylene Glycol Monobutyl Ether 1559-34-8	5-20	Not Listed	Not Listed	NA	NA
Polyalkylene Glycol Monomethyl Ether 23783-42-8	5-20	Not Listed	Not Listed	NA	NA
Polyethylene Glycol 25322-68-3	5-20	Not Listed	Not Listed	NA	NA
Polyethylene glycol monobutyl ether 9004-77-7	5-20	Not Listed	Not Listed	NA	NA
Polyalkylene Glycols 9038-95-3	5-20	Not Listed	Not Listed	NA	NA
Diethylene Glycol Monomethyl Ether 111-77-3	<5	Not Listed	Not Listed	NA	NA
Diethylene Glycol Monoethyl Ether 111-90-0	<5	Not Listed	Not Listed	NA	NA
Trade Secret : Trade Secret Inhibitor Package	<3	Not Known	Not Known	NA	NA

No specific component of this material is listed as a Hazardous Substance CERCLA (40 CFR 261). However, this product contains various ethylene glycols and glycol ethers which are each included as a broad category on the CERCLA Hazardous substances list.

SARA 311/312 Hazard Categories: Delayed

State Regulations:

Ingredient/CAS No.	wt. %	California Prop. 65 Cancer list	California Prop. 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male

MATERIAL SAFETY DATA SHEET

Trade Name: NAPA DOT 3 Brake Fluid
 MSDS NO.
 Revision Date:
 Date Printed 10/07/2004

Ingredient/CAS No.	wt. %	California Prop. 65 Cancer list	California Prop. 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male
Diethylene Glycol 111-46-6	5-15	Not Listed	Not Listed	Not Listed	Not Listed
Diethylene Glycol Monobutyl Ether 112-34-5	5-20	Not Listed	Not Listed	Not Listed	Not Listed
Triethylene glycol monomethyl ether 112-35-6	6-25	Not Listed	Not Listed	Not Listed	Not Listed
Triethylene Glycol Monoethyl Ether 112-50-5	6-25	Not Listed	Not Listed	Not Listed	Not Listed
Triethylene glycol monobutyl ether 143-22-6	20-39	Not Listed	Not Listed	Not Listed	Not Listed
Tetraethylene Glycol Monobutyl Ether 1559-34-8	5-20	Not Listed	Not Listed	Not Listed	Not Listed
Polyalkylene Glycol Monomethyl Ether 23783-42-8	5-20	Not Listed	Not Listed	Not Listed	Not Listed
Polyethylene Glycol 25322-68-3	5-20	Not Listed	Not Listed	Not Listed	Not Listed
Polyethylene glycol monobutyl ether 9004-77-7	5-20	Not Listed	Not Listed	Not Listed	Not Listed
Polyalkylene Glycols 9038-95-3	5-20	Not Listed	Not Listed	Not Listed	Not Listed
Diethylene Glycol Monomethyl Ether 111-77-3	<5	Not Listed	Not Listed	Not Listed	Not Listed
Diethylene Glycol Monoethyl Ether 111-90-0	<5	Not Listed	Not Listed	Not Listed	Not Listed
Trade Secret : Trade Secret Inhibitor Package	<3	Not Listed	Not Listed	Not Listed	Not Listed

U.S. TSCA: The components of this product are listed on the TSCA Inventory.

16. OTHER INFORMATION

General Notes: Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

Disclaimer:

The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. **1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Trade Name: NAPA DOT 3 Brake Fluid 32 Oz
Chemical Family: GLYCOL ETHER
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: Zak Products, 3006 Skyway Circle South, Irving, TX 75038

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: NAPA DOT 3 Brake Fluid 32 Oz
Chemical Family: GLYCOL ETHER
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: Conoco Phillips, Houston, TX 77079

MATERIAL SAFETY DATA SHEET

Trade Name: NAPA DOT 3 Brake Fluid
MSDS NO.
Revision Date:

Date Printed 10/07/2004

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: NAPA DOT 3 Brake Fluid 32 Oz
Chemical Family: GLYCOL ETHER
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: The Heartland, P.O. Box 1520, Wheaton, IL 60189

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: NAPA DOT 3 Brake Fluid 32 Oz
Chemical Family: GLYCOL ETHER
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: Santech, 2450 Handley Ederville Rd., Fort Worth, TX 76118

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: NAPA DOT 3 Brake Fluid 32 Oz
Chemical Family: GLYCOL ETHER
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: Cyclo Industries, 10190 Riverside Drive, Palm Beach Gardens, FL 33410-4881

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: NAPA DOT 3 Brake Fluid 32 Oz
Chemical Family: GLYCOL ETHER
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: Warren Oil Co., Highway 301 N, Dunn, NC 28334

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: NAPA DOT 3 Brake Fluid 32 Oz
Chemical Family: GLYCOL ETHER
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: Bowes Seal Fast, Indianapolis, IN 46218

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: NAPA DOT 3 Brake Fluid 32 Oz
Chemical Family: GLYCOL ETHER
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: Master Corporation, Memphis, TN 38138

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: NAPA DOT 3 Brake Fluid 32 Oz
Chemical Family: GLYCOL ETHER

MATERIAL SAFETY DATA SHEET

Trade Name: NAPA DOT 3 Brake Fluid
MSDS NO.
Revision Date:

Date Printed 10/07/2004

Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: AGCO Parts, 1500 North Raddant Road, Batavia, IL 60510

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: NAPA DOT 3 Brake Fluid 32 Oz
Chemical Family: GLYCOL ETHER

Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

Supplier: Kar Products, P.O. Box 6908, Cleveland, OH 44101

H1BAK1347 NAPA Lith-Ease Grease (Plastic Tub 1 pound) 765-1393

=====

MATERIAL SAFETY DATA SHEET

Effective Date: 9-6-94 Revision Date:
none

Code: AGS NAPA Lith-Ease Grease (Plastic Tub 1 pound) 765-1393
Page: 1

=====

Section 1 - Product and Company Identification

PRODUCT NAME: NAPA Lith-Ease Grease (Plastic Tub 1 pound) 765-1393

MANUFACTURER'S NAME: NUMBER	AGS Company 2651 Hoyt St. Muskegon Hts. , MI 49444	EMERGENCY TELEPHONE (800)255-3924
INFORMATION		MISCELLANEOUS (616)733-2101

=====

Section 2 - Hazardous Ingredients

HAZARDOUS INGREDIENT	CAS NO.	WGT. %	TLV
White Lithium Grease	Not Assigned	100%	5 cu. m.

NOTE:

=====

Section 3 - Hazards Indentification

EYES: May cause irritation.

SKIN: May cause irritation on prolonged or repeated contact.

INGESTION: Contains petroleums, may cause diarrhea and nausea.

INHALATION: When at elevated temperature or aerosolized, may cause irritation of the respiratory tract.

OTHER EFFECTS: Not known.

=====

Section 4 - First Aid Measures

EYES: Flush with water for at least 15 minutes. Call a physician

immediately.

SKIN: Wash thoroughly with soap and water.

INGESTION: Do not induce vomiting. Call a physician immediately.

INHALATION: Of oil mist from grease; remove victim to fresh air.
Administer oxygen or artificial respiration as required.
Consult a physician.

=====

MATERIAL SAFETY DATA SHEET

Effective Date: 9-6-94
none

Revision Date:

NAPA Lith-Ease Grease (Plastic Tub 1 pound) 765-1393

Code: AGS

Page: 2

=====

Section 5 - Firefighting Measures

FLASH POINT : 400F
METHOD : C.O.C.
AUTO IGNITION TEMP: Not Determined

FLAMMABLE LIMITS:

LEL: Not Determined
UEL: Not Determined

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, foam, water fog,
sand or
earth.

SPECIAL PROCEDURES: Wear self-contained breathing apparatus.

UNUSUAL HAZARDS: Dense smoke.

=====

Section 6 - Environmental Release Measures

SPILL PROCEDURE: Transfer bulk of material to a container. Remove the
residue with an absorbent material.

=====

Section 7 - Handling and Storage

CONDITIONS TO AVOID: None listed.

=====

Section 8 - Exposure Controls/Personal Protection

VENTILATION REQUIREMENTS: General exhaust exceptable where a TLV of 5
cu.

m. as mineral oil will not be exceeded.

EYES : Yes
GLOVES : Yes
CLOTHING : No
RESPIRATORY: No

OTHER: Eye wash in work area.

=====

MATERIAL SAFETY DATA SHEET

Effective Date: 9-6-94 Revision Date:
none
NAPA Lith-Ease Grease (Plastic Tub 1 pound) 765-1393
Code: AGS
Page: 3

=====

Section 9 - Physical and Chemical Properties

pH SUPPLIED : Not Applicable
pH DILUTED : Not Applicable
WATER SOLUBILITY: Nil
SPECIFIC GRAVITY: (Water=1) 0.90
MELTING POINT : 360F (min.)
BOILING POINT : Not Applicable
% VOLATILES : Not Applicable
VAPOR PRESSURE : Not Applicable
VAPOR DENSITY : Not Applicable
EVAPORATION RATE: Not Applicable
APPEARANCE : Pale yellow semi-solid with mineral oil odor.

=====

Section 10 - Stability and Reactivity

UNSTABLE AND/OR AUTO REACTIVE: Stable
INCOMPATIBLE MATERIALS: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS: CO and carbon dioxide.

=====

Section 11 - Toxicological Information

Not available.

=====

Section 12 - Ecological Information

Not available.

=====

Section 13 - Disposal Considerations

DISPOSAL METHOD: Removal by an approved, licensed waste hauler.

EPA WASTE I.D. NO.: Not Reg.

=====
Section 14 - Transport Information

Not available.

=====
Section 15 - Regulatory Information

Not available.

=====
MATERIAL SAFETY DATA SHEET

Effective Date: 9-6-94
none

Revision Date:

NAPA Lith-Ease Grease (Plastic Tub 1 pound) 765-1393

Code: AGS
Page: 4

=====
Section 16 - Other Information

TRADE NAME : NAPA White Lithium Grease
COMMON NAME : Lith-Ease
CONTAINER SIZE: Plastic Tube, 1 pound

NFPA: HEALTH : 0
FLAMMABILITY : 1
REACTIVITY : 0
SPECIFIC HAZARD: N/A

HMIS: HEALTH : 0
FLAMMABILITY : 1
REACTIVITY : 0
PROTECTIVE EQUIPMENT: A

***The information herein is given in good faith,
no warranty, expressed or implied, is made.***



Material Safety Data Sheet

Section 1: Product & Company Identification

Product Name: NAPA/CRC® Disc Brake Quiet

Product Number (s): 091444, 091445

Manufactured By:
CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com

General Information	(215) 674-4300
Technical Assistance	(800) 521-3168
Customer Service	(800) 272-4620
24-Hr Emergency (CHEMTREC)	(800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Red paste, acrylic odor

As defined by OSHA's Hazard Communication Standard, this product is hazardous.

Potential Health Effects:

EYE: Direct contact with material may cause mild irritation, redness and stinging.

SKIN: Prolonged or repeated contact may cause mild irritation and redness of the skin.

INHALATION: Inhalation of vapor or mist can cause irritation to the respiratory passages, headache, and nausea.

INGESTION: Swallowing this material may cause gastrointestinal discomfort.

CHRONIC EFFECTS: None known

TARGET ORGANS: None

Medical Conditions Aggravated by Exposure: None known

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Product Name: NAPA/CRC® Disc Brake Quiet
Product Number (s): 091444, 091445

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Acrylic polymers	proprietary blend	55 – 65
Water	7732-18-5	35 – 45
Ethylene glycol	107-21-1	1 – 3
Pigments	2814-77-9 / 3468-63-1 / 2786-76-7	< 1

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Do not induce vomiting unless instructed by medical personnel. If victim is conscious, give them a glass of water to drink. Consult a physician for further instructions.

Note to Physicians: Treat symptomatically.

Section 5: Fire-Fighting Measures

Flammable Properties: As defined by OSHA, this product is not flammable.

Flash Point:	None (TCC)	Upper Explosive Limit:	ND
Autoignition Temperature:	ND	Lower Explosive Limit:	ND

Suitable Extinguishing Media: As appropriate for surrounding fire.

Products of Combustion: Thermal decomposition may yield acrylic monomers.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Product Name: NAPA/CRC® Disc Brake Quiet

Product Number (s): 091444, 091445

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

Methods for Containment & Clean-up: Dike area to contain spill. Material can create slippery conditions. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid breathing vapors.

Storage Procedures: Store in a cool dry area out of direct sunlight. Keep containers closed when not in use. Keep product from freezing. Product stability may be affected.

Aerosol Storage Level: NA

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Acrylic polymers	NE	NE	NE	NE	NE		
Water	NE	NE	NE	NE	NE		
Ethylene glycol	NE	NE	NE	100 (c)	NE		mg/m ³
Pigments	NE	NE	NE	NE	NE		

N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor and particulate cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as neoprene or nitrile. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Product Name: NAPA/CRC® Disc Brake Quiet
Product Number (s): 091444, 091445

Physical State: Paste
Color: Red
Odor: Acrylic
Specific Gravity: 1.042
Initial Boiling Point: > 200 F
Freezing Point: ND
Vapor Pressure: ND
Vapor Density: ND (air = 1)
Evaporation Rate: < 1 (ether = 1)
Solubility: Dispersible in water
pH: NA
Volatile Organic Compounds: wt %: 0.7 g/L: 7.29 lbs./gal: 0.06

Section 10: Stability and Reactivity

Stability: Stable
Conditions to Avoid: Freezing temperatures
Incompatible Materials: None known
Hazardous Decomposition Products: Thermal decomposition may yield acrylic monomers.
Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

ACUTE EFFECTS

<u>Component</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Acrylic polymers	LD50	> 5000 mg/kg	Oral	Rat
Acrylic polymers	LD50	> 5000 mg/kg	Dermal	Rabbit

CHRONIC EFFECTS

Carcinogenicity:

	<u>Component</u>	<u>Result</u>
OSHA:	None listed	
IARC:	None listed	
NTP:	None listed	

Mutagenicity: No information available

Other: None

Section 12: Ecological Information

Product Name: NAPA/CRC® Disc Brake Quiet

Product Number (s): 091444, 091445

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: No information available
Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: Disposal Considerations

Disposal: This product is not a RCRA hazardous waste. (See 40 CFR Part 261.20 – 261.33)

All disposal activities must comply with federal, state and local regulations. Local regulations may be more stringent than state or national requirements.

Section 14: Transport Information

Proper shipping description:

US DOT (ground): Not Regulated

Special Provisions: None

Section 15: Regulatory Information

U.S. Federal

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: ethylene glycol (5000 lbs)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:

Fire Hazard	No
Reactive Hazard	No
Release of Pressure	No
Acute Health Hazard	No
Chronic Health Hazard	No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
ethylene glycol (2%)

Clean Air Act:

Product Name: NAPA/CRC® Disc Brake Quiet

Product Number (s): 091444, 091445

Section 112 Hazardous Air Pollutants (HAPs): ethylene glycol

State Regulations

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm:

D&C Orange #17 (3468-63-1);
trace amounts of acrylonitrile, formaldehyde
and ethyl acrylate may also be present

State Right to Know:

New Jersey: 107-21-1
Pennsylvania: 107-21-1, 102-71-6
Massachusetts: 107-21-1
Rhode Island : 107-21-1, 102-71-6

Additional Regulatory Information: None

Section 16: Other Information

NFPA: Health: 1 Flammability: 0 Reactivity: 0
HMIS: Health: 1 Flammability: 0 Reactivity: 0 PPE: B

Prepared By: Michelle Rudnick
CRC #: 562A
Revision Date: 12/13/2007

Changes since last revision: MSDS reformatted in accordance with ANSI Z400.1-2004

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS:	Chemical Abstract Service	NA:	Not Applicable
ppm:	Parts per Million	ND:	Not Determined
TCC:	Tag Closed Cup	NE:	Not Established
PMCC:	Pensky-Martens Closed Cup	g/L:	grams per Liter
PPE:	Personal Protection Equipment	lbs./gal:	pounds per gallon
TWA:	Time Weighted Average	STEL:	Short Term Exposure Limit
OSHA:	Occupational Safety and Health Administration		
ACGIH	American Conference of Governmental Industrial Hygienists		
NIOSH	National Institute of Occupational Safety & Health		

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NM7212

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	NAPA® MAC'S STARTING FLUID
Product code	NM7212
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: aerosol

WARNING! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. CONTENTS UNDER PRESSURE. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS.

Potential Health Effects

Routes of exposure

Inhalation, Skin absorption, Skin contact, Eye Contact

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Ingestion

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Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing aerosol and/or mist is possible when material is sprayed. Aerosol and mist may present a greater risk of injury because more material may be present in the air than from vapor alone. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), Individuals with preexisting heart disorders maybe more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), loss of appetite, loss of coordination, irregular heartbeat, narcosis (dazed or sluggish feeling)

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: effects on hearing

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

There are no data available for assessing risk to the fetus from maternal exposure to this material.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
n-HEPTANE	142-82-5	>=70-<80%
ETHYL ETHER	60-29-7	>=15-<20%
CARBON DIOXIDE	124-38-9	>=1.5-<5%

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

Treatment: No information available.

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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water mist, Carbon dioxide (CO₂), Dry chemical

Hazardous combustion products

carbon dioxide and carbon monoxide, various hydrocarbons

Precautions for fire-fighting

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing impervious protective gloves. As with all products of this nature, good personal hygiene is essential. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or smoking. Regular laundering of contaminated

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clothing is essential to reduce indirect skin contact with this material. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage

Do not store near extreme heat, open flame, or sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

n-HEPTANE		142-82-5
ACGIH	time weighted average	400 ppm
ACGIH	Short term exposure limit	500 ppm
NIOSH	Recommended exposure limit (REL):	85 ppm
NIOSH	Recommended exposure limit (REL):	350 mg/m3
NIOSH	Ceiling Limit Value and Time Period (if specified):	440 ppm
NIOSH	Ceiling Limit Value and Time Period (if specified):	1,800 mg/m3
OSHA Z1	Permissible exposure limit	500 ppm
OSHA Z1	Permissible exposure limit	2,000 mg/m3
OSHA Z1A	time weighted average	400 ppm
OSHA Z1A	time weighted average	1,600 mg/m3
OSHA Z1A	Short term exposure limit	500 ppm
OSHA Z1A	Short term exposure limit	2,000 mg/m3
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	400 ppm
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,600 mg/m3
US CA OEL	Short term exposure limit	500 ppm
US CA OEL	Short term exposure limit	2,000 mg/m3
ACGIH	time weighted average	400 ppm
ACGIH	Short term exposure limit	500 ppm

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ETHYL ETHER		60-29-7
ACGIH	time weighted average	400 ppm
ACGIH	Short term exposure limit	500 ppm
OSHA Z1	Permissible exposure limit	400 ppm
OSHA Z1	Permissible exposure limit	1,200 mg/m3
CARBON DIOXIDE		124-38-9
ACGIH	time weighted average	5,000 ppm
ACGIH	Short term exposure limit	30,000 ppm
NIOSH	Recommended exposure limit (REL):	5,000 ppm
NIOSH	Recommended exposure limit (REL):	9,000 mg/m3
NIOSH	Short term exposure limit	30,000 ppm
NIOSH	Short term exposure limit	54,000 mg/m3
OSHA Z1	Permissible exposure limit	5,000 ppm
OSHA Z1	Permissible exposure limit	9,000 mg/m3

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection

Wear resistant gloves (consult your safety equipment supplier).
Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local

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safety equipment supplier to determine the proper personal protective equipment for your use.

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	aerosol
Form	aerosol
Colour	No data
Odour	No data
Boiling point/boiling range	34.60 °C / 94.3 °F @ 1,013.23 hPa
pH	No data
Flash point	No data
Evaporation rate	No data
Explosion limits	1.05 %(V) 36.5 %(V)
Vapour pressure	717.26 hPa @ 77 °F / 25 °C
Vapour density	No data
Density	0.7114 g/cm ³ @ 60.01 °F / 15.56 °C
	No data
Solubility	No data
Partition coefficient: n-octanol/water	No data
log Pow	no data available
Autoignition temperature	No data

10. STABILITY AND REACTIVITY**Stability**

Stable.

Conditions to avoid

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Avoid heat, open flame, and prolonged storage at elevated temperatures.

Incompatible products

strong oxidizing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide, various hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

n-HEPTANE	LD 50 Rat: > 15,000 mg/kg
ETHYL ETHER	LD 50 Rat: 3,230 - 3,920 mg/kg
CARBON DIOXIDE	no data available

Acute inhalation toxicity

n-HEPTANE	LC 50 Rat: 103 g/m ³ , 4 h
ETHYL ETHER	LC 50 Rat: 32000 ppm, 4 h
CARBON DIOXIDE	no data available

Acute dermal toxicity

n-HEPTANE	LD 50 Rabbit: > 2,001 mg/kg
ETHYL ETHER	no data available
CARBON DIOXIDE	no data available

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

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Acute Toxicity to Aquatic Invertebrates
No data

Environmental fate and pathways
No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

IMDG:

UN1950, AEROSOLS 2.1,

IATA_P:

UN1950, Aerosols, flammable 2.1,

IATA_C:

UN1950, Aerosols, flammable 2.1,

CFR_ROAD:

UN1950, Aerosols 2.1,

CFR_RAIL:

UN1950, Aerosols 2.1,

CFR_INWTR:

UN1950, Aerosols 2.1,

Dangerous goods descriptions (if indicated above) may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer.

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BENZENE

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

BENZENE
TOLUENE

SARA Hazard Classification Acute Health Hazard

SARA 313 Component(s)

Reportable quantity - Product

US. EPA CERCLA Hazardous Substances (40 CFR 302) 511 lbs

Reportable quantity - Components

n-HEPTANE	142-82-5	none
ETHYL ETHER	60-29-7	100 lbs
CARBON DIOXIDE	124-38-9	none

	Health	Flammability	Reactivity	Other
HMIS	1	4	0	
NFPA	1	4	0	

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

MATERIAL SAFETY DATA SHEET

8700
02 00

DATE OF PREPARATION
Aug 25, 2009

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

8700

PRODUCT NAME

NAPA® Mac's® Carb, Choke, & Throttle Body Cleaner

MANUFACTURER'S NAME

Manufactured by:
The Sherwin-Williams Co.
Diversified Brands
Cleveland, OH 44115

Distributed by:
Balkamp Headquarters
P. O. Box 421268
Indianapolis, IN 46242

Telephone Numbers and Websites

Regulatory Information	(216) 566-2902
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
<i>*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)</i>	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
10	74-98-6	Propane	ACGIH TLV OSHA PEL 2500 PPM 1000 PPM	760 mm
23	142-82-5	Heptane	ACGIH TLV ACGIH TLV OSHA PEL OSHA PEL 400 PPM 500 PPM STEL 400 PPM 500 PPM STEL	50 mm
1	64742-89-8	Lt. Aliphatic Hydrocarbon Solvent	ACGIH TLV OSHA PEL 100 PPM 100 PPM	53 mm
2	100-41-4	Ethylbenzene	ACGIH TLV ACGIH TLV OSHA PEL OSHA PEL 100 PPM 125 PPM STEL 100 PPM 125 PPM STEL	7.1 mm
8	1330-20-7	Xylene	ACGIH TLV ACGIH TLV OSHA PEL OSHA PEL 100 PPM 150 PPM STEL 100 PPM 150 PPM STEL	5.9 mm
1	108-87-2	Methyl Cyclohexane	ACGIH TLV OSHA PEL 400 PPM 400 PPM	40 mm
55	67-64-1	Acetone	ACGIH TLV ACGIH TLV OSHA PEL 500 PPM 750 PPM STEL 1000 PPM	180 mm

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death. Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary and reproductive systems.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists. Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

HMS Codes

Health	2*
Flammability	4
Reactivity	0

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	EXTINGUISHING MEDIA
Propellant < 0 °F	1.0	12.8	Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

- Remove all sources of ignition. Ventilate the area.
- Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE**STORAGE CATEGORY**

Not Available

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively. During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition. Consult NFPA Code. Use approved Bonding and Grounding procedures. Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION**PRECAUTIONS TO BE TAKEN IN USE**

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

PROTECTIVE GLOVES

None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	6.11 lb/gal	731 g/l
SPECIFIC GRAVITY	0.73	
BOILING POINT	<0 - 292 °F	<-18 - 144 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	100%	
EVAPORATION RATE	Faster than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
Volatile Weight 45.00%	Less Water and Federally Exempt Solvents	

SECTION 10 — STABILITY AND REACTIVITY**STABILITY — Stable****CONDITIONS TO AVOID**

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION**CHRONIC HEALTH HAZARDS**

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
74-98-6	Propane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
142-82-5	Heptane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64742-89-8	Lt. Aliphatic Hydrocarbon Solvent	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
100-41-4	Ethylbenzene	LC50 RAT	4HR	Not Available
		LD50 RAT		3500 mg/kg
1330-20-7	Xylene	LC50 RAT	4HR	5000 ppm
		LD50 RAT		4300 mg/kg
108-87-2	Methyl Cyclohexane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
67-64-1	Acetone	LC50 RAT	4HR	Not Available
		LD50 RAT		5800 mg/kg

SECTION 12 — ECOLOGICAL INFORMATION**ECOTOXICOLOGICAL INFORMATION**

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS**WASTE DISPOSAL METHOD**

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION**US Ground (DOT)**

May be classed as Consumer Commodity, ORM-D

UN1950, AEROSOLS, 2.1, LIMITED QUANTITY, (ERG#126)

Canada (TDG)

May be classed as Consumer Commodity, ORM-D

UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, (ERG#126)

IMO

May be shipped as Limited Quantity

UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, Ems F-D, S-U

SECTION 15 — REGULATORY INFORMATION**SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION**

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene	8	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

1073
05 00

DATE OF PREPARATION
Aug 25, 2009

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

1073

PRODUCT NAME

NAPA® Mac's® Battery Terminal Protector

MANUFACTURER'S NAME

Manufactured by:
The Sherwin-Williams Co.
Diversified Brands
Cleveland, OH 44115

Distributed by:
Balkamp Headquarters
P. O. Box 421268
Indianapolis, IN 46242

Telephone Numbers and Websites

Regulatory Information	(216) 566-2902
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
9	74-98-6	Propane		
		ACGIH TLV	2500 PPM	760 mm
		OSHA PEL	1000 PPM	
21	106-97-8	Butane		
		ACGIH TLV	800 PPM	760 mm
		OSHA PEL	800 PPM	
14	142-82-5	Heptane		
		ACGIH TLV	400 PPM	50 mm
		ACGIH TLV	500 PPM STEL	
		OSHA PEL	400 PPM	
		OSHA PEL	500 PPM STEL	
13	108-88-3	Toluene		
		ACGIH TLV	20 PPM	22 mm
		OSHA PEL	100 PPM (Skin)	
		OSHA PEL	150 PPM (Skin) STEL	
2	100-41-4	Ethylbenzene		
		ACGIH TLV	100 PPM	7.1 mm
		ACGIH TLV	125 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	125 PPM STEL	
13	1330-20-7	Xylene		
		ACGIH TLV	100 PPM	5.9 mm
		ACGIH TLV	150 PPM STEL	
		OSHA PEL	100 PPM	
		OSHA PEL	150 PPM STEL	
2	64742-94-5	Medium Aromatic Hydrocarbons		
		ACGIH TLV	Not Available	0.12 mm
		OSHA PEL	Not Available	
0.3	91-20-3	Naphthalene		
		ACGIH TLV	10 PPM	1 mm
		ACGIH TLV	15 PPM STEL	
		OSHA PEL	10 PPM	
		OSHA PEL	15 PPM STEL	
16	67-64-1	Acetone		
		ACGIH TLV	500 PPM	180 mm
		ACGIH TLV	750 PPM STEL	
		OSHA PEL	1000 PPM	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary, cardiovascular and reproductive systems.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

HMIS Codes

Health	2*
Flammability	4
Reactivity	0

SECTION 4 — FIRST AID MEASURES

- EYES:** Flush eyes with large amounts of water for 15 minutes. Get medical attention.
- SKIN:** Wash affected area thoroughly with soap and water.
Remove contaminated clothing and laundry before re-use.
- INHALATION:** If affected, remove from exposure. Restore breathing. Keep warm and quiet.
- INGESTION:** Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	EXTINGUISHING MEDIA
Propellant < 0 °F	0.8	12.8	Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

- Remove all sources of ignition. Ventilate the area.
- Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Available

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively.
During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
Consult NFPA Code. Use approved Bonding and Grounding procedures.
Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.
When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	6.02 lb/gal	721 g/l
SPECIFIC GRAVITY	0.72	
BOILING POINT	<0 - 415 °F	<-18 - 212 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	95%	
EVAPORATION RATE	Faster than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)	Less Water and Federally Exempt Solvents	
	Volatile Weight 76.81%	

SECTION 10 — STABILITY AND REACTIVITY**STABILITY — Stable**
CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION**CHRONIC HEALTH HAZARDS**

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
74-98-6	Propane	LC50 RAT LD50 RAT	4HR	Not Available Not Available
106-97-8	Butane	LC50 RAT LD50 RAT	4HR	Not Available Not Available
142-82-5	Heptane	LC50 RAT LD50 RAT	4HR	Not Available Not Available
108-88-3	Toluene	LC50 RAT LD50 RAT	4HR	4000 ppm 5000 mg/kg
100-41-4	Ethylbenzene	LC50 RAT LD50 RAT	4HR	Not Available 3500 mg/kg
1330-20-7	Xylene	LC50 RAT LD50 RAT	4HR	5000 ppm 4300 mg/kg
64742-94-5	Medium Aromatic Hydrocarbons	LC50 RAT LD50 RAT	4HR	Not Available Not Available
91-20-3	Naphthalene	LC50 RAT LD50 RAT	4HR	Not Available Not Available
67-64-1	Acetone	LC50 RAT LD50 RAT	4HR	Not Available 5800 mg/kg

SECTION 12 — ECOLOGICAL INFORMATION**ECOTOXICOLOGICAL INFORMATION**

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

US Ground (DOT)

May be classed as Consumer Commodity, ORM-D

UN1950, AEROSOLS, 2.1, LIMITED QUANTITY, (ERG#126)

Canada (TDG)

May be classed as Consumer Commodity, ORM-D

UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, (ERG#126)

IMO

May be shipped as Limited Quantity

UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, Ems F-D, S-U

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
108-88-3	Toluene	13	
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene	13	
91-20-3	Naphthalene	0.2	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

1072
03 00

DATE OF PREPARATION
Aug 25, 2009

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

1072

PRODUCT NAME

NAPA® Mac's® Battery Terminal Cleaner

MANUFACTURER'S NAME

Manufactured by:
The Sherwin-Williams Co.
Diversified Brands
Cleveland, OH 44115

Distributed by:
Balkamp Headquarters
P. O. Box 421268
Indianapolis, IN 46242

Telephone Numbers and Websites

Regulatory Information	(216) 566-2902
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300

*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
3	74-98-6	Propane	ACGIH TLV	2500 PPM
			OSHA PEL	1000 PPM
7	106-97-8	Butane	ACGIH TLV	800 PPM
			OSHA PEL	800 PPM
6	67-63-0	2-Propanol	ACGIH TLV	200 PPM
			ACGIH TLV	400 PPM STEL
			OSHA PEL	400 PPM

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

HMIS Codes

Health	2
Flammability	2
Reactivity	0

SECTION 4 — FIRST AID MEASURES

- EYES:** Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
 Remove contaminated clothing and launder before re-use.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT Propellant < 0 °F	LEL 1.9	UEL 12.7	EXTINGUISHING MEDIA Carbon Dioxide, Dry Chemical, Alcohol Foam
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UNUSUAL FIRE AND EXPLOSION HAZARDS

- Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.
 Application to hot surfaces requires special precautions.
 During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

- Full protective equipment including self-contained breathing apparatus should be used.
 Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

- Remove all sources of ignition. Ventilate the area.
- Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Available

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

- Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively.
 During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
 Consult NFPA Code. Use approved Bonding and Grounding procedures.
 Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

- Use only with adequate ventilation.
 Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
 Wash hands after using.

VENTILATION

- Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits.
 Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

- If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

PROTECTIVE GLOVES

- None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

EYE PROTECTION

- Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

- Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	7.71 lb/gal	923 g/l
SPECIFIC GRAVITY	0.93	
BOILING POINT	<0 - 213 °F	<-18 - 100 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	98%	
EVAPORATION RATE	Faster than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
pH	7.0	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

Volatile Weight 15.90% Less Water and Federally Exempt Solvents

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
74-98-6	Propane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
106-97-8	Butane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
67-63-0	2-Propanol	LC50 RAT	4HR	Not Available
		LD50 RAT		5045 mg/kg

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

US Ground (DOT)

May be classed as Consumer Commodity, ORM-D
UN1950, AEROSOLS, 2.1, LIMITED QUANTITY, (ERG#126)

Canada (TDG)

May be classed as Consumer Commodity, ORM-D
UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, (ERG#126)

IMO

May be shipped as Limited Quantity
UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, EmS F-D, S-U

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
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No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

<p>The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.</p>

Supplier:
 Permatex, Inc.
 10 Columbus Blvd.
 Hartford, CT 06106
 Telephone: 1-87-Permatex
 (877) 376-2839

Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: NAPA 765-1151 ANTI-SEIZE 16OZ
 Item No: 21115
 Product Type: Lubricant

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Percent	ACGIH 8 Hr. TWA:	OSHA 8 Hr. TWA:
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC 64742-52-5	50-60	5 mg/m3 mist	5 mg/m3 mist
CALCIUM OXIDE 1305-78-8	15-25	2 mg/m3	5 mg/m3
ALUMINIUM POWDER (PYROPHORIC) 7429-90-5	5-15	metal dust, as Al: 10 mg/m3 TWA	total dust, as Al: 15 mg/m3 TWA; respirable fraction, as Al: 5 mg/m3 TWA
GRAPHITE 7782-42-5	1-10	3 mg/m3 TWA	3 mg/m3 TWA
MINERAL OIL 64741-44-2	1-10	5 mg/m3 TWA	10 mg/m3 TWA
LITHIUM SOAP 7620-77-1	1-10		
SILICA, QUARTZ 14808-60-7	0.1-1.0	0.1 mg/m3 TWA (respirable dust)	0.1 mg/m3 TWA (respirable dust)

3. HAZARDS IDENTIFICATION

Toxicity: May cause eye and skin irritation. May cause nose, throat and respiratory irritation. May cause gastrointestinal irritation. May cause central nervous system (CNS) depression.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation.

Signs and Symptoms of Exposure: Overexposure may cause eye and skin redness, difficulty breathing and vomiting. Excessive accidental exposure may cause headache, dizziness, nausea and mild respiratory irritation. Inhalation of dust at levels above recommended exposure limit may cause metallic or sweet taste, irritation of pharynx and possible ulceration with perforation of the nasal septum. Repeated skin contact may cause allergic skin reactions.

Ingredients	Percent	NTP:	ACGIH Carcinogens	IARC:
SILICA, QUARTZ 14808-60-7	0.1-1.0	Known Carcinogen		Group 1; Vol. 68; 1997

Medical Conditions Recognized as Being Aggravated by Exposure: Persons with respiratory problems such as emphysema and asthma should avoid inhalation.

4. FIRST AID MEASURES

Ingestion: If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Skin Contact: Remove contaminated clothing. Wash area with soap and water. If irritation persists, seek medical attention.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get

Product Name: NAPA 765-1151 ANTI-SEIZE 16OZ
Item No: 21115

medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point (°F/C): Greater than 200 degrees F. Method: Tag Closed Cup
Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.
Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus. Water spray may be ineffective on flames but should be used to keep fire-exposed containers cool.
Hazardous Products Formed by Fire or Thermal Decomposition: Metal oxide fumes, Oxides of carbon. Nitrogen compounds, Barium oxide. Sulfur dioxide. Hydrogen sulfide, Zinc.
Unusual Fire/Explosion Hazards: May ignite when sufficient heat is applied.
Lower Explosive Limit: 30% aluminum metal; 1% oil
Upper Explosive Limit: 7% oil

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

7. HANDLING AND STORAGE

Storage: Store away from heat, sparks or open flame. Do not store at temperatures above 120 degrees F.
Handling: Avoid prolonged skin contact. Keep away from eyes. Do not inhale vapors. Do not use near heat, sparks or open flame. Wash hands and face after handling this compound.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses or goggles.
Skin: Neoprene or nitrile gloves recommended.
Ventilation: Provide adequate local ventilation to maintain vapor concentration below TLV if misting of oil occurs.
Respiratory Protection: Use an approved NIOSH organic vapor respirator below the TLV. If TLV is exceeded or overexposure is likely, use positive pressure or self contained breathing apparatus.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Silver paste
Odor: PETROLEUM
Boiling Point (°F): Not determined.
pH: Does not apply
Solubility in Water: Nil
Specific Gravity: 1.17
VOC Content(Wt.%): Not determined
Vapor Pressure: Less than 5 mm Hg
Vapor Density (Air=1): Not Determined
Evaporation Rate: Not Determined

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal conditions
Hazardous Polymerization: WILL NOT OCCUR
Incompatibilities: Strong oxidizers, alkalis, mineral acids, selected amines.
Conditions to Avoid: Do not expose to heat or store at temperatures above 120 F.
Hazardous Products Formed by Fire or Thermal Decomposition: Metal oxide fumes, Oxides of carbon. Nitrogen compounds, Barium oxide. Sulfur dioxide. Hydrogen sulfide, Zinc.

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations.

Product Name: NAPA 765-1151 ANTI-SEIZE 16OZ
Item No: 21115

US EPA Waste Number: D001

14. TRANSPORT INFORMATION

DOT (49CFR 172)

Domestic Ground Transport

DOT Shipping Name: Unrestricted
Hazard Class: NONE
UN/ID Number: None
Marine Pollutant: None

IATA

Proper Shipping Name: Unrestricted
Class or Division: None
UN/NA Number: NONE

IMDG

Proper Shipping: Unrestricted
Hazard Class: None
UN Number: None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.
CALIFORNIA PROP 65:

TSCA Inventory Status:

All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 1, FLAMMABILITY 1, REACTIVITY 1
Estimated HMIS Classification: FLAMMABILITY 1, REACTIVITY 1, HEALTH 1

NFPA is a registered trademark of the National Fire Protection Assn.
HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd Health and Safety Manager
Company: Permatex, Inc. 10 Columbus Blvd. Hartford, CT 06106
Telephone Number: 1-87-Permatex (877) 376-2839
Revision Date: 08/08/2001

ATT Kandy

4 pages

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**Global Parts Order Processing
Material Safety Data Sheet
NEUWIRTH MOTORS INC**

April 6, 2010
11:20

*MOPAR TRANSMISSION
FLUID*

94009

CHRYSLER
HAZARD COMMUNICATION SHEET

233885 DRAFT PART/COMTTY CD: 05127382AB
PREPARATION DATE: 10-18-06 STNDRD: N/AV SUPPLIER: 37637 MFGR: 03500
OSHA HAZ: YES HAZWOPER HAZ: YES CONS PROD/HAZ SUB: YES

*** SECTION 01 - PRODUCT INFORMATION ***

MFG BY: PART SALES & SERVICE CHRYSLER
26311 LAWRENCE AVE CENTERLINE MI 48015
EMERGENCY PHONE: 248-512-8002 AFTER HOURS: 248-576-8888
DIST BY: PART SALES & SERVICE CHRYSLER
26311 LAWRENCE AVE CENTERLINE MI 48015
EMERGENCY PHONE: 248-512-8002 AFTER HOURS: 248-576-8888
CHRYSLER INDUSTRIAL HYGIENE: 248-512-8260 AFTER HOURS: 248-576-8888
BRAND NAME: SHELL ATF 3403-M115
MFG ID : 53061
DESCRIPTION: FLUID-AUTOMATIC TRANSMISSION

*** SECTION 02 - INGREDIENTS ***

HAZARDOUS INGREDIENTS:	PERCENT				
COMM NAME / CAS NO & CHEM NAME:	BY WGT	OSHA	ACGIH	CHRYIS	UNITS NOTATIONS
EXISTING INGREDIENTS					
DISTILLATES (PETROLEUM), SOLVENT-	60-100 W	5	5	5	MG/M3 I1 N1
064741-89-5 DISTILLATES, PETROLE	L	N/AP	10	10	
HYDROTREATED LIGHT NAPHTHENIC DIS	60-100 W	5	5	5	MG/M3 I1 N1
064742-53-6 DISTILLATES, PETROLE	L	N/AP	10	10	
DISPERSANT	10-30 W	N/AV	N/AV	N/AV	N/AV
000756-00-2C DISPERSANT					
INHIBITORS, ORGANIC	10-30 W	N/AV	N/AV	N/AV	N/AV
000950-00-2C INHIBITORS, ORGANIC					
GENERIC DESC: MIXTURE(S) OF THE FOLLOWING: PETROLEUM DISTILLATE(S), WAX, ADDITIVES AND XYLENE.					

*** SECTION 03 - PHYSICAL DATA ***

BOILING POINT : N/AV F SOLUB IN WATER: N/AV
VAPOR PRESSURE: < 0 MM HG ATN/AV EVAP. RATE: N/AV REF: N/AV
VAPOR DENSITY : N/AV SPECIFIC GRAVITY: 0.890 AT 60 F
PH AT FULL STRENGTH: N/AV PH AT REC. DILUT: N/AV
%VOLATILE BY VOL : N/AV VOLATILE ORGANIC COMP: N/AV N/AV
ODOR THRESHOLD: N/AV PPM FOR % POPULATION
FREEZING POINT: N/AV COEFF. OF WATER/OIL DIST: N/AV
APPEARANCE & ODOR: STATE: LIQUID..... COLOR: RED..... ODOR: HYDROCARBON.....
ODOR: PETROLEUM.....

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*** SECTION 04 - FIRE AND EXPLOSION DATA ***

FLASH POINT: 374 F COC IGN TEMP: N/AV LEL: N/AV UEL: N/AV

SPECIAL FIRE & EXPLOSION HAZARDS:

PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER. DO NOT USE
WATER IN STRAIGHT STREAMS.

EXTINGUISHING MEDIA:

WATER FOG, FOAM, DRY CHEMICAL OR CARBON DIOXIDE.

SPECIAL FIREFIGHTING PROCEDURES:

USE PROTECTIVE CLOTHING. USE SELF-CONTAINED BREATHING APPARATUS WITH A FULL
FACEPIECE OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE. USE
WATER TO COOL FIRE EXPOSED CONTAINERS.

SENSITIVE TO MECHANICAL IMPACT?: N/AV SENSITIVE TO STATIC DISCHARGE?: N/AV

HAZARDOUS COMBUSTION PRODUCTS:

OXIDES OF NITROGEN, OXIDES OF SULFUR, OXIDES OF PHOSPHORUS, ORGANIC
COMPOUNDS, CARBON MONOXIDE AND CARBON DIOXIDE.

FLAME PROJECTION: N/AP

*** SECTION 05 - HEALTH HAZARD DATA ***

EFFECTS OF OVEREXPOSURE - ACUTE & CHRONIC:

<<---EYE CONTACT--->> MINOR IRRITATION. <<---SKIN CONTACT--->> DIRECT
CONTACT MAY PRODUCE THE FOLLOWING: MINOR IRRITATION.. PROLONGED CONTACT MAY
PRODUCE THE FOLLOWING: OIL ACNE, FOLLICULITIS OR DERMATITIS.<<---INHALATION--->> IF HEATED TO HIGH TEMPERATURE VAPOR MAY PRODUCE THE
FOLLOWING: IRRITATION OF UPPER RESPIRATORY TRACT. <<---INGESTION--->> NO
KNOWN EFFECTS. HOWEVER, INGESTION IS NOT RECOMMENDED. <<---MEDICAL
CONDITIONS WHICH MAY BE AGGRAVATED BY THIS PRODUCT--->> SKIN DISORDERS AND
LUNG OR RESPIRATORY TRACT DISORDERS.

EMERGENCY FIRST AID PROCEDURES:

<<---EYE CONTACT--->> RINSE EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER,
OCCASIONALLY LIFTING BOTH UPPER AND LOWER LIDS. CONTINUE FOR 15 MINUTES.
CONTACT A PHYSICIAN. <<---SKIN CONTACT--->> REMOVE CONTAMINATED CLOTHING.
WASH WITH SOAP AND WATER. IF CONDITION PERSISTS, CONSULT A PHYSICIAN.
<<---INHALATION--->> REMOVE TO FRESH AIR AT ONCE. ARTIFICIAL RESPIRATION IF
BREATHING HAS STOPPED. CARDIAC RESUSCITATION IF INDICATED. CONTACT A
PHYSICIAN. <<---INGESTION--->> LARGE QUANTITIES-DO NOT INDUCE VOMITING-CALL
PHYSICIAN IMMEDIATELY.

*** SECTION 06 - REACTIVITY DATA ***

STABILITY: STABLE

CONDITIONS TO AVOID:

HIGH TEMPERATURE AND SPARKS OR OPEN FLAME.

MATERIALS TO AVOID:

OXIDIZABLE MATERIALS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

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POLYMERIZATION CONDITIONS TO AVOID:

POLYMERIZATION WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION PRODUCTS:

OXIDES OF NITROGEN, OXIDES OF SULFUR, OXIDES OF PHOSPHORUS, ORGANIC COMPOUNDS, CARBON MONOXIDE AND CARBON DIOXIDE.

*** SECTION 07 - SPILL OR LEAK PROCEDURES ***

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

LARGE SPILL-DO NOT FLUSH INTO SEWER SYSTEM. WEAR PROTECTIVE CLOTHING. WEAR RESPIRATORY PROTECTION. STOP SPILL AT SOURCE. CONTAIN WITH DIKE. REMOVE SPILL BY USING A VACUUM TRUCK. PUMP INTO SALVAGE TANK. PREVENT GROUNDWATER CONTAMINATION. RESIDUE-ABSORB ON SAND OR VERMICULITE FLUSH AREA WITH WATER.

WASTE DISPOSAL METHODS:

DISPOSE OF IN A MANNER CONSISTENT WITH STATE, PROVINCIAL, LOCAL, AND FEDERAL DISPOSAL REGULATIONS. ADVISE AUTHORITIES IF PRODUCT HAS ENTERED OR MAY ENTER SEWERS, WATERCOURSES OR EXTENSIVE LAND AREAS.

*** SECTION 08 - SPECIAL PROTECTION ***

RESPIRATORY PROTECTION:

ORGANIC VAPOR RESPIRATOR OR AIR-SUPPLIED RESPIRATOR. THIS EQUIPMENT MAY BE NEEDED IF SIGNIFICANT VAPORS OR MIST ARE GENERATED.

VENTILATION TYPE:

GOOD GENERAL VENTILATION.

PROTECTIVE GLOVES:

RECOMMENDED. NITRILE RUBBER GLOVES.

EYE PROTECTION:

RECOMMENDED. CHEMICAL GOGGLES.

OTHER PROTECTIVE EQUIPMENT:

CLOTHING (SAME MATERIAL AS GLOVES). ALL SKIN CONTACT MUST BE AVOIDED. PROTECTIVE EQUIPMENT MUST BE WORN AT ALL TIMES DURING PRODUCT USE IF SKIN CONTACT IS POSSIBLE.

*** SECTION 09 - SPECIAL PRECAUTIONS ***

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE:

AVOID SKIN CONTACT. REMOVE CONTAMINATED CLOTHING AND LAUNDRER BEFORE REUSE. WASH THOROUGHLY AFTER HANDLING. LEATHER CLOTHING AND SHOES WILL BE DAMAGED BY THIS PRODUCT. STORE IN A COOL, DRY PLACE. STORE IN A WELL VENTILATED AREA. KEEP AWAY FROM OPEN FLAME. AVOID USING OR STORING AT HIGH TEMPERATURES.

OTHER PRECAUTIONARY MEASURES:

MAINTAIN GOOD HOUSEKEEPING AND HYGIENIC PRACTICES.

*** SECTION 10 - WASTE LABELING INFORMATION ***

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DOT LABELING INFORMATION (49 CFR 100-199)

ID#: N/AP ERG#: HAZARD CLASS - PRMY: N/AP PACKING GROUP: N/AP

NOT HAZARDOUS PER DOT REGULATIONS

RCRA INFORMATION (40 CFR 122-124, 260-265)

INFORMATION UNAVAILABLE AT THIS TIME

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	Marvel Air Tool Oil
PRODUCT CODE	MM080, MM085, MM85R, MM086, MM088R, MM089 MM
CHEMICAL FAMILY	Petroleum Distillates
CHEMICAL NAME	Complex Mixture of Hydrocarbons
FORMULA	Mixture

MANUFACTURER

Marvel Oil Company, Inc
625 Willowbrook Centre Parkway
Willowbrook, IL 60527
Phone: 630-455-3866
Fax: 630-455-3868

EMERGENCY TELEPHONE NUMBERS

Transportation:
CHEMTREC: 800-424-9300
Medical:
ROCKY MTN POISON CTR: 800-332-3073

2. POSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	CONCENTRATION (wt %)
Naphthenic Hydrocarbons	64742-52-5	70 – 80
Mineral Spirits	08052-41-3	20 – 30
Chlorinated Hydrocarbons	00095-50-1	0 – 1

EXPOSURE LIMITS 8 hrs. TWA(ppm)

	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Naphthenic Hydrocarbons	5 as oil mist	5 as oil mist
Mineral Spirits	100	100
Chlorinated Hydrocarbons	25	25

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

INHALATION: Can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even asphyxiation.

INGESTION: Can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration into lungs can cause pneumonitis which can be fatal.

SKIN CONTACT: Prolonged or repeated contact can cause moderated irritation, defatting or dermatitis.

EYE CONTACT: Can cause severe irritation, redness, tearing or blurred vision.

4. FIRST AID MEASURES

EYE: Flush with large amounts of water, lifting upper and lower eyelids occasionally. Get medical attention.

SKIN: Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder before re-use.

INHALATION: Remove person to fresh air. If breathing difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm and quiet. Call a physician.

INGESTION: Do not induce vomiting. Keep person quiet and warm. Get medical attention. Aspiration of material into lungs can cause chemical pneumonitis which can be fatal.

5. FIRE FIGHTING MEASURES

FLASH POINT: 128 ° F (53 ° C) TCC

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus with full facepiece operated with positive pressure-demand when fighting large fires.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: Ventilate area. Remove sources of ignition. Prevent entry into sewers and waterways. Pick up free liquid for recycle and/or disposal. Absorb small amounts on inert material for disposal.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE (MIN./MAX.): -40 ° F (-40 ° C)/ 120 ° F (49 C)

SHELF LIFE: 3 years minimum when the original container is kept tightly closed and properly stored.

SPECIAL SENSITIVITY: None.

HANDLING AND STORAGE PRECAUTIONS: Empty containers may be dangerous since fumes may still exist. Observe precautions given for this product as stated in this document.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION REQUIREMENTS: Splash goggles.

SKIN PROTECTION REQUIREMENTS: Wear chemically resistant gloves.

RESPIRATOR/VENTILATION REQUIREMENTS: Provide sufficient ventilation to avoid exposure levels above the established TLV's.

EXPOSURE LIMITS: Not established for product as whole.

Mineral Spirits	NIOSH	100 ppm TWA
Oil Mist	OSHA	5 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Thin liquid

COLOR:	Red
ODOR:	Petroleum
BOILING POINT:	Not determined
MELT / FREEZE POINT	- 60 ° F (- 51 ° C)
PH:	Not applicable
SOLUBILITY IN WATER:	Insoluble
SPECIFIC GRAVITY:	0.876 @ 60 ° F (15.6 ° C)
% VOLATILE BY WEIGHT:	25 %
VAPOR PRESSURE:	Not determined
VAPOR DENSITY:	Not determined

10. REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITIES: Strong oxidizing agents.

DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide and hydrocarbons.

11. TOXICOLOGICAL INFORMATION

ACUTE INHALATION: Aspiration into lungs can cause pneumonitis which can be fatal.

CHRONIC INHALATION: Not determined.

ACUTE SKIN CONTACT: Prolonged or repeated contact can cause moderate irritation, defatting or dermatitis.

CHRONIC SKIN CONTACT: Not determined.

ACUTE EYE CONTACT: Can cause severe irritation, redness, tearing or blurred vision.

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Ignitable hazardous waste, EPA Hazardous Waste Number D001

WASTE DISPOSAL METHOD: Dispose of product in accordance with all local, state and federal laws and regulations.

14. TRANSPORT INFORMATION

DOT INFORMATION:

PROPER SHIPPING NAME:	Non Bulk Bulk	Not regulated Petroleum distillates, n.o.s.
TECHNICAL SHIPPING NAME:		Fuel and oil additive
HAZARD CLASS:	Non Bulk Bulk	ORM-D Class 3
UN NUMBER:		UN 1268
PRODUCT RQ (lbs):		None
LABEL:	Non Bulk Bulk	ORM-D Flammable Liquid
PLACARD:	Non Bulk Bulk	None Flammable Liquid
FREIGHT CLASS BULK:		PG III
FREIGHT CLASS PACKAGE:		None
PRODUCT LABEL		None

15. **REGULATORY INFORMATION**

TSCA STATUS:	All ingredients listed.
CERCLA REPORTABLE QUANTITY:	None
SARA TITLE III:	

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES	None
---------------------------------------------------	------

SECTION 311/312 HAZARD CATEGORIES

Acute Health	Yes
Chronic Health	Yes
Fire	Yes
Reactive	No
Sudden Release of Pressure	No

SECTION 313

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
Ortho-dichlorobenzene	00095-50-1	0 - 0.25 %

RCRA STATUS: If discarded in its purchased form, this product would be an ignitable waste with an EPA Hazardous Waste Number of D001. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24)

CANADIAN STATUS: All materials contained in this product are listed on the Canadian Domestic Substances List.

EUROPEAN UNION: All materials contained in this product are listed on EINECS.

STATE REGULATORY INFORMATION

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

<u>COMPONENT/ CAS NUMBER</u>	<u>CONCENTRATION</u>	<u>STATE CODE</u>
p-dichlorobenzene	less than 150 ppm	CA
00106-46-7		

CA = Material known to the state of California to cause cancer and/or birth defects. (California Proposition 65).

16. OTHER INFORMATION

HMIS CLASSIFICATION	Health	2
	Flammability	2
	Reactivity	0
	PPI	B
NFPA RATING	Health	2
	Fire	2
	Reactivity	0
	Special	None
REASON FOR ISSUE	Revise address, phone & fax numbers	
PREPARED BY	Richard P. Kelly	
TITLE	Technical Manager	
APPROVAL DATE	June 29, 2006	
SUPERCEDES DATE	June 9, 2005	
REVISION NUMBER	#07	

This information is to the best of Marvel Oil Company's knowledge and belief, accurate and reliable. However, no representation, warranty, or guarantee is made to its accuracy, reliability or completeness. It is the users responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

Msdsmm080-3.doc

Material Safety Data Sheet



Date of Issue 22 February 2010
Version 21

110482 WHITE PAINT 5 GAL (LOWES)

HOME IMPROVEMENT STORE

1. Product and company identification

Product name : FH INT SG LTX WH
 Code : 78110C
 Supplier : PPG Industries, Inc.
 One PPG Place
 Pittsburgh, PA 15272

Emergency telephone number : (412) 434-4515 (U.S.)
 (514) 645-1320 (Canada)
 01-800-00-21-400 (Mexico)

Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

2. Hazards identification

Emergency overview : WARNING1
 MAY BE HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE RESPIRATORY TRACT AND EYE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
 Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Slightly irritating to the respiratory system.
Ingestion : May be harmful if swallowed.
Skin : No known significant effects or critical hazards.
Eyes : Moderately irritating to eyes.

Over-exposure signs/symptoms

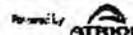
Inhalation : Adverse symptoms may include the following:
 respiratory tract irritation
 coughing

Ingestion : No specific data.
Skin : No specific data.
Eyes : Adverse symptoms may include the following:
 irritation
 watering
 redness

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (section 11)



Product code 78110C

Date of Issue 22 February 2010 Version 21

Product name FH INT SG LTX WH

3. Composition/information on ingredients

Name	CAS number	%
titanium dioxide	13483-67-7	7 - 13
Kaolin	1332-58-7	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use solvents or thinners.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable	: Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
Special exposure hazards	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hazardous combustion products	: Decomposition products may include the following materials: metal oxide/oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.



MSDS Request Department
Phone: 352-323-3500
Fax: 352-323-0005

To:

Company :
Fax Number : 1(910)3431306
Phone Number :

From: Brenda Rios
Fax Number : 352-323-0005
Phone Number : 352-323-3500

Time Sent : Tuesday, April 06, 2010 11:28AM
Pages : 8
Description : B. Rios (MSDS Request #20100406-318447) - 0.3MB

MESSAGES:
Attention Randy

CHEVRON:

HAVE
2
MAIN
2
4-5
4-6

MD3 TRANSMISSION FLUID QTS

1000 THF HYDRAULIC FLUID QTS

SAE 85W-140 25 GAL

SAE 50 SYNTHETIC TRANS. FLUID 25 GAL

75W 90 SYNTHETIC GEAR LUBE 25 GAL

DEXTRON III / MERCON TRANS FLUID QTS

CARQUEST:

2050 DIESEL FUEL CONDITIONER

DYNA SYSTEMS:

PN 105 CHEMICAL PENETRANT

D+E DOSE: 05127382 AB MOPAR TRANS. FLUID

FLEET PRIDE:

5601 AIRBRAKE ANTIFREEZE PENRAT

2358 60 50 CHERRY GEL

509 1000 SEALANT TUBE CAULKING

KENDALL: (EBL) EXTENDED BEARING LIFE 25 GAL

27, BARNES:

HM-270 SEALANT (CAULKING TUBE)

LOWES:

1-888-429-6281

110486 OLYMPIC FAST HIDE SEMI-GLOSS PAINT

5 GAL

COASTAL DIESEL:

M720 BRAKE CLEANER 5 GAL

• NAPA:

ⁿ
763-0250

DE-1 DE-ICER (GUNK)

DAL 1677 GLOSS BLACK DUPLIC COLOR

DAL 1675 GLOSS WHITE DUPLIC COLOR

PAG 100 / 4V OYE A/C 765-8024

PAG OIL CHANGE A/C 409512

ESTER¹⁰⁰ A/C 409510

BRAKE FLUID 35-101

MARVEL AIR TOOL OIL

called

75-801 WHEEL BEARING GREASE

765-1393 WHITE LITHIUM GREASE

1805 KRYLON PAINT CAT YELLOW

GC-1 GUNK GLASS CLEANER

091444 DISC BRAKE QUIET

3M SILICONE PASTE 08946

CRC POWER LUBE 03045

• NAPA

WD-40

7212 STARTING FLUID

M3515 BANK STARTING FLUID

8700 CARB, CHOKE CLEANER

1073 BATTERY TERMINAL PROTECTOR

1072 BATTERY CLEANER

DC 14 SEAFOAM

127 MA PERMATEX DISC BRAKE QUIET

765-1151 ANTISEEZE

BARS LEAK C16

4325 P PURPLE POWER

409 889 A/C FLUSH

134A A/C PRESTONE

DUPONT 54VA 134A 302B CYLINDER A/C

~~CAPITOL FORD:~~

~~KT 625P MERCON-SP TRANS. FLUID MOTOR CRAFTS~~

TRIPLE T:

27101-CTCS ALLISON TRANS. FLUID

991 441 CI FLEETRITE ANTISIZE

8A DIESEL FUEL CONDITIONER (51200)

CA 990625 FLEETRITE P/S FLUID

ZEP: 704-596-7084 8031734-1290

DYNA 143 CLEANER/DEGREASER

POWERHOUSE 0282 802C

ZEP 40 CLEANER 697D

0058 ZEP LUBRISIL LUBRICANT

ZEP TOX WASP/HORNET SPRAY 0125/ 698B

ZEP INSECT REPELLANT 0127/ 693C

DILMAR OIL CO?

5067710 SHELL RETINAX LX2 TUBE GREASE

5080660 SHELL TRANS. FLUID ATF 134 (9TS)

MYERS TIRE

46-633 TIRE COMPOUND

46509 MOUNTING LUBRICANT

CANNALL 800-791-4800

CLEANMASTER KLEER-FLD

MANTEK

106230600 MIGHTY BLUE WINDSHIELD FLUID

FLOOR CLEANER BARREL ??

(KIMBALL MIDWEST) COCA-COLA RED 80-858

"MIGHTY BLUE" 106230600 WINDSHIELD

"STATE" ELECTRICAL CLEANER 44825

VOICE
MAIL

"FOSTER" JEL-LUBE 19-15

• SUPER LUBE 3110 LUBRICANT

• NATIONAL WELDERS:

• ARGON

• ACETYLENE

• CARBON DIOXIDE

• OXYGEN

• 3 m PRODUCTS

• A-COOL - 82

APPENDIX B
PROPERTY DEED

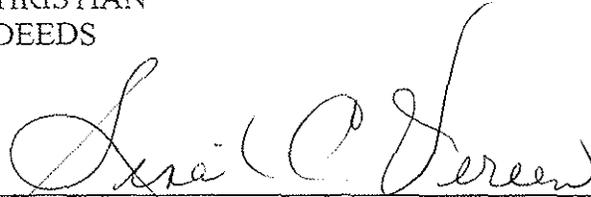
REBECCA T. CHRISTIAN
NEW HANOVER COUNTY
REGISTER OF DEEDS

STATE OF NORTH CAROLINA
COUNTY OF NEW HANOVER

I hereby certify this to be a true copy of the attached document filed and recorded in the aforesaid County, as evidenced in Instrument/Book No. 257 starting with Page No. 85 and ending with Page No. 86.

Witness my hand and seal, this the 22nd day of July, 2003.

REBECCA T. CHRISTIAN
REGISTER OF DEEDS



Signature of Assistant or Deputy Register of Deeds

(SEAL)

In the event the parties of the second part shall fail to pay the monthly rentals herein stipulated for a period of thirty days after the same shall have become due and payable, or shall fail to effect fire insurance herein required and pay the premium therefor within the period of time required by the Agency through which said fire insurance is effected, or shall fail to keep said property in reasonable repair, or shall fail to pay any and all taxes and assessments levied against said property as same become due and payable, the said parties of the second part shall forfeit all rights under this lease at the option of the first part, and the first part shall, at his option, have the right to terminate said lease in the event the said second parties fail to carry out any of their obligations enumerated herein and all rights of the said parties of the second part hereunder shall cease and the said parties of the second part hereby agree to surrender said premises to the party of the first part upon written notice of said party of the first part, and hereby waive any and all notice to vacate said premises.

If the parties of the second part shall carry out all the obligations imposed upon them under the terms of this agreement and make all payments regularly and promptly as herein provided, then the parties of the second part shall have the right on or before July 1st, 1948 to purchase said property at a price of Twelve Hundred and 00/100 (\$1200.00) Dollars, with interest thereon from October 1st, 1936 at 6% annually, computed monthly and to receive proper deed to said premises which said party of the first part agrees to execute and deliver. And in the event the said parties of the second part desire to exercise the option to purchase said property given hereunder, they shall notify the party of the first part in writing, by registered mail, on or before May 1st, 1948.

And in the event the said parties of the second part desire to exercise said option, the purchase price of said property to wit \$1,200.00 with interest at 6% annually, computed monthly, from October 1st, 1936, shall be credited with the \$12.00 per month rental stipulated herein, provided of course, said rental is paid as herein required.

IN TESTIMONY WHEREOF, the parties hereto, have herunto set their hands and seals in duplicate, this the day and year first above written.

WORLD WAR VETERANS LOAN FUND,
STATE OF NORTH CAROLINA.
BY Graham K. Hobbs (Seal)
Commissioner
J.T. Carroll (Seal)
Lora May Carroll (Seal)

STATE OF NORTH CAROLINA,
WAKE COUNTY.

Personally appeared before me this day, Graham K. Hobbs, Commissioner of the World War Veterans Loan Fund, State of North Carolina, and acknowledged due execution of the foregoing instrument for the purpose therein expressed.

Witness my hand and notarial seal, this the 24 day of October 1936.

(Notarial Seal)

Grace Wynne Hinton
Notary Public

My commission expires: Aug 12- 1937.

STATE OF NORTH CAROLINA)

New Hanover County

I, Lena M. Batts, a Notary Public in and for the State and County aforesaid, do hereby certify that J.T. Carroll and Lora May Carroll his wife, personally appeared before me this day and acknowledged the due execution of the annexed instrument, and the said Lora May Carroll wife of J.T. Carroll being by me privately examined, separate and apart from her said husband touching her voluntary execution of the same, doth state that she signed the same freely and voluntarily, without fear or compulsion of her said husband, or any other person, and that she doth still voluntarily assent thereto.

Witness my hand and seal, this 10th day of October 1936.

(Notarial Seal)

Lena M. Batts, Notary Public

My commission expires the 3rd day of January 1937.

STATE OF NORTH CAROLINA,

New Hanover County.

The foregoing Certificates of Grace Wynne Hinton & Lena M. Batts Notaries Public of Wake & New Hanover Counties are adjudged to be correct. Let the instrument with the Certificates be recorded.

This the 7 day of Nov. 1936.

Lois J. Ward
Deputy Clerk Superior Court.

Received and recorded November 7th, 1936

at 11:15 A.M. and verified

[Signature]
Register of Deeds.

GEORGE H. HUTAFF AND WIFE : STATE OF NORTH CAROLINA)
TO : COUNTY OF NEW HANOVER ()
WILMINGTON COCA-COLA BOTTLING : THIS DEED Made and executed this 7th day of
WORKS, INC. : November, 1936, by and between GEORGE H. HUTAFF and
WARRANTY DEED : wife, TAMIHA C. HUTAFF, of the City of Wilmington,
County of New Hanover, State of North Carolina, parties
of the first part, and WILMINGTON COCA-COLA BOTTLING WORKS, INCORPORATED, a corporation
organized and existing under the laws of the State of North Carolina, with its principal
place of business in the City of Wilmington, County and State aforesaid, party of the
second part,

W I T N E S S E T H :

That the said parties of the first part, for and in consideration of the sum of One Hundred (\$100) Dollars, and other valuable considerations to them in hand paid by the said party of the second part, the receipt of which is hereby acknowledged, have given, granted, bargained and sold, aliened and conveyed, and by these presents do hereby give, grant, bargain and sell, alien, convey and confirm unto the said party of the second part, its successors and assigns, forever, all that cert-in lot or parcel of land, situated, lying and being in the City of Wilmington, County of New Hanover, State of North Carolina, and being more particularly described as follows:

BEGINNING at the intersection of the Eastern line of Tenth Street with the Southern line of Princess Street, and running thence Southwardly along the Eastern line of Tenth Street 106 feet, thence Eastwardly and parallel with Princess Street 93 feet, thence Northwardly and parallel with Tenth Street 106 feet to the Southern line of Princess Street, thence Westwardly and along the Southern line of Princess Street 93 feet to the point of beginning; the same being part of Lots 1 and 2, in Block 174, according to the official plan of the City of Wilmington, North Carolina.

TO HAVE AND TO HOLD the above granted and described premises, together with all and singular, the rights, privileges, easements, tenements and appurtenances thereunto belonging, or in anywise appertaining unto the said party of the second part, its successors and assigns, in fee simple, forever.

And the said parties of the first part, for themselves, their heirs, executors and administrators, do covenant to and with the said party of the second part, its successors and assigns, that they are seized in fee of the above granted and described premises, and they have good right to sell and convey the same in fee simple; that the same are free and clear from any and all encumbrances, and that they will and their heirs, executors and administrators shall warrant and defend the title to the same against the lawful claims and demands of any and all persons whomsoever.

IN TESTIMONY WHEREOF, the said parties of the first part have hereunto set their hands and seals, the day and year first above written.

George H. Hutaff (SEAL)
Tabitha C. Hutaff (SEAL)

STATE OF NORTH CAROLINA
COUNTY OF NEW HANOVER

I, Albert L. Dasher, a Notary Public in and for the State and County aforesaid, do hereby certify that GEORGE H. HUTAFF and TABITHA C. HUTAFF, his wife, personally appeared before me this day and acknowledged the due execution of the foregoing instrument, and the said TABITHA C. HUTAFF, wife of GEORGE H. HUTAFF, being by me privately examined, separate and apart from her said husband, touching her voluntary execution of the same, doth state that she signed the same freely and voluntarily, without fear or compulsion of her said husband, or any other person, and that she doth still voluntarily assent thereto.

Witness my hand and seal, this 7th day of November 1936.
(Notarial Seal)
My commission expires Jan. 16, 1938.
STATE OF NORTH CAROLINA
New Hanover County.

Albert L. Dasher
Notary Public.

The foregoing Certificate of Albert L. Dasher Notary Public of New Hanover County, is adjudged to be correct. Let the instrument with the Certificate be recorded.
This the 7 day of Nov 1936.

Lula J. Ward
Deputy Clerk Superior Court.

received and recorded November 7th, 1936
at 12:00 Noon and verified.

[Signature]
Register of Deeds.

C. J. HEALY, TR. : STATE OF NORTH CAROLINA
MARY B. WALLACE : COUNTY OF NEW HANOVER

RELEASE.

TO : THIS INSTRUMENT, made this 3th day of May, 1936, by and between SHORE ACRES CO. : Clayton C. Bellamy, Trustee, in a certain Deed of Trust duly recorded RELEASE : in the office of the Register of Deeds for New Hanover County, in Book No. , and (Mrs.) Mary B. Wallace, parties of the first part, and Shore Acres Company, a North Carolina Corporation, party of the second part. WHEREAS, That whereas Shore Acres Company did in and by Deed of Trust aforesaid convey unto the said Clayton C. Bellamy, Trustee, certain properties in said Deed of Trust aforesaid and described as;

WHEREAS, it was provided in said Deed of Trust that if the Shore Acres Company should pay off or cause to be paid off any and every of said notes, and interest, the lots hereinafter described shall be reconveyed to Shore Acres Company and that said property will then be released from the operation of said Deed of Trust, and,

WHEREAS, the party of the second part has paid in full the required number of notes, which entitles the said hereinafter described lots to be released from the provisions of said Deed of Trust, and the said Mary B. Wallace, owner of the notes, has requested the said Trustee to execute a Deed of Release to the party of the second part for the property hereinafter set forth, which said request is evidenced by Mary B. Wallace joining in and executing this instrument.

NOW THEREFORE, the said parties of the first part, in consideration of the price and for the further consideration of \$1.00 paid to them by the party of the second part do hereby release, quitclaim and convey unto the said party of the second part, its successors and assigns, all of that certain property, lying, situate and being in the development known as Shores Acres Development No. , in the County and State of North Carolina, and being designated as lots Nos. 36 and 37 according to the official map recorded in the office of the Register of Deeds for New Hanover County, in B. P. Book No. 3, at page No. 1.

Together with all and singular the tenements, easements, hereditaments and appurtenances thereto in anywise appertaining.

TO HAVE AND TO HOLD, the above described and released property unto the said party of the second part, and its successors and assigns forever, free, clear and discharged of and from the lien of the Deed of Trust aforesaid.

IN WITNESS WHEREOF the said parties of the first part have hereunto set their hands and seals of the date and year first above written.

Clayton C. Bellamy (SEAL)
Trustee
Mary B. Wallace (SEAL)

STATE OF NORTH CAROLINA
COUNTY OF NEW HANOVER

Personally appeared before me, J. J. Winsley, a Notary Public in and for the State and County aforesaid, Clayton C. Bellamy, Seal who acknowledged the due execution by him as Trustee, of the annexed instrument for the purposes therein expressed. Witness my hand and official seal this 7th day of November, A.D., 1936.

(Notarial Seal)
My commission expires April 20, 1937.
STATE OF NORTH CAROLINA
COUNTY OF NEW HANOVER

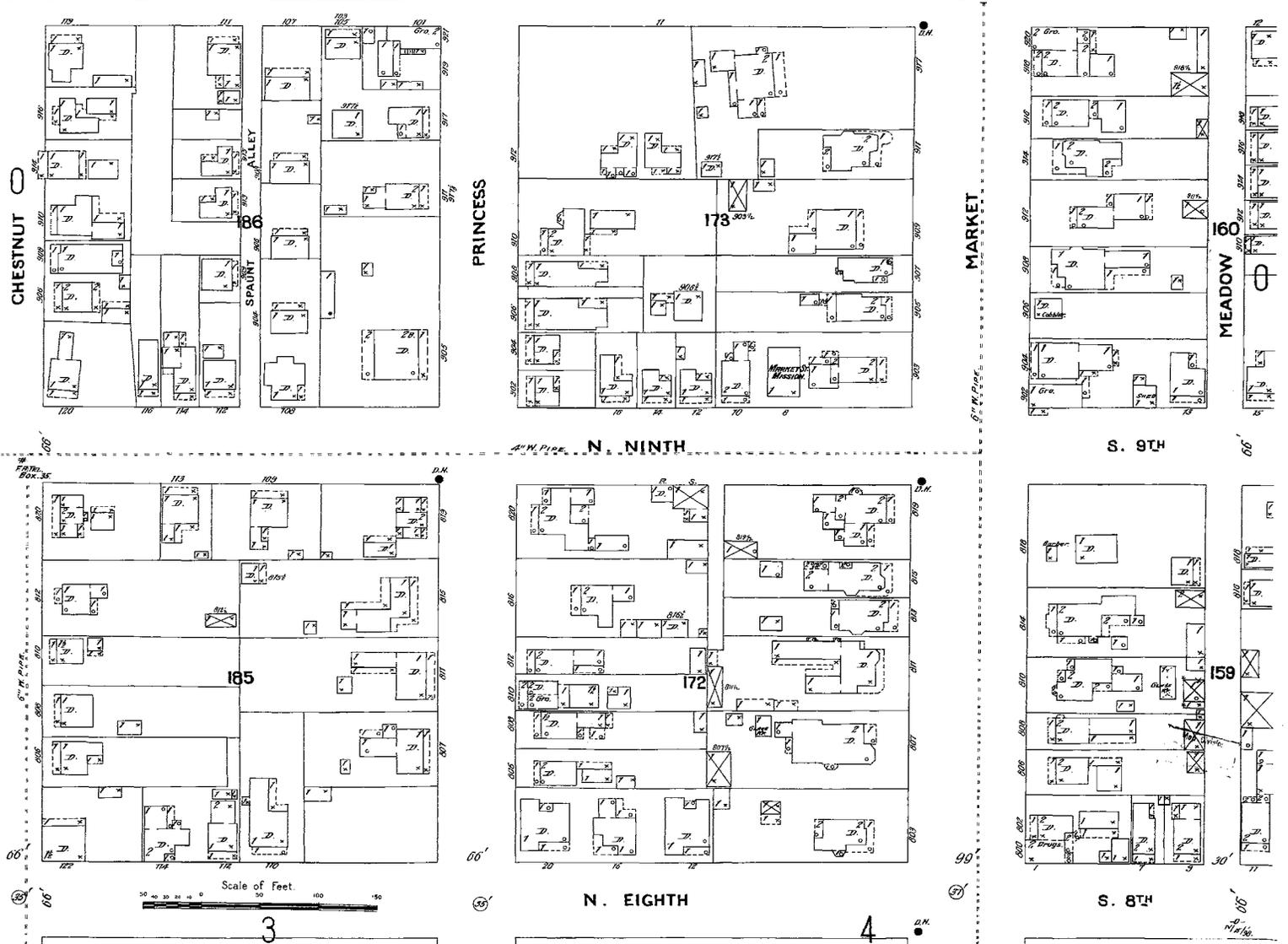
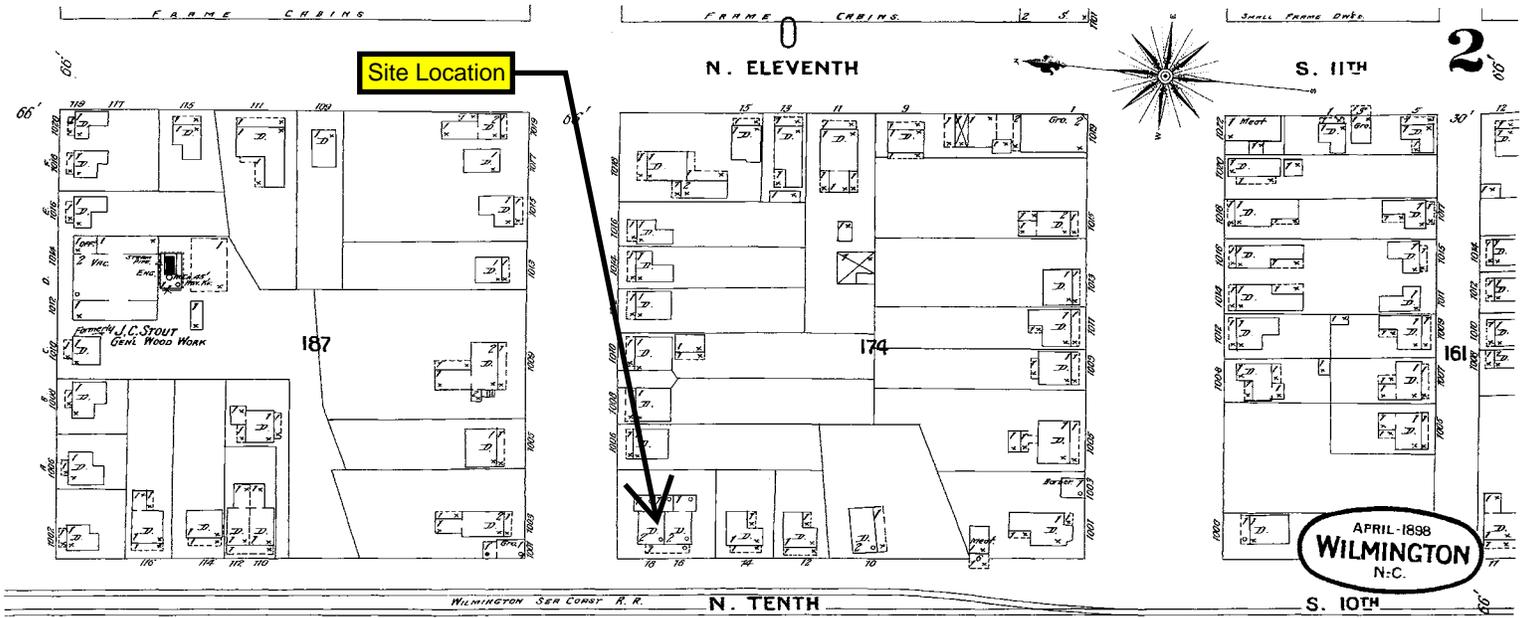
J. J. Winsley
Notary Public.

Personally appeared before me J. J. Winsley, a Notary Public, in and for the County and State aforesaid (Mrs.) Mary B. Wallace, who acknowledged the due execution of the annexed instrument for the purposes therein expressed.

Witness my hand and official seal this 7th day of November- 1936.
(Notarial Seal)
My commission expires April 20- 1937

J. J. Winsley
Notary Public

APPENDIX C
SANBORN MAPS

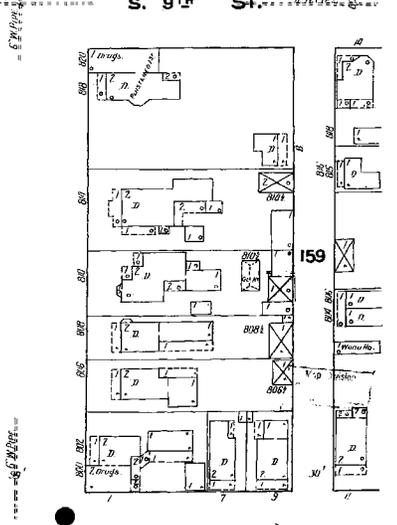
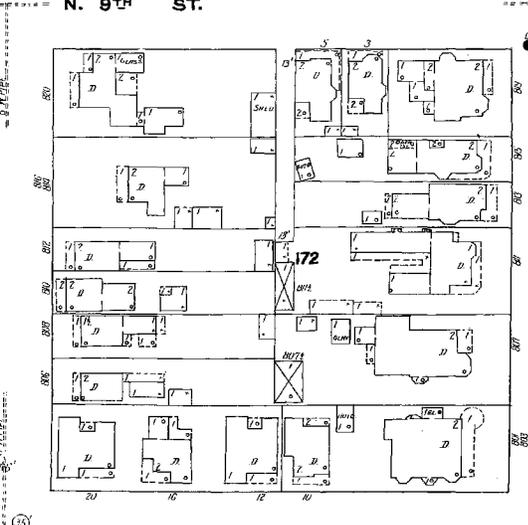
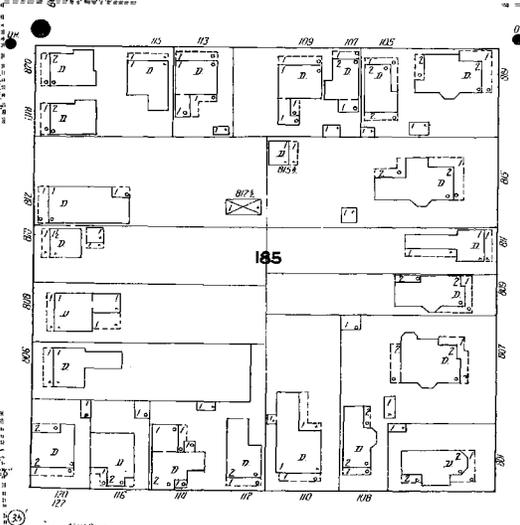
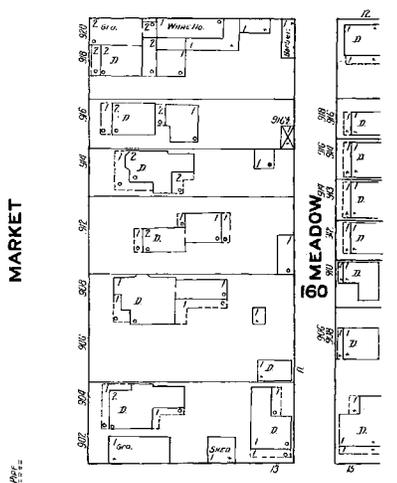
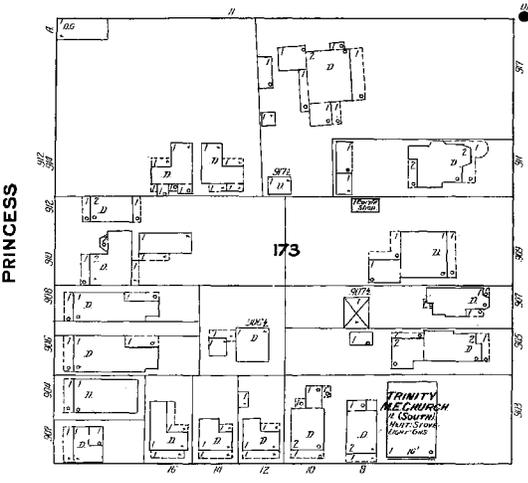
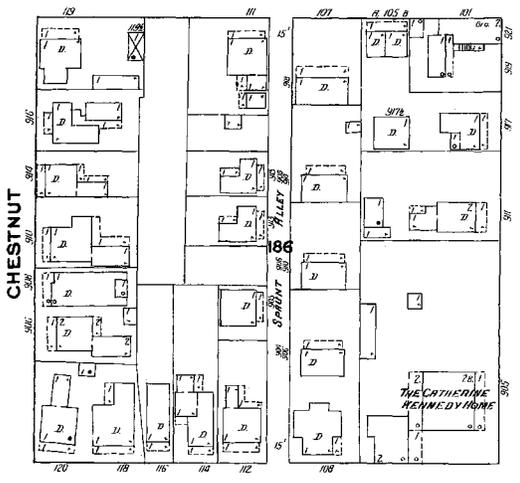
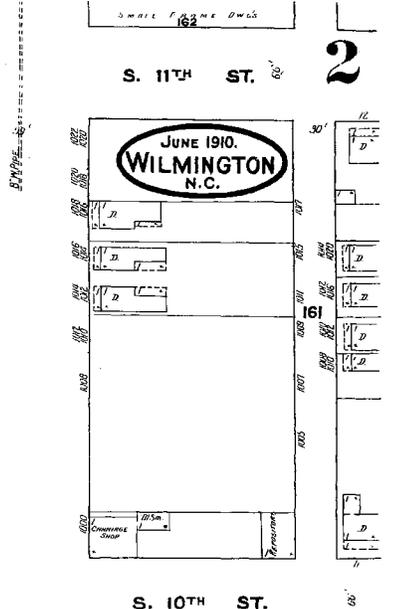
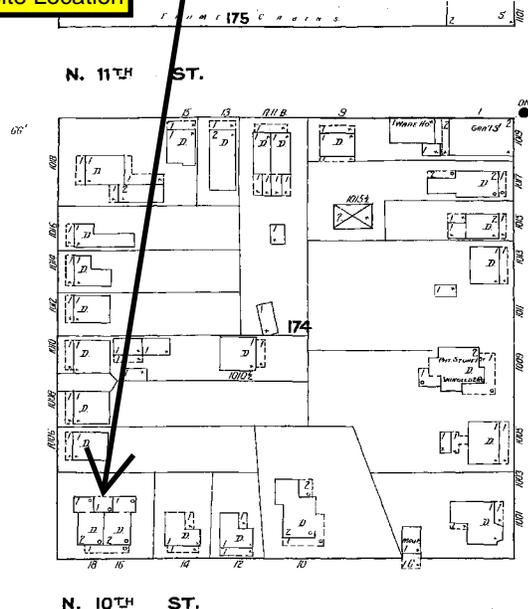
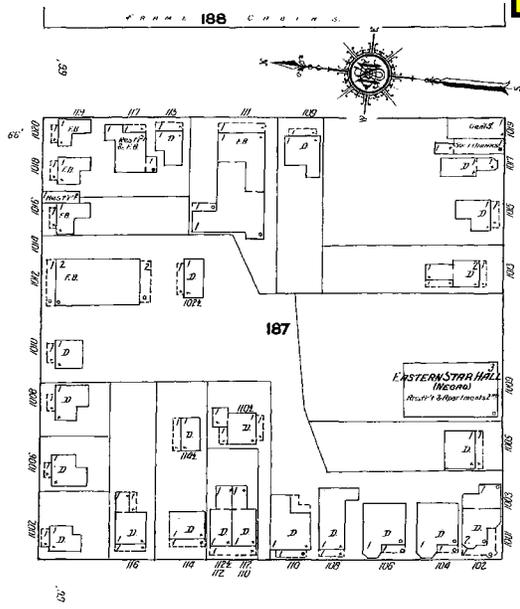


Site Location

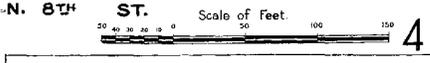
APRIL 1898
WILMINGTON
N.C.

Scale of Feet
0 50 100 150

Site Location



3



4



1915

WILMINGTON, N.C.

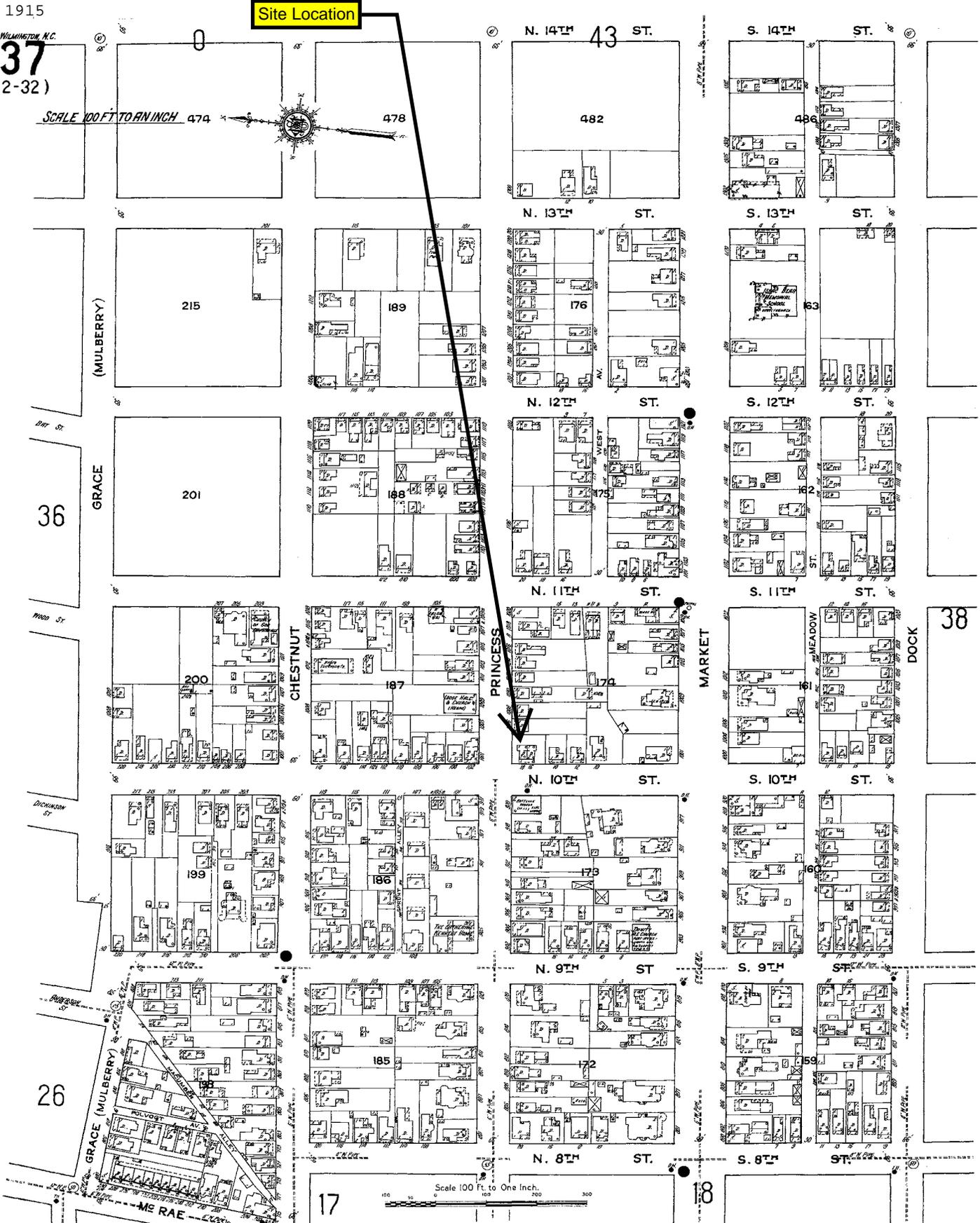
37

(2-32)

Site Location

SCALE 100 FT. TO AN INCH 474

478



Scale 100 ft. to One Inch.

17

18

38

36

26

215

189

201

188

200

187

199

186

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172

482

486

176

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172

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1951

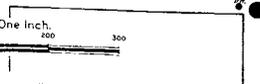
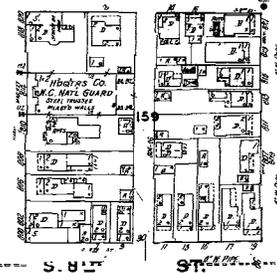
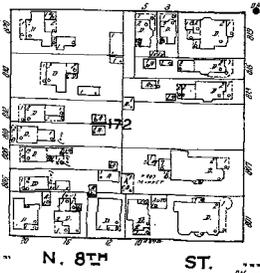
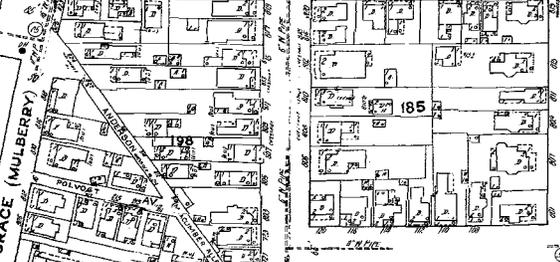
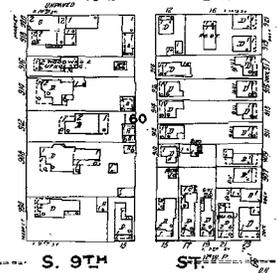
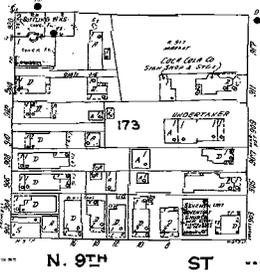
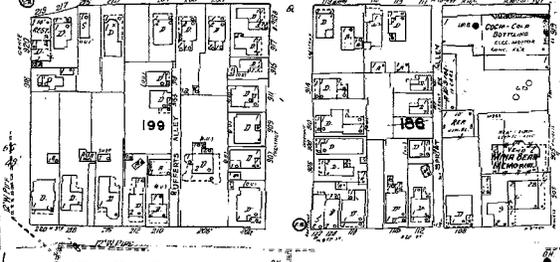
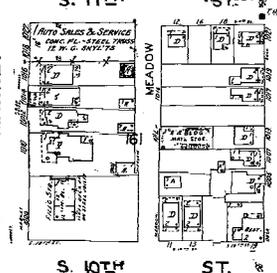
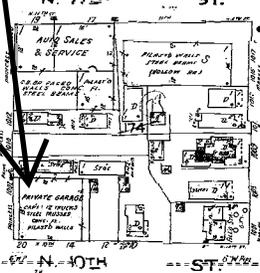
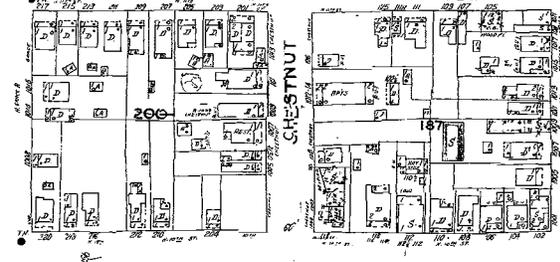
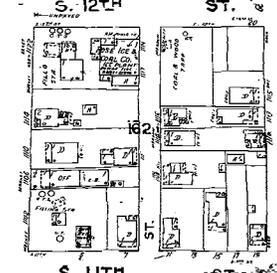
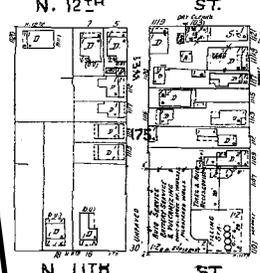
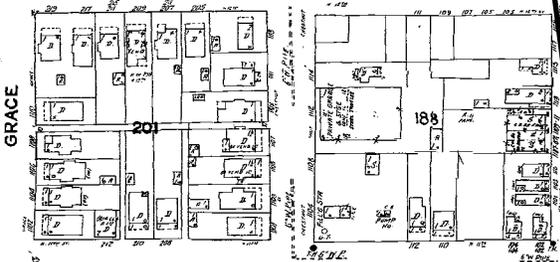
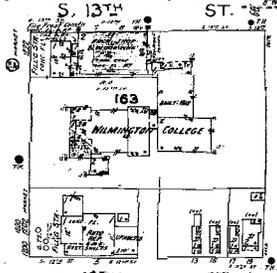
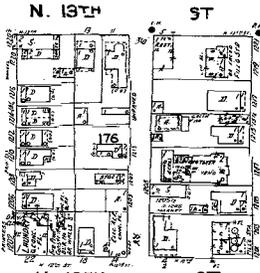
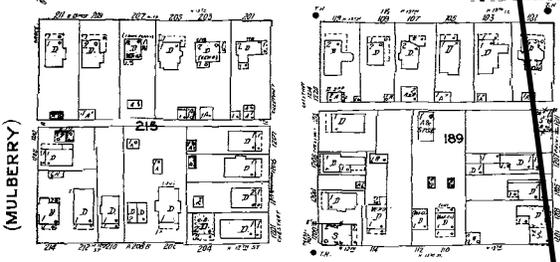
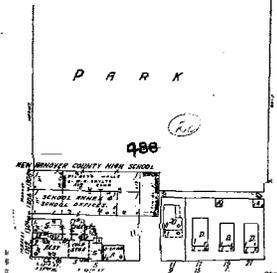
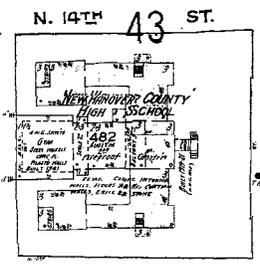
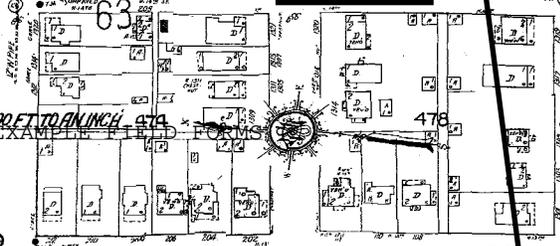
WILMINGTON, N.C.

37

(2-32)

SCALE 100 FT. TO ONE INCH

Site Location



36

26

38

17

18

Scale 100 Ft. to One Inch.



53
(37)

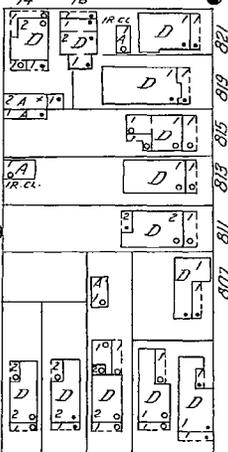
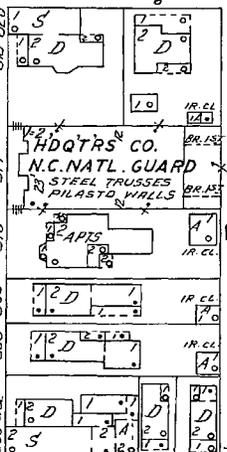
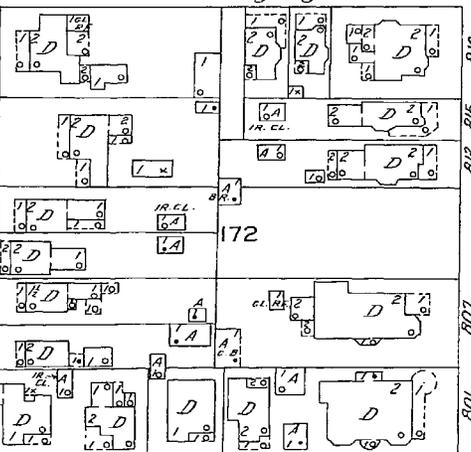
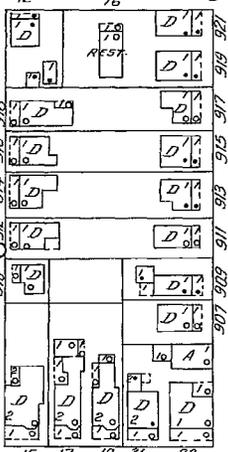
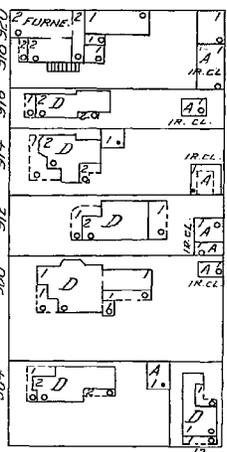
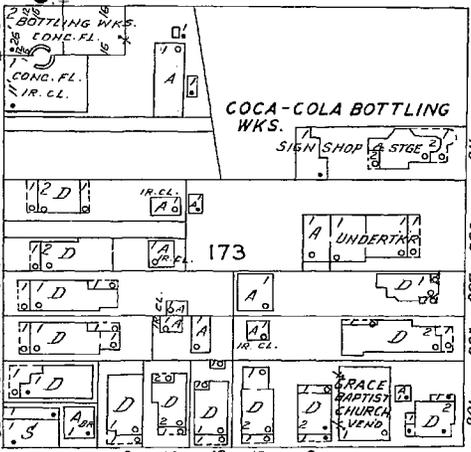
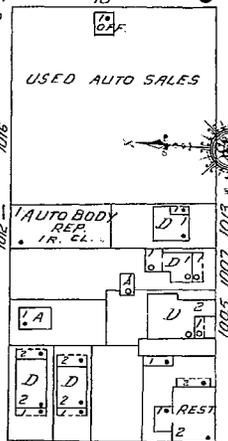
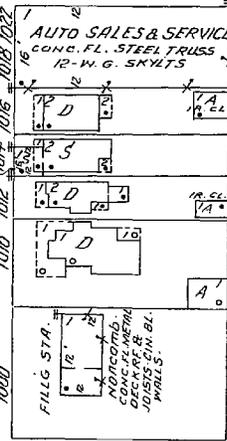
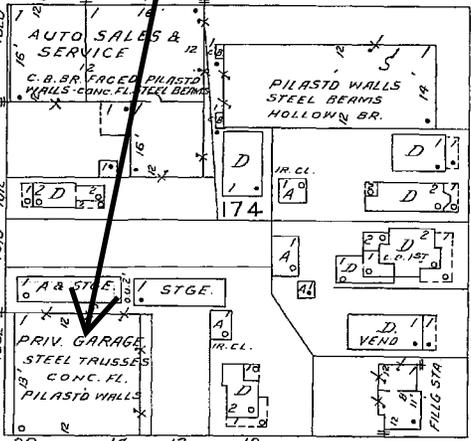
"NE"
JUNE 1955

Site Location

52

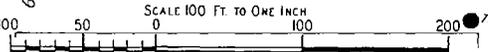
N. 11TH ST.

S. 11TH ST.



N. 8TH ST.

S. 8TH ST.



Copyright 1955 by the Sanborn Map Co.

(7121A R.S.M.)

APPENDIX D
PREVIOUS REPORTS



**REPORT OF
PHASE I ENVIRONMENTAL SITE ASSESSMENT**

**18-PARCEL SITE
COCA COLA FACILITY
PRINCESS, CHESTNUT, N. 11TH AND N. 10TH STREETS
WILMINGTON, NORTH CAROLINA**

Prepared For:

Mr. James McFarland
East Coast Development & Brokerage, Inc.
P. O. Box 2277
Wilmington, North Carolina 28402

Prepared By:

MACTEC Engineering and Consulting, Inc.
5710 Oleander Drive, Suite 110
Wilmington, North Carolina 28403

MACTEC Project No. 6550-07-0447-01

February 21, 2008



engineering and constructing a better tomorrow

February 21, 2008

Mr. James McFarland
East Coast Development & Brokerage, Inc.
P. O. Box 2277
Wilmington, North Carolina 28402

Subject: **Report of Phase I Environmental Site Assessment
Approximately 5.6106 Acres
18-Parcel Site – Coca Cola Facility
Wilmington, North Carolina 28401
MACTEC Project No. 6550-07-0447-01**

Dear Mr. McFarland:

As authorized by your acceptance of Proposal No. 07-WILM-73, dated September 25, 2007, MACTEC Engineering and Consulting, Inc. (MACTEC) is pleased to submit this Report of Phase I Environmental Site Assessment for the above-referenced Site. The purpose of our services was to identify recognized environmental conditions associated with the Site.

This report is intended for the use of East Coast Development & Brokerage, Inc., subject to contractual terms between East Coast Development & Brokerage, Inc. and MACTEC. Reliance on this document by any other party is prohibited without the expressed, written consent of MACTEC. Use of this report for purposes beyond those reasonably intended by East Coast Development & Brokerage, Inc. and MACTEC will be at the sole risk of the user.

This report presents project information, which includes survey procedures and limitations, along with our findings, conclusions and recommendations. We appreciate your selection of MACTEC for this project and look forward to assisting you further on this and other projects. If you have any questions, please do not hesitate to contact us.

Sincerely,

MACTEC Engineering and Consulting, Inc.

A handwritten signature in blue ink, appearing to read "Marlo Hitriz".

Marlo Hitriz
Environmental Scientist

A handwritten signature in blue ink, appearing to read "B. Walker Jones".

B. Walker Jones, REM
Principal Scientist

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1.0 Executive Summary

MACTEC Engineering and Consulting, Inc. (MACTEC) contracted with East Coast Development & Brokerage, Inc. to conduct the Phase I – Environmental Site Assessment (ESA). The subject Site is located between Chestnut and Market Streets, with Princess traversing their center and between N. 9th and N. 11th Streets, with N. 10th traversing their center. The Site encompasses one full block and portions of 3 blocks of Downtown Wilmington, New Hanover County, North Carolina (Figure 1 in Appendix A). According to the New Hanover County tax assessor's office, the Site is comprised of 18 parcels and approximately 5.6106 acres. Currently, three buildings, as well as a truck and employee parking lot occupy the Site (Figure 2 in Appendix A). Electric Bottling Company formerly occupied this land.

HISTORY

MACTEC conducted a review of the Site history. Based on the available sources, the Site appeared to be developed since at least 1893. From approximately 1893 through 1915 the Site was mainly residentially developed. In approximately 1915, commercial activity began at the property with the development of the Bottling Works. The property remained commercial (Bottling) and residential. In the 1960's commercial development (Bottling) expanded and most residential was cleared. By the 1970's most residential had been removed and the Bottling expanded through the 1980's and 1990's.

SITE RECONNAISSANCE

There are four main portions of the Site; the warehouse and offices (parcel 18), the vending center/repair and offices (parcel 16), the vehicle maintenance garage (parcel 17), and the truck and employee parking (parcels 1-15). The following details our observations during the site reconnaissance:

Warehouse (Parcel 18):

- Used for warehousing, receipt, shipping, sales, promotional item storage, and offices.
- Building is serviced by city water and sewer. The sewer system receives wastewater from warehousing activities and sanitary facilities currently located here.
- Numerous floor drains (some active, some filled with concrete) were noted throughout the building, they are connected to the city sewer system.
- A disconnected water treatment system (formerly used when building was connected to well water for process) is located within the warehouse (55-gallon drums with white crystalline substance).
- Fluorescent bulbs are stored in small storage room and picked up by an Environmental Company.
- A slop sink receives wash water from washing the floor. The floor cleaner is not a hazardous chemical.
- Dented/Damaged bottles and cans are crushed in a crusher machine within the building and wastewater is pumped into a 55-gallon drum, however this process was noted adjacent to a floor drain which appeared to also receive crush water (more or less sugar water).
- A large AST is located within the building. Reportedly, this tank formerly contained caustic (sodium hydroxide).
- A fill pipe is located adjacent to the southwest corner of the building. Reportedly this fill pipe is disconnected. Reportedly, no USTs are currently in operation at the Site.
- A disconnected water quality monitoring system exists adjacent to the southwest corner of the building. This system was formerly used to monitor the water prior to entering the city sewer system. The wastewater from the former soda pre-mix tanks was monitored for syrup/sugar

content prior to entering the city system. Apparently this system has been discontinued as soda is no longer mixed at the plant.

- The trucks are loaded and unloaded in back of the warehouse. Minor surficial staining was noted on the ground surface.
- Numerous drains behind the warehouse were observed. These drains connect to the city sewer/and city stormwater system.
- Two or three 55-gallon plastic drums containing fluid from crushing bottles are stored near one of the bay doors at the back of the warehouse. They are picked up by Coca Cola and brought to Coca Cola headquarters.
- A propane AST, behind the warehouse is used to run the forklifts.
- Blocks of crushed cans and bottles sit adjacent to the propane AST. They are picked up and recycled.
- Fill or vent pipes in association with the closed-in-place USTs behind the warehouse were not observed.

Vending Center/Repair (Parcel 17):

- Vending and fountain equipment/machines are picked up and delivered here to be serviced, washed, and shipped out. Some machine/equipment is stored here.
- General household cleaners, paint, aerosol sprays, and parts are stored here.
- A wash pit inside the building for washing the equipment/machines receives is connected to city sewer system.
- Floor drains were noted in the building.
- A sump pump exists in the shipping loading bay of the vending area and is used when too much rainwater accumulates in this area.
- A fenced area exists behind the vending center. This area formerly contained a cooling tower (ammonia).

Vehicle Repair/Maintenance Garage (Parcel 16):

- A waste oil AST and waste antifreeze AST within secondary containment are located within the building. Surficial staining was noted on the floor adjacent to the containment. Crandall Waste Service pumps the tanks once a month.
- A 550-gallon motor oil AST is located in the building. A spill tray sits below the AST. Product was observed in the tray. Staining was noted on the floor adjacent to the tray. Mofit Oil services the AST.
- A 55-gallon drum of antifreeze and a 55-gallon drum of grease sit adjacent to the motor oil AST.
- A parts washing sink sits adjacent to the aforementioned drums. Crandall Waste Service services the sink.
- An electric hydraulic lift is located in the building. The hydraulic fluid is contained in the arm of the lift.
- Six 35-gallon drums of gear oil and transmission fluid as well as three 55-gallon drums of used oil filters were observed in the building.
- Cabinets are used for storage of small containers of paints, cleaners, degreasers, lubricants, and coolants.
- Seven 5-gallon buckets of hydraulic fluid were noted adjacent to the cabinets. Stains were noted on the floor adjacent to the cabinets.
- The former wash area behind the vehicle repair garage contains a drain which leads to the city system.
- The groundcover behind the vehicle repair building is mainly crushed gravel.

REGULATORY INFORMATION

Electronic Database Review

Environmental Data Resource, Inc. (EDR) was contracted by MACTEC to review state and federal environmental regulatory lists of the Site and surrounding properties. The database did identify several sites on the environmental regulatory lists, within the ASTM standard search distances from the Site. Contaminated groundwater from off-site sources are considerations when evaluating recognized environmental conditions. Hydraulically upgradient properties would be located southwest and west of the Site. The database results indicated that there are no properties of concern adjacent to the subject Site. There are also no sites of concern to the southwest or west, upgradient within a 1/4 mile of the subject Site. The Site was found on the FINDS, UST, IMD, LUST, and RCRA-CESQG lists reviewed by EDR.

RCRA-CESQG Listing = The facility is classified as a conditionally exempt small quantity generator which means that they generate less than 100kg of hazardous waste per calendar month. Hazardous wastes include D001 (ignitable hazardous wastes), D018 (Benzene), and D039 (Tetrachloroethylene). There were no violations found.

Environmental Reports Provided to MACTEC

MACTEC interviewed Mr. Doug Leonard, Director of Environmental Affairs for Coca Cola. Mr. Leonard provided MACTEC with several environmental reports/documents related to environmental assessment and remediation activities previously conducted at the site. The following provides a summary of the results of this work:

- One 10,000-gallon diesel AST was installed on 1/1/1964 and removed on 8/12/1988. The associated fuel dispenser, related delivery lines, concrete containment wall, and concrete pad were also reported removed. The results of surficial soil samples collected indicated the presence of slightly elevated levels of total petroleum hydrocarbons (TPH). Based on the data, these concentrations were below the North Carolina Department of Environment and Natural Resources (NCDENR) action levels for TPH. (Parcels 1-15).
- Two 4,000-gallon diesel USTs were installed on 3/20/1976 and removed on 11/29/1989. The UST closure activities were documented with the NCDENR. The results of analysis of soil and groundwater samples collected following the closure activities did not indicate the presence of TPH or BTEX (benzene, toluene, ethylbenzene, xylene) constituents above the State regulatory limits. (Parcels 1-15).
- One 6,000-gallon gasoline UST and one 1,000-gallon gasoline UST were installed on 3/22/1968 and filled with concrete on 12/31/1988. The analytical results of samples collected during this work indicated the presence of petroleum constituents in soil and groundwater at concentrations above the State regulatory limits. Following assessment activities and regulatory review, the NCDENR identified this site as Incident No. 10487 and determine this site to have a Low Risk Classification. Based on the Low Risk Classification, the NCDENR granted a No Further Action (NFA) conditional pending the completion of a public notice. The conditions of the NFA restrict the use of groundwater in this area for use as a water supply. (Parcel 18).

- Contaminated soils were identified behind the vehicle repair building in 2002. Soil abatement activities included soil excavation and confirmation testing. The results of this work were presented to the NCDENR for review. The NCDENR provided a NFA letter for this work. (Parcel 17).

A Limited Environmental Compliance Review, prepared by ERM NC, PC, dated December 21, 2004, recommended ventilation for fork-lift storage area; stated that used oil is stored in an AST and picked up by Crandall; stated that floor wash water is disposed in the sanitary sewer; stated that vehicle wash water is picked up by a mobile service, states that out-of-date sodas are discharged to sanitary sewer, and stated that active AST's contain used oil and antifreeze.

CONCLUSIONS/RECOMMENDATIONS

Floor drains that were observed at select locations across the Site are reportedly connected to the City of Wilmington's municipal sewer system. Petroleum or hazardous substances that may have spilled in the vicinity of these floor drains have likely entered the city sewer system and transported off the Site.

Several petroleum/chemical AST's and 55-gallon drums observed in the various buildings were positioned on raised or slab concrete floors. Minor staining was observed on the concrete floors in the vicinity of several of these vessels. The presence of chemical storage in vessels of this nature and observed staining on the concrete is considered to be a recognized environmental condition. However, based on the presence of secondary containment observed for the majority of these vessels, the good condition of the concrete floor systems and the general good house keeping noted during our reconnaissance, we did not observe conditions that would indicate a release of chemicals to the underlying soils from these vessels.

Several petroleum UST's and one AST were identified and closed during previous environmental assessment and remediation activities. Petroleum releases from these tanks were also documented during previous work. The former presence of these tanks and identified releases are considered to be recognized environmental conditions to the Site. The reports and correspondence from the NCDENR indicates that where petroleum contamination was detected above the state's regulatory limits, a NFA was granted for the owner with land restrictions. Therefore, contaminated soils and groundwater may still be present at the Site. The NFA requires a restriction of the use of groundwater for potable purposes. Subsurface activities associated with construction or redevelopment could be impacted where handling and disposal of contaminated materials is required. These activities should be carefully evaluated prior to commencement of such work. An evaluation of the legal responsibilities associated with NCDENR agreement regarding the contaminated materials present and the acquisition of this property is also recommended.

The previous environmental documents indicate that two closed-in-place USTs are currently present at the Site. Should these tanks be encountered during redevelopment, they should be removed in accordance with local, state and federal requirements.

Based on the findings discussed above and the current regulatory requirements, MACTEC does not recommend further environmental assessment at this time.

2.0 Introduction

2.1 Purpose

The purpose of this Phase I was to identify recognized environmental conditions associated with the property. E 1527-05 defines recognized environmental conditions as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk or harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions."

2.2 Detailed Scope of Services

MACTEC prepared this Phase I based on readily available information and Site observations. We conducted the following tasks at the Site, which are in general accordance with those tasks established in E 1527-05:

- Reviewed the history of the Site using readily available standard historical sources and an interview with the property owner.
- Reviewed lists published by selected state and federal environmental regulatory agencies for records or comments pertaining to past or present environmental concerns at the Site and/or within specified "search distances" from the Site. These distances adhere to the standard search distances recommended in E 1527-05. The lists we reviewed include: Federal National Priorities site list (NPL) (1.0-mile); Federal Delisted NPL site list (0.5-mile); Federal Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) (0.5-mile), which contains sites which are proposed to be placed on the NPL, and sites that are in the screening and assessment phase for possible inclusion on the NPL; the list of Federal CERCLIS NFRAP sites which have been assessed and at which EPA determined that No Further Remedial Action is Planned to place the sites on the NPL (0.5-mile); Federal RCRA CORRACTS facilities list (1.0-mile); Federal RCRA non-CORRACTS TSD facilities list (0.5-mile); Federal RCRA generators list (0.25-mile); Federal institutional control/engineering control registries (property); Federal ERNS list (Emergency Response Notification System) (property); State and Tribal lists of the Hazardous Waste Sites identified for investigation or remediation (state and tribal equivalent-NPL for 1.0-mile distance) and (state and tribal equivalent-CERCLIS for 0.5-mile); State and Tribal solid-waste disposal site and/or landfill (0.5-mile); State or Tribal leaking storage tank lists (LUSTs) (0.5-mile); State and Tribal registered storage tank lists (USTs) (0.25-mile); State and Tribal institutional control/engineering control registries (property); State and Tribal Voluntary Cleanup Sites (VCP 0.5-mile); and State and Tribal Brownfield sites (0.5-mile).
- Conducted a "walk-over" Site reconnaissance to look for surficial indications of activities involving hazardous substances and petroleum products.

- Conducted a vehicular reconnaissance in the vicinity of the subject Site to verify the location of the facilities identified during our list review, and to visibly determine if land use on adjacent properties creates the potential for an adverse, environmental impact on the subject Site.
- Prepared this written report that summarizes our observations, findings, and conclusions.

Our proposed scope of services for this Phase I ESA does not include certain non-scope issues as defined in E 1527-05 including, but not limited to: sampling or evaluating buildings for radon, mold, lead-based paint or asbestos-containing materials, evaluating ambient air quality, identifying wetlands, or testing of the soil, air, surface water, drinking water, or groundwater for chemical contaminants.

2.3 Limitations and Exceptions

Our findings and opinions are relative to the date of our Site work and should not be relied on to represent conditions on other dates. These opinions are based on information obtained during the study and our experience. If additional information becomes available which might change our conclusions, we request the opportunity to review the information, reassess the potential concerns, and modify our opinions, if warranted.

Although this assessment has attempted to identify the potential for environmental impacts to the subject Site, potential sources of contamination may have escaped detection due to (1) the limited scope of this assessment, (2) the inaccuracy of public records, (3) the presence of undetected or unreported environmental incidents, (4) inaccessible areas, and/or (5) deliberate concealment of detrimental information.

2.4 Special Terms and Conditions

The terms and conditions of our work are those in MACTEC Proposal No. 07-WILM-73, which Mr. James McFarland with East Coast Development & Brokerage, Inc. accepted on September 25, 2007.

2.5 User Reliance

This report is intended for the sole use of East Coast Development & Brokerage, Inc. The contents should not be relied upon by other parties without the expressed, written consent of MACTEC.

3.0 Site Description

3.1 Location and Legal Description

The subject Site is located between Chestnut and Market Streets, with Princess traversing their center and between N. 9th and N. 11th Streets, with N. 10th traversing their center. The Site encompasses one full block and portions of 3 blocks of Downtown Wilmington, New Hanover County, North Carolina (Figure 1 in Appendix A). According to the New Hanover County tax assessor's office, the Site is comprised of 18 parcels and approximately 5.6106 acres. Currently, three buildings, as well as a truck and employee parking lot occupy the Site (Figure 2 in Appendix A). Electric Bottling Company formerly occupied this land. The table below lists each parcel, its current associated address, use, and acreage.

Parcel Identification Number (PIN)	Address	Acreage	Parcel #	Current Use
RO4818-016-002-000	112 N. 10th St.	0.2962	1	Parking
RO4818-016-003-000	110 N. 10th. St.	0.0975	2	Parking
RO4818-016-004-000	921 Princess St.	0.1961	3	Parking
RO4818-016-005-000	1005 Princess St.	0.0861	4	Parking
RO4818-016-006-000	1007 Princess St.	0.0636	5	Parking
RO4818-016-007-000	921 Princess St.	0.1267	6	Parking
RO4818-016-008-000	1009 Princess St.	0.0444	7	Parking
RO4818-016-009-000	921 Princess St.	0.0494	8	Parking
RO4818-016-009-001	921 Princess St.	0.114	9	Parking
RO4818-016-010-000	923 Princess St.	0.1008	10	Parking
RO4818-016-011-000	1015 Princess St.	0.0819	11	Parking
RO4818-016-015-000	109 N. 11th St.	0.0983	12	Parking
RO4818-016-016-000	111 N. 11th St.	0.1446	13	Parking
RO4818-016-020-000	1010 Chestnut St.	0.3771	14	Parking
RO4818-016-021-000	1006 Chestnut St.	0.0438	15	Parking
RO4818-017-003-000	921 Princess St.	0.4979	16	Vending Center
RO4818-018-001-000	921 Princess St.	0.6443	17	Vehicle Maintenance
RO4817-024-001-000	921 Princess St.	2.5479	18	Warehouse (entire block)

3.2 Site and Vicinity General Characteristics

The Site is located on: the south side of Chestnut Street, the north side of Market Street, the east side of N. 9th Street, and the west side of N. 11th Street (See Figure 2 in Appendix A). The area in the vicinity of the property is mainly commercial and residential and is zoned as Commercial Service.

3.3 Current Use of the Property

The Site is currently occupied by the Coca Cola Facility. The warehouse encompasses one block, known as parcel # RO4817-024-001-000. The warehouse is used to store Coca Cola soft-drinks and promotional items. It also is used as a distribution center where fleet trucks are loaded with product, then shipped out to local retailers. There are also small offices inside the warehouse. The vending center encompasses parcel # RO4818-017-003-000. Vending machines and fountain equipment/machines are maintained, washed, and stored here. For any major overhaul or major repair, they are shipped to the Coca Cola off-Site headquarters. The vehicle maintenance garage encompasses parcel # RO4818-018-001-000. General repair and maintenance of fleet vehicles (delivery trucks, tractors, trailers, forklifts, and etc.) is conducted here.

3.4 Description of Structures, Roads and Other Improvements

Parcel Identification Number (PIN)	Address	Characteristics
RO4818-017-003-000	921 Princess St.	Vending Center (Parcel 16)
RO4818-018-001-000	921 Princess St.	Vehicle Maintenance (Parcel 17)
RO4817-024-001-000	921 Princess St.	Warehouse (entire block – Parcel 18)

The Site encompasses 5.6106 acres. Three buildings are situated on the Site. The warehouse is comprised of many sections that have been added throughout time approximately 1920 through 1981. The vending center is comprised of three sections, initially constructed approximately 1915. The vehicle maintenance garage is comprised of one section, initially constructed approximately 1939. The Site is connected to city water and sewer, electricity, propane, and natural gas. Parcel 18 is bordered by: Chestnut Street to the north, Princess Street to the south, N. 9th Street to the west, and N. 10th Street to the east. It can be accessed by entrance driveway off N. 10th Street or N. 9th Street. Parcel 16 is bordered by: Princess Street to the north and N. 10th Street to the east. It can be accessed by entrance area off Princess Street or by a truck loading dock entrance ramp. Parcel 17 is bordered by Princess Street to the north and N. 10th Street to the west. It can be accessed off an entrance drive off N. 10th Street. Parcels 1-15 are bordered by Chestnut Street to the north, Princess Street to the south, N. 10th Street to the west, and N. 11th Street to the east. It can be accessed by entrance driveway off N. 11th Street or parking entrance off N. 10th Street.

3.5 Current Uses of Adjoining Properties

The subject Site is bound: on the north by a commercial property and Chestnut Street, followed by residential properties; to the east by commercial service properties and N. 11th Street, followed by a mix of commercial service and residential properties; to the west by N. 9th Street and commercial and residential properties; and to the south by commercial properties and Market Street.

4.0 User/Owner-Provided Information

4.1 Title Records

MACTEC was not provided with title records or a legal description of the Site; however MACTEC obtained property information from certain New Hanover County offices, which are included in Appendix B.

4.2 Environmental Liens (Questionnaire #'s 1&2)

MACTEC contacted Mr. Doug Leonard, Director of Environmental Affairs for the owner of the Site and Mr. James McFarland, potential buyer of the Site. Mr. McFarland did not have knowledge of environmental liens or land use restrictions held against the Site. Mr. Leonard has knowledge of a No Further Action letter issued by DENR, stating that on-site groundwater is not suitable for use as a water supply. Both Mr. McFarland and Mr. Leonard completed User Questionnaires which are attached in Appendix F.

4.3 Specialized Knowledge (Questionnaire #3)

Mr. McFarland did not have specialized knowledge of past or present environmental concerns at the subject Site or nearby properties. Mr. Leonard has specialized knowledge of past environmental concerns at the subject Site, as he oversees environmental affairs for the current land owner. Mr. Leonard forwarded all appropriate documentation to MACTEC for review. This documentation will be discussed in section 5.3.

4.4 Commonly Known Information (Questionnaire #5)

MACTEC did not discover commonly known information related to environmental concerns. Mr. McFarland stated that one corner of the property has been used for repair of trucks and automobiles. Mr. Leonard stated that the Coca Cola Plant is currently used as beverage distribution, fleet maintenance, and vending machine maintenance. Mr. Leonard provided MACTEC with available reports for spills or releases at the Site, inclusive of environmental cleanups.

4.5 Valuation Reduction for Environmental Issues (Questionnaire #4)

Mr. McFarland does not have knowledge of a reduction in value of the Site due to the fact of any contamination at the property.

4.6 Owner/Property Manager/Occupant Information

MACTEC interviewed: Mr. Doug Leonard, director of environmental affairs for the owner of the property; Mr. Gary Munday, technical service manager for the vending center of the Coca Cola Facility since 1993; Mr. Donald Irving, senior technician at Coca Cola since 1974; Shawn Johnson, fleet technician in fleet maintenance center of Coca Cola Facility. Both Mr. Munday and Mr. Johnson are unaware of any violations, spills/releases of chemicals, or past or present environmental concerns at the Site. Mr. Leonard is aware of past environmental concerns at the Site and supplied supporting documentation to MACTEC. Mr. Irving stated that he was only aware with one environmental problem at the Site. The area behind the maintenance garage was, at one time, contaminated with oils associated with servicing tractor trailer trucks. Reportedly, there was a large rack system used to change oil on the trucks and possibly for other maintenance. Contaminated dirt/ground surface) beneath this area was excavated and remediated.

4.7 Reason for Performing the Phase I

East Coast Development & Brokerage intends on renovating the buildings and re-using the buildings commercially.

5.0 Records Review

5.1 Physical Setting Sources

MACTEC reviewed the following sources to obtain information regarding the physical setting of the Site:

- Geological Survey (USGS) Topographic Map, 7.5-minute series, Wilmington, North Carolina Quadrangle, dated 1970, revised 1979, published by the USGS (Appendix A);
- Geologic Map of North Carolina, published in 1985 by the Department of Natural Resources and Community Development (NRCD);
- *Soil Survey of New Hanover County, North Carolina*, published in 1977 by the Soil Conservation Service of the United States Department of Agriculture, (Site located on Sheet 14) soil descriptions found in Appendix B;

- New Hanover County Online, website <http://www.nhcgov.com>;
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Mapping obtained in 1999, by EDR;
- Environmental Data Resources (EDR) (EDR mapping is found in Appendix C); and
- National Wetlands Inventory (NWI) maps maintained by the United States Fish and Wildlife Service, dated 2002 and 2005, and obtained from EDR (EDR mapping is found in Appendix C).

The topographic map shows the elevation of the Site ranges from approximately 50 feet above mean sea level in the western portion to 35 feet above mean sea level in the eastern portion with the relief sloping to the northeast. For the purposes of this report it is reasonable to infer that groundwater flow will be a subdued reflection of surface flow. This inference is of shallow groundwater that is not being influenced by pumping or subsurface conduits such as tile drains or utility lines. Based on the topographic conditions, groundwater in the surficial aquifer beneath the Site appears to flow to the northeast toward Burnt Mill Creek. Upgradient properties would therefore be considered southwest and west of the Site.

The Site is situated in the Lower Atlantic Coastal Plain Physiographic Province. The Atlantic Coastal Plain Physiographic Province generally extends seaward from the Fall Line, where it lies in contact with the Piedmont physiographic province, to the Atlantic Ocean. The Geologic Map shows the subject Site is located in the Tertiary Coastal Plain, specifically the Comfort Member and New Hanover Member, undivided. The Comfort Member is described as Bryozoan-echinoid skeletal limestone, locally dolomitized, solution cavities common. The New Hanover Member is described as, Phosphate-pebble conglomerate, micritic, thin; restricted top basal part of Castle Hayne Formation in southeast counties.

The Soil Survey of New Hanover County, North Carolina indicates that the Site lies within the Baymeade-Urban land complex (Bh) land complex, as depicted on sheet 14 and attached in Appendix B. Baymeade-Urban land complex soil is on the flats and low ridges of the upland and in small areas that are along the drainageways but are not subject to flooding. These soils have very low available water capacity and moderately rapid permeability.

The EDR map shows that the Site is not within the 100-year or 500-year flood zone.

The EDR map shows that the Site is not inclusive of National or State wetlands.

5.2 Standard Environmental Record Sources

Environmental Data Resources, Inc. (EDR), under subcontract to MACTEC, reviewed the state and federal regulatory lists referenced in Section 2.2. Please note that these lists are limited as they only include sites known to the regulatory agencies at the time of publication. These lists identify sites that are contaminated or exhibit potential for contamination due to the generation or handling of toxic or hazardous materials. EDR searches other regulatory lists beyond ASTM standard and consequently include their findings in their report. The EDR report and maps are included in Appendix C.

The Site was found on the FINDS, UST, IMD, LUST, and RCRA-CESQG lists reviewed by EDR. A description of these listings can be found below.

- UST Listing = Two 4,000-gallon diesel USTs, installed on 3/20/1976 and removed on 11/29/1989, one 6,000-gallon gasoline UST installed on 3/22/1968 and filled with concrete on

- 12/31/1988, one 1,000-gallon gasoline UST installed on 3/22/1968 and filled with concrete on 12/31/1988, one 10,000-gallon UST, installed on 1/1/1964 and removed on 8/12/1988.
- IMD Listing = A surface spill of inorganics occurred on 7/9/2002. No soil or groundwater contamination was detected and the incident was closed-out and a No Further Action was administered by DENR.
 - LUST Listing = A petroleum leak occurred on 11/17/1992 which contaminated groundwater and soil. As part of an environmental assessment it was confirmed that contamination had occurred from 3 gasoline/diesel USTs that were closed in 1988. The incident was closed-out on 8/16/1999.
 - RCRA-CESQG Listing = The facility is classified as a conditionally exempt small quantity generator which means that they generate less than 100kg of hazardous waste per calendar month. Hazardous wastes include D001 (ignitable hazardous wastes), D018 (Benzene), and D039 (Tetrachloroethylene). There were no violations found.

The database identified several sites on the environmental regulatory lists, within the ASTM standard search distances from the Site. Contaminated groundwater from off-site sources are considerations when evaluating recognized environmental conditions. As discussed in section 5.1, hydraulically upgradient properties would be located southwest and west of the Site. The database results indicated that there are no properties of concern adjacent to the subject Site. There are also no sites of concern to the southwest or west, upgradient within a 1/4 mile of the subject Site. The referenced locations are shown in the Overview Map within the EDR report in Appendix C.

5.3 Additional Environmental Record Sources

MACTEC contacted City of Wilmington Fire Department, Chief Blackley to check their records of storage tanks, as well as surface discharges of hazardous chemicals or petroleum products at or adjacent to the subject Site. Mr. Blackley stated that he does not have a record of storage, spills, or releases at the property or the surrounding area. He also stated that his record of underground storage tanks did not reflect a difference from MACTEC's records of USTs.

MACTEC interviewed Mr. Doug Leonard, Director of Environmental Affairs for Coca Cola. Mr. Leonard provided MACTEC with several environmental reports/documents related to environmental assessment and remediation activities previously conducted at the site. The following reports were provided:

- ❖ November, 1992, Report of Miscellaneous Environmental Actions, prepared by Integrity Environmental Consultants;
- ❖ June 1993, Comprehensive Site Assessment, prepared by Conestoga-Rovers & Associates;
- ❖ August 27, 1993, Well Abandonment Forms and letter, prepared by Shield Environmental Associates, Inc.;
- ❖ June, 1994, Final Report, Aboveground Storage Tank Closure Activities, prepared by ESE, Inc.
- ❖ February 26, 1999, Limited Site Assessment (Administrative Office), prepared by Catlin Engineers And Scientists;
- ❖ July 2, 1999, Limited Site Assessment (Former UST Basin), prepared by Catlin Engineers and Scientists;
- ❖ August 16, 1999, Notice of No Further Action, prepared by Department of Environment and Natural Resources (DENR UST Section);
- ❖ October 14, 2002, Report of Findings For Soil Abatement And Confirmation Sampling, prepared by Catlin Engineers and Scientists;
- ❖ October 22, 2002, Letter/No Further Action, prepared by DENR Division of Water Quality; and
- ❖ December 21, 2004, Limited Environmental Compliance Review, prepared by ERM NC, PC.

The following provides a summary of the previous reported work:

- One 10,000-gallon diesel AST was installed on 1/1/1964 and removed on 8/12/1988. The associated fuel dispenser, related delivery lines, concrete containment wall, and concrete pad were also reported removed. The results of surficial soil samples collected indicated the presence of slightly elevated levels of total petroleum hydrocarbons (TPH). Based on the data, these concentrations were below the North Carolina Department of Environment and Natural Resources (NCDENR) action levels for TPH. (Parcels 1-15).
- Two 4,000-gallon diesel USTs were installed on 3/20/1976 and removed on 11/29/1989. The UST closure activities were documented with the NCDENR. The results of analysis of soil and groundwater samples collected following the closure activities did not indicate the presence of TPH or BTEX (benzene, toluene, ethylbenzene, xylene) constituents above the State regulatory limits. (Parcels 1-15).
- One 6,000-gallon gasoline UST and one 1,000-gallon gasoline UST were installed on 3/22/1968 and filled with concrete on 12/31/1988. The analytical results of samples collected during this work indicated the presence of petroleum constituents in soil and groundwater at concentrations above the State regulatory limits. Following assessment activities and regulatory review, the NCDENR identified this site as Incident No. 10487 and determine this site to have a Low Risk Classification. Based on the Low Risk Classification, the NCDENR granted a No Further Action (NFA) conditional pending the completion of a public notice. The conditions of the NFA restrict the use of groundwater in this area for use as a water supply. (Parcel 18).
- Contaminated soils were identified behind the vehicle repair building in 2002. Soil abatement activities included soil excavation and confirmation testing. The results of this work were presented to the NCDENR for review. The NCDENR provided a NFA letter for this work. (Parcel 17).

A Limited Environmental Compliance Review, prepared by ERM NC, PC, dated December 21, 2004, recommended ventilation for fork-lift storage area; stated that used oil is stored in an AST and picked up by Crandall; stated that floor wash water is disposed in the sanitary sewer; stated that vehicle wash water is picked up by a mobile service, states that out-of-date sodas are discharged to sanitary sewer, and stated that active AST's contain used oil and antifreeze.

5.4 Historical Use Information on the Property

MACTEC performed a Site and vicinity reconnaissance, conducted interviews, and reviewed available historical information in order to evaluate the current and historical uses of the Site and surrounding properties. We reviewed the reference materials listed below:

- Aerial photographs dated 1949, 1956, and 1966 from New Hanover County Soil & Water Conservation;
- Aerial photographs dated 1974, 1981, 1986, and 1990 from New Hanover County Engineering Department;
- 2006 aerial photograph from New Hanover County GIS Department;

- Property Record Card/Parcel Information, obtained from New Hanover County tax department office and website;
- Sanborn Fire Insurance Maps dated 1893, 1898, 1904, 1910, 1915, 1951, 1953, 1955, 1967, and 1973;
- Interview with City of Wilmington Fire Department, Mr. Chief Blackley, January 22, 2008;
- Interview with Mr. Doug Leonard, director of environmental affairs for the owner of the property on October 22nd, 2007; Mr. Gary Munday, technical service manager for the vending center of the Coca Cola Facility since 1993 on October 11th and 22nd, 2007; Mr. Donald Irving, senior technician at Coca Cola since 1974 on October 22, 2007; and Shawn Johnson, fleet technician in fleet maintenance center of Coca Cola Facility on October 11, 2007.

MACTEC conducted a review of the Site history. Based on the available sources, the Site appeared to be developed since at least 1893. Copies of the aerial photographs and sanborn maps can be found in Appendix D.

Sanborn Maps-

*For reference
warehouse section = the current parcel 18, aka PIN RO4817-024-001-000
vending center = the current parcel 16, aka PIN RO4818-017-003-000
vehicle maintenance garage center = the current parcel 17, aka PIN RO4818-018-001-000
parking area = the current parcels 1 - 15

- **1893 Map:** depicts a small portion of the Site. The current warehouse section is depicted as residential. The current parking section is depicted as residential. The current vending center is depicted as a theatre. The current vehicle repair section is depicted as residential.
- **1898 Map:** depicts: parcel 18 as entirely residential with a small grocery store; parcels 1-15 as residential with a small grocery store on parcel 3 and a wood working shop on parcel 14; parcel 16 as residential; parcel 17 as residential.
- **1904 Map:** depicts the same as 1898, except for parcels 1-15. The small grocery store has moved to parcel 2, the wood working shop has closed and changed to an apartment building, and Eastern Star Hall exists on parcels 5, 6, & 7.
- **1910 Map:** depicts the same as 1904 except for parcels 1-15 are all residential.
- **1915 Map:** depicts the same as 1910, except for parcel 16 is no longer residential, it contains the Bottling Works and on parcels 1-15, Eastern Star Hall is now a church.
- **1951 Map:** depicts the Site different from the 1915 Sanborn. Changes include;
 - Parcel 18 now contains Coca Cola Bottling in the southeast corner with two gas tanks and small repair building. Also, a commercial building was added.
 - Parcel 16, the Bottling Works has been expanded with another building.
 - Parcel 17 is no longer residential; it contains a garage (repair) with storage.
 - Parcels 1-15, the church has now become a store with an additional building.
- **1953 Map:** few changes; the new commercial building on parcel 18 has been combined with another building to make a large apartment complex.
- **1955 Map:** few changes; parcel 2 from parcels 1-15 is a feed and hay store.
- **1967 Map:** much different; most of the residences have been removed from parcel 18, except for the ones that border Chestnut Street and the Coca Cola Bottling works on parcel 18 has expanded with two new buildings and the two gas tanks were removed. The adjacent apartments have also been

removed. Parcel 15 has been cleared of some of its residences, the apartment building has been removed and the hay & feed store is vacant.

- **1973 Map:** No more residential buildings exist on parcel 18 and the Coca Cola plant has expanded with four more buildings. More residences have been removed from Parcel 15, as well as the hay & feed store. The area where the apartments were located, is now parking.

Aerial Photographs-

- **1949:** Quality is poor and difficult to interpret, however similar to the 1951 sanborn.
- **1956:** Quality is poor and difficult to interpret, however similar to the 1951 sanborn.
- **1966:** Quality is poor and difficult to interpret, however similar to the 1951 sanborn.
- **1974:** Parcel 18, similar to 1973 sanborn (developed with large Coca Cola building). Parcels 1-15 more dwellings removed and most of the parcels are used for parking with two commercial sized buildings. Parcel 16 contains Coca Cola building. Parcel 17 similar to 1951 sanborn (repair garage).
- **1981:** Similar to 1974 aerial except two buildings were added to the Coca Cola building on Parcel 18.
- **1986:** Similar to 1981 aerial, with more used parking of large trailers on Parcels 1-15.
- **1990:** Similar to 1986 aerial, with more parking of large trailers on Parcel 17.
- **2006:** Similar to 1990 aerial, except for Parcels 1-15 have been cleared of all buildings and is solely used for parking of large trailers and regular vehicles.

5.5 Historical Use Information on the Adjoining Properties

Aerial photographs and Sanborn maps were used to evaluate historical use of the surrounding properties and are depicted in the table below:

Historical Land Use Table				
Approximate Year	North/Beyond	East/Beyond	West/Beyond	South/Beyond
Late 1890's	Chestnut Street and Residential	Residential and N. 11 th Street	Residential and N. 9 th Street	Residential and Market Street
Early 1900's	Princess Street/Residential	Residential and N. 11 th Street	Residential and N. 9 th Street	Residential and Market Street
Mid 1900's	Chestnut St., Residential, and Commercial inclusive of gasoline station	Residential, Commercial and N. 11 th Street, inclusive of auto sales and service	Residential and N. 9 th Street	Residential, Commercial and Market Street, inclusive of gasoline station and mortuary
1960's	Chestnut St., Residential, and Commercial inclusive of gasoline station	Residential, Commercial and N. 11 th Street, inclusive of auto sales and service	Residential and N. 9 th Street	Residential, Commercial and Market Street
1970's	Chestnut St., Residential, and Commercial inclusive of gasoline station	Residential, Commercial and N. 11 th Street	Commercial, Residential and N. 9 th Street	Residential, Commercial and Market Street
1980's	Chestnut St., Residential, and Commercial	Commercial and N. 11 th Street	Commercial, Residential and N. 9 th Street	Commercial and Market Street
1990's	Chestnut St.,	Commercial and N. 11 th	Commercial,	Commercial and

	Residential, and Commercial	Street	Residential and N. 9 th Street	Market Street
Mid 2000's	Chestnut St., Residential, and Commercial	Commercial and N. 11 th Street	Commercial, Residential and N. 9 th Street	Commercial and Market Street

The parcel immediately south of parcel 16 was formerly occupied by a Coca Cola building from sometime after 1915 through an unspecified amount of time. The area to the south/southeast of the Site has historically (after 1915 through current day) contained gasoline stations, automotive service and repair garages, as well as dry cleaners. Based on the topographic conditions, groundwater in the surficial aquifer beneath the Site appears to flow to the northeast toward Burnt Mill Creek. Upgradient properties would therefore be considered southwest and west of the Site.

6.0 Site Reconnaissance

6.1 Methodology and Limiting Conditions

Ms. Marlo Hitriz of MACTEC conducted the Site reconnaissance of the subject Site on October 11th and 22nd, 2007. The Site reconnaissance was conducted on foot and the area reconnaissance was conducted both on foot and by a driving tour on public roads. Photographs taken during the Site reconnaissance can be found in Appendix E.

6.2 General Site Setting

The subject Site is located between Chestnut and Market Streets, with Princess traversing their center and between N. 9th and N. 11th Streets, with N. 10th traversing their center. The Site encompasses one full block and portions of 3 blocks of Downtown Wilmington, New Hanover County, North Carolina (Figure 1 in Appendix A). According to the New Hanover County tax assessor's office, the Site is comprised of 18 parcels and approximately 5.6106 acres. Currently, three buildings, as well as a truck and employee parking lot occupy the Site (Figure 2 in Appendix A).

6.3 Exterior Observations

There are four main portions of the Site; the warehouse and offices (parcel 18), the vending center/repair and offices (parcel 16), the vehicle maintenance garage (parcel 17), and the truck and employee parking (parcels 1-15). The following details our observations during the site reconnaissance:

Warehouse:

- A fill pipe is located adjacent to the southwest corner of the building. Reportedly this fill pipe is disconnected. Reportedly, no USTs are currently in operation at the Site.
- A disconnected water quality monitoring system exists adjacent to the southwest corner of the building. This system was formerly used to monitor the water prior to entering the city sewer system. The wastewater from the former soda pre-mix tanks was monitored for syrup/sugar content prior to entering the city system. Apparently this system has been discontinued as soda is no longer mixed at the plant.
- The trucks are loaded and unloaded in back of the warehouse. Minor surficial staining was noted on the ground surface.
- Numerous drains were observed. These drain connect to the city sewer/water system.

- Two or three 55-gallon plastic drums containing fluid from crushing bottles are stored near one of the bay doors at the back of the warehouse. They are picked up by Coca Cola and brought to Coca Cola headquarters.
- A propane AST, behind the warehouse is used to run the forklifts.
- Blocks of crushed cans and bottles sit adjacent to the propane AST. They are picked up and recycled.
- USTs and/or fill or vent pipes in association with the formerly mentioned closed-in-place USTs behind the warehouse were not observed.

Vending Center/Repair:

- A sump pump exists in the shipping loading bay of the vending area and is used when too much rainwater accumulates in this area.
- A fenced area exists behind the vending center. This area formerly contained a cooling tower.

Vehicle Repair/Maintenance Garage:

- The former wash area behind the vehicle repair garage contains a drain which leads to the city system.
- The groundcover behind the vehicle repair building is mainly crushed gravel.

6.4 Interior Observations

There are three main buildings at the Site; the warehouse and offices on parcel 18, the vending center/repair and offices on parcel 16, and the vehicle maintenance garage on parcel 17. The following details our observations during the site reconnaissance:

Warehouse:

- Used for warehousing, receipt, shipping, sales, promotional item storage, and offices.
- Building is serviced by city water and sewer. The sewer system receives wastewater from warehousing activities and sanitary facilities currently located here.
- Numerous floor drains (some active, some filled with concrete) were noted throughout the building, they are connected to the city sewer system.
- A disconnected water treatment system (formerly used when building was connected to well water for process) is located within the warehouse (55-gallon drums with white crystalline substance).
- Fluorescent bulbs are stored in small storage room and picked up by an Environmental Company.
- A slop sink receives wash water from washing the floor. The floor cleaner is not a hazardous chemical.
- Dented/Damaged bottles and cans are crushed in a crusher machine within the building and wastewater is pumped into a 55-gallon drum, however this process was noted adjacent to a floor drain which appeared to also receive crush water (more or less sugar water).
- A large AST is located within the building. Reportedly, this tank formerly contained caustic (sodium hydroxide).

Vending Center/Repair:

- Vending and fountain equipment/machines are picked up and delivered here to be serviced, washed, and shipped out. Some machine/equipment is stored here.
- General household cleaners, paint, aerosol sprays, and parts are stored here.
- A wash pit for the equipment/machines receives wastewater and is connected to city sewer system.
- Floor drains were noted in the building.

Vehicle Repair/Maintenance Garage:

- A waste oil AST and waste antifreeze AST within secondary containment are located within the building. Surficial staining was noted on the floor adjacent to the containment. Crandall Waste Service pumps the tanks once a month.
- A 550-gallon motor oil AST is located in the building. A spill tray sits below the AST. Product was observed in the tray. Staining was noted on the floor adjacent to the tray. Mofit Oil services the AST.
- A 55-gallon drum of antifreeze and a 55-gallon drum of grease sit adjacent to the motor oil AST.
- A parts washing sink sits adjacent to the aforementioned drums. Crandall Waste Service services the sink.
- An electric hydraulic lift is located in the building. The hydraulic fluid is contained in the arm of the lift.
- Six 35-gallon drums of gear oil and transmission fluid as well as three 55-gallon drums of used oil filters were observed in the building.
- Cabinets are used for storage of small containers of paints, cleaners, degreasers, lubricants, and coolants.
- Seven 5-gallon buckets of hydraulic fluid were noted adjacent to the cabinets. Stains were noted on the floor adjacent to the cabinets.

7.0 Interviews

7.1 Interview with Owner

MACTEC interviewed Doug Leonard, Director of Environmental Affairs for the owner of the property (Coca Cola). Mr. Leonard stated that he does not have knowledge of present environmental concerns at the subject site and no underground storage tanks currently exist on the property. Mr. Leonard has knowledge of past environmental concerns at the subject Site and he provided MACTEC with past environmental reports in regards to these concerns.

7.2 Interview with Site Manager

MACTEC interviewed Donald Irving, Senior Technician (employee since 1974), Gary Munday, Technical Service Manager at vending center (employee since 1993) and Shawn Johnson, Fleet Technician for the Vehicle Repair/Maintenance Garage.

Mr. Irving stated that the facility was once the Electric Bottling Company who operated until 1992 or 1993 when Coca Cola Consolidated took over the Site. Soda was mixed, bottled, and prepared for shipment on Site until 1992 or 1993. The syrup was delivered in 55-gallon drums, and was mixed in large tanks with the other ingredients to make the appropriate soda. Soda was piped into a filler/equipment tank which filled the bottles with soda. The bottles were pre-labeled. Carbonation was added and the bottles were capped and boxed and packed for shipment/delivery out of the facility. Water supply wells were used for the production process. Water softeners and polishers were used for treatment of the water. Ammonia was used in the cooling tower for the production process. Also caustic was stored in a large AST and was used for the production process. Mr. Irving stated that other previous chemicals used were food grade grease and engine oils. The former underground storage tanks held gasoline for the trucks and the former AST held diesel. All product, syrup, wash-water, wastewater went to the system of floor drains under the building and into the city sewer system. Bottling and production

were conducted in both the warehouse and the vending center buildings. This was halted in 1992 or 1993 when it was changed to the current day activities.

Mr. Munday explained that the vending center is currently used to service the vending and fountain equipment/machines. Equipment is picked up, washed, and either maintained or shipped out to Coca Cola for major service. Storage of equipment/machines also occurs in this building. A wash pit, connected to city sewer is used also in this building. He stores machine parts and general cleaners in this building.

Mr. Johnson explained that the vehicle repair building is currently used to service company vehicles (forklifts, delivery trucks, route trucks). The waste oil and waste antifreeze ASTs are pumped out approximately once a month by Crandall Oil. Crandall also services the parts washing sink and picks up waste from small spills contained by Speedy Dri. Mofit Oil fills and services the motor oil AST. Mr. Johnson confirmed chemicals used. Mr. Munday stated that in the past, a wash area was used behind the service garage and he believes that it was connected to city sewer.

Mr. Irving, Munday, and Johnson were unaware of any current environmental concerns, issues, or violations. They stated that underground storage tanks no longer exist on the property. Besides the previously stated, Mr. Munday was aware of a past environmental concern with the vehicle repair garage. He stated that in the past a large rack system was used in the area behind the garage. This was used to repair tractor trailer trucks. Soil contamination was found in this area and it was excavated and removed.

7.3 Interview with Occupants

Please refer to Section 7.2.

7.4 Interview with Local Government Officials

MACTEC contacted City of Wilmington Fire Department, Chief Blackley to check their records of storage tanks, as well as surface discharges of hazardous chemicals or petroleum products at or adjacent to the subject Site. Mr. Blackley stated that he does not have a record of storage, spills, or releases at the property or the surrounding area. He also stated that his record of underground storage tanks did not reflect a difference from MACTEC's records of USTs.

8.0 Findings

MACTEC personnel observed recognized environmental conditions (RECs) associated with the Site during the course of this Phase I ESA, defined as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property".

Floor drains that were observed at select locations across the Site are reportedly connected to the City of Wilmington's municipal sewer system. Petroleum or hazardous substances that may have spilled in the vicinity of these floor drains have likely entered the city sewer system and transported off the Site.

Several petroleum/chemical AST's and 55-gallon drums observed in the various buildings, were positioned on raised or slab concrete floors. Minor staining was observed on the concrete floors in the

vicinity of several of these vessels. The presence of chemical storage in vessels of this nature and observed staining on the concrete is considered to be a recognized environmental condition.

Several petroleum UST's and one AST were identified and closed during previous environmental assessment and remediation activities. Petroleum releases from these tanks were also documented during previous work. The former presence of these tanks and identified releases are considered to be recognized environmental conditions to the Site. The reports and correspondence from the NCDENR indicates that where petroleum contamination was detected above the state's regulatory limits, a NFA was granted for the owner with land restrictions.

9.0 Opinions/Recommendations

Although the presence of chemical storage in vessels and observed staining on the concrete is considered to be a recognized environmental condition, based on the presence of secondary containment observed for the majority of these vessels, the good condition of the concrete floor systems and the general good house keeping noted during our reconnaissance, we did not observe conditions that would indicate a release of chemicals to the underlying soils from these vessels.

The previous environmental documents indicate that two closed-in-place USTs are currently present at the Site. Should these tanks be encountered during redevelopment, they should be removed in accordance with local, state and federal requirements.

Contaminated soils and groundwater may still be present at the Site, which is considered to be a recognized environmental condition. The NCDENR NFA requires a restriction of the use of groundwater for potable purposes. Subsurface activities associated with construction or redevelopment could be impacted where handling and disposal of contaminated materials is required. These activities should be carefully evaluated prior to commencement of such work. An evaluation of the legal responsibilities associated with NCDENR agreement regarding the contaminated materials present and the acquisition of this property is also recommended.

Based on the findings discussed above and the current regulatory requirements, MACTEC does not recommend further environmental assessment at this time.

10.0 Conclusions

MACTEC has conducted a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM International's Standard Practice E 1527-05. Any exceptions to, or deletions from, this practice are described in Section 2.3 of this report.

11.0 Deviations

MACTEC has conducted a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM International's Standard Practice E 1527-05. During the course of this Phase I, we did not encounter deviations from the scope of E 1527-05, with the exception of the following:

The environmental conditions and handling practices of the Electric Bottling Company/Bottling Works formerly located on the subject Site are unknown, however bottling and production were conducted in both the warehouse and the vending center buildings. This was halted in 1992 or 1993 when it was purchased by Coca Cola and changed to the current day activities.

12.0 Signatures of Environmental Professionals



Marlo Hitriz
Environmental Scientist



B. Walker Jones, REM
Principal Scientist

13.0 Environmental Professional Statement

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental professional* as defined in § 312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



B. Walker Jones

2/21/08

Date

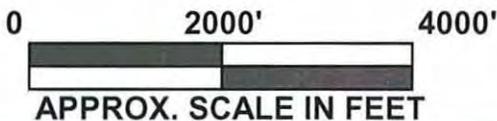
APPENDIX A
DRAWINGS

N



APPROXIMATE SITE LOCATION

Source: USGS Wilmington North Carolina Topographic Map 1970/1979



SITE LOCATION MAP
 COCA COLA FACILITY: 18 - PARCEL SITE
 PRINCESS, CHESTNUT, N 10TH/11TH STREETS
 WILMINGTON, NORTH CAROLINA

DRAWN: WBM	JOB #: 6550-07-0447
APPROVAL: <i>[Signature]</i>	DATE: 2-21-08
SCALE: AS SHOWN	FIG. NO. 1

USGS TOPOQUAD; WILMINGTON, NC 1970, REVISED 1979



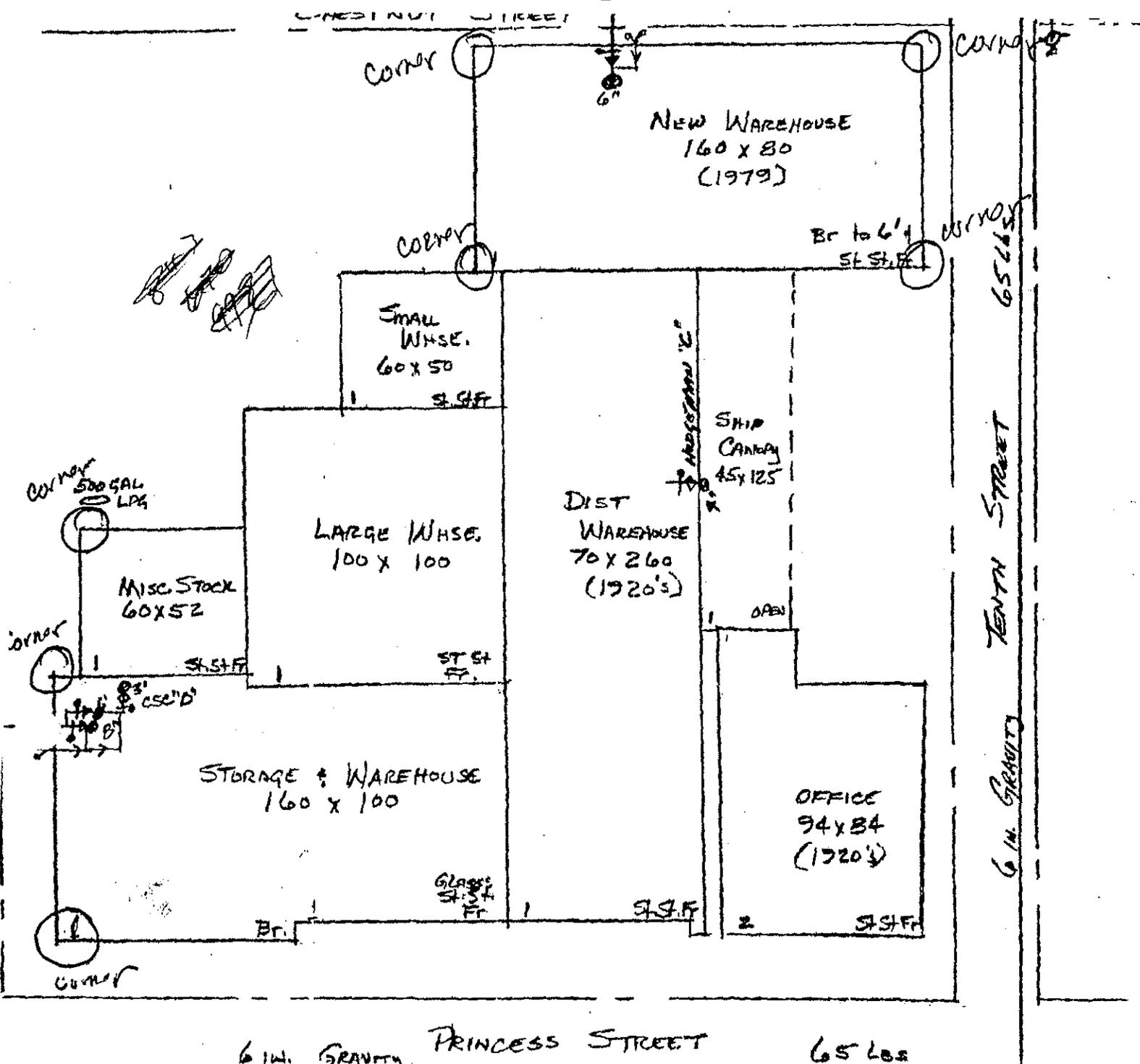
SITE MAP - COCA COLA FACILITY
 18 - PARCEL SITE
 PRINCESS, CHESTNUT, NORTH 10TH AND NORTH 11TH STREETS
 WILMINGTON, NORTH CAROLINA



DRAWN:	WBM	JOB:	6550-07-0447
APPROVAL:	<i>[Signature]</i>	DATE:	2-21-08
SCALE:	AS SHOWN	FIG:	2

PARCEL	PIN
1	RO4818-016-002-000
2	RO4818-016-003-000
3	RO4818-016-004-000
4	RO4818-016-005-000
5	RO4818-016-006-000
6	RO4818-016-007-000
7	RO4818-016-008-000
8	RO4818-016-009-000
9	RO4818-016-009-001
10	RO4818-016-010-000
11	RO4818-016-011-000
12	RO4818-016-015-000
13	RO4818-016-016-000
14	RO4818-016-020-000
15	RO4818-016-021-000
16	RO4818-017-003-000
17	RO4818-018-001-000
18	RO4817-024-001-000

AERIAL IMAGE - 2006 NHCO GIS



HYDRAULICALLY DESIGNED SYSTEM DATA

RISER LOCATION	Type Sym	Temp (°F)	Density (g/cm ³) or No. of Holes	Design Area (ft ²) or psig/cm	DEMAND BOR	
					Flow (gpm)	Press (psi)

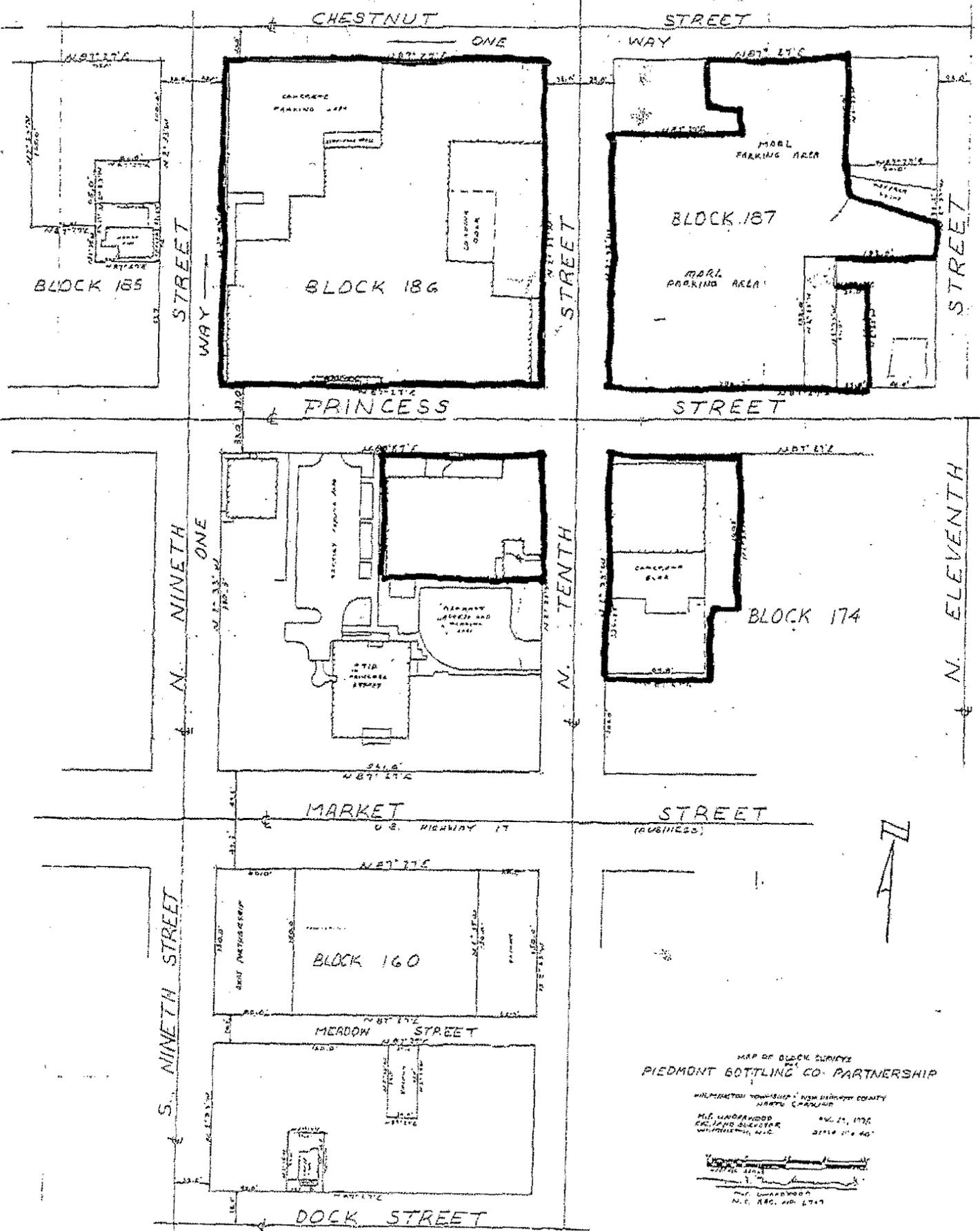
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For F

Date 2

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Exhibit "B"



MAP OF BLOCK SURVEY
 PIEDMONT BOTTLING CO. PARTNERSHIP
 WILMINGTON TOWNSHIP, NEW HAMPSHIRE COUNTY
 HERRICK, VERMONT
 M.E. WOODWARD, INC. AUG. 25, 1976
 25114 1/2" X 40"

M.E. WOODWARD, INC.
 110 S. BROAD ST. WILMINGTON, N.H.



*Celebrating 35 Years
1973 • 2008*

September 17, 2008

Crosland, LLC

5020 Weston Parkway
Suite 300
Cary, NC 27513

Attention: Mr. Austin Williams

Reference: Limited Soil and Groundwater Sampling Report

Coca-Cola Bottling Facility
18 Parcels within blocks of Market Street, Chestnut Street,
9th Street, and 11th Street
Wilmington, North Carolina
S&ME Project No. 1054-08-264

Dear Mr. Williams:

S&ME, Inc. (S&ME) is pleased to provide this report of Limited Soil and Groundwater Sampling services for the above-referenced site. This limited sampling program was performed to assess areas where underground storage tanks (USTs) were located or were closed in place and other areas where maintenance and cleaning operations were performed on the site. These sampling services have been performed in general accordance with our proposal (S&ME Proposal No. P4539-08V, Rev. 01) for Limited Soil and Groundwater Sampling, dated July 29, 2008.

BACKGROUND/PROJECT INFORMATION

On July 9, 2008, S&ME received from you several documents regarding previous site assessment activities that were performed at the subject site. S&ME copied these documents and returned the originals to you for your receipt on July 10, 2008. The documents provided from Crosland included:

- *Phase I Environmental Site Assessment*, February 21, 2008, prepared by MACTEC Engineering and Consulting, Inc. (MACTEC)
- *Asbestos Building Survey Report*, December 1, 1994, prepared by Brown & Root Environmental
- Property deeds
- Letters to property owners requesting water usage information, October 29, 2007, prepared by Applied Resource Management, P.C.

Mr. Tom Raymond with S&ME contacted you on July 11, 2008. You indicated that you had received the original documents back from S&ME. You informed Mr. Raymond that development plans for the site included residential, commercial, and office spaces. You requested S&ME to prepare a scope of work (SOW) to address environmental concerns that were identified in the documents.

Crosland retained the services of Attorney Carol Jones Van Buren to review the previous environmental assessment reports. A conference call was held on July 28, 2008, with Tom Raymond (S&ME), Michelle Logut (S&ME), Austin Williams (Crosland), and Carol Jones Van Buren (attorney). As a result of this discussion, S&ME finalized the SOW to address environmental concerns that were identified in the assessment reports.

The Coca-Cola bottling facility in Wilmington, North Carolina is located between Chestnut and Market Streets, and between 9th and 11th Streets. The Site encompasses one full block and portions of three blocks. According to the dated February 2008, *Phase I Environmental Site Assessment* (ESA) report, the site is comprised of 18 parcels and encompasses approximately 5.6 acres. **Figure 1** is a site vicinity map showing the location of the site.

In the Phase I ESA, MACTEC identified several recognized environmental conditions (RECs), but did not recommend further environment assessment. However, based on the long commercial and industrial history of the site, and the fact that several USTs were previously used, S&ME recommended limited soil and groundwater sampling and analysis in areas where USTs were located or were closed in place and in other areas where maintenance and cleaning operations were performed.

The objective of the additional soil and groundwater sampling event is to gather information to assess environmental concerns identified in previous assessment reports prepared for the subject property. Please note that this sampling program is not intended to be an all inclusive assessment of the entire property or for all contaminants.

SOIL SAMPLING

On August 19-20, 2008, S&ME installed 11 soil borings (B-1 through B-11) on the subject property utilizing direct push technology, commonly referred to as Geoprobe[®]. Prior to beginning the Geoprobe[®] drilling, a survey for underground utilities and piping was performed. The Geoprobe[®] pushes a 2-inch diameter, 5-foot long, hollow, stainless-steel probe into the ground.

Soil borings B-1 through B-11 were advanced at locations on the subject property identified as potential areas of environmental concern. These potential areas of concern were identified by S&ME personnel and Ms. Van Buren through the review of previous environmental assessment reports performed for the subject property. **Figure 2** shows soil boring locations at the subject property. **Table 1** shows the reasoning for soil boring locations based on previous environmental assessments performed on the subject property. Photographs of soil boring locations and potential areas of environmental

concern and lithologic descriptions of the soils encountered during the installation of each of the soil borings are included as attachments.

Soil samples from each boring were collected at approximate two-foot intervals and screened with a toxic vapor analyzer (TVA) to measure relative headspace concentrations of volatile organic compounds (VOCs) using photo-ionization detection (PID) and flame-ionization detection (FID). VOC headspace readings were obtained from a portion of the soil sample, which was placed in a re-sealable bag. The other portion of the sample was placed in a laboratory-supplied container and stored in an insulated container with ice for possible laboratory analyses. After waiting approximately 15 minutes to allow the sample in the plastic bag to reach ambient temperature and headspace equilibrium, the TVA probe was inserted into the bag to obtain a headspace reading.

The sample from each boring that exhibited the highest reading on the TVA or that was most visually impacted was submitted for laboratory analysis. If there was no indication in the field of environmental impact, the sample from the two to three foot depth below ground surface (when near product lines and other potential shallow source areas), and from the eight to ten foot depth below ground surface or from an area near and above the groundwater table (when near USTs) was submitted for laboratory analysis. The other portion of each selected soil sample was shipped under standard chain-of-custody procedures to Environmental Science Corporation (ESC) of Mt. Juliet, Tennessee, a North Carolina certified laboratory. The soil samples were analyzed for VOCs by EPA Method 8260B and polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270C. Please note that soil boring locations B-1 through B-11 correspond to soil samples SS-1 through SS-11, respectively.

GROUNDWATER SAMPLING

After reaching termination depths in soil borings B-1 through B-11, the borings were converted into temporary piezometers. The piezometers were constructed by inserting, into the boreholes, five to ten feet of 1-inch slotted PVC screen and a sufficient length of one-inch PVC riser pipe to reach the surface. The depth-to-groundwater was measured between 3.3 feet below ground surface (ft bgs) in B-5 to 10.0 ft bgs in B-1. In a previous assessment report, the groundwater flow direction has been reported to be in the southeast direction toward the Cape Fear River.

Groundwater samples were collected from each of the groundwater sampling points using a peristaltic pump with new silicon and polyethylene tubing. Groundwater was pumped from each of the groundwater sampling locations until the sample became clear. The sample containers were then filled directly from the tubing.

The groundwater samples were shipped under standard chain-of-custody procedures to ESC for analytical testing for VOCs by EPA Method 8260B and PAHs by EPA Method 8270C. Please note that boring locations B-1 through B-11 correspond to groundwater samples GW-1 through GW-11, respectively.

Following completion of groundwater sampling, the temporary piezometers were removed from the boreholes. Investigative derived wastes (IDW), such as soil cuttings generated during the soil boring advancement were disposed of in accordance with the procedures specified by the North Carolina Department of Environment and Natural Resources (NCDENR). Specifically, the soil cuttings and bentonite pellets were used to backfill the soil borings on the site. Soil borings located inside building structures or in parking areas where a concrete slab was encountered, concrete was mixed on-site and was also used to fill the top one to two feet of the boring up to the finished surface.

SOIL SAMPLING RESULTS

The attached boring logs for boring B-1 through B-11 present the soil descriptions at each boring location to depths of up to fifteen (15) ft bgs. The results of the TVA field screenings are also provided on the boring logs. Elevated readings were measured on the TVA for soil samples from B-2, B-9, and B-11. A summary of TVA measurements is included on **Table 2**. The results of the soil sample analysis and a comparison to the NCDENR's standards are summarized in **Table 3**. Copies of the laboratory analytical results and chain-of-custody forms for this sampling event are included as an attachment.

The laboratory analytical results of the soil samples indicated that tetrachloroethene (PCE) was detected at concentrations exceeding the NCDENR Soil to Groundwater Maximum Soil Contaminant Concentration (MSCC) of 0.0074 milligrams per kilogram (mg/Kg) in soil samples SS-7 (0.032 mg/Kg) and SS-8 (0.014 mg/Kg). Benzo(a)anthracene and benzo(a)pyrene were also detected in soil samples SS-7 and SS-8 exceeding the NCDENR Inactive Hazardous Sites Branch Soil Remediation Goal (IHSB SRG) of 0.022 mg/Kg for both constituents. Benzo(a)anthracene was detected at 0.078 mg/Kg in soil sample SS-7 and 0.068 mg/Kg in soil sample SS-8. Benzo(a)pyrene was detected at 0.08 mg/Kg in soil sample SS-7 and 0.063 mg/Kg in soil sample SS-8.

Several additional VOCs and PAHs were detected in soil samples SS-2, SS-4, SS-7, SS-8, and SS-9 at concentrations exceeding their respective laboratory reporting limits, but below their respective MSCCs and IHSB SRGs. Concentrations of VOCs and PAHs were not detected above the laboratory's reporting limits in soil samples SS-1, SS-3, SS-5, SS-10, and SS-11. Please note that soil sample SS-6 was not collected during this sampling event due to limited soil material recovered during the completion of soil boring B-6.

GROUNDWATER ANALYTICAL RESULTS

The laboratory analytical results of the groundwater samples indicated that tetrachloroethene was detected at a concentration exceeding the 15A NCAC 2L .0202 Standard (2L Standard) of 0.7 micrograms per liter ($\mu\text{g/L}$) in the groundwater sample GW-6 (1.1 $\mu\text{g/L}$). Concentrations of cis-1,2-dichloroethene were also detected exceeding the laboratory reporting limit, but below the 2L Standard in GW-7 and GW-8. In addition, concentrations of n-butylbenzene, sec-butylbenzene, p-isopropyltoluene, n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene were detected at concentrations exceeding their respective laboratory reporting limits, but below their respective 2L Standards in groundwater sample GW-2. Concentrations of VOCs and PAHs were not detected above the laboratory's reporting limits in groundwater samples GW-1, GW-3 through GW-5, and GW-9 through GW-11. The results of the groundwater sample analysis and a comparison to NCDENR's standards are summarized in **Table 4**. Copies of the laboratory analytical results and chain-of-custody forms are included as an attachment.

CONCLUSIONS AND RECOMMENDATIONS

S&ME has completed a limited soil and groundwater sampling program in general conformance with the SOW to address potential areas of environmental concern identified from previous environmental assessment reports. Our assessment was conducted in general accordance with the SOW dated July 29, 2008.

Soil borings B-6, B-7 and B-8 were installed in the maintenance building and vehicle maintenance pad, wash down pad and a soil excavation/disposal area. Laboratory results indicate that similar detected compounds; VOCs in groundwater, and VOCs and PAHs in soil, were reported at the three sample locations. Additional details are presented below.

Laboratory results indicate the presence of the chlorinated hydrocarbon, PCE, above the soil to groundwater MSCC in soil samples SS-7 and SS-8, located in the area of the maintenance shop. Soil sample SS-6 was not collected during this sampling event due to limited soil material recovered during the completion of soil boring B-6. Low levels of PCE were also detected in the groundwater sample GW-6 at a concentration exceeding the 2L Standard. PCE was not detected above laboratory reporting limits in groundwater samples GW-7 and GW-8. However, cis-1,2-dichloroethene, a daughter product from the degradation of PCE, was detected in groundwater samples GW-7 and GW-8 above the laboratory reporting limits, but below the 2L Standard. It appears that chlorinated hydrocarbons are present in the soil and groundwater in the area of the maintenance shop. A possible source of these chlorinated hydrocarbons may be the parts washer located along the northern wall of the maintenance shop, near boring B-6. S&ME observed staining on the floor in vicinity of the parts washer.

The PAHs, benzo(a)anthracene and benzo(a)pyrene, were also detected in soil samples SS-7 and SS-8 at concentrations exceeding the IHSB SRGs. PAHs are indicative of heavier petroleum products and have been previously reported in the groundwater in the vicinity of the former solid waste disposal area located along the southeast corner of the

maintenance shop. Laboratory analytical results of groundwater samples GW-7 and GW-8 do not indicate detections of these constituents above laboratory reporting limits. This indicates that the PAHs have not significantly leached to groundwater at these sample locations. The maintenance building and vehicle maintenance pad, washdown pad and a soil excavation/disposal area

Several additional VOCs and PAHs were detected in soil samples SS-2, SS-4, SS-7, SS-8, and SS-9 at concentrations exceeding their respective laboratory reporting limits, but below their respective soil-to-groundwater MSCCs and IHSB SRGs. In addition, concentrations of several VOCs and one PAH were detected at concentrations exceeding their respective laboratory reporting limits, but below their respective 2L Standards in groundwater sample GW-2.

The NCDENR's, *Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater*, June 2007, Section 4.2, states that the responsible party must notify the NCDENR immediately upon discovery of a discharge or release. We suggest that a copy of these results be provided to the property owner or other responsible party and that an experienced environmental attorney be consulted regarding any required reporting responsibilities.

It is important to note that any impacted soil or groundwater that is encountered and/or removed during site development will require proper handling and disposal or treatment at licensed facilities. Provisions for worker safety and exposure concerns will be required during site development. The contractors working at the site should be required to develop and implement health and safety plans for their workers, considering site conditions and their planned activities.

In addition, S&ME recommends that consideration of measures to address possible migration of contaminated vapors into structures that may be built over contaminated soil or groundwater areas should be included in the design of the new structures.

CLOSING

S&ME welcomes the opportunity to assist you with your environmental needs. Should you have any questions regarding this report, please call us at (919) 872-2660.

Sincerely,
S&ME, Inc.


Michelle L. Logut
Environmental Scientist


Thomas P. Raymond, P.E.
Environmental Services Manager

Attachments:

Figures: 1 – Site Vicinity Map
 2 – Sample Location Map – General Site Area

Tables: 1 – Reason for Sample Locations
 2 – Summary of Soil Screening Results
 3 – Summary of Soil Analytical Results
 4 – Summary of Groundwater Analytical Results

Photograph Logs

Soil Boring Logs

Laboratory Data Reports and Chain-of-Custody Forms

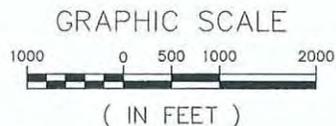
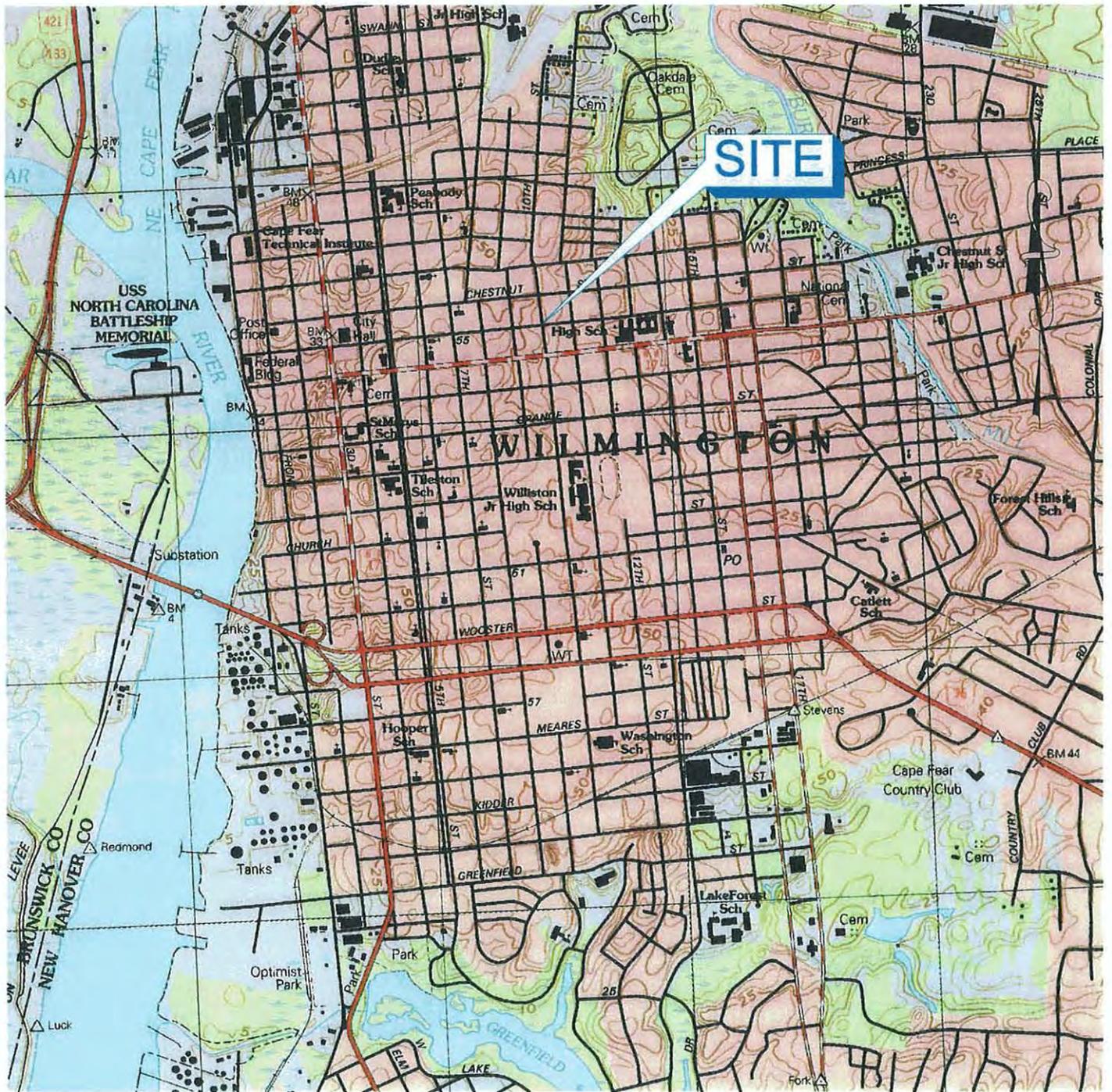


IMAGE SOURCE: NCGS DRG
 WILMINGTON, NC (O34077B8) DATED 1993

A-1148

SCALE:	1" = 2000'
DATE:	SEPT. 2008
DRAWN BY:	BTR
PROJECT NO:	1054-08-264



VICINITY MAP

LIMITED SOIL & GROUNDWATER SAMPLING REPORT
 COCA-COLA BOTTLING FACILITY
 WILMINGTON, NORTH CAROLINA

FIGURE NO.

1

S:\PROJECTS\2008\08-264_Crosland Wilmington Coca-Cola Site\CAD\A1148.dwg, A1148, 9/9/2008 11:12:44 AM, 1:1

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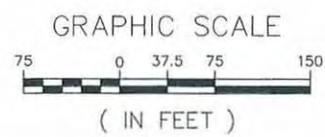


LEGEND

- APPROXIMATE SOIL BORING AND GROUNDWATER SAMPLING LOCATION

NOTE:
SOIL BORINGS COMPLETED ON AUGUST 19-20, 2008

IMAGE SOURCE: NEW HANOVER COUNTY GIS
2006 AERIAL (3127-1)



SCALE:	1" = 150'
DATE:	SEPT. 2008
DRAWN BY:	BTR
PROJECT NO:	1054-08-264



SAMPLE LOCATION MAP
LIMITED SOIL & GROUNDWATER SAMPLING REPORT
COCA-COLA BOTTLING FACILITY
WILMINGTON, NORTH CAROLINA

A-1149
FIGURE NO.
2

Table 1
Reason for Sample Locations
Coca-Cola Bottling Facility
18 Parcels within blocks of Market Street, Chestnut Street, 9th Street, and 11th Street
Wilmington, North Carolina
S&ME Project No. 1054-08-264

Sample ID	Reason for Sample Locations
B-1	6,000-gallon and 1,000-gallon underground storage tanks (USTs) were closed in place in this area; piping and fuel dispensers were also used in this area.
B-2	
B-3	A gas station with USTs was reported in operation in this area in 1898, 1904, and 1910; a fill pipe was also recently reported to be present on this corner.
B-4	Gas tanks were reported in use in this area in 1951.
B-5	A 1,000-gallon UST was removed from this area. This area is also near a previous ink/cleaning solvent storage room and a building that previously performed repairs.
B-6	Borings are located inside of the maintenance building where a waste oil above ground storage tank (AST), new motor oil AST, 55-gallon drums containing waste oil filters, a hydraulic lift, a parts washer, and an air compressor are in use. A waste oil filter crusher was previously used in the area of boring B-7.
B-7	
B-8	A vehicle maintenance pad, washdown pad, sump, and a soil excavation/disposal area was reported in this area. A gasoline filling station off-site to the south of this area was also reported in operation from the 1950's to 1970's.
B-9	Borings are near an area of off-site gasoline station and laundry operations, and boring location B-10 is near the location of former USTs.
B-10	
B-11	Boring is in an area where soil excavation and remediation was performed.

Notes:

1. See Figure 2 for sample locations.
2. Reasoning for sample locations was determined from the review of environmental reports performed by others.

Table 2
Soil Field Screening Results
Coca-Cola Bottling Facility
18 Parcels within blocks of Market Street, Chestnut Street, 9th Street, and 11th Street
Wilmington, North Carolina
S&ME Project No. 1054-08-264

Sample ID	Date Collected	Sample Interval (ft bgs)	PID Readings (ppm)	FID Readings (ppm)
B-1	8/20/2008	3.5-5.0	32.03	3.39
		6.0-8.0	39.25	1.90
		8.0-10.0	56.36	3.57
B-2	8/20/2008	2.0-4.0	22.87	3.47
		6.0-8.0	38.71	0.38
		8.0-10.0	236	922
B-3	8/20/2008	0.5-2.0	16.21	1.28
B-4	8/20/2008	3.5-5.0	53.08	3.57
		6.0-8.0	39.22	3.55
B-5	8/20/2008	1.0-2.5	21.19	2.06
B-6	--	Soil samples were not collected due to limited soil material recovered during the completion of soil boring B-6.		
B-7	8/20/2008	0.5-2.0	10.69	3.67
B-8	8/20/2008	0.5-2.5	12.09	0.63
B-9	8/19/2008	0.0-2.0	84.50	2.29
		2.0-4.0	93.19	1.97
B-10	8/19/2008	0.0-2.0	31.98	3.41
		2.0-4.0	23.18	2.97
		5.0-6.0	30.00	1.94
B-11	8/19/2008	0.0-2.0	125	4.50
		2.0-4.0	365	3.10

Notes:

1. Ft bgs: feet below ground surface
2. PID: Photo-Ionization Detector
3. FID: Flame-Ionization Detector
4. PPM: parts per million (volume/volume)
5. --: No data.
6. Shading indicates soil sample selected for laboratory analysis.
7. See Figure 2 for soil sample locations.

Table 3
Summary of Soil Analytical Results
Coca-Cola Bottling Facility
18 Parcels within blocks of Market Street, Chestnut Street, 9th Street, and 11th Street
Wilmington, North Carolina
S&ME Project No. 1054-08-264

Analytical Method			Volatile Organic Compounds (VOCs) by EPA Method 8260B (mg/kg)									Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270C (mg/kg)										
Contaminant of Concern			Acetone	Benzene	p-Isopropyltoluene	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Sample ID	Date Collected	Depth (ft bgs)																				
SS-1	8/20/2008	3.5-5.0	<0.064	<0.0013	<0.0013	<0.0064	<0.0013	<0.0064	<0.0013	<0.0013	<0.0013	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
SS-2	8/20/2008	8.0-10.0	<2.4	<0.048	0.53	<0.24	<0.048	<0.24	<0.048	0.11	1.5	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	0.05	<0.034	<0.034
SS-Duplicate (SS-2)	8/20/2008	8.0-10.0	<3.0	<0.060	<0.060	<0.30J4	<0.060	<0.30	<0.060	<0.060	0.35	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
SS-3	8/20/2008	0.5-2.0	<0.054J3	<0.0011	<0.0011	<0.0054	<0.0011	<0.0054	<0.0011	<0.0011	<0.0011	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
SS-4	8/20/2008	6.0-8.0	<0.061J3	<0.0012	<0.0012	<0.0061	<0.0012	<0.0061	<0.0012	<0.0012	<0.0012	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.052	<0.040	<0.040
SS-5	8/20/2008	1.0-2.5	<0.065J3	<0.0013	<0.0013	<0.0065	<0.0013	<0.0065	<0.0013	<0.0013	<0.0013	<0.043	<0.043	<0.043	<0.043	<0.043	<0.043	<0.043	<0.043	<0.043	<0.043	<0.043
SS-6	--	--	Soil sample SS-6 was not collected due to limited soil material recovered during the completion of soil boring B-6.																			
SS-7	8/20/2008	0.5-2.0	0.069J3	0.0012	<0.0011	<0.0054	0.032	<0.0054	0.0018	<0.0011	<0.0011	0.078	0.08	0.12	0.06	0.05	0.071	0.12	0.05	0.05	0.05	0.1
SS-8	8/20/2008	0.5-2.5	<0.057J3	<0.0011	<0.0011	<0.0057	0.014	<0.0057	<0.0011	<0.0011	<0.0011	0.068	0.063	0.096	<0.038	<0.038	0.06	0.087	<0.038	0.061	0.057	0.075
SS-9	8/19/2008	2.0-4.0	<0.059J3	0.0022	<0.0012	<0.0059	<0.0012	0.0076	<0.0012	<0.0012	<0.0012	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039
SS-10	8/19/2008	5.0-6.0	<0.054	<0.0011	<0.0011	<0.0054	<0.0011J3	<0.0054	<0.0011	<0.0011	<0.0011	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
SS-11	8/19/2008	2.0-4.0	<0.060	<0.0012	<0.0012	<0.0060J4	<0.0012	<0.0060	<0.0012	<0.0012	<0.0012	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Soil to Groundwater MSCCs			2.8	0.0056	NS	0.58	0.0074	7.3	1.6	7.5	7.3	0.34	0.091	1.2	6700	12	38	280	3.3	0.58	60	290
IHSB SRGs			2800	0.64	NS	11.2	0.48	132	400	NS	NS	0.022	0.022	0.22	NS	2.2	22	460	0.22	11.2	NS	460

- Notes:
1. Analytes that are not shown were not detected.
 2. VOCs: Volatile Organic Compounds.
 3. PAHs: Polynuclear Aromatic Hydrocarbons.
 4. All concentrations are reported in milligrams per kilogram (mg/Kg).
 5. Ft bgs: Feet below ground surface.
 6. --: No data.
 7. MSCC: Maximum Soil Contaminant Concentrations.
 8. IHSB SRGs: Inactive Hazardous Sites Branch Health-Based Soil Remediation Goals.
 9. NS: Regulatory standard or goal not established for contaminant.
 10. Concentrations exceeding the laboratory's reporting limits are shown in **BOLD** fields.
 11. Concentrations that exceed the soil to groundwater MSCCs and/or IHSB SRGs are shown in Shaded and **BOLD** fields.
 12. Qualifiers:
 - A3: The associated batch QC was outside the established quality control range for precision.
 - A4: The associated batch QC was outside the established quality control range for accuracy.
 13. See Figure 2 for soil sample locations.

Table 4
Summary of Groundwater Analytical Results
Coca-Cola Bottling Facility
18 Parcels within blocks of Market Street, Chestnut Street, 9th Street, and 11th Street
Wilmington, North Carolina
S&ME Project No. 1054-08-264

Analytical Method		Volatile Organic Compounds (VOCs) by EPA Method 8260B (µg/L)									Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270C (µg/L)
Contaminant of Concern		n-Butylbenzene	sec-Butylbenzene	cis-1,2-Dichloroethene	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	Tetrachloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Naphthalene
Sample ID	Date Collected										
GW-1	8/20/2008	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.1
GW-2	8/20/2008	9.6	1.3	<1.0	3.9	<5.0	2.2	<1.0	8	38	1.7
GW-Duplicate (GW-2)	8/20/2008	<1.0	2.9	<1.0	11	<5.0	3.5	<1.0	12	52	1.5
GW-3	8/20/2008	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
GW-4	8/20/2008	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.4
GW-5	8/20/2008	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.2
GW-6	8/20/2008	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	1.1	<1.0	<1.0	<1.1
GW-7	8/20/2008	<1.0	<1.0	2.7	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.1
GW-8	8/20/2008	<1.0	<1.0	1.9	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
GW-9	8/19/2008	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
GW-10	8/19/2008	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
GW-11	8/19/2008	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
Equipment Blank	8/20/2008	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	NR
Trip Blank	8/20/2008	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	NR
2L Standards		70	70	70	NS	21	70	0.7	350	350	21

Notes:

1. Analytes that are not shown were not detected.
2. VOCs: Volatile Organic Compounds.
3. PAHs: Polynuclear Aromatic Hydrocarbons.
4. All concentrations are reported in micrograms per liter (µg/L).
5. 2L Standards: North Carolina Groundwater Quality Standards 15A NCAC 2L.0202.
6. NR: Analysis not requested for parameter.
7. NS: Regulatory standard not established for contaminant
8. Concentrations exceeding the laboratory's reporting limits are shown in **BOLD** fields
9. Concentrations that exceed the 2L Standards are shown in Shaded and **BOLD** fields.
10. See Figure 2 for groundwater sample locations.

APPENDIX E
HEALTH AND SAFETY PLAN

HEALTH AND SAFETY PLAN

COCA-COLA VEHICLE MAINTENANCE FACILITY
1002 PRINCESS STREET
WILMINGTON, NORTH CAROLINA

PREPARED FOR:

COCA-COLA BOTTLING COMPANY CONSOLIDATED
ATTN: MR. DOUG LEONARD, DIRECTOR OF ENVIRONMENTAL AFFAIRS
PO BOX 31487
CHARLOTTE, NC 28231-1487

CATLIN PROJECT NO. 208-069

PREPARED BY:

CATLIN ENGINEERS AND SCIENTISTS
P. O. BOX 10279
WILMINGTON, NORTH CAROLINA 28404-0279
(910) 452-5861

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SITE SPECIFIC HEALTH AND SAFETY PLAN

Site Coca-Cola Vehicle Maintenance Facility **Project No.** 208-069

Client Coca-Cola **Project Manager (PM)** G. Richard Garrett, P.G.

Client Safety & Health Contact Michael D. Mason **Site Manager (SM)** TBD

Plan Prepared By Ben Ashba **Date** May 2011

Reviewed By Michael D. Mason **Date** May 2011

Overall Project Objective: Completion of a Phase I and Phase II Remedial Investigation to identify and characterize contaminants and areas of concern at an old inactive vehicle maintenance facility utilized by Coca-Cola.

A. HAZARD EVALUATION

Chemical hazards known or suspected to exist on the site.

CONSTITUENT	EXPOSURE LIMITS		
	TLV	OSHA PEL	IDLH
Tetrachloroethene	25 ppm (TWA)	100 ppm (TW)	150 ppm
Benzo(a)anthracene	0.2 mg/m ³	0.2 mg/m ³ (TWA)	80 mg/m ³
Benzo(a)pyrene	0.2 mg/m ³	0.2 mg/m ³ (TWA)	80 mg/m ³

NOTE: Hazardous substance information sheets for these constituents are provided in Section N. PEL = Permissible Exposure Limit; TLV = Threshold Limit Value; IDLH = Immediately Dangerous to Life or Health; TWA = Time weighted Average; OSHA = Occupational Safety and Health Administration; ppm = parts per million

The avenue for exposure to the chemicals listed above is through direct contact with the contaminated material (dermal absorption) and inhalation of vapors or dusts. See Section N for Material Safety Data Sheets (MSDSs) for the above listed chemicals.

The following general symptoms may indicate an exposure to a hazardous chemical. Personnel will be removed from the work site and provided medical attention if the symptoms occur:

- Dizziness or stupor
- Nausea
- Headaches
- Cramps
- Chest pains and coughing
- Rashes or burns
- Irritation of the eyes, nose, or throat

Procedure to Control Hazards: The potential for chemical exposure will be reduced by the use of personal protective equipment (PPE) and clothing and is further discussed in Section G of this health and safety plan.

One or more of the following physical hazards may be present on the site.

PHYSICAL HAZARDS	
PHYSICAL HAZARD	PHYSICAL HAZARD
Overhead Utilities	Heavy Equipment Operation
Buried Utilities	Hazardous Fauna/Flora
Uneven Ground	Heat/Cold Stress
Concrete Surface	Noise Hazards
Slippery Conditions	Traffic/Motor Vehicle Operation
Trip/Fall Hazards	Manual Lifting/Back Strain
Inclement Weather	Electrical

The physical hazards listed above include safety and environmental hazards. These hazards will be assessed prior to initiation of fieldwork and on-going as needed by the Site Manager. The following information provides guidelines for dealing with some of the hazards listed above:

Overhead Utilities

Procedure to Control Hazard: Maintain a 15 foot buffer between equipment and overhead utility lines.

Buried Utilities

Procedure to Control Hazard: All utilities will be marked and cleared prior to initiating intrusive activities.

Slips, Trips and Falls

Procedure to Control Hazard: Tools and debris must be picked up. Spills will be cleaned up immediately. Personnel shall not walk or climb on equipment not designed as walking surfaces.

Inclement Weather

Procedure to Control Hazard: Serious hazards may result from adverse weather. The Site Manager has authority to discontinue activities due to threatening or severe weather conditions (i.e. lightning, heavy rain, strong winds, etc.). Field activities will cease during periods of heavy rain, lightning, or winds in excess of approximately 35 mph.

Hazardous Fauna/Flora

Procedure to Control Hazard: Bare skin will be covered as much as practical when working in forested areas. Perfumes and scented deodorants will be avoided as they may attract insects. Approach debris, rock piles, and other snake habitats with caution. Recognize and avoid poisonous plants.

Heat Stress

Procedures to Control Hazard: One or more of the following measures will be used to help control heat stress:

- Provision of adequate liquids to replace body fluids.
- Establishment of a work regime that will provide adequate rest periods.
- Workers shall remove impermeable protective garments during rest periods.
- Workers shall not be assigned to other tasks during rest periods.
- Monitor heart rate/body temperature.

Cold Stress

Procedure to Control Hazard: One or more of the following measures will be used to control cold stress:

- Dress in layers.
- Avoid touching cold surfaces (especially metal) with bare skin.
- Minimize exposed skin surfaces.
- Keep active.
- Maintain body fluids.

Noise Hazards

Procedure to Control Hazard: Hearing protection will be worn during the operation of heavy equipment and drill rigs.

Traffic

Procedure to Control Hazard: In areas of vehicle traffic, personnel will wear traffic safety vests. Traffic cones will be used to re-direct traffic away from work area. The cones will be placed as to give vehicles adequate time and distance to avoid the work area.

Manual Lifting/Back Strain

Procedure to Control Hazard: Proper lifting techniques will be utilized. No loads over 60 pounds will be lifted without means of assistance.

Electrical

Procedure to Control Hazard: Electrical work will only be performed by approved electricians. No electrical work shall be done on an energized circuit. Hand tools must be grounded or double insulated.

B. EMERGENCY PLANNING

B.1 HOSPITAL ROUTE AND MAP (Refer to the map on the following page):

Directions from site to hospital:

1. Head west on Princess St toward N 10th St
2. Take the 1st left onto N 10th St
3. Take the 1st left onto Market St
4. Turn right onto S 16th St
5. Continue onto S 17th St
6. Turn left at Medical Center Dr
7. Turn right, Hospital will be on the left

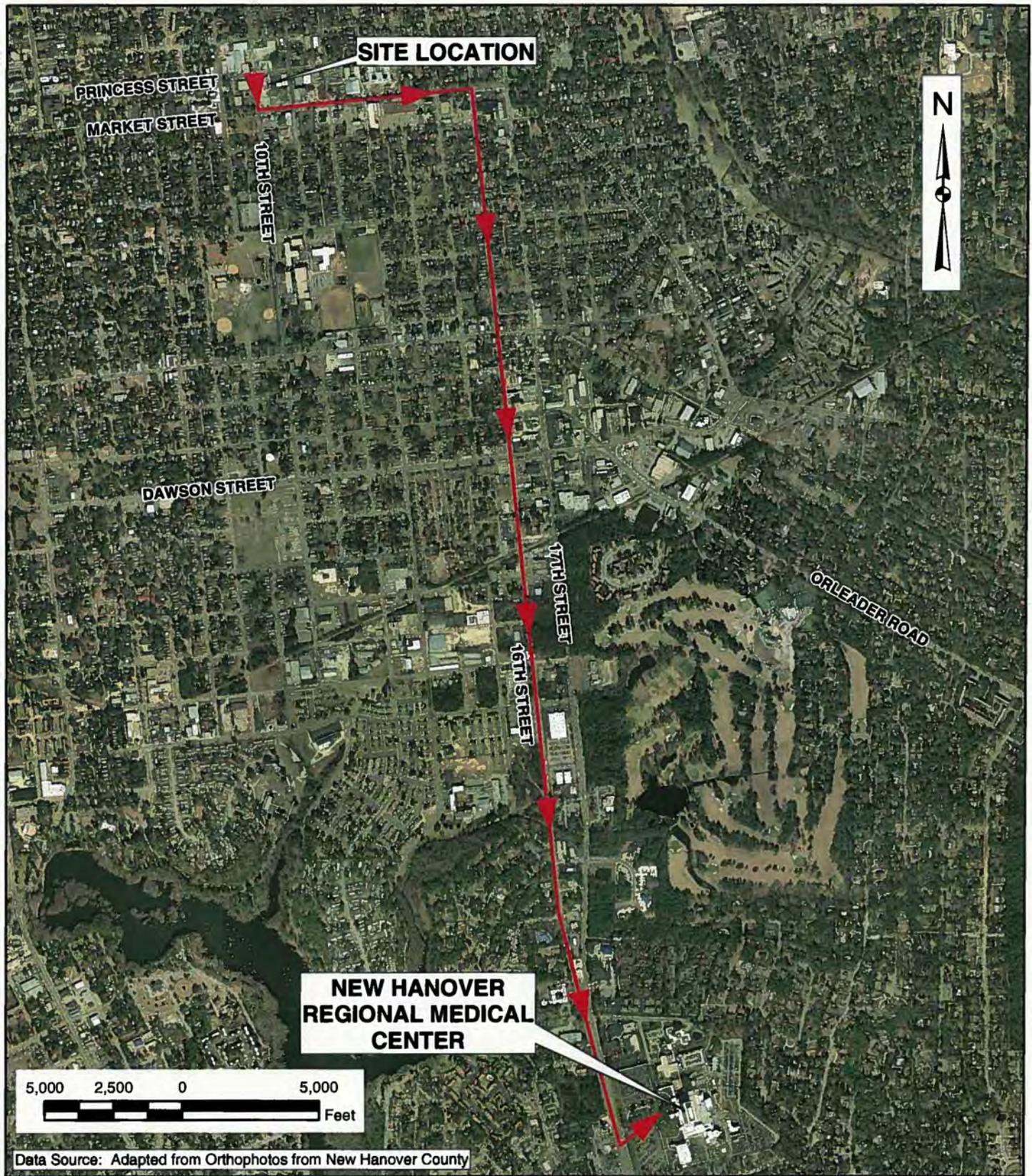
Refer to the map on the following page for an illustration of the directions.

B.2 EMERGENCY PHONE NUMBERS

Local Sources of Assistance:

FACILITY	PHONE NUMBER	CONTACT
Police	911 or (910) 343-3600	New Hanover County 911 or Wilmington Police Department
Sheriff	911 or (910) 798-4200	New Hanover County Sheriff's Office
Fire/Rescue	911	Fire Department
EMS	911	Rescue Squad
Hospital	(910) 343 – 7000	New Hanover County Regional Medical Center
CATLIN	(910) 452-5861	G. Richard Garrett, P.G.

HOSPITAL ROUTE MAP(S)



 CATLIN Engineers and Scientists 220 Old Dairy Road Wilmington, NC 28406 Corporate Licensure No. for Engineering Services C-0586	PROJECT COCA COLA, LLC. WORKPLAN 1002 PRINCESS STREET WILMINGTON, NC	TITLE HOSPITAL ROUTE MAP	FIGURE B.1	
	JOB NO. 208069	DATE SEPT 2010	SCALE AS SHOWN	DRAWN BY THW

National or Regional Sources of Assistance:

CATLIN Engineers and Scientists	1-910-452-5861
EPA National Response Center 24 hour Spill Reporting Center	1-800-424-8802
Region 4 - EPA National Response Center 24 hour Spill Reporting Center	(404) 562-8700
NC Division of Emergency Management 24 hour Hotline to report spills	1-800-858-0368
EPA Region 4–North Carolina	1-919-733-4984
Chemtrec (24 Hours)	1-800-424-9300
Poison Control/ Treatment	1-800-222-1222
National Response Center, NRC (Oil/Hazardous Substances)	1-800-424-8802
US DOT, Hazardous Materials Information Center	1-800-467-4922
US Coast Guard (Fort Macon Station) 24 hour Operations Center	1-252-247-4570
Poison Control Center	1-800-222-1222

B.3 FIRST AID AND EMERGENCY EQUIPMENT

The following equipment is located in CATLIN field vehicles:

- First Aid Kit
- Eye Wash Kit
- Fire Extinguisher
- Mobile Phone

B.4 ACCIDENT PROCEDURES

All accidents and injuries should be reported immediately to the Site Manager.

The Site Manager will:

- Stop the Job.
- Determine the severity of the situation.
- If needed:
 1. Clear the work area.

2. Call or instruct someone to call emergency personnel (fire, ambulance, etc.)
3. Ensure that non-emergency medical attention is obtained if needed.
 - Determine the cause and correct it to prevent reoccurrence.
 - Call the Project Manager and report the situation.
 - Resume work.

Provide basic first aid procedures as necessary and note time and circumstances of injuries. In the event of injury, the injured person should be transported to the closest hospital (see Section B.1). Notify CATLIN Project Manager.

B.5 EMERGENCY COMMUNICATION

The Site Manager will be the Emergency Coordinator, and will be responsible for the entry and exit of response personnel, contacting emergency personnel, and reporting to the Project Manager. The following commands are commonly used for communication when verbal commands can not be used:

Hand gripping throat	Out of air, cannot breathe.
Grip partner's wrist or place both arms around the waist	Leave area immediately, no debate.
Hands on top of head	Need assistance.
Thumbs up	OK, all right, I understand.
Thumbs down	No, negative.

C. PROJECT TASKS/MINIMUM PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIRED

One or more of the following tasks may be performed.

TYPE	Minimum Level of PPE	TYPE	Minimum Level of PPE
Soil Sampling	D	Geophysical Survey	D
Groundwater Sampling	D	Site Visit	D
Surface-Water Sampling	D	Drum Sampling	D
Sediment Sampling	D	Surveying	D
Air Sampling/Monitoring	D	Field Measurements	D
Drilling/DPT	D		
Pilot Testing	D		

NOTE: Changing site conditions may require a higher level of PPE which is further discussed in Section G.

Description of Site Operations: Completion of a Phase I and Phase II Remedial Investigation to identify and characterize contaminants and areas of concern at an old inactive vehicle maintenance facility operated by Coca-Cola.

D. ORGANIZATION & RESPONSIBILITIES

The following personnel are designated to carry out job functions on the site. Their responsibilities and the tasks they will be carrying out on the site are listed below.

NAME & TITLE	RESPONSIBILITY & TASKS
Rick Catlin - Program Manager	CATLIN Engineers and Scientists point of contact
Rick Garrett - Project Manager	Project oversight and point of contact
Mike D. Mason – Health and Safety Coordinator	Coordinates Health and Safety Program at CATLIN
TBD – Site Manager	Responsible for all onsite activities and field safety
Tom Stetler and Justin Heter - Field Geologists	Performance of field activities
Bill Miller and John Wood - Drillers	Performance of field activities
Ben Ashba, Shane Chasteen, Dimitri Talbert - Scientists	Performance of field activities
Roger Caulder - Technicians	Performance of field activities

One or more of the following subcontractor work parties may be used to complete the investigation.

SUBCONTRACTOR WORK PARTY	RESPONSIBILITY
Waste Disposal Operators	Collect and dispose of investigative derived waste (IDW)
Utility Locator	Locate utilities
Paramounte Engineering	Registered Land Survey

E. SITE CONTROL

The Site Manager will coordinate access and control security at the site. Site personnel will sign a daily attendance sheet and a master sheet (Section M) indicating they have read this Health and Safety Plan (HASP) and that they will comply. Each morning a health and safety meeting will be conducted for all site personnel by the Site Manager. The safety procedures and the day's planned operations will be discussed. Topics may include:

Grubbing and clearing hazards	Site physical hazards
Defective equipment	Changes in procedure
Wildlife hazards	Unexpected utilities
Review hazardous materials	Monitoring results
Underground structures	Personal hygiene
Directions to local medical facilities	

F. AIR MONITORING EQUIPMENT

This section specifies the air monitoring equipment and action levels to be used during site visit and all field activities. If action levels exceed the "stop work" value higher levels of PPE (i.e. Level C or above) will be required.

AIR MONITORING INSTRUMENT	PARAMETER	AIR MONITORING INTERVAL	ACTION LEVEL	
			Level D PPE Required (ppm)	Stop Work (ppm)
Combustible Gas Monitor	Explosive Vapors	Periodic	<5% of LEL	≥5% of LEL
Entry RAE	Hydrogen Sulfide and Volatile Organics	Hourly	<10 ppm	≥10 ppm

LEL = Lower Explosive Limit

G. PERSONAL PROTECTIVE EQUIPMENT (PPE) (29CFR 1910.120)

This section lists the equipment that must be used on the site while performing tasks that require Level D PPE. Subcontractors must use the same equipment listed here as a minimum.

- Hard Hat (29CFR 1910.135)
- Safety Glasses (29CFR 1910.133)
- Work Gloves (29CFR 1910.138)
- Steel-Toe Safety Boots (29CFR 1910.136)
- Hearing Protection (29 CFR 1910.95)

As previously stated, changing site conditions may require a higher level of PPE. In general, it is not anticipated that levels of protection will exceed Level D. However, should conditions warrant a higher protection level, work will cease until the Project Manager is notified and this HASP is amended.

The justification for Level C PPE is dependent on the toxic nature of the constituents. The primary routes for exposure are inhalation/ingestion and dermal contact with compounds and/or contaminated dusts. Strict work practices shall be utilized to control all routes of entry. Dust production may occur due to the fine particle size of the soil during soil sampling.

Below is an example of equipment and procedures which would be implemented should Level C PPE be required.

Level C

- Full-face, air-purifying, dual cartridge respirator (Model North #7600-8A)
- Filter combination cartridges
- Hard Hat
- Chemical-resistant coverall (CPF2), welded seams
- Inner and outer chemical-resistant gloves (nitrile for sampling, neoprene for decontamination of sampling equipment)
- Chemical-resistant boot covers
- Safety boots/shoes

Donning/Doffing Sequence

At the beginning of each day, new, un-used PPE (cartridges, chemical-resistant coveralls, gloves, etc.) will be donned.

At the end of each day or as conditions warrant used/spent PPE will be doffed during the decontamination procedures. Used/spent PPE will be placed in a DOT approved drum for temporary storage pending proper disposal.

Inspection Sequence

All protective clothing will be inspected as follows:

- As received from distributor
- As issued to personnel
- Periodically during usage
- After use and prior to maintenance

Protective clothing/equipment will be inspected for:

- Tears/rips
- Imperfect seams
- Non-uniform coatings

- Malfunctioning closures
- Cracks
- Holes
- Other irregularities

Respiratory Program

Use and maintenance of respirators will be in accordance with the CATLIN respiratory program. All full-face respirator wearers will be quantitatively or qualitatively fit tested and medically approved for respirator usage. All respirators shall be properly decontaminated at the end of the workday and stored in a clean area. The respirators will be identified with either the user's name, an identification number (ID) or both. The following discusses operating procedures for air-purifying respirators.

Cleaning and Disinfecting Air-Purifying Respirators (APR)

Air-purifying respirators should be cleaned and disinfected daily. Where respirators are used occasionally, or when they are in storage, the cleaning interval should be modified as appropriate.

Daily Cleaning Routine

The cleaning and disinfecting steps are as follows:

Respirator Disassembly - Respirators should be taken to a clean area where the cartridges may be removed and discarded. For thorough cleaning, the inhalation and exhalation valves are removed.

Cleaning - There are two types of cleaning procedures, which may be used as deemed appropriate. The first involves mixing a cleaning and disinfecting solution of two tablespoons of bleach to one gallon of water. Using impervious gloves, the respirator is first washed in a mild soap solution, rinsed, then placed in the bleach solution. The respirator should not be left in the bleach solution longer than two minutes.

The other cleaning/disinfecting option is to utilize commercially prepared cleaning/disinfected wipes.

Rinsing - The cleaned and disinfected respirator will be thoroughly rinsed to remove all traces of detergent and disinfectant. This step is not necessary if using the commercially-prepared wipes.

Drying - The respirator should be allowed to dry in room air on a clean surface or hung upside down to dry.

Re-assembly and Inspection - The clean, dry respirator should be re-assembled and inspected in a clean area. Check to make sure that there is no remaining moisture that would allow valves to stick or soap residue present.

After Routine Use Following Entry/Decontamination

The steps to be followed in the field for cleaning/disinfecting are as follows:

- Remove all cartridges
- Wash mask in soap and rinse thoroughly

At a minimum, the mask and valves should be wiped with commercially-prepared disinfectant wipes or isopropyl alcohol.

APR Inspection and Checkout

- The entire unit should be visually inspected for any obvious damages, defects, or deterioration.
- Check the facepiece harness to ensure it is damage-free. The serrated portion of the harness may fragment which would prevent proper face seal adjustment.
- Inspect the lens for scratches and proper seal in the facepiece.
- Inspect the exhalation valve to check for dirt, tears, or creases.
- Inspect the inhalation valves to ensure a clean pathway.
- Ensure that cartridges are the same manufacturer as the respirator and for the appropriate contaminant suspected.

Storage of Air-Purifying Respirators

Storage of respirators will be in a clean area to protect against:

Dust	Heat
Sunlight	Extreme Cold
Excessive Moisture	Damaging Chemicals
Mechanical Damage	

Dry respirators will be placed in clean, sealed plastic bags.

H. DECONTAMINATION PROCEDURES

Personnel and equipment leaving an exclusion zone shall be decontaminated. Level D decontamination protocol shall be used with the following decontamination procedures:

LEVEL D EQUIPMENT DECONTAMINATION STEPS	
1	Gather contaminated equipment.
2	Remove excess soil/mud from equipment.
3	Rinse equipment with water.
4	Wash equipment in soap and water.
5	Rinse equipment with distilled water.
6	Rinse equipment with Isopropyl Alcohol
7	Triple rinse with distilled water.
8	Air dry.

LEVEL D PERSONAL DECONTAMINATION STEPS	
1	If coveralls are worn roll down keeping dirty side inside to waist.
2	Remove gloves.
3	Continue rolling coveralls until off.
4	Remove eye and head protection
5	Wash hands, face and neck with water.

The following equipment is typically required for decontamination.

- Scrub Brushes
- Waste Containers
- Soap
- Plastic Tubs
- Plastic Drop Cloths
- Garbage Bags
- Paper Towels
- Isopropyl Alcohol
- Pump Spray Bottles (alcohol)
- Pump Spray Bottles (water)
- Steam Cleaner
- Water (tap and distilled)

I. GENERAL SAFETY RULES

1. Report all work injuries and illnesses immediately.
2. Report all Unsafe Acts or Unsafe Conditions to your Supervisor.
3. Use seat belts when on Company business in any vehicles.
4. Firearms, weapons, and/or explosives are not permitted on Company Property or at the job site.
5. Use, possession, sale or being under the influence of illegal drugs, misuse of prescription drugs and/or alcohol is not permitted on Company Property or while "on duty".
6. **Under no circumstance** shall any CATLIN employee enter a confined space.
7. Keep work areas clean and aisles clear. Do not block emergency equipment or exits.
8. Wear and use the prescribed Personal Protective Safety Equipment. This includes foot protection, head protection, eye protection, gloves, warning vests, etc.
9. No smoking, eating, drinking or chewing of gum or tobacco products while on the site. Avoid hand to mouth contact. A designated smoking and break area may be established off-site.
10. In event of potential or actual fire or explosion, evacuate the area immediately. Assemble in the pre-designated area and conduct a head count of all personnel. Notify the fire department. **DO NOT** attempt to fight the fire. Notify CATLIN Project Manager.

J. MEDICAL MONITORING

(29CFR 1910.120)

CATLIN's Medical Monitoring Program provides medical surveillance of employees who may be exposed to hazardous substances or health hazards, or which may be required to wear respiratory protection. The physical examinations may be performed:

- At least every 12 months;
- At more frequent intervals if determined medically necessary;
- If an employee is injured, becomes ill or develops symptoms due to overexposure involving hazardous substances or health hazards;
- And at termination of employment.

K. EDUCATION AND TRAINING

CATLIN employees are provided with initial indoctrination and continuing training to enable them to perform their work in a safe manner (as required by OSHA and 29 CFR 1910.120). Training requirements are based on the specific job/tasks that the employee is responsible for performing. Types of training provided to employees include, but may not be limited to:

APPENDIX F
EXAMPLE FIELD FORMS



LOW FLOW FIELD MEASUREMENTS

CATLIN PROJECT: COCA-COLA 1002 Princess St.

LOGGED BY: _____

CATLIN PROJECT # : 208-069

DATE: _____

CLIENT'S NAME: Coca-Cola

Monitoring Well ID = _____

DATE SAMPLED: _____

Actual Time (hr:min)	Change in Time (min.)	pH (Standard Units)	Conductivity (us/cm)	Temperature (C)	Redox-Potential (mv) (if required)	Visual Turbidity Classification*	Depth to Groundwater (Feet BLS)
	0	No measurement at 0.					
	5						
	10						
	15						
	20						
	25						
	30						
	35						
	40						
	45						
	50						
	55						
	60						

Average Flow Rate = _____ GPM

Approximate Volume Removed = _____ Gallons

pH = +/- 0.1 standard pH units

Conductivity = +/- 3%

Temperature = +/- 10%

Redox Potential = +/- 10 mv

GPM = Gallons Per Minute

* Turbidity - Indicate if clear, slightly turbid, moderately turbid or highly turbid.

Note: Following water quality meter was used: _____



PROPERTY OWNER AND CONTACT SHEET

CATLIN PROJECT: COCA-COLA 1002 Princess St.	CLIENT'S NAME: Coca-Cola Bottling Comp. Of Wilmington
CATLIN PROJECT #: 208-069	
TIME/DATE:	REMARKS AND ATTITUDE:
CONTACT:	
PHONE:	
ADDRESS:	
CONTACTED BY:	
TIME/DATE:	REMARKS AND ATTITUDE:
CONTACT:	
PHONE:	
ADDRESS:	
CONTACTED BY:	
TIME/DATE:	REMARKS AND ATTITUDE:
CONTACT:	
PHONE:	
ADDRESS:	
CONTACTED BY:	
TIME/DATE:	REMARKS AND ATTITUDE:
CONTACT:	
PHONE:	
ADDRESS:	
CONTACTED BY:	



CHAIN-OF-CUSTODY RECORD AND TESTING REQUEST (GEOTECHNICAL)

CATLIN PROJECT: <u>1002 Princess St.</u>	REPORT TO: _____	COLLECTED BY: _____
CATLIN PROJECT #: <u>208-069</u>	TURNAROUND: _____	DATE: _____
CLIENT'S NAME: <u>ola Bottling Comp. Of Wili</u>		

SAMPLE NO.										FIELD NOTES
SAMPLE CONTAINER (ST,B,O)										
NO. OF SAMPLES										
BORING OR TEST PIT NO.										
DEPTH										
TESTS (CHECK THOSE WANTED)										
VISUAL CLASSIFICATION (ASTM D-2488)										
MOISTURE CONTENT (ASTM D-2216)										
ATTERBERG LIMITS (ASTM D-4318)										
GRAIN SIZE w/ Hydrometer (ASTM D-422)										
GRAIN SIZE w/o Hydrometer (ASTM D-422)										
WASH 200 (ASTM D-1140)										
SPECIFIC GRAVITY (ASTM D-854)										
BULK DENSITY/POROSITY										
STANDARD PROCTOR (ASTM D-698)										
MODIFIED PROCTOR (ASTM D-1557)										
CLAY PERMEABILITY (ASTM D-5084)										
CLAY (remold) PERMEABILITY (ASTM D-5084)										
SAND PERMEABILITY (ASTM D-2434)										
OTHER (SPECIFY)										

* (ALL THREE PREVIOUS LISTED TESTS)	TOTAL NO. OF SAMPLES:
FOR SAMPLE CONTAINER: ST=SHELBY TUBE B=BUCKET O=OTHER	

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	SHIPMENT METHOD	RECEIVED BY: (SIGNATURE)	DATE/TIME
------------------------------	-----------	-----------------	--------------------------	-----------

SAMPLE DISPOSAL (CIRCLE ONE) <input type="checkbox"/> CATLIN <input type="checkbox"/> RETURN TO CLIENT <input type="checkbox"/> OTHER: _____	COMMENTS:
-------------------------------------------------------------------------------------------------------------------------------------------------	-----------



AGGRESSIVE FLUID - VAPOR RECOVERY (AFVR)

CATLIN PROJECT:	<u>COCA-COLA</u>	LOGGED BY: _____
CATLIN PROJECT # :	<u>208-069</u>	DATE: _____
CLIENT'S NAME:	<u>Coca-Cola Bottling Comp. Of Wilmington</u>	FACILITY ID: _____
INCIDENT NUMBER AND NAME:	_____	_____

Well ID#	Time	Average Effluent Velocity (scfm)	Average Effluent Temperature (F)	Average Effluent Concentration (ppm)	Total Volatized (gallons)	Total Product as Fluid (gallons)	Total Product Recovered (gallons)
TOTALS							

Cross Sectional Area of Stack = _____

		SITE HISTORY UST OWNER/OPERATOR INFORMATION	
CATLIN PROJECT: COCA-COLA		LOGGED BY: _____	
1002 Princess St.		DATE: _____	
CATLIN PROJECT # : 208-069		DAY: _____	
CLIENT'S NAME: Coca-Cola Bottling Comp		WEATHER: _____	
UST ID Number	Name of Owner or Operator	Dates of Ownership/Operation (m/dd/yy) to (m/dd/yy)	Owner or Operator?
Address		Telephone Number	
UST ID Number	Name of Owner or Operator	Dates of Ownership/Operation (m/dd/yy) to (m/dd/yy)	Owner or Operator?
Address		Telephone Number	
UST ID Number	Name of Owner or Operator	Dates of Ownership/Operation (m/dd/yy) to (m/dd/yy)	Owner or Operator?
Address		Telephone Number	
UST ID Number	Name of Owner or Operator	Dates of Ownership/Operation (m/dd/yy) to (m/dd/yy)	Owner or Operator?
Address		Telephone Number	



MONITORING WELL SAMPLING RECORD

CATLIN PROJECT:	COCA-COLA 1002 Princess St.	DAY:	DATE:
CATLIN PROJECT # :	208-069	WEATHER:	
CLIENT'S NAME:	Coca-Cola Bottling Comp. Of Wilming	REPORTED BY:	
		CREW:	

WELL ID.					
DATE/TIME SAMPLED					
WELL DIAMETER					
WELL DEPTH - A					
DEPTH TO WATER - B					
(A-B) FT. WATER IN WELL - C*					
GALLONS/FT. - D					
(CXD) ONE VOLUME - E					
(EX3) THREE VOLUMES - F					
VOLUME OF BAILER - G**					
(F/G) NO. BAILS REQUIRED - H*					
NO. BAILS REMOVED - I*					
VOLUME REMOVED					
TURBIDITY					
COMMENTS					

WELL VOLUME:
 1" WELL = 0.045 GAL/FT.
 2" WELL = 0.163 GAL/FT.
 4" WELL = 0.661 GAL/FT.
 6" WELL = 1.501 GAL/FT.

BAILER VOLUME:
 3' X 1.5" BAILER = 0.24 GAL/BAIL
 4' X 1.5" BAILER = 0.37 GAL/BAIL

NOTES:
 TURBIDITY - Indicate clear, slight, moderate or high.
 *-Calculate from measurement point, ie. TOC. **NOT BLS**
 ** - An entry of PUMP indicates that bailers were not used to develop/purge the well and that a pump was used to remove the volume indicated.
 Please note air temp. if available _____



SEDIMENT SAMPLE COLLECTION DATA

CATLIN PROJECT:	COCA-COLA 1002 Princess St.	LOGGED BY: _____
CATLIN PROJECT # :	208-069	DATE: _____
CLIENT'S NAME:	Coca-Cola Bottling Comp. Of Wlin	DAY: _____
		WEATHER: _____

SAMPLE NO.					
DATE					
TIME					
NCSP ACTUAL (N)					
NCSP ACTUAL (E)					
SEDIMENT TARGET (DEPTH BELOW WATER SURFACE IN FEET)					
LENGTH OF PIPE IN SEDIMENT (ft)					
RECOVERY (ft)					
SEDIMENT COMPACTION (ft)					
WATER SURFACE ELEVATION (ft)					
TOP OF SEDIMENT ELEVATION (ft)					
RANGE OF SAMPLE ELEVATION (ft)					
WATER CONDITIONS					

NCSP = North Carolina State Plane (US State Plane 1983 - North Carolina 3200) _____

APPENDIX G

CERTIFICATION STATEMENTS

IHSB SITE NAME Coca-Cola Bottling Facility, Wilmington, New Hanover Cnty, NC Site ID# NONCD0002851

DATE & NAME OF DOCUMENT 5/17/11 Remedial Investigation Work Plan

TYPE OF SUBMITTAL (circle all that apply): Report, Workplan, Work Phase Comp. Statement, Schedule Change

REMEDIATING PARTY DOCUMENT CERTIFICATION STATEMENT (.0306(B)(2))

"I certify under penalty of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

Doug Leonard
Name of Remediating Party

Doug Leonard
Signature of Remediating Party

5/18/11
Date

NOTARIZATION

North Carolina (Enter State)

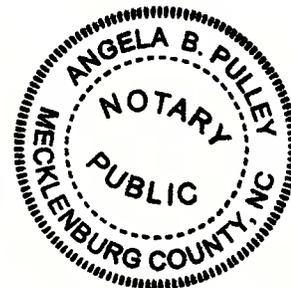
Mecklenburg COUNTY

I, Angela B. Pulley, a Notary Public of said County and State, do hereby certify that Doug Leonard did personally appear and sign before me this day, produced proper identification in the form of a Drivers License, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certifications is true and accurate, and he or she then signed these Certifications in my presence.

WITNESS my hand and official seal this 18th day of May, 2011.

Angela B. Pulley
Notary Public (signature) (OFFICIAL SEAL)

My commission expires: 8/12/2012 Angela B. Pulley



IHSB SITE NAME Coca-Cola Bottling Facility, Wilmington, New Hanover Cnty, NC

DATE & NAME OF DOCUMENT 5/17/11 RI Work Plan Site ID# NONCD0002851

TYPE OF SUBMITTAL (circle all that apply): Report, Workplan Work Phase Comp. Statement, Schedule Change

REGISTERED SITE MANAGER CERTIFICATION OF SIGNATURES

As the Registered Environmental Consultant for the Site for which this filing is made, I certify that the signatures included herewith are genuine and authentic original handwritten signatures and/or true, accurate, and complete copies of the genuine and authentic original handwritten signatures of the persons who purport to sign for this filing. I further certify that I have collected through reliable means the originals and/or copies of said signatures from the persons authorized to sign for this filing who, in fact, signed the originals thereof. Those persons and I understand and agree that any copies of signatures have the same legally binding effect as original handwritten signatures, and I certify that any person for whom I am submitting a copy of their signature has provided me with their express consent to submit said copy. Additionally, I certify that I am authorized to attest to the genuineness and authenticity of the signatures, both originals and any copies, being submitted herewith and that by signing below, I do in fact attest to the genuineness and authenticity of all the signatures, both originals and copies, being submitted for this filing.

G. Richard Garrett
Name of Registered Site Manager

GR Garrett
Signature of Registered Site Manager

5/26/11
Date

REGISTERED SITE MANAGER DOCUMENT CERTIFICATION STATEMENT (.0306(b)(1))

"I certify under penalty of law that I am personally familiar with the information contained in this submittal, including any and all supporting documents accompanying this certification, and that the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete and complies with the Inactive Hazardous Sites Response Act G.S. 130A-310, et seq, and the remedial action program Rules 15A NCAC 13C .0300. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

G. Richard Garrett
Name of Registered Site Manager

GR Garrett
Signature of Registered Site Manager

5/26/11
Date

NOTARIZATION

North Carolina (Enter State)

New Hanover COUNTY

I, Sheila H. Smith, a Notary Public of said County and State, do hereby certify that G.R. Garrett did personally appear and sign before me this day, produced proper identification in the form of drivers license, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certifications is true and accurate, and he or she then signed these Certifications in my presence.

WITNESS my hand and official seal this 26th day of May, 2011.

Sheila H Smith
Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: 12/5/14.

