# WORKER CRUSHED BY VEHICLE CHASSIS

Type of Incident: Fatality
Date of Incident: February 17, 2012

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## SECTION 1.0 DATE AND TIME OF INCIDENT

1.1 The incident occurred on February 17, 2012 at approximately 12:00 p.m.

#### SECTION 2.0 NAME AND ADDRESS OF PRINCIPAL PARTIES

#### 2.1 Owner

2.1.1 Maxi Service Ltd. O/A Harry's Auto Wrecking 10032 128 Avenue Grande Prairie, Alberta T8V 6K7

# 2.2 Employer

2.2.1 Maxi Service Ltd. O/A Harry's Auto Wrecking 10032 128 Avenue Grande Prairie, Alberta T8V 6K7

#### 2.3 Worker

## SECTION 3.0 DESCRIPTION OF PRINCIPAL PARTIES

## 3.1 Owner and Employer

3.1.1 Maxi Service Ltd. O/A Harry's Auto Wrecking was an automotive dismantling and recycling parts business operating in Grande Prairie, Alberta. They were a member of the Alberta Auto Recyclers and Dismantlers Association and the Automotive Recyclers Association.

#### 3.2 Worker

3.2.1 Dismantler (\*\*\*\*\* \*\*\*\*) was employed by Maxi Service Ltd. O/A Harry's Auto Wrecking since February 2011. The Dismantler's (\*\*\*\*\*\*\*) duties at the time of the incident were to remove various parts and items from light duty cars and trucks.

### SECTION 4.0 LOCATION OF INCIDENT

4.1 The location of the incident was at 10032 128 Avenue, Grande Prairie, Alberta. (Attachment A, Map)

# SECTION 5.0 EQUIPMENT, MATERIAL AND OBSERVATIONS

# **5.1** Equipment and Material

#### 5.1.1 The Worksite

- 5.1.1.1 The incident occurred in the west bay of a 3 bay dismantling building. The dismantling building was located directly north of the main office building. (Attachment C, Photograph # 1)
- 5.1.1.2 Dismantler (\*\*\*\*\* \*\*\*\*) was assigned the west bay in the dismantling building to conduct dismantling activities. (Attachment C, Photograph # 2)

#### 5.1.2 2001 Ford F-550 Truck

- 5.1.2.1 The 2001 Ford F-550 truck, VIN \*\*\*\*\*\*\*\*\*\*\*\*, was one of four vehicles purchased by Maxi Service Ltd. O/A Harry's Auto Wrecking from a third party company. The Ford F-550 truck was purchased in May 2011.
- 5.1.2.2 The steel deck with bulkhead was bolted (with 8 bolts) to the chassis of the 2001 Ford F-550 truck prior to the incident. (Attachment C, Photograph # 3 and Photograph # 8)
- 5.1.2.3 The chassis of the 2001 Ford F-550 truck was positioned in the west bay of the dismantling building. The front axle and tires were attached to the chassis, the rear axle and tires had been removed. (Attachment C, Photograph # 4)

# 5.1.3 Blackhawk Automotive Jack Stands and Vulcan 2 Ton Hoist with Homemade Spreader Bar

- 5.1.3.1 The steel deck with bulkhead (which was part of the truck) was supported by two 10 ton Blackhawk Automotive jack stands Model B67312. The jack stands were placed at each rear corner of the steel deck to provide support to the steel deck. (Attachment C. Photograph # 5)
- 5.1.3.2 The Vulcan 2 ton hoist had a homemade spreader bar attached to the hoist hook. The homemade spreader bar had a chain at either end of the spreader bar, and this chain was attached to the side rails of the steel deck to provide support to the steel deck during the dismantling process. (Attachment C, Photograph # 6)

## 5.1.4 HIAB Truck Mounted Crane

5.1.4.1 The HIAB Model # 045-2 truck mounted crane was attached to the chassis. The HIAB Model # 045-2 truck mounted crane was a "behind the cab mount". The crane would have added extra weight to the chassis. (Attachment C, Photograph # 6)

#### 5.2 Observations

- 5.2.1 The Ford F550 truck chassis was positioned inside the west bay of the dismantling shop.
- 5.2.2 There were two Blackhawk Automotive 10 ton jack stands, one under each corner of the steel deck with bulkhead. A front end loader with fork attachment was observed supporting the back end of the steel deck with bulkhead. (Attachment C, Photograph #7)
- 5.2.3 The rear of the chassis was raised up off the shop floor by two floor jacks. The two floor jacks were used at the time of the rescue to lift the chassis off of Dismantler (\*\*\*\*\* \*\*\*\*\*). (Attachment C, Photograph # 5 and Photograph # 7)
- 5.2.4 An air line was observed underneath the chassis and supported steel deck. An impact gun with a chisel attachment was found at the rear of the supported steel deck. (Attachment C, Photograph # 7)

#### SECTION 6.0 NARRATIVE DESCRIPTION OF THE INCIDENT

- 6.1 In May 2011, Maxi Service Ltd. purchased the 2001 Ford F-550 truck with steel deck and truck mounted HIAB crane from a third party company located in Grande Prairie, Alberta. The 2001 Ford F-550 truck was then stored at Maxi Service Ltd. yard.
- 6.2 Maxi Service Ltd. sold the rear end of the 2001 Ford F-550 truck. The rear axle, differential, rear wheels and driveshaft were removed from the 2001 Ford F-550 truck. This work was done outside in the Maxi Service Ltd. yard approximately 2-3 weeks prior to the incident.
- 6.3 On or about February 13, 2012 a Maxi Service Ltd. loader operator placed the 2001 Ford F-550 truck into the west bay of the dismantling shop. The loader operator lifted the back end of the Ford F-550 truck (there was no rear axle or wheels on at this time) and pushed it into the bay, cab first. The Ford F-550 truck was placed in the dismantling shop for dismantling.
- Once the vehicle was pushed in, cab first, Dismantler (\*\*\*\*\* \*\*\*\*) set a jack stand down at each rear corner of the steel deck, and the loader operator set the rear of the steel deck down on the jack stands.
- 6.5 From approximately February 13, 2013 to February 16, 2013 Dismantler (\*\*\*\*\*

  \*\*\*\*) proceeded to strip the Ford F-550 truck from the front of the vehicle back towards the HIAB truck mounted crane. This included stripping the front bumper, engine, cab, seats, windows, doors and toolbox. The front axle and front wheels were left attached to the front chassis and the rear part of the chassis was in a suspended state with 8 bolts attaching the rear chassis to the steel truck deck. Under each rear corner of the steel deck was a 10 ton jack stand.
- On the morning of February 17, 2012 Maxi Service Ltd. Dismantler (\*\*\*\*\* \*\*\*\*) was working on dismantling the steel deck from the chassis of the Ford F-550 truck. At approximately 11:45 a.m. the Maxi Service Ltd. shop foreman walked through the dismantling shop, then returned to the office.
- 6.7 The Dismantler (\*\*\*\*\* \*\*\*\*) was laying on the shop floor underneath the 2001 Ford F-550 truck chassis and steel deck and was using an air chisel working at removing the bolts that attached the steel deck to the chassis. (Attachment C, Photograph # 8)

- As the Dismantler (\*\*\*\*\* \*\*\*\*) was removing the last bolt that attached the steel deck to the chassis, the chassis dropped down pinning Dismantler (\*\*\*\*\* \*\*\*\*) between the shop floor and truck chassis. As this occurred, a co-worker heard a loud bang. The co-worker ran over and observed Dismantler (\*\*\*\*\* \*\*\*\*) pinned underneath the truck chassis, and then the co-worker summoned for help. (Attachment C, Photograph # 9)
- 6.9 Emergency Medical Services and RCMP attended the worksite. The Dismantler (\*\*\*\*\*\*) was transported to the Grande Prairie QEII hospital by EMS where he was pronounced deceased on February 17, 2012.

#### SECTION 7.0 ANALYSIS

#### 7.1 Direct Cause

7.1.1 On February 17, 2012 at approximately 12:00 p.m. Dismantler (\*\*\*\*\* \*\*\*\*) was fatally crushed by a Ford F-550 truck chassis.

#### SECTION 8.0 FOLLOW-UP/ ACTION TAKEN

## 8.1 Industry

- 8.1.1 Maxi Service Ltd. completed a hazard assessment which included controlling the hazards identified for the dismantling of vehicles, and the Stop Work Order was lifted March 15, 2012.
- 8.1.2 Maxi Service Ltd. conducted an investigation into the circumstances surrounding the incident.

#### **8.2** Additional Measures

8.2.1 There were no additional measures required.

## SECTION 9.0 SIGNATURES

ORIGINAL REPORT SIGNED July 29, 2015

Lead Investigator Date

ORIGINAL REPORT SIGNED Aug 5, 2015

Manager Date

ORIGINAL REPORT SIGNED Aug 6, 2015

Director Date

## **SECTION 10.0 ATTACHMENTS:**

Attachment A Map

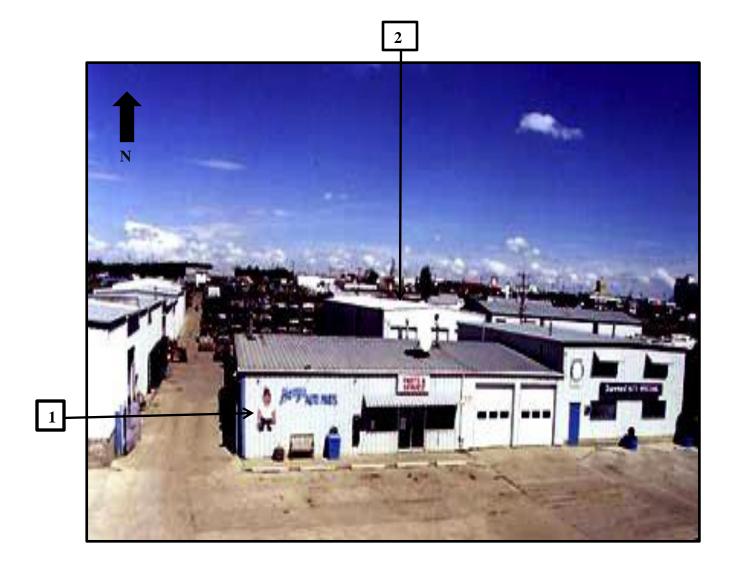
Attachment B No Diagram Attachment C Photographs

File: F-982468 Attachment "A" Map Page 1 of 1



## Map

The black arrow shows the city of Grande Prairie, Alberta. The incident occurred at 10032 128 Avenue in Grande Prairie, Alberta.



# Photograph # 1

- 1. Shows the Maxi Service Ltd. O/A Harry's Auto Wrecking main office building with the parts and service departments.
- 2. Shows the west bay of the dismantling shop where the incident occurred.

(photograph from Harry's Auto Wrecking website)

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- 1. Shows the west bay in which the Dismantler (\*\*\*\*\* \*\*\*\*) was working.
- 2. Shows the loader which was used to provide support to the steel deck during the rescue.
- 3. The inset photograph shows the interior of the west bay where the incident occurred. The inset photograph was taken facing south and shows the front cab, engine, seats and windows all removed.

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- 1. Shows the steel deck with bulkhead which was attached to the Ford F-550 vehicle chassis prior to the incident.
- 2. Shows the HIAB 045-2 truck mounted crane which was attached to the Ford F-550 vehicle chassis.
- 3. Shows one of the Blackhawk Automotive 10 ton jack stands which was used to support the steel deck.
- 4. The inset photograph shows a more distant view of the west bay.

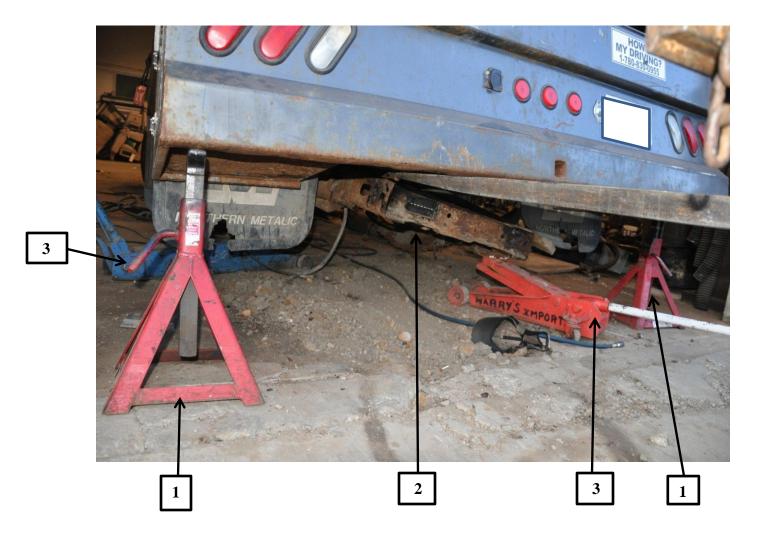
File: F-982468 Attachment "C" Page 4 of 10





- 1. Shows the rear part of the chassis from the Ford F-550 truck.
- 2. Shows there was no rear axle or rear tire.
- 3. The inset photograph shows the front part of the chassis from the Ford F-550 truck. It also shows the front axle and tires still attached.

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- 1. Shows the 2 Blackhawk Automotive 10 ton jack stands that were placed under each corner of the steel deck to provide support. Dismantler (\*\*\*\*\*\*\*) set the jack stands when the Ford F-550 truck was put in the west bay.
- 2. Shows the chassis of the Ford F-550 truck which fell on Dismantler (\*\*\*\*\* \*\*\*\*) causing fatal injuries.
- 3. Shows the two floor jacks which were used during the rescue to lift the chassis off of Dismantler (\*\*\*\*\*\*\*)



- 1. Shows the HIAB 045-2 truck mounted crane. The crane was a "behind the cab" mount and was attached to the Ford F-550 truck chassis.
- 2. Shows the Vulcan 2 ton hoist with a homemade spreader bar attached to the 2 ton hoist hook.
- 3. Shows the chain attached to the homemade spreader bar and wrapped around the steel deck rails.

File: F-982468 Attachment "C" Page 7 of 9

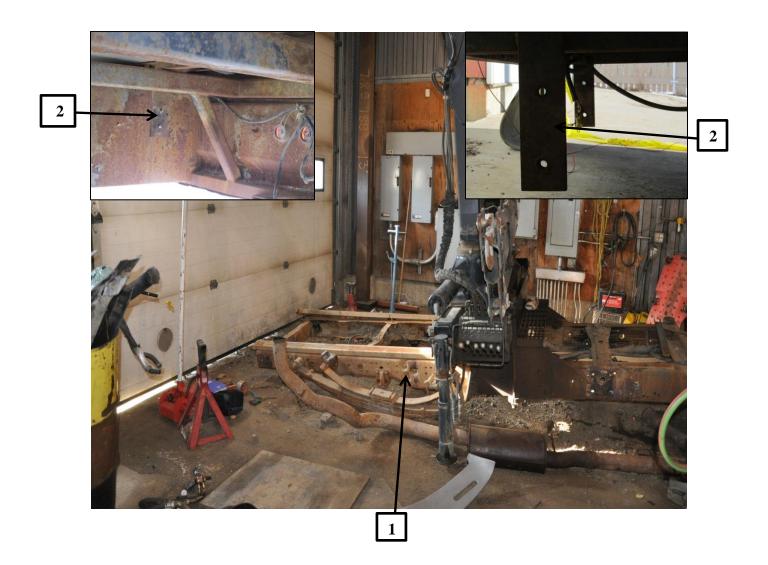


# Photograph # 7

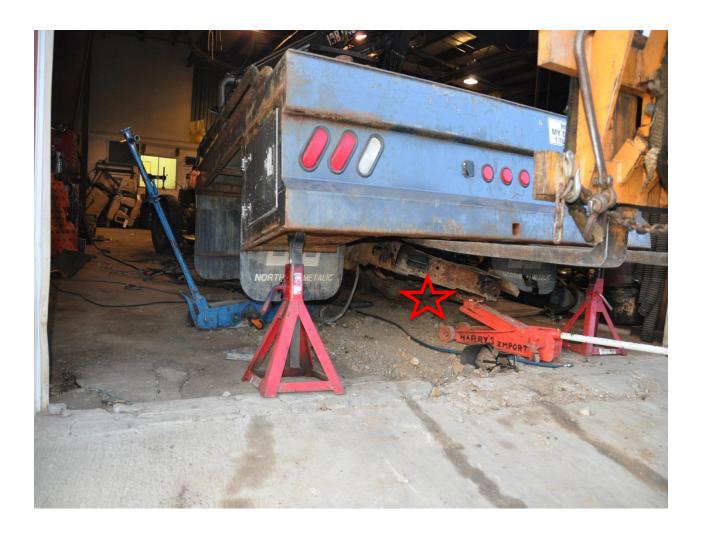
- 1. Shows the airline located underneath the truck chassis.
- Shows the impact gun with chisel attachment.
   Dismantler (\*\*\*\*\* \*\*\*\*) was using the impact gun with chisel attachment to remove the bolts that attached the steel deck to the truck chassis.
   The photograph also shows the forks of the loader supporting the steel truck deck and the 2

The photograph also shows the forks of the loader supporting the steel truck deck and the 2 floor jacks used as part of the rescue.

File: F-982468 Attachment "C" Page 8 of 9



- 1. Shows where the steel truck deck was bolted onto the Ford F-550 truck chassis.
- 2. The inset photographs show the underside of the steel truck deck that was bolted to the truck chassis.



Photograph # 9

The red star shows the approximate location Dismantler (\*\*\*\*\* \*\*\*\*) was pinned when the Ford F-550 truck chassis fell.