

# INCIDENT ACTION PLAN

Be brief and concise with your entries

<b>Location</b> Bayou Corne Sink Hole	<b>Control Level</b> Company Supervisory	<b>Operational Period</b> 8/13/12 From 06:00 To 20:00
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<p><b>1.0 SITUATION</b> Disease, community, environment</p> <p>PROMPTS: Weather, disease trends, Resources, Hazards &amp; safety</p> <p>REFERENCE: Maps, weather reports, Sitreps, appreciation, warnings, alerts</p>	<p>CURRENT <b>Overcast @ 08:00</b></p>
	<p>PREDICTED <b>Partly Cloudy</b></p>
<p><b>2.0 OBJECTIVES (or MISSION)</b></p> <p>PROMPTS: Time &amp; space</p> <p>REFERENCE: Appreciation – control options, courses open to disease</p>	<p>CURRENT</p> <p><b>Brought in high volume air mover with vacuum box.</b></p> <p><b>Installed 4 RAE Air Monitors around sink hole and Well Pad #3. Ranges of VOC are 0.8 – 4.</b></p> <p><b>Clean Harbors set up a de-con station at the boat launch and waiting on landowner approval.</b></p> <p><b>Setting Rope Mop Skimming System.</b></p> <p><b>Actively removing contaminated vegetation.</b></p> <p><b>Completed Health &amp; Safety Plan.</b></p> <p><b>Site is being prepared to accept the rig on Thursday.</b></p> <p><b>-Worked on and received permits from:</b> <b>LaDNR</b> <b>Corp of Engineers</b></p> <p><b>-Worked on getting PO's and managing the drilling project.</b></p> <p><b>Finalize sink hole characterization.</b></p> <p><b>Finalize order for field equipment.</b></p> <p><b>Coordinate involvement of MDH Engineered Solutions to mobilize staff and tilt meter / inclinometer equipment.</b></p> <p><b>Discuss option of geoprobe rig mobilization to the site for purposes of gas monitoring for ultimate gas vent well field.</b></p>
	<p>ALTERNATE</p>

<b>3.0 EXECUTION</b> add safety information as appropriate	
<p><b>GENERAL OUTLINE</b></p> <p>PROMPTS: Strategies &amp; tactics (current/proposed/alternate)</p> <p>REFERENCE: Appreciation, Control Options</p>	<p><b>Safety Information: See Attached Safe Work Rules Reference IAP dated 8/9/12</b></p> <p><b>Additional to our Safe Work Rules for this project we are adding the awareness of insects, reptiles and animals.</b></p> <p><b>Inspect location for flammability</b></p> <p><b>Daily Safety Meetings</b></p> <p><b>PPE Required on site: Respirator w/ VOC Cartridge, Gloves for sampling, eye protection, life preservers, hearing protection.</b></p>
<b>GROUPINGS</b>	<b>NA</b>
<p><b>TASKS</b> Including PR &amp; Media</p>	<b>Same as above</b>
<p><b>COORDINATING INSTRUCTIONS</b></p> <p>PROMPTS: Timings, routes, assembly areas, staging areas</p>	<b>Texas Brine Grand Bayou Facility will be used as staging area.</b>
<b>4.0 ADMINISTRATION (Logistics support)</b>	
PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)	
<p><b>SUPPLY</b> WHO, WHAT, WHERE, WHEN of resources not readily available</p>	<b>NA</b>
<p><b>GROUND SUPPORT</b> Transport of personnel, traffic mgt, refuelling, mechanical repair/maintenance</p>	<b>NA</b>

<p><b>COMMUNICATIONS</b> Installation, maintenance, technical advice</p>	<p><b>Cell Phone &amp; Landline Communications:</b>                  Kenneth Blanchard – Area Manager – 985-██████████ (985-██████████)                  kblanchard@texasbrine.com                  Scott Borne – Facility Manager – 985-██████████ (985-██████████)                  sborne@texasbrine.com                  Joel Miller, PE – Consultant – 337-██████████ (337-██████████) joel.miller@cox-internet.com                  Bruce Martin – Operations/PR – 713-██████████ (281-██████████)                  bmartin@texasbrine.com                  Mark Cartwright – Technical/Engineering – 713-██████████ (281-██████████)                  mcartwright@unitedbrine.com                  Scott Whitelaw – Environmental/Safety – 713-██████████ (713-██████████)                  swhitelaw@tum.com</p>
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<p><b>STAGING AREA/ FCP</b> Setting up, communications, staffing</p>	<p><b>Texas Brine Grand Bayou Facility</b> 1301 Hwy 70 South, Belle Rose, La 70341</p>
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**5.0 ADMINISTRATION** (Logistics services)

PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)

<p><b>FACILITIES</b> Security, waste, cleaning</p>	<p><b>NA</b></p>
<p><b>CATERING</b></p>	<p><b>NA</b></p>
<p><b>OH&amp;S/MEDICAL</b> Medical plan, first aid plan</p>	<p><b>Call 911</b></p>
<p><b>FINANCE</b></p>	<p><b>NA</b></p>
<p><b>TRAVEL</b></p>	<p><b>NA</b></p>
<p><b>INDUCTION/ TRAINING</b></p>	<p><b>NA</b></p>
<p><b>ACCOMMODATION</b></p>	<p><b>NA</b></p>

**6.0 CONTROL, COORDINATION & COMMUNICATION**

<p><b>CONTROL &amp; COORDINATION STRUCTURE</b></p> <p>REFERENCE Structural Chart</p>	<p><b>Plant Management Supervision / Contractor Work</b></p>
<p><b>COORDINATION &amp; LIAISON</b></p> <p>Local knowledge, police, agency reps, emergency mgt reps</p>	<p><b>NA</b></p>
<p><b>COMMUNICATIONS</b></p> <p>PROMPTS Communications structure, operational comms plan, information mgt</p>	<p><b>Plant Management – Contractor Communication via Cell Phone</b></p>

<p style="text-align: center;"><b>EXTRAS</b></p>	
<p><b>Attachments</b></p> <p>PROMPTS: maps, weather, organisational charts, resources, comms diagram</p>	<p><b>Site Map</b> <b>Current Weather</b> <b>Safe Work Rules</b> <b>Safety Training Log</b></p>
<p><b>Plan developers</b></p> <p>PROMPTS PO, Logs Mgr, Controller</p>	<p><b>NA</b></p>
<p><b>Approval</b></p> <p>Controller, Ops Director</p>	<p><b>TBC Company Rep:</b> <b>FOSC:</b> <b>SOSC:</b> <b>POSC:</b></p>

# INCIDENT BRIEFING

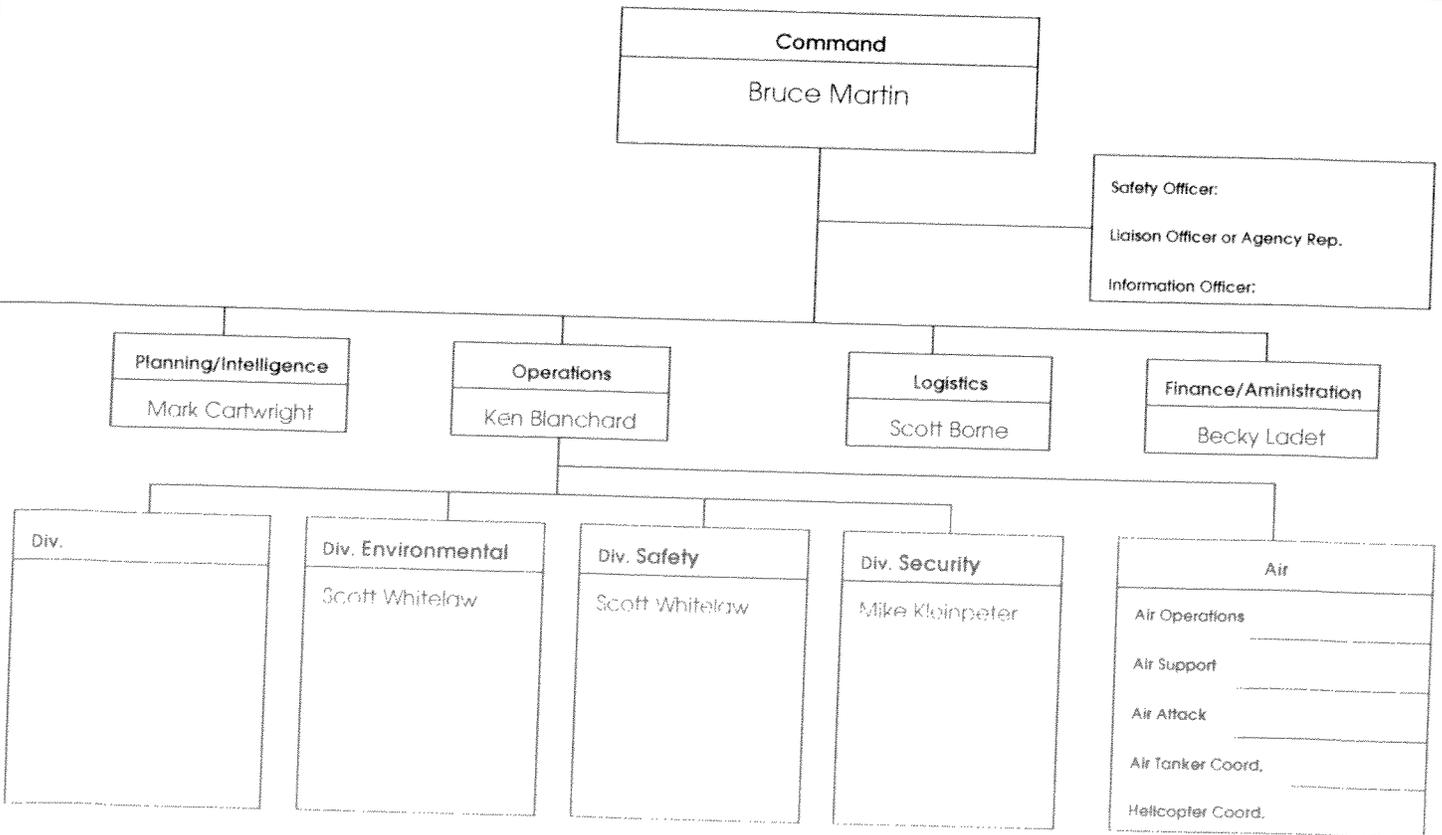
1. Incident Name  
Grand Bayou Come Sink Hole

2. Date  
8/13/2012

3. Time  
06:00-20:00

## 4. Map Sketch

## 5. Current Organization







# ORGANIZATION ASSIGNMENT LIST

**1. Incident Name**

Bayou Corne Sink Hole

**2. Date**

8/13/12

**3. Time**

06:00 - 18:00

**4. Operational Period**

Everyday

**Position**

**Name**

**5. Incident Commander and Command Staff**

**Incident Commander**

Mark Cartwright

**Deputy**

Kenneth Blanchard

**Safety Officer**

Scott Whitelaw

**Information Officer**

Bruce Martin

**Liaison Officer**

Scott Borne

**6. Agency Representative**

**Agency**

**Name**


**7. Planning/Intelligence Section**

**Plans/Intel Chief**

**Deputy**

**Resources Unit**

**Situation Unit**

**Documentation Unit**

**Demobilization Unit**

**Technical Specialists**

**Human Resources**

**Training**

**GIS**


**8. Logistics Section**

**Logistics Chief**

**Deputy**

**Supply Unit**

**Facilities Unit**

**Ground Support Unit**

**Communications Unit**

**Medical Unit**

**Food Unit**

ICS 203

**Operations Section**

**Op's Chief**

**Deputy**

**a. Branch I**

**Branch Director**

**Deputy**

**Division/Group**

**Division/Group**

**Division/Group**

**Division/Group**

**Division/Group**

**Staging Area**

**Staging Area**

**b. Branch II**

**Branch Director**

**Deputy**

**Division/Group**

**Division/Group**

**Division/Group**

**Division/Group**

**Division/Group**

**Staging Area**

**Staging Area**

**c. Branch III**

**Branch Director**

**Deputy**

**Division/Group**

**Division/Group**

**Division/Group**

**Division/Group**

**Division/Group**

**d. Air Operations Branch**

**Air Operations Branch Director**

**Air Tactical Supervisor**

**Air Support Supervisor**

**Helicopter Coordinator**

**Air Tanker Coordinator**

**10. Finance/Administration Section**

**Finance/Admin. Chief**

**Deputy**

**Time Unit**

**Procurement Unit**

**Compensation/Claims Unit**

**Cost Unit**

Prepared by (Resource Unit Leader)





POINT	NORTHING	EASTING
GPS BASE REFERENCE PT	548102.54	3342328.31
WELL 10	547975.94	3342190.67
WELL 9	548555.34	3342151.99
T.B.M. 2	549154.54	3342242.42
WATER WELL 2	549203.41	3342177.03
WELL 2	549133.19	3342109.45
WATER WELL 5	549196.90	3341550.59
WELL 3	549112.86	3341453.33
T.B.M. 3		
T.B.M. 3A		
T.B.M. 3B		
T.B.M. 3C		
T.B.M. 1		
WATER WELL 1	549511.30	3342133.60
TANK "E" - A		
TANK "E" - B		
TANK "E" - C		
TANK "E" - D		
TANK "W" - A		
TANK "W" - B		
TANK "W" - C		
TANK "W" - D		
WELL 1	549796.90	3342061.73
OXY #4 MON.	550443.24	3342138.56
OXY #5 MON	551003.60	3342110.73
T.B.M. 1	547548.82	3341285.09
T.B.M. 5	548932.04	3340643.21
T.B.M. 6	550091.68	3341247.31
OXY GPS 1	547921.40	3342282.44
18NW SAMPLE	549666	3341165
18NE SAMPLE	549612	3341301
18SE SAMPLE	549427	3341252

RAPID SCOUT CMS  
CONDUIT SE PRELIMINARY

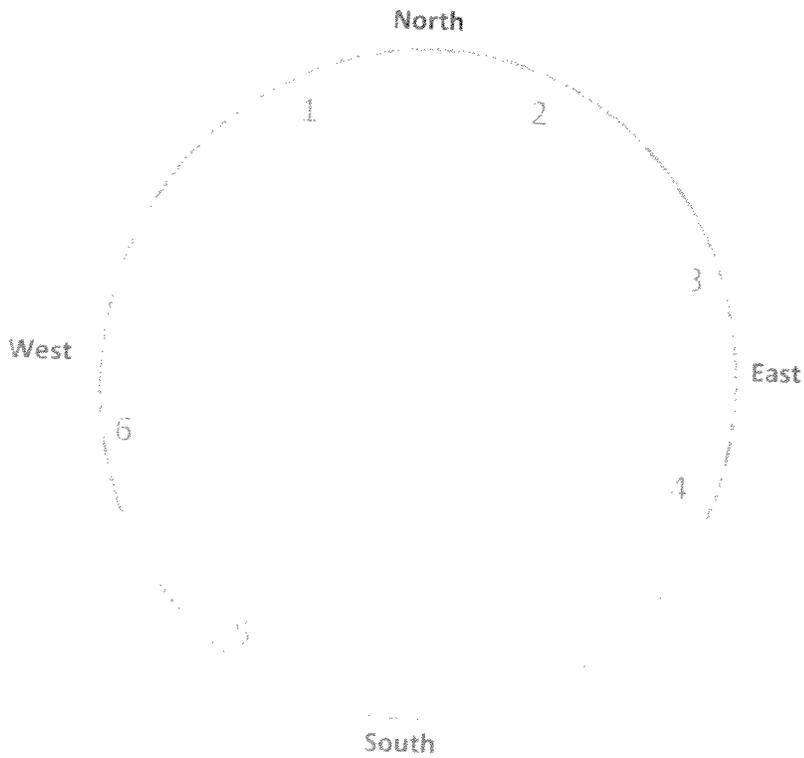
Apr 10	14 Jul 12	19 Jul 12	28 Jul 12	29 Jul 12	30 Jul 12	31 Jul 12	1 Aug 12	2 Aug 12	3 Aug 12	4 Aug 12	5 Aug 12
5 37	5 36	5 37	5 37	5 65	5 58	5 6	5 61	5 72		5 56	5 57

# Bayou Corne Sinkhole

Date and Time:

8-12-12 / 8-13-12

	Time	Time	Time	Time
	10:00 p.m.	1:00 a.m.	4:00 a.m.	7:00 a.m.
Tree 1	OK	GONE	GONE	GONE
Tree 2	OK	OK	OK	OK
Tree 3	OK	OK	OK	OK
Tree 4	OK	OK	OK	OK
Tree 5	OK	OK	OK	OK
Tree 6	OK	OK	OK	OK



NOTE: Coordinates for each tree are forth coming.

By: Austin Buxton



# SAFETY LOG SIGN-IN SHEET

COMPANY: Texas Brine / Clear Harbor  
LOCATION: Grand Bayou  
DATE: 8/13/12  
HOURS: \_\_\_\_\_  
TOPICS/PURPOSE: Sink Hole Clear up  
CONDUCTED BY: Scott Borne

## PERSONS ATTENDING:

PRINT NAME	& SIGNATURE
<u>Brandon Herbert</u>	<u>[Signature]</u>
<u>Antonio Lerma</u>	<u>Antonio Lerma</u>
<u>Ryan P. Hanline</u>	<u>Ryan P. Hanline</u>
<u>Jose A Yerecu</u>	<u>Jose A Yerecu</u>
<u>Sam Armstrong</u>	<u>Sam Armstrong</u>
<u>Brandon Lopez</u>	<u>Brandon Lopez</u>
<u>Oscar Yerecu</u>	<u>Oscar Yerecu</u>
<u>Mark Simon</u>	<u>Mark Simon</u>
<u>DAVE LAW</u>	<u>Dave Law</u>
<u>DOUG WHITMAN</u>	<u>Doug Whitman</u>
<u>Gilbert Vargas</u>	<u>Gilbert Vargas</u>
<u>Dante Holmes</u>	<u>Dante Holmes</u>
<u>Russell Bradford</u>	<u>Russell Bradford III</u>

## PERSONS ATTENDING:

# SAFETY LOG SIGN-IN SHEET

PRINT NAME	& SIGNATURE
Carlton Craft	Carlton Craft
James Haack	[Signature]
Jeremie Wilson	[Signature]
Cody Barnes	[Signature]
JEFF Sellers	Jeff Sellers
Terence Hall Jr	Terence Hall Jr
Carl Burson Jr	Carl Burson Jr
Jonathan J. Accorant	Jon J. Accorant
Mike Aucain	Mike Aucain
Mark Landlos	Mark Landlos
JOHN TREGLE	John Tregle
Jules Johnson	Jules Johnson
Jordan Brasseaux	[Signature]
Jason Poirier	[Signature]
EARL VANACOR	Earl Vanacor
Eddie Bailey	[Signature]
Brooke Guidry	[Signature]
John A. Grenillion	[Signature]
Jacob Boudreaux	Jacob Boudreaux
Macaulay Kasu	[Signature]
RICARDO GAUTIER	[Signature]

# SAFETY LOG SIGN-IN SHEET

COMPANY: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

HOURS: \_\_\_\_\_

TOPICS/PURPOSE: \_\_\_\_\_

CONDUCTED BY: \_\_\_\_\_

**PERSONS ATTENDING:**

**PRINT NAME**

**& SIGNATURE**

JOSE LINA LOPEZ

*Jose Lina Lopez*

LUIS A RISO

*Luis A RISO*

JOSE GONZALEZ

ERNESTO ARANGO

KEVIN RESTREPO

HUBO TINTAYA

EMILIO MOREL

CHRIS BLANCO

BRANDEN VINCENT

JOHN BRASSARD

CORRY BREWER

LUKE GARRITT

GRAY FREDRICK

JESSE TREPETHER

**PERSONS ATTENDING:**

Company Name: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Revision Date: 10/2010

*[Signature]* Michael Mishes

*[Signature]* Luke Delchiassey ©  
*[Signature]* Rexby Stelby

MILLER ENGINEERS & ASSOCIATES, INC.  
CONSULTING ENGINEERS & LAND SURVEYORS  
FRANKLIN, LA

OXY #5 MONUMENT

" = 400'

NOTE:  
PROPERTY & LEASE LINES ARE APPROXIMATE ONLY  
THIS SKETCH DOES NOT REPRESENT A PROPERTY  
BOUNDARY SURVEY

OXY #1 MONUMENT

APPROX. EDGE  
OF SLURRY PIT  
8/4/12

TB  
WATER SAMPLES

WELL 1

TANK "W"

TANK "E"

WATER WELL 1

T.B.M. 1

T.B.M. 3A

WATER WELL 5

WATER WELL 2

WELL 3

T.B.M. 3

WELL 2

T.B.M. 2

T.B.M. 5

T.B.M. 3B

TBC LEASE LINE

WELL 9

GPS BASE

WELL 10

REFERENCE PT.

OXY GPS #4

T.B.M. 4

**76°F** Belle Rose, Louisiana

Enter City, State, Country or U.S. Zip code or Airport Id



Local National Global Storms Health Travel Community Forecast Current Radar Satellite wxMap iNav

Weather Report

Home » Local » Weather Report

Belle Rose, Louisiana

Weather Report | Interactive Weather Map | Extended Forecast | Hourly Forecast | Past Observations | Historic Averages | Related

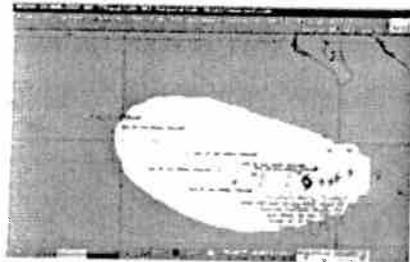
Current Conditions - °F | °C

As of 6:53 AM on Monday 13 Aug 2012 (Local Time) from KBTR Reporting Station

Clear <b>76°F</b> Feels Like: 76° Wind Chill: 76°    Ceiling: Unl Heat Index: 76°    Visibility: 10mi Dew Point: 75°    Wind: 0mph Humidity: 97%    Direction: NA NA Pressure: 30.01"    Gusts: NA <b>Report Text:</b> KBTR 131153Z AUTO 00000KT 10SM CLR 24/24 A3001 RMK AO2 SLP160 T02440239 10261 20244 53007 TSNO	<b>Today's Forecast</b>		<b>Local Information</b> No Weather Alerts for this location
	<b>8 AM</b> Sunny <b>79°</b>	<b>9 AM</b> Sunny <b>84°</b>	<b>10 AM</b> Sunny <b>88°</b>
<a href="#">View Detailed Observations for the last 48 Hours · 14 Days</a>	<a href="#">View Complete Hourly Forecast »</a>		<a href="#">Radar</a> · <a href="#">Satellite</a> · <a href="#">Surface Analysis</a>

Tropical Storm Tracking

Tropical Storm Hector  
PACIFIC TRACK



Maps:

- » Current Track
- » Visible Satellite
- » Infrared Satellite

Bulletins:

- » Advisory

Additional Resources:

- » Watches & Warnings
- » Severe Outlook Today
- » Severe Outlook Tomorrow
- » Lightning Strikes
- » Hurricane Season Summaries

New Forecast Map Updates  
Plan your seasonal activities better

View the Detailed Extended Forecast



10 Day Forecast - °F | °C

View the Detailed Extended Forecast

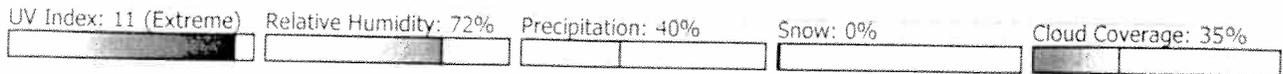
mon	tue	wed	thu	fri	sat	sun	mon	tue	wed
aug 13	aug 14	aug 15	aug 16	aug 17	aug 18	aug 19	aug 20	aug 21	aug 22
PM T-Storms	Iso T-Storms	Sct T-Storms	Iso T-Storms	Sct T-Storms					
90°	76°	90°	76°	89°	76°	90°	76°	88°	76°
86°	74°	86°	74°	87°	75°	86°	75°	87°	75°

Details for Monday, August 13

Sunny skies this morning. Scattered showers and thunderstorms developing during the afternoon. High near 90F. Winds SW at 5 to

10 mph. Chance of rain 40%.

**Evening:** Isolated thunderstorms this evening, then skies turning mostly clear after midnight. Low 76F. Winds light and variable. Chance of rain 30%.



**Sunrise:** 6:31 AM  
**Sunset:** 7:47 PM

**Moonrise:** 2:43 AM  
**Moonset:** 4:51 PM



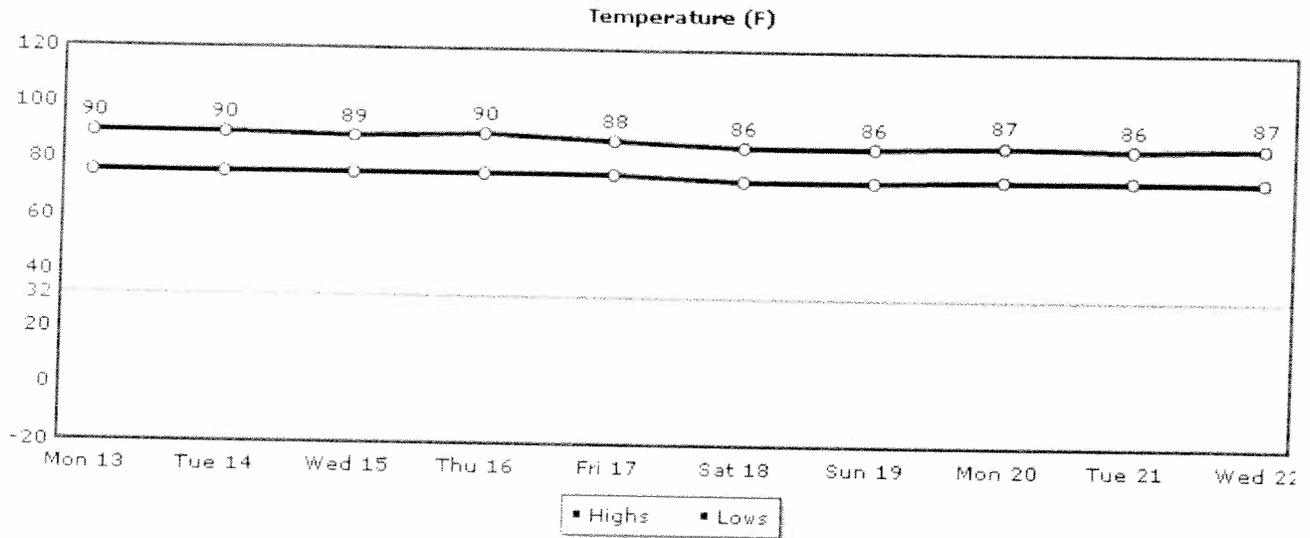
**Moonphase:**  
Waning Crescent



**Direction:** SW (222°)  
**Speed:** 8Mph(12Km, 6Kts)

Daily Forecast Chart

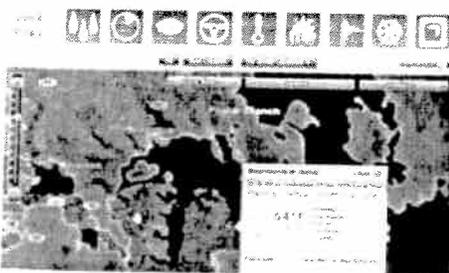
Chart Options: Temperature ▾



Temperature UV Index Relative Humidity Precipitation Snow Clouds Wind

Daily Forecast Hourly Forecast Past Observations Historic Averages

More from Intellicast

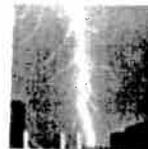


Check Out Our  
Interactive Weather Map

Articles

- Local Weather Maps
- US Weather Maps
- US Current Weather
- Global Weather Maps
- Weather Analysis Charts
- Active Storm Track
- Weather Tools

Weather Center



**Weather Alerts**

Current National Weather Service Watches and Warnings by type and state throughout the United States.



**Ski & Snow**

The Ski & Snow Section is where you can get the latest ski resort conditions and snow forecasts.

# TEXAS BRINE COMPANY, LLC AND AFFILIATED COMPANIES

## Safe Work Practices

UNDERGROUND  
STORAGE, LLC



**UNITEDBRINE**  
PURE LIFE. PURE WATER.

**UNITEDBRINE**  
PURE LIFE. PURE WATER.

TEXAS BRINE COMPANY, LLC

UNITED BRINE COMPANY, LLC  
SERVICES MARRIAGE, LLC



RESPONSIBLE CARE

American  
Chemistry  
Council

# Material Safety Data Sheet



## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

### DIESEL FUEL No. 2

**Product Use:** Fuel [See Section 16 for Additional Product Numbers]

**Synonyms:** 15 S Diesel Fuel 2, Alternative Low Aromatic Diesel (ALAD), Calco LS Diesel 2, CALCO ULS C-B0-B5 DF2, CALCO ULS C-B0-B5 DF2 DYED, CALCO ULS C-B2 DF2, CALCO ULS C-B2 DF2 DYED, CALCO ULS C-B5 DF2, CALCO ULS C-B5 DF2 DYED, Calco ULS DF2, Calco ULS Diesel 2, CALCO ULS S-B0-B5 DF2 DYED, Calco ULS S-B5 DF2, Calco ULS S-B5 DF2 DYED, CALCO ULS TX-B1 DF2 DF2, CALCO ULS TX-B1 DF2 DYED, CALCO ULS TX-B2 DF2, CALCO ULS TX-B2 DF2 DYED, CALCO ULS TX-B3 DF2, CALCO ULS TX-B3 DF2 DYED, CALCO ULS TX-B4 DF2, CALCO ULS TX-B4 DF2 DYED, CALCO ULS TX-B5 DF2, CALCO ULS TX-B5 DF2 DYED, Chevron LS Diesel 2, Chevron ULS Diesel 2, CT ULS C-B0-B5 DF2, CT ULS C-B0-B5 DF2 DYED, CT ULS C-B2 DF2, CT ULS C-B5 DF2, CT ULS S-B0-B5 DF2 DYED, CT ULS S-B5 DF2, CT ULS S-B5 DF2 DYED, CT ULS S-B0-B5 DF2, CT ULS SPECIAL DF2 DYED, CT ULS TX-B1 DF2, CT ULS TX-B2 DF2, CT ULS TX-B3 DF2, CT ULS TX-B4 DF2, CT ULS TX-B5 DF2, Diesel Fuel Oil, Diesel Grade No. 2, Diesel No. 2-D S15, Diesel No. 2-D S500, Diesel No. 2-D S5000, Distillates, straight run, Gas Oil, HS Diesel 2, HS Heating Fuel 2, Light Diesel Oil Grade No. 2-D, LS Diesel 2, LS Heating Fuel 2, Marine Diesel, RR Diesel Fuel, Texaco Diesel, Texaco Diesel No. 2, ULS C-B0-B5 DF2, ULS C-B0-B5 DF2 DYED, ULS C-B2 DF2, ULS C-B2 DF2 DYED, ULS C-B5 DF2, ULS C-B5 DF2 DYED, ULS S-B0-B5 DF2 DYED, ULS S-B5 DF2, ULS S-B0-B5 DF2, ULS TX-B1 DF2, ULS TX-B1 DF2 DYED, ULS TX-B3 DF2, ULS TX-B3 DF2 DYED, ULS TX-B4 DF2, ULS TX-B4 DF2 DYED, ULS TX-B5 DF2, ULS TX-B5 DF2 DYED, Ultra Low Sulfur Diesel 2

#### Company Identification

Chevron Products Company  
Marketing, MSDS Coordinator  
6001 Bollinger Canyon Road  
San Ramon, CA 94583  
United States of America

#### Transportation Emergency Response

CHEMTREC: (800) 424-9300 or (703) 527-3887

#### Health Emergency

Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

#### Product Information

MSDS Requests: <http://www.chevron.com/contact/>

Technical Information: (510) 242-5357

SPECIAL NOTES: This MSDS covers all Chevron, Texaco and Calco CARB & non-CARB Diesel No. 2 Fuels. The sulfur content is less than 0.5% (mass). Red dye is added to non-taxable fuel. (MSDS 6894)  
SPECIAL NOTES: This MSDS covers all Chevron and Calco CARB Low Sulfur Diesel No. 2 Fuels. Red dye is added to non-taxable fuel. (MSDS 7098)

## SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
------------	------------	--------

Diesel Fuel No. 2	68476-34-6	95 - 100 %vol/vol
Fatty Acid Methyl Esters (FAME)	Mixture	0 - 5 %vol/vol
Total sulfur	Mixture	0 - 0.5 %weight
Naphthalene	91-20-3	0.02 - 0.2 %weight

<b>SECTION 3 HAZARDS IDENTIFICATION</b>
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**EMERGENCY OVERVIEW**

- COMBUSTIBLE LIQUID AND VAPOR
- CAUSES SKIN IRRITATION
- MAY CAUSE RESPIRATORY TRACT IRRITATION IF INHALED
- MAY CAUSE LUNG DAMAGE IF SWALLOWED
- MAY CAUSE DIZZINESS, DROWSINESS AND REDUCED ALERTNESS
- CONTAINS MATERIAL THAT MAY CAUSE DAMAGE TO:
- LIVER
- BLOOD/BLOOD FORMING ORGANS
- THYMUS
- MAY CAUSE CANCER BASED ON ANIMAL DATA
- TOXIC TO AQUATIC ORGANISMS. MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT

\*\*\*\*\*

**IMMEDIATE HEALTH EFFECTS**

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin causes irritation. Symptoms may include pain, itching, discoloration, swelling, and blistering. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Ingestion:** Because of its low viscosity, this material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death. May be irritating to mouth, throat, and stomach. Symptoms may include pain, nausea, vomiting, and diarrhea.

**Inhalation:** The vapor or fumes from this material may cause respiratory irritation. Mists of this material may cause respiratory irritation. Symptoms of respiratory irritation may include coughing and difficulty breathing. Excessive or prolonged breathing of this material may cause central nervous system effects. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.

**DELAYED OR OTHER HEALTH EFFECTS:**

**Cancer:** Whole diesel engine exhaust has been classified as a Group 2A carcinogen (probably carcinogenic to humans) by the International Agency for Research on Cancer (IARC). Prolonged or repeated exposure to this material may cause cancer. Contains naphthalene, which has been classified as a Group 2B carcinogen (possibly carcinogenic to humans) by the International Agency for Research on Cancer (IARC). Diesel exhaust particulate has been classified as reasonably anticipated to be a human carcinogen in the National Toxicology Program's Ninth Report on Carcinogens. The National Institute of Occupational Safety and Health (NIOSH) has recommended that whole diesel exhaust be regarded as potentially causing cancer. Diesel engine exhaust is known to the State of California to cause cancer.

**Target Organs:** Contains material that may cause damage to the following organ(s) following repeated skin contact based on animal data: Liver Blood/Blood Forming Organs Thymus

See Section 11 for additional information. Risk depends on duration and level of exposure.

#### SECTION 4 FIRST AID MEASURES

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** Wash skin with water immediately and remove contaminated clothing and shoes. Get medical attention if any symptoms develop. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** If swallowed, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

**Inhalation:** Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue or if any other symptoms develop.

**Note to Physicians:** Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid, which may cause pneumonitis.

#### SECTION 5 FIRE FIGHTING MEASURES

See Section 7 for proper handling and storage.

##### FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Combustible liquid.

**NFPA RATINGS:** Health: 1 Flammability: 2 Reactivity: 0

##### FLAMMABLE PROPERTIES:

**Flashpoint:** (Pensky-Martens Closed Cup) 52 °C (125 °F) Minimum

**Autoignition:** 257 °C (494 °F)

**Flammability (Explosive) Limits (% by volume in air):** Lower: 0.6 Upper: 4.7

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

##### PROTECTION OF FIRE FIGHTERS:

**Fire Fighting Instructions:** For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

**Protective Measures:** Eliminate all sources of ignition in the vicinity of the spill or released vapor. If this material is released into the work area, evacuate the area immediately. Monitor area with combustible gas indicator.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

## SECTION 7 HANDLING AND STORAGE

**Precautionary Measures:** Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 29C (85F).

Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe vapor or fumes. Do not breathe mist. Wash thoroughly after handling. Keep out of the reach of children.

**Unusual Handling Hazards:** WARNING! Do not use as portable heater or appliance fuel. Toxic fumes may accumulate and cause death. Slow heat generation may occur with oil-soaked rags, spent filter aids and spent absorbent material and may cause spontaneous combustion if stored near combustibles and not handled properly. Store biodiesel soaked rags, filter aids, and spill absorbent material in approved safety disposal containers and dispose of properly. Biodiesel soaked rags may be washed with soap and water and allowed to dry in well ventilated area.

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**General Storage Information:** DO NOT USE OR STORE near heat, sparks, flames, or hot surfaces . USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### ENGINEERING CONTROLS:

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include: Chlorinated Polyethylene (or Chlorosulfonated

Polyethylene), Nitrile Rubber, Polyurethane, Viton.

**Respiratory Protection:** Determine if airborne concentrations are below the recommended occupational exposure limits for jurisdiction of use. If airborne concentrations are above the acceptable limits, wear an approved respirator that provides adequate protection from this material, such as: Air-Purifying Respirator for Organic Vapors.

When used as a fuel, this material can produce carbon monoxide in the exhaust. Determine if airborne concentrations are below the occupational exposure limit for carbon monoxide. If not, wear an approved positive-pressure air-supplying respirator.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

#### Occupational Exposure Limits:

Component	Agency	TWA	STEL	Ceiling	Notation
Diesel Fuel No. 2	ACGIH	100 mg/m <sup>3</sup>	--	--	Skin A3 total hydrocarbon
Diesel Fuel No. 2	CVX	--	1000 mg/m <sup>3</sup>	--	--
Naphthalene	ACGIH	10 ppm (weight)	15 ppm (weight)	--	Skin
Naphthalene	OSHA Z-1	50 mg/m <sup>3</sup>	--	--	--

Consult local authorities for appropriate values.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

**Color:** Varies depending on specification

**Physical State:** Liquid

**Odor:** Petroleum odor

**pH:** Not Applicable

**Vapor Pressure:** 0.04 kPa (Approximate) @ 40 °C (104 °F)

**Vapor Density (Air = 1):** >1

**Boiling Point:** 175.6°C (348°F) - 370°C (698°F)

**Solubility:** Soluble in hydrocarbons; insoluble in water

**Freezing Point:** Not Applicable

**Melting Point:** Not Applicable

**Specific Gravity:** 0.8 - 0.88 @ 15.6°C (60.1°F) (Typical)

**Viscosity:** 1.9 cSt - 4.1 cSt @ 40°C (104°F)

### SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous Decomposition Products:** None known (None expected)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### SECTION 11 TOXICOLOGICAL INFORMATION

#### IMMEDIATE HEALTH EFFECTS

**Eye Irritation:** The eye irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Irritation:** The skin irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** The skin sensitization hazard is based on evaluation of data for similar materials or product components.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

#### **ADDITIONAL TOXICOLOGY INFORMATION:**

This product contains naphthalene. **GENERAL TOXICITY:** Exposure to naphthalene has been reported to cause methemoglobinemia and/or hemolytic anemia, especially in humans deficient in the enzyme glucose-6-phosphate dehydrogenase. Laboratory animals given repeated oral doses of naphthalene have developed cataracts. **REPRODUCTIVE TOXICITY AND BIRTH DEFECTS:** Naphthalene did not cause birth defects when administered orally to rabbits, rats, and mice during pregnancy, but slightly reduced litter size in mice at dose levels that were lethal to the pregnant females. Naphthalene has been reported to cross the human placenta. **GENETIC TOXICITY:** Naphthalene caused chromosome aberrations and sister chromatid exchanges in Chinese hamster ovary cells, but was not a mutagen in several other in-vitro tests. **CARCINOGENICITY:** In a study conducted by the National Toxicology Program (NTP), mice exposed to 10 or 30 ppm of naphthalene by inhalation daily for two years had chronic inflammation of the nose and lungs and increased incidences of metaplasia in those tissues. The incidence of benign lung tumors (alveolar/bronchiolar adenomas) was significantly increased in the high-dose female group but not in the male groups. In another two-year inhalation study conducted by NTP, exposure of rats to 10, 30, and 60 ppm naphthalene caused increases in the incidences of a variety of nonneoplastic lesions in the nose. Increases in nasal tumors were seen in both sexes, including olfactory neuroblastomas in females at 60 ppm and adenomas of the respiratory epithelium in males at all exposure levels. The relevance of these effects to humans has not been established. No carcinogenic effect was reported in a 2-year feeding study in rats receiving naphthalene at 41 mg/kg/day. This product contains gas oils. CONCAWE (product dossier 95/107) has summarized current health, safety and environmental data available for a number of gas oils, typically hydrodesulfurized middle distillates, CAS 64742-80-9, straight-run middle distillates, CAS 64741-44-2, and/or light cat-cracked distillate CAS 64741-59-9. **CARCINOGENICITY:** All materials tested have caused the development of skin tumors in mice, but all featured severe skin irritation and sometimes a long latency period before tumors developed. Straight-run and cracked gas oil samples were studied to determine the influence of dermal irritation on the carcinogenic activity of middle distillates. At non-irritant doses the straight-run gas oil was not carcinogenic, but at irritant doses, weak activity was demonstrated. Cracked gas oils, when diluted with mineral oil, demonstrated carcinogenic activity irrespective of the occurrence of skin irritation. Gas oils were tested on male mice to study tumor initiating/promoting activity. The results demonstrated that while a straight-run gas oil sample was neither an initiator or promotor, a blend of straight-run and FCC stock was both a tumor initiator and a promoter. **GENOTOXICITY:** Hydrotreated & hydrodesulfurized gas oils range in activity from inactive to weakly positive in in-vitro bacterial mutagenicity assays. Mouse lymphoma assays on straight-run gas oils without subsequent hydrodesulphurization gave positive results in the presence of S9 metabolic activation. In-vivo bone marrow cytogenetics and sister chromatic exchange assay exhibited no activity for straight-run components with or without hydrodesulphurization. Thermally or catalytically cracked gas oils tested with in-vitro bacterial mutagenicity assays in the presence of S9 metabolic activation were shown to be mutagenic. In-vitro sister chromatic exchange assays on cracked gas oil gave equivocal results both with and without S9 metabolic activation. In-vivo bone marrow cytogenetics assay was inactive for two cracked gas oil samples. Three hydrocracked gas oils were tested with in-vitro bacterial mutagenicity assays with S9, and one of the three gave positive results. Twelve distillate fuel samples were tested with in-vitro bacterial mutagenicity assays & with S9 metabolic activation and showed negative to weakly positive

results. In one series, activity was shown to be related to the PCA content of samples tested. Two in-vivo studies were also conducted. A mouse dominant lethal assay was negative for a sample of diesel fuel. In the other study, 9 samples of No 2 heating oil containing 50% cracked stocks caused a slight increase in the number of chromosomal aberrations in bone marrow cytogenetics assays. DEVELOPMENTAL TOXICITY: Diesel fuel vapor did not cause fetotoxic or teratogenic effects when pregnant rats were exposed on days 6-15 of pregnancy. Gas oils were applied to the skin of pregnant rats daily on days 0-19 of gestation. All but one (coker light gas oil) caused fetotoxicity (increased resorptions, reduced litter weight, reduced litter size) at dose levels that were also maternally toxic.

This product may contain significant amounts of Polynuclear Aromatic Hydrocarbons (PAH's) which have been shown to cause skin cancer after prolonged and frequent contact with the skin of test animals. Brief or intermittent skin contact with this product is not expected to have serious effects if it is washed from the skin. While skin cancer is unlikely to occur in human beings following use of this product, skin contact and breathing, of mists, vapors or dusts should be reduced to a minimum.

## SECTION 12 ECOLOGICAL INFORMATION

### ECOTOXICITY

This material is expected to be toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. The ecotoxicity hazard is based on an evaluation of data for the components or a similar material.

### ENVIRONMENTAL FATE

**Ready Biodegradability:** This material is not expected to be readily biodegradable. On release to the environment the lighter components of diesel fuel will generally evaporate but depending on local environmental conditions (temperature, wind, mixing or wave action, soil type, etc.) the remainder may become dispersed in the water column or absorbed to soil or sediment. Diesel fuel would not be expected to be readily biodegradable. In a modified Strum test (OECD method 301B) approximately 40% biodegradation was recorded over 28 days. However, it has been shown that most hydrocarbon components of diesel fuel are degraded in soil in the presence of oxygen. Under anaerobic conditions, such as in anoxic sediments, rates of biodegradation are negligible. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

## SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

## SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Description:** UN1202, GAS OIL, COMBUSTIBLE LIQUID, III  
**ADDITIONAL INFORMATION:** NON-BULK PACKAGES ARE NOT REGULATED IN THE U.S.A. SEE 49 CFR 173.150 (F) FOR SPECIAL PROVISIONS FOR VESSEL AND AIRCRAFT.

**IMO/IMDG Shipping Description:** UN1268, PETROLEUM DISTILLATES, N.O.S. (DIESEL FUEL, GASOIL), 3, III, FLASH POINT SEE SECTION 5 OR 9, MARINE POLLUTANT (DIESEL FUEL, GASOIL)

**ICAO/IATA Shipping Description:** UN1202, GAS OIL, 3, III

### SECTION 15 REGULATORY INFORMATION

<b>EPCRA 311/312 CATEGORIES:</b>	1. Immediate (Acute) Health Effects:	YES
	2. Delayed (Chronic) Health Effects:	YES
	3. Fire Hazard:	YES
	4. Sudden Release of Pressure Hazard:	NO
	5. Reactivity Hazard:	NO

**REGULATORY LISTS SEARCHED:**

01-1=IARC Group 1	03=EPCRA 313
01-2A=IARC Group 2A	04=CA Proposition 65
01-2B=IARC Group 2B	05=MA RTK
02=NTP Carcinogen	06=NJ RTK
	07=PA RTK

The following components of this material are found on the regulatory lists indicated.

Diesel Fuel No. 2	07
Naphthalene	01-2B, 02, 03, 04, 05, 06, 07

**NEW JERSEY RTK CLASSIFICATION:**

Refer to components listed in Section 2. Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: DIESEL FUEL

**WHMIS CLASSIFICATION:**

Class B, Division 3: Combustible Liquids  
Class D, Division 2, Subdivision A: Very Toxic Material - Chronic Toxic Effects  
Carcinogenicity  
Class D, Division 2, Subdivision B: Toxic Material - Skin or Eye Irritation

### SECTION 16 OTHER INFORMATION

**NFPA RATINGS:** Health: 1 Flammability: 2 Reactivity: 0

**HMIS RATINGS:** Health: 2\* Flammability: 2 Reactivity: 0  
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**Additional Product Number(s):** CPS203408, CPS203410, CPS203413, CPS203417, CPS203431, CPS203436, CPS203437, CPS203441, CPS203443, CPS203447, CPS203449, CPS203450, CPS220122, CPS225114, CPS225115, CPS225150, CPS266176, CPS270000, CPS270005, CPS270030, CPS270031, CPS270032, CPS270033, CPS270034, CPS270040, CPS270041, CPS270042, CPS270043, CPS270044, CPS270045, CPS270046, CPS270047, CPS270048, CPS270049, CPS270050, CPS270051,

CPS270052, CPS270053, CPS270054, CPS270058, CPS270059, CPS270060, CPS270062, CPS270063, CPS270064, CPS270065, CPS270068, CPS270069, CPS270070, CPS270081, CPS270082, CPS270083, CPS270084, CPS270085, CPS270086, CPS270087, CPS270088, CPS270089, CPS270090, CPS270091, CPS270094, CPS270095, CPS270096, CPS271006, CPS272006, CPS272007, CPS272008, CPS272009, CPS272010, CPS272011, CPS272012, CPS272013, CPS272093, CPS272102, CPS272126, CPS272129, CPS272130, CPS272131, CPS272152, CPS272185, CPS272190, CPS272195, CPS272593, CPS272601, CPS272602, CPS272693, CPS272793, CPS273003, CPS273030, CPS273053, CPS275000

**REVISION STATEMENT:** This revision updates the following sections of this Material Safety Data Sheet: 1, 16

**Revision Date:** MAY 01, 2012

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	MSDS - Material Safety Data Sheet
CVX - Chevron	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Chevron Energy Technology Company, 100 Chevron Way, Richmond, California 94802.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.