

**Worker Crushed by Equipment**

Type of Incident: Fatality

Date of Incident: September 27, 2011

## TABLE OF CONTENTS

SECTION	TITLE	PAGE NUMBER
1.0	DATE AND TIME OF INCIDENT	3
2.0	NAME & ADDRESS OF PRINCIPAL PARTIES	3
2.1	Owner	3
2.2	Employer	3
2.3	Workers	3
3.0	DESCRIPTION OF PRINCIPAL PARTIES	3
3.1	Owner	3
3.2	Employer	3
3.3	Workers	4
4.0	LOCATION OF INCIDENT	4
5.0	EQUIPMENT, MATERIAL AND OBSERVATIONS	4
5.1	Equipment and Material	4
5.2	Observations	4
6.0	NARRATIVE DESCRIPTION OF INCIDENT	5
7.0	ANALYSIS	6
7.1	Direct Cause	6
7.2	Contributing Factors	6
8.0	FOLLOW-UP/ ACTION TAKEN	6
8.1	Alberta Human Services, Occupational Health and Safety	6
8.2	Industry	7
8.3	Additional Measures	7
9.0	SIGNATURES	8
10.0	ATTACHMENTS	8

**SECTION 1.0 DATE AND TIME OF INCIDENT**

1.1 The incident occurred on September 27, 2011 at approximately 11:15 am.

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

**2.1 Owner**

2.1.1 \*\*\*\*\*  
\*\*\*\*\*  
\*\*\* \*\*

**2.2 Employer**

2.2.1 418775 Alberta Inc, operating as Trendsetter Homes  
100, 114 Canal Garden, Strathmore, AB  
T1P 1Y4

**2.3 Workers**

2.3.1 \*\*\*\*\*  
\*\*\* \*\*\*\*\* \*\*  
\*\*\* \*\*

2.3.2 \*\*\*\*\*  
\*\*\* \*\*\*\*\* \*\*  
\*\*\* \*\*

2.3.3 \*\*\*\*\*  
\*\*\* \*\*\*\*\* \*\*  
\*\*\* \*\*

**SECTION 3.0 DESCRIPTION OF PRINCIPAL PARTIES**

**3.1 Owner**

3.1.1 \*\*\*\*\* are private citizens who own the home.

**3.2 Employer**

3.2.1 418775 Alberta Inc, operating as Trendsetter Homes (Trendsetter) is a small residential construction company located in Strathmore, Alberta. The company has been in operation since 1990. At the time of the incident, the company employed four workers, including the Owner.

### **3.3 Workers**

- 3.3.1 Worker 1 (\*\*\*\*\* \*\*\*) was the sole Owner of Trendsetter and was in charge at the site. He was the only employee authorized to operate the skid steer and was also in charge of safety for the company.
- 3.3.2 Worker 2 (\*\*\*\*\* \*\*\*) was employed by Trendsetter as a Project Manager/Construction Supervisor. Worker 2 (\*\*\*\*\* \*\*\*) had approximately six years of experience with Trendsetter.
- 3.3.3 Worker 3 (\*\*\*\*\* \*\*\*\*\*) was self-employed as a home stager. Worker 3 (\*\*\*\*\* \*\*\*\*\*) was not employed by Trendsetter and had come to the site to assist the Owner.

## **SECTION 4.0 LOCATION OF INCIDENT**

- 4.1 The incident occurred at a residential construction site located at \*\*\*\*\* \*\*\*, W, Millarville, Alberta, see Attachment A – Map, Attachment B – Photograph 1.

## **SECTION 5.0 EQUIPMENT, MATERIAL AND OBSERVATIONS**

### **5.1 Equipment and Material**

- 5.1.1 1999 Thomas Equipment Skid Steer Loader Model A902/T135S, S/N \*\*\*\*\* (Skid Steer). See Attachment B – Photograph 2. The skid steer was owned by Trendsetter.
- 5.1.2 Thomas Backhoe Attachment Model BH108704, S/N \*\*\*\*\* (Backhoe) When the backhoe attachment is in use, the operator sits on a seat that is outside of the skid steer cab. See Attachment B – Photograph 3. The backhoe attachment was owned by Trendsetter.

### **5.2 Observations**

- 5.2.1 OHS officers observed sunny, warm weather upon arrival at the work site. The ambient weather conditions recorded at the Environment Canada weather station, Priddis Observatory for 11:00 a.m. was 17.7 C.
- 5.2.2 The site was a residential construction site. The concrete foundation had been poured with insulated concrete forms. The area around the foundation had not been backfilled.
- 5.2.3 A skid steer was observed with a backhoe attachment.

- 5.2.4 The skid steer was facing approximately South perpendicular to a shallow trench with the bucket and dipper arm on the ground. The skid steer was facing downwards approximately 20 degrees.
- 5.2.5 The safety bar in the skid steer was in the down position. When in the down position, the safety bar releases the parking brake and the hydraulic controls of the lift and tilt circuits.

## **SECTION 6.0 NARRATIVE DESCRIPTION OF THE INCIDENT**

- 6.1 Worker 1 (\*\*\*\*\*), Worker 2 (\*\*\*\*\* and Worker 3 (\*\*\*\*\* arrived at the worksite on the morning of Tuesday, September 27, 2011 at approximately 10:00 a.m. Worker 1 (\*\*\*\*\* briefed Workers 2 and 3 (\*\*\*\*\* and \*\*\*\*\* on the task of chipping out the concrete.
- 6.2 Worker 2 (\*\*\*\*\* and Worker 3 (\*\*\*\*\* were preparing to chip out concrete around the footing of the house. Worker 1 (\*\*\*\*\* was preparing to dig a trench to re-route a power line using a skid steer and backhoe attachment delivered to the site the previous day
- 6.3 At approximately 10:45 a.m., Worker 1 (\*\*\*\*\* put the backhoe attachment on the skid steer and started to dig the trench for the power line on the north side of the house.
- 6.4 Workers 2 and 3 (\*\*\*\*\* and \*\*\*\*\* were working on the northwest corner of the house at the base of the foundation. Workers 2 and 3 (\*\*\*\*\* and \*\*\*\*\* could not see Worker 1 (\*\*\*\*\* from their location.
- 6.5 At approximately 11:00 a.m., Worker 1 (\*\*\*\*\* stopped digging to check on Workers 2 and 3 (\*\*\*\*\* and \*\*\*\*\*). After checking in with Workers 2 and 3 (\*\*\*\*\* and \*\*\*\*\*), Worker 1 (\*\*\*\*\* then returned to the skid steer to resume digging the trench.
- 6.6 At approximately 11:15 a.m., Workers 2 and 3 (\*\*\*\*\* and \*\*\*\*\* heard Worker 1 (\*\*\*\*\* make a loud, distressed noise. Workers 2 and 3 (\*\*\*\*\* and \*\*\*\*\* ran to the skid steer and found Worker 1 (\*\*\*\*\* with his head and upper torso pinned between the seat of the backhoe attachment and the cab of the skid steer, with his right foot on the backhoe attachment plate and his left foot inside the cab. See Attachment B – Photograph 4.

- 6.7 Worker 3 (\*\*\*\*\* \*\*\*\*\*) turned off the skid steer and Worker 2 (\*\*\*\*\* \*\*\*\*\*) called 911.
- 6.8 Alberta Health Services Emergency Medical Services (EMS), Priddis Fire Department, Turner Valley RCMP and Turner Valley RCMP Victim Services Unit attended the scene. EMS pronounced Worker 1 (\*\*\*\*\* \*\*\*\*\*) dead at approximately 12:30 p.m.
- 6.9 The Priddis Fire Department arranged for a heavy wrecker truck to be brought in to stabilize the skid steer before extricating Worker 1 (\*\*\*\*\* \*\*\*\*\*).

## **SECTION 7.0 ANALYSIS**

### **7.1 Direct Cause**

- 7.1.1 The worker received critical injuries when he was pinned between the roof of the skid steer cab and the backhoe seat.

### **7.2 Contributing Factors**

- 7.2.1 The skid steer seat pressure switch had been bypassed. This safety feature was designed to prevent the hydraulics from operating unless someone was in the seat.
- 7.2.2 The seat belt safety lock was bypassed. The safety feature was designed to prevent the hydraulics from operating unless the seat belt was securely fastened.
- 7.2.3 The seat bar was in the down position. If the seat bar had been in the up position the lift arms would have been deactivated. See Attachment B – Photograph 5.
- 7.2.4 There were no maintenance records available for the skid steer. It could not be determined when the safety features had been bypassed or by whom.
- 7.2.5 No documented training records could be located to confirm the training and competence of the operator.
- 7.2.6 A written hazard assessment was not done by the workers at the site.

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

### **8.1 Alberta Human Services, Occupational Health and Safety**

- 8.1.1 On September 27, 2011, Occupational Health and Safety was notified of a serious incident by the Turner Valley RCMP. Occupational Health and Safety attended the work site and commenced an investigation.

- 8.1.2 On September 27, 2011, OHS issued a verbal Stop Work Order, followed by a Client Contact Report on September 28, to Trendsetter until a hazard assessment was completed and corrective actions implemented to address identified hazards.
- 8.1.3 On September 28, 2011, OHS issued a Client Contact Report to Trendsetter for the Stop Work Order.
- 8.1.4 On September 28, 2011, OHS issued a Notice To Produce to Trendsetter for the employer investigation report.
- 8.1.5 On September 28, 2011, OHS issued a Notice To Produce to Trendsetter for documents related to the investigation.
- 8.1.6 On October 11, 2011, OHS received a copy of the Trendsetter hazard assessment for the site that outlined corrective actions. OHS lifted the Stop Work Order.
- 8.1.7 On February 9, 2012, OHS received the requested documents.
- 8.1.8 On March 23, 2012, OHS received a copy of the Trendsetter's investigation report.
- 8.1.9 As of March 23, 2012, Trendsetter had complied with all OHS Orders and Notices to Produce.

## **8.2 Industry**

- 8.2.1 On September 27, 2011, Trendsetter voluntarily stopped work at the site and removed the skid steer from the site.
- 8.2.2 Trendsetter voluntarily removed the skid steer from service. Trendsetter sold the skid steer after having the skid steer inspected and repaired by a certified mechanic.
- 8.2.3 On October 11, 2011, the employer submitted a hazard assessment for the site.
- 8.2.4 On February 9, 2012, the employer submitted the final documents that had been requested.
- 8.2.5 On March 23, 2012, the employer submitted an incident investigation report.

## **8.3 Additional Measures**

- 8.3.1 No additional measures were taken.

**SECTION 9.0      SIGNATURES**

ORIGINAL REPORT SIGNED

Lead Investigator

October 15, 2013

Date

ORIGINAL REPORT SIGNED

Reviewer

October 9, 2013

Date

ORIGINAL REPORT SIGNED

Director Investigations

October 15, 2013

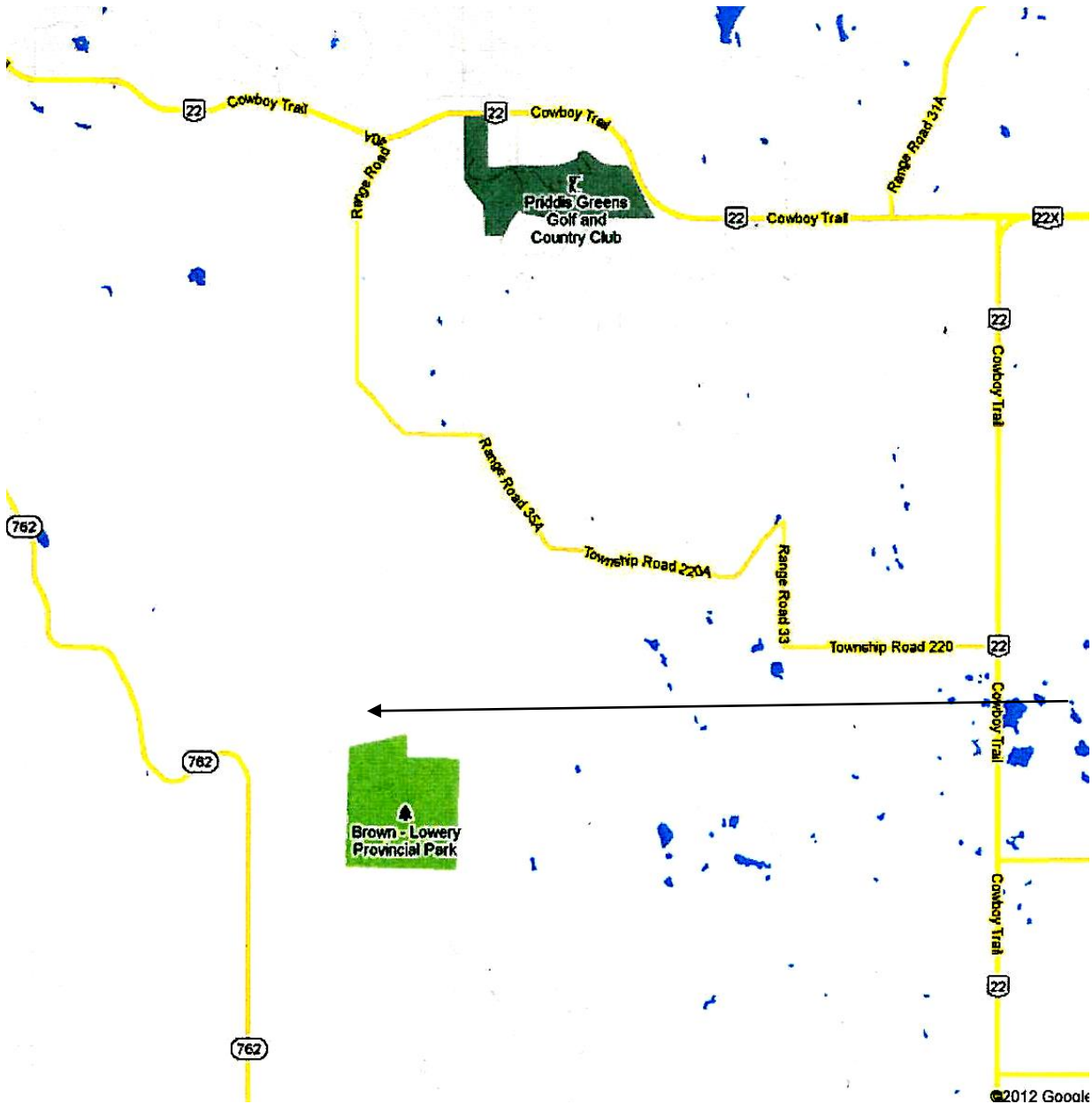
Date

**SECTION 10.0      ATTACHMENTS:**

Attachment A - Map

Attachment B - Photographs





Arrow shows the approximate location where the incident occurred, 242210 306 Street W, Millarville, Alberta.



1.

**Photograph 1** – Shows the incident scene looking south/southeast.

1. Shows the skid steer involved in the incident.



**Photograph 2** – Shows the backhoe attachment and skid steer.



**Photograph 3** – Shows backhoe controls, seat and top of skid steer cab.

1. Shows the backhoe controls.
2. Shows the backhoe seat.
3. Shows the roof of the skid steer cab.
4. Shows the left lift arm.



**Photograph 4** – Shows the approximate location of the worker.

1. Shows the approximate location where the worker became pinned.
2. Shows the roof of the skid steer cab.
3. Shows the backhoe seat.



**Photograph 5** – Shows the seat bar in the down position.