09-030

PHASE I ENVIRONMENTAL SITE ASSESSMENT
PORTION OF SE17-39-01 W5M
LACOMBE COUNTY, ALBERTA

Submitted to:

BELTERRA LAND COMPANY LTD.
Edmonton, Alberta

Submitted by:

AMEC EARTH & ENVIRONMENTAL
Edmonton, Alberta

April 2008

EE-24888

Copies: 2 – Belterra Land Company Ltd.
1 – AMEC Earth & Environmental File

03 April 2008
EE-24888

Belterra Land Company Ltd.
8323-157 Avenue
Edmonton, Alberta T5Z 2P9

Attention: **Sylvain Blouin**
Owner, Managing Partner

Dear Mr. Blouin:

Re: **Phase I Environmental Site Assessment**
Portion of SE17-39-01 W5M
Lacombe County, Alberta

AMEC Earth & Environmental (AMEC) is pleased to submit this Phase I Environmental Site Assessment (ESA) report on the above-referenced property.

Should you have any questions regarding our findings, please call the undersigned at (780) 436-2152. Thank you for allowing AMEC to be of service. We have enjoyed working with you on this project and look forward to assisting you in the future.

Yours truly,

AMEC Earth & Environmental

Silvan Zorzut
Senior Environmental Site Assessor

AMEC Earth & Environmental
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EXECUTIVE SUMMARY

Project:	Phase I Environmental Site Assessment
Site Address:	1402 Township Road 392, Lacombe County, Alberta
Legal Description:	Portion of SE17-39-01 W5M
Property Size:	19.63 hectares
Site Owner:	Christopher Shane Tronnes and Lillian Betty Lucille Tronnes both of Box 1068 Red Deer, Alberta
Site Occupants:	Residential

Belterra Land Company Ltd. retained AMEC Earth & Environmental (AMEC) to conduct a Phase I Environmental Site Assessment (ESA) of a property located at 1402 Township Road 392 (the 'Site') in Lacombe County, Alberta. The purpose of the assessment was to identify actual or potential environmental contamination at the Site that may have resulted from previous land use, construction, management or operation of the property.

METHODOLOGY

The Phase I ESA methodology for this project consisted of:

- a review of historical and current documentation pertaining to the Site;
- development of an understanding of the Site in relation to its surrounding environment;
- inspection of the Site to identify practices or circumstances that may present potential environmental contamination; and
- preparation of a report summarizing the methodology and findings of the Phase I ESA.

SITE DESCRIPTION

The Site is located at 1402 Township Road 392 near Sylvan Lake in Lacombe County and is bordered by Birchcliff Road (Township Road 392) to the south and Range Road 1-4 to the east.

The Site, having an area of 19.63 hectares, is zoned agricultural. Currently, there are three permanent buildings and approximately 11 storage sheds on the Site. A house is located near the southeast corner of the Site and was constructed in the early 1970's. This house, having an area of approximately 150 m^2, is a walk-out bungalow. The house is of wood frame construction with a concrete basement and asphalt shingled roof. A shop with attached carport and having an area of approximately 200 m^2 is located to the northwest of the house and is of wood frame construction with a concrete slab floor and an asphalt shingled roof. The carport addition on the east side of the shop has a gravel surface. A storage building having an area of approximately 200 m^2 is located to the northwest of the shop. This building is of wood construction with no foundation. Heating for the house and shop is provided by a furnace and boiler, respectively. Both are fuelled by natural gas. Sewerage wastes from the house are collected in a septic tank located to the south. Potable water for Site residents is provided from a groundwater well located to the southwest of the house. The

shop is not connected to the sewerage system or water supply. The storage shed is not serviced. Approximately 11 storage sheds are distributed throughout the southeast corner of the Site and are generally of wood construction.

Currently, the shop is used by the Site resident for woodworking. Air extraction systems are in place to collect sawdust from equipment used inside the building. The sawdust is collected in a bag system and disposed of or burned.

A forest surrounds the three buildings and storage sheds. The remaining portion of the Site is primarily agricultural pasture and hay land. The topography is generally undulating with a general southward slope. Shallow depressions were evident near the southwest corner of the Site. The perimeter of the Site is fenced.

The Site generally slopes southward. Sylvan Lake is located approximately 150 metres to the south.

FINDINGS

At the time of writing, correspondence had not yet been from the David Thompson Health Region regarding potential environmental concerns for the Site. Any documentation received from this information resource requiring further investigation will be forwarded.

The Site was evaluated against AMEC's standard Phase I ESA checklists. There are no findings associated with the following issues:

- urea formaldehyde foam insulation;
- bulk storage tanks;
- chemical usage and storage;
- hydraulic hoists;
- sumps and drains;
- air and water emissions;
- nuisance odours and noise;
- waste disposal practices;
- ozone-depleting substances;
- radon;
- hazardous materials and equipment; and
- mould.

The interior of the house was note inspected. However, based on the date of construction and inspection of the other buildings, AMEC identified the following issues regarding the potential presence of asbestos-containing materials, PCB-containing electrical equipment and lead-based paint. Descriptions of the situations, the potential for contamination and recommendations for your consideration are provided in the following text.

Asbestos Containing Materials (ACMs)

Based on the date of construction, there is a potential that asbestos-containing materials (ACMs) may be present within the Site buildings. ACMs that may be present include, but are not limited to, plaster finishes (i.e. ceiling texture and drywall joint compound), sheet vinyl flooring, floor tiles, and vermiculite insulation in wall and roof cavities in the buildings.

AMEC recommends that potential ACMs be sampled and analysed to confirm the presence of asbestos prior to undertaking renovation or demolition activities having the potential to disturb these materials. ACMs in poor condition should be removed or encapsulated in accordance with the Alberta Asbestos Abatement Manual to reduce the potential for the generation of airborne asbestos fibres.

PCB-Containing Electrical Equipment

There is a potential that PCB-containing fluorescent lamp ballasts may be present. They are not considered a hazard while in use, but, should be inspected periodically and any leaking or non-functioning units replaced.

AMEC recommends that the serial codes and date of manufacture be checked on the removed ballasts to confirm the presence of PCBs. PCB-containing fluorescent lamp ballasts can be identified using the Environment Canada Publication, *Environmental Protection Series - Identification of Lamp Ballasts Containing PCBs*. Ballasts containing PCBs will require special handling and disposal through licensed disposal firms.

Lead-Based Paint

In 1976, the maximum concentration of total lead in consumer paints was limited to 0.5 percent by weight of the dried paint film, by the federal *Hazardous Products Act*. However, lead-based paints were routinely used in buildings until the early 1980's. Some of the buildings were constructed prior to 1980, therefore, there is a potential that lead-based paints may have been used. Lead-based paints are not considered to be a hazard unless they are in poor condition. At the time of the inspection, the painted surfaces on the buildings were in good condition. Lead-based paints can be managed though encapsulation or removal at which time flaking or peeling is noted.

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1.0 INTRODUCTION

1.1 PROJECT BACKGROUND

Mr. Sylvain Blouin of Belterra Land Company Ltd. retained AMEC Earth & Environmental (herein referred to as 'AMEC') to conduct a Phase I Environmental Site Assessment (herein referred to as 'ESA') of a property identified as a portion of the southeast quarter of Section 17, Township 39, Range 01, West of the 5th Meridian (Portion of SE17-39-01 W5M) and located at 1402 Township Road 392 in Lacombe County, Alberta. Authorization to proceed with the investigation of this property (herein referred to as the 'Site') was received on 13 March 2008.

1.2 OBJECTIVES

The objective of a Phase I ESA is to identify potential or actual environmental contamination that could be associated with current and past activities on the Site, and to determine if additional investigations are recommended.

1.3 METHODOLOGY

AMEC's methodology in conducting Phase I ESAs is based on the requirements in the Canadian Standards Association[1]. A standardized checklist was used as a guide during the inspection.

The work performed as part of this investigation included the following components.

1. Perform a review of historical and current information pertaining to the Site and adjacent properties.

2. Interview representatives knowledgeable about the Site and surrounding land use.

3. Conduct an inspection of the Site to identify potential environmental concerns.

4. Prepare a report summarizing the methodology and findings of the Historical and Site Reconnaissance tasks. The report would include recommendations for additional detailed investigation and assessment if necessary.

[1] Canadian Standards Association (CSA). 2001. Phase I Environmental Site Assessment (CSA Z768-01). Ottawa, Canada.

2.0 RESULTS

2.1 SITE DESCRIPTION

The Site (Legal Description: Portion of SE17-39-01 W5M) is located at 1402 Township Road 392 near Sylvan Lake in Lacombe County, Alberta (Figure 1). The Site is bordered by Birchcliff Road (Township Road 392) to the south and Range Road 1-4 to the east. The Site is currently owned by Christopher Shane Tronnes and Lillian Betty Lucille Tronnes. A copy of the current land title is included in Appendix A.

The Site, having an area of 19.63 hectares, is zoned agricultural. Currently, there are three permanent buildings and approximately 11 storage sheds on the Site. A house is located near the southeast corner of the Site and was constructed in the early 1970's (Plate 1; Appendix B). This house, having an area of approximately 150 m^2, is a walk-out bungalow. The house is of wood frame construction with a concrete basement and asphalt shingled roof. A shop with attached carport and having an area of approximately 200 m^2 is located to the northwest of the house and is of wood frame construction with a concrete slab floor and an asphalt shingled roof (Plate 2; Appendix B). The carport addition on the east side of the shop has a gravel surface. A storage building having an area of approximately 200 m^2 is located to the northwest of the shop (Plate 3; Appendix B). This building is of wood construction with no foundation. Heating for the house and shop is provided by a furnace and boiler, respectively. Both are fuelled by natural gas. Sewerage wastes from the house are collected in a septic tank located to the south. Potable water for Site residents is provided from a groundwater well located to the southwest of the house. The shop is not connected to the sewerage system or water supply. The storage shed is not serviced. Approximately 11 storage sheds are distributed throughout the southeast corner of the Site and are generally of wood construction.

Currently, the shop is used by the Site resident for woodworking. Air extraction systems are in place to collect sawdust from equipment used inside the building. The sawdust is collected in a bag system and disposed of or burned (Plate 4; Appendix B).

A forest surrounds the three buildings and storage sheds. The remaining portion of the Site is primarily agricultural pasture and hay land (Plate 5; Appendix B). The topography is generally undulating with a general southward slope. Shallow depressions were evident near the southwest corner of the Site. The perimeter of the Site is fenced.

The Site generally slopes southward. Sylvan Lake is located approximately 150 metres to the south.

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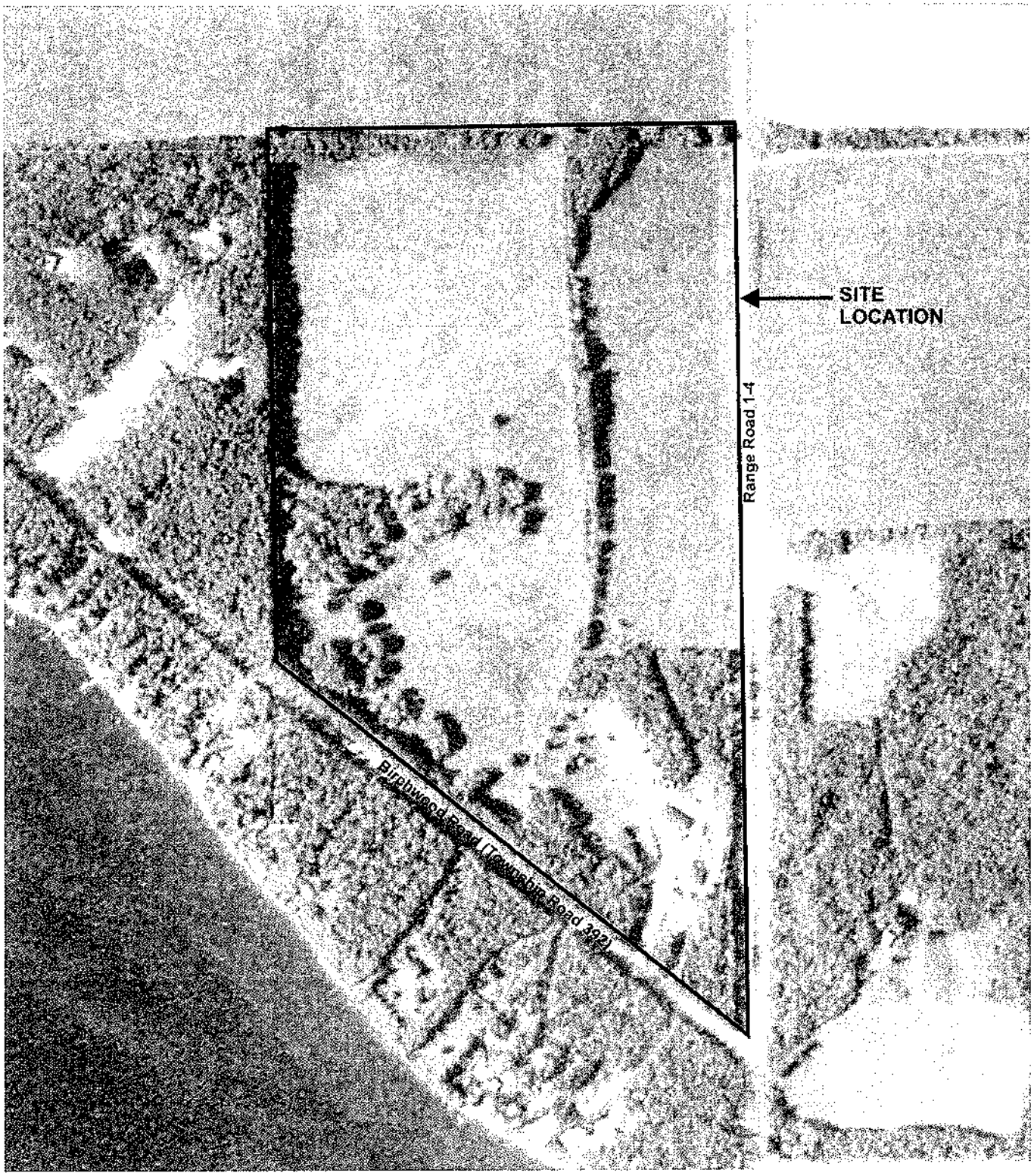

amec

2007 AERIAL PHOTOGRAPH
SHOWING SITE LOCATION
1402 TOWNSHIP ROAD 392
PORTION OF SE-17-39-01-W5M
LACOMBE COUNTY, ALBERTA

SCALE	~1:4,000	DATE	APR/08	MADE	LN	CHKD.	SZ	JOB	EE24888	FIGURE	1

2.1.1 Regional Geology

The Site is underlain by a thin layer (<5 metres) of undifferentiated overburden[2]. Immediately beneath these deposits is the Paskapoo Formation. The Paskapoo Formation is continental in origin and consists primarily of sandstone. The formation is the water supply source for the Town of Sylvan Lake.

2.1.2 Adjacent Land Use

The neighbouring properties were viewed from the Site or publicly accessible areas. The adjacent properties are as follows:

- cultivated agricultural land to the north;
- cultivated agricultural land, residences and undeveloped land to the east, across Range Road 1-4;
- residential lakeside lots to the south, across Birchcliff Road; and
- residential acreages to the west.

No sources of apparent environmental impact were identified on the neighbouring properties.

2.1.3 Site Drainage and Topography

The Site and surrounding area topography consists of gently undulating land that generally slopes towards the south (Plate 5; Appendix B). At the time of the Site visit, ponding was evident in depressions located within the south side of the Site.

2.2 HISTORICAL RECORDS REVIEW

2.2.1 Aerial Photographs

Aerial photographs of the Site and surrounding area were obtained to determine the historic land use and development. It should be noted that aerial photography does not provide a continuous record of Site development. It is possible that features of interest may have appeared and disappeared between the dates of coverage. In addition, photography quality and scale are variable and may make features difficult to identify or their purpose difficult to establish. Available photographs for the Site ranging from 1950 to 2007 were reviewed and are summarized in Table 1. Reproductions of aerial photographs for the years 1950, 1962, 1969, 1975, 1978, 1986, and 1998 are provided in Appendix B. The aerial photograph for 2007 was used to make Figure 1.

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2 Tokarsky, O., 1971. Hydrogeology for the Rocky Mountain House Area, Alberta. Alberta Research Report 71-3.

Table 1: Summary of Aerial Photograph Review

Year	Scale	Description
1950	1:40,000	The Site was forested undeveloped land. A small clearing was evident on the south portion of the Site, in the area of the current driveway. Range Road 1-4 and Birchcliff Road were established adjacent to the east and south sides of the Site, respectively. The lands to the west and south were forested. The land to the north was cleared and appeared to be cultivated. The properties to the east were a mix of forest and cultivated agricultural lands.
1962	1:31,680	The west and north portions of the Site were cleared. Two small buildings appeared to be established near the southeast corner of the Site in the area of the current shop. A trail appeared to extend from the southeast corner of the Site to a location near the west central edge of the property. Residential development was evident along Sylvan Lake, to the south of the Site.
1969	1:31,680	No significant changes were observed on the Site. Additional residential development was evident to the south of the Site.
1975	1:12,000	The house was constructed near the southeast corner of the Site by this time. The storage building also appeared to have been constructed to the northwest. Another building of similar size was located to the south of the storage building. Corrals appeared to have been built to the south of the shop. Piles of miscellaneous unidentifiable materials were evident in the pastures to the north and west of the forested area surrounding the building. A residence was built to the east of the southeast corner of the Site.
1978	1:10,000	Light-coloured unidentifiable materials remained present to the north and west of the forested area on the southeast corner of the Site. Trailers and or vehicles appeared to be parked to the north of this forested area.
1986	1:10,000	A disturbed area (possibly a gravel pit), covering approximately 0.2 hectares, was evident on the west half of the Site, approximately 150 metres northwest of the storage building. A penned area used for hay storage was evident approximately 150 metres north of the storage building. Additional vehicles and/or trailers appeared to be parked to the north of the forested area. The structure previously located to the south of the storage building was removed. The shop was constructed on the Site by this time. Land clearing activities, likely associated with oil and/or gas drilling, were evident to the east, across Range Road 1-4.
1998	1:30,000	The disturbed area on the west side of the Site and the light coloured areas were no longer evident on the Site. The hay storage area and vehicles and/or trailers were no longer evident.
2004	1:30,000	The carport addition was constructed onto the southeast side of the shop. Residential development was evident on the properties adjacent to the west side of the Site.

2.2.2 Site Occupancy

The Site has been used for agricultural purposes and occupied by residents since the 1960's. The current owners are not aware of any industrial operations being conducted on the Site.

2.2.3 Fire Insurance Plans

Fire Insurance Plans (FIPs) were not available for the Site.

2.2.4 Landfills and Dumps

No landfill sites were recorded on the Site or within 500 metres according to Alberta Environment's H.E.L.P. (Help End Landfill Pollution) program database[3].

2.3 SUMMARY OF INTERVIEWS/CORRESPONDENCE

The information resources listed in Table 2 were contacted to obtain current and historical information about the Site. Copies of the correspondence, if any, received from the information resources and personnel are provided in Appendix A. Their responses are summarized in Table 2.

[3] Alberta Environment, 1988. Data Tracking and Management Control System H.E.L.P. (Help End Landfill Pollution) Program. Industrial Waste Landfill Program. Edmonton, Alberta.

Table 2: Information Resources Contacted

Contact	Agency	Items Discussed	Responses
Cindy Dewing	Environmental Law Centre	Stop Orders, Control Orders, Tickets, violations of various Environmental Acts	Correspondence received from the Environmental Law Centre indicated that they have no records regarding environmental incidents or control orders recorded against Christopher or Lillian Tronnes, the current Site occupants and owners.
Connie Jacobsen	Petroleum Tank Management Association of Alberta (PTMAA)	Bulk Storage Tanks (underground and aboveground)	Correspondence received from the PTMAA indicated that they have no records of storage tanks on the Site.
Jolene Tejki	Lacombe County	Fires, emergency response, environmental incidents, bulk storage tanks, Site development	Correspondence received from Lacombe County indicated the following. • In 1968, Lacombe County No. 14 proposed to use a 1.2 hectare (3 acre) portion of the Site as a sanitary landfill, however, there is no evidence that this proposed use received approval. • An application to operate a confinement livestock facility in was filed with the County in 1980. However, the zoning did not allow for this development and Lacombe County did not authorize rezoning. • On 18 April 1986, Alberta Environment sent the landowners a letter advising that a recent inventory of gravel operations was conducted and a small active pit was discovered on this property. This pit was determined to be less than 2 hectares (5 acres) in size, therefore, the landowner was not required to obtain a Development and Reclamation approval.
Database	Abacus Datagraphics Ltd.	Oil/gas wells, groundwater wells, facilities and batteries, or environmental spills	Searches through the Abacus Datagraphics Ltd. database had no Energy Resources Conservation Board (ERCB) records of oil/gas wells, facilities and batteries or environmental spills on the Site. A Gull Lake Deer Creek Gas Co-op natural gas pipeline traverses along the south and east sides of the Site. There are no other pipelines on the Site. An oil/gas well is located approximately 100 metres to the east of the Site. This well was drilled and cased in 1985. There are no production records for this well. Based on this information, it is unlikely that this well has impacted the Site.

Contact	Agency	Items Discussed	Responses
Database	Alberta Environment Groundwater Information System	Groundwater wells	Searches through the Alberta Environment Groundwater Information System database indicated that there are records of nine groundwater wells located within SE17-39-01 W5M. These wells, ranging in depth from approximately 12 to 55 metres, were drilled between 1964 and 2001 and intended for domestic use.
Iain Strathern	Alberta Environment – Freedom of Information and Protection of Privacy (FOIP) office	Potential environmental concerns	Correspondence received from the Alberta Environment (AENV) FOIP office indicated they had no records of potential environmental concerns for the Site.
Personnel	David Thompson Health Region	Potential environmental health concerns	At the time of writing, correspondence had not yet been received from David Thompson Health Region regarding records of outstanding orders, notices, landfills, waste sites, or contamination for the Site.
Christopher Tronnes	Current Site owner and occupant	Potential environmental concerns and Site operations	Mr. Tronnes along with Ms. Lillian Tronnes has owned the Site since 1993. Mr. Tronnes indicated that he is not aware of any potential environmental concerns. Mr. Tronnes was not aware of gravel extraction operations on the property. He identified an area of the Site located approximately 150 metres northwest of the storage building where evidence of excavation was apparent and indicated that he uses this area for motocross training. Pieces of concrete pipe and other obstacles were placed in this area as part of a motocross track.

2.4 SITE INSPECTION RESULTS

Mr. Silvan Zorzut of AMEC conducted a visual inspection of the Site on 20 March 2008. The interior of the house was not inspected. The results of the inspection are presented in the following text and the completed checklists are included in Appendix C.

2.4.1 Site Appearance

At the time of the inspection, portions of the Site were covered with up to 0.1 metres of snow. The Site generally appeared to be in a neat and orderly manner. An area showing evidence of excavation, possibly gravel extraction, was noted approximately 150 metres to the northwest of the storage building (Plate 6; Appendix B). This disturbed area covered an area of approximately 1.5 hectares and was vegetated with grasses and other weedy growth. Pieces of concrete pipe and rocks were observed in this area. According to Mr. Tronnes, these materials were placed in this area to build an obstacle motocross course for motorbikes. No staining or evidence of wastes or chemicals was observed on the Site.

2.4.2 Asbestos Containing Materials

Based on the date of construction, there is a potential that asbestos-containing materials (ACMs) may be present within the Site buildings. ACMs that may be present include, but are not limited to, plaster finishes (i.e. ceiling texture and drywall joint compound), sheet vinyl flooring, floor tiles, and vermiculite insulation in wall and roof cavities in the buildings.

2.4.3 Polychlorinated Biphenyls (PCBs)

The insulating fluid in fluorescent lamp ballasts is used to compensate for variations in the voltage of the electrical supply. Until about 1980, the fluid in these ballasts often contained PCBs. Since some of the buildings were constructed prior to 1980, there is a potential that PCB-containing fluorescent lamp ballasts are present. No other potential PCB-containing electrical equipment was observed on the Site.

2.4.4 Urea Formaldehyde Foam Insulation

No evidence of urea formaldehyde foam insulation (UFFI) was observed on the Site.

2.4.5 Bulk Storage Tanks

No underground or aboveground bulk storage tanks were observed on the Site.

2.4.6 Chemical Usage and Storage

Aside from small quantities of cleaners, paints and thinners, no chemicals were observed on the Site:

2.4.7 Hydraulic Hoists

No hydraulic hoists were identified on the Site.

2.4.8 Sumps and Drains

No sumps were observed on the Site. The drains inside the house are connected to a pump-out septic tank located to the south of the house.

2.4.9 Air and Water Emissions

There are no other air emission sources on Site other than the natural gas fired furnaces. Aside from sanitary sewerage and storm water run-off, there are no liquid discharges from the Site.

2.4.10 Nuisance Odours and Noise

No odour or noise concerns were noted during the Site inspection.

2.4.11 Waste Disposal Practices

Wood wastes generated from woodworking activities, including cabinet building and shed construction, are burned in a barrel located on the Site. According to the Site owners, the remaining wastes generated on the Site are collected by the County or transported to the local landfill for disposal. No hazardous wastes are generated on the Site.

2.4.12 Ozone Depleting Substances

No potential sources of ozone depleting substances were identified on the Site.

2.4.13 Lead and Lead-Based Paint

In 1976, the maximum concentration of total lead in consumer paints was limited by the federal *Hazardous Products Act* to 0.5% by weight of the dried paint film. However, lead-based paints were routinely used in buildings until the early 1980's. Since some of the Site buildings were constructed prior to 1980, there is a potential that lead-based paints were used. No other sources of lead were observed on the Site.

2.4.14 Radon

Radon is a tasteless, odourless, invisible gas that may be associated with building materials and soils under buildings. It cannot be detected without specialized equipment. It is not known if a radon survey had been undertaken at this Site. Based on area geology, radon is not likely to be present in hazardous concentrations.

2.4.15 Hazardous Materials and Equipment

Aside from smoke and/or fire detectors, no other sources of radioactive substances were observed on the Site. Mercury-containing thermostats and fluorescent light tubes may be present inside the buildings. Disposal of small quantities of light tubes and radioactive waste (1 to 2 units' smoke detectors) into general waste bins is generally acceptable under the "small quantities exception" of the *Alberta Waste Control Regulation 192/96*[4]. Larger quantities of these materials requiring disposal should be segregated and treated as hazardous waste. Fluorescent light tubes/bulbs only pose a risk if they are damaged. When removed from service they should be packaged to avoid breakage.

2.4.16 Mould

Moulds (also known as "fungi") are present everywhere in the natural environment, indoors and outdoors. Exposure to mould may occur indoors on water damaged building materials during occupancy, building maintenance and / or repair operations. The most common types of moulds are generally not hazardous. However, some moulds may be problematic to some people.

Evidence of mould growth was not observed during the Site reconnaissance. However, observations were made only in readily accessible areas of the buildings that were inspected and did not include inspections of concealed spaces such wall or ceiling spaces and cavities.

2.4.17 Other Issues

Searches through the Alberta Environment Groundwater Information System database indicated that there are records of nine groundwater wells located within SE17-39-01 W5M. These wells, ranging in depth from approximately 12 to 55 metres, were drilled between 1964 and 2001 and intended for domestic use. One water well, located to the southwest of the house, is used by the tenant as a domestic water source. According to Mr. Tronnes, the quality of the water from this well is good and there is no requirement for treatment.

No other potential environmental concerns were identified at the time of inspection.

[4] Province of Alberta. Environmental Protection and Enhancement Act. Alberta Regulation 192/96. Waste Control Regulation. 1996. Queen's Printer, Edmonton, Alberta.

3.0 SUMMARY OF FINDINGS AND RECOMMENDATIONS

At the time of writing, correspondence had not yet been from the David Thompson Health Region regarding potential environmental concerns for the Site. Any documentation received from this information resource requiring further investigation will be forwarded.

The Site was evaluated against AMEC's standard Phase I ESA checklists. There are no findings associated with the following issues:

- urea formaldehyde foam insulation;
- bulk storage tanks;
- chemical usage and storage;
- hydraulic hoists;
- sumps and drains;
- air and water emissions;
- nuisance odours and noise;
- waste disposal practices;
- ozone-depleting substances;
- radon;
- hazardous materials and equipment; and
- mould.

The interior of the house was note inspected. However, based on the date of construction and inspection of the other buildings, AMEC identified the following issues regarding the potential presence of asbestos-containing materials, PCB-containing electrical equipment and lead-based paint. Descriptions of the situations, the potential for contamination and recommendations for your consideration are provided in the following text.

Asbestos Containing Materials (ACMs)

Based on the date of construction, there is a potential that asbestos-containing materials (ACMs) may be present within the Site buildings. ACMs that may be present include, but are not limited to, plaster finishes (i.e. ceiling texture and drywall joint compound), sheet vinyl flooring, floor tiles, and vermiculite insulation in wall and roof cavities in the buildings.

AMEC recommends that potential ACMs be sampled and analysed to confirm the presence of asbestos prior to undertaking renovation or demolition activities having the potential to disturb these materials. ACMs in poor condition should be removed or encapsulated in accordance with the Alberta Asbestos Abatement Manual[5] to reduce the potential for the generation of airborne asbestos fibres.

[5] Alberta Human Resources and Employment. Asbestos Abatement Manual. May 2005.

PCB-Containing Electrical Equipment

There is a potential that PCB-containing fluorescent lamp ballasts may be present. They are not considered a hazard while in use, but, should be inspected periodically and any leaking or non-functioning units replaced.

AMEC recommends that the serial codes and date of manufacture be checked on the removed ballasts to confirm the presence of PCBs. PCB-containing fluorescent lamp ballasts can be identified using the Environment Canada Publication, *Environmental Protection Series - Identification of Lamp Ballasts Containing PCBs*[6]. Ballasts containing PCBs will require special handling and disposal through licensed disposal firms.

Lead-Based Paint

In 1976, the maximum concentration of total lead in consumer paints was limited to 0.5 percent by weight of the dried paint film, by the federal *Hazardous Products Act*. However, lead-based paints were routinely used in buildings until the early 1980's. Some of the buildings were constructed prior to 1980, therefore, there is a potential that lead-based paints may have been used. Lead-based paints are not considered to be a hazard unless they are in poor condition. At the time of the inspection, the painted surfaces on the buildings were in good condition. Lead-based paints can be managed though encapsulation or removal at which time flaking or peeling is noted.

6 Environment Canada, August 1991. Environmental Protection series - Identification of Lamp Ballasts Containing PCBs. Report EPS 2/CC2

4.0 CLOSURE

This report was prepared for the exclusive use of Belterra Land Company Ltd. in accordance with the proposed work scope and contract prepared for this site (EE24000-1054), verbal and written requests from Belterra Land Company Ltd., Mr. Sylvain Blouin and generally accepted assessment practices. It is intended to provide a Phase I Environmental Site Assessment (ESA) of the Site identified as a Portion of SE17-39-01 W5M and located at 1402 Township Road 392 near Sylvan Lake in Lacombe County, Alberta, at the time of the Site visit. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from AMEC will be required. With respect to third parties, AMEC has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected during the Phase I ESA of the property conducted by AMEC. It is based solely on the conditions of the Site encountered at the time of the Site visit on 20 March 2008, supplemented by a review of historical information and data obtained by AMEC as described in this report, and discussion with a representative of the owner/occupant, as reported herein. Except as otherwise may be specified, AMEC disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to AMEC after the time during which AMEC conducted the Phase I ESA.

In evaluating the property, AMEC has relied in good faith on information provided by other individuals noted in this report. AMEC has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. AMEC accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

AMEC makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel. This Report is also subject to the further Standard Limitations contained in Appendix D.

Respectfully submitted,

AMEC Earth & Environmental

Silvan Zorzut
Senior Environmental Site Assessor

Reviewed by:

Reed Jackson, B.Sc.
Senior Reviewer

APPENDIX A

Documentation

- Land Title
- Correspondence from Regulatory Authorities

LACOMBE COUNTY

transmitted via fax to: (780) 435-8425

March 18, 2008

Silvan Zorzut
AMEC Earth & Environmental
4810 – 93 Street
Edmonton AB T6E 5M4

Dear Silvan:

RE: Request for Information
Pt. SE 17-39-1-W5M, Sylvan Lake

In response to your letter dated March 13, 2008, staff has reviewed County files pertaining to this property and have the following information for you.

In 1968, County of Lacombe No. 14 proposed to use a 3 acre portion of this property for "Nuisance grounds" (Sanitary Land Fill); however there is no evidence that this landfill ever received approval.

An application was received to construct or operate a confinement livestock facility in 1980, however the zoning of the property did not allow for such development at the time. In response, the landowner applied for a rezoning but this request was never authorized by the County. The current zoning of the property is Agricultural "A" under the County's Land Use Bylaw No. 1056/07.

On April 18, 1996, Alberta Environment sent the landowners at the time a letter advising that a recent inventory of gravel operations in the County they discovered a small active pit on this property. The pit was determined to be less than 5 acres; therefore the landowner was not required to obtain a Development and Reclamation approval.

To the best of our knowledge, the County has no record of any underground or aboveground storage tanks, fires or emergency responses/environmental incidents impacting this property.

If you have any questions, please feel free to contact me.

Yours truly,
LACOMBE COUNTY

Jolene Tejkl
Assistant Planner/Development Officer

ENVIRONMENTAL LAW CENTRE
Suite 800, 10025 - 106 Street, Edmonton, AB T5J 1G4
Phone: (780) 424-5099 Fax: (780) 424-5133
Internet: www.elc.ab.ca E-Mail: elc@elc.ab.ca

March 14, 2008 Our File: 036377

Mr. Silvan Zorzut
AMEC Earth & Environmental Limited
4810 - 93 Street
Edmonton, AB T6E 5M4

Dear Mr. Zorzut:

RE: Search Requested - Lillian Tronnes

In response to your request of March 13, 2008, we have searched the Environmental Enforcement Historical Search Service database for an exact match with respect to the above request, and can advise that as of today's date, there have been NO enforcement actions issued pursuant to the Alberta "Environmental Protection and Enhancement Act" ("EPEA") and its predecessor legislation, the "Hazardous Chemicals Act", "Agricultural Chemicals Act", "Clean Water Act" and "Clean Air Act" to 1971, and/or pursuant to the "Water Act" from 1999 onwards.

This search is limited to the following enforcement actions under EPEA and its predecessor legislation: Tickets, Prosecutions, Administrative Penalties, Warnings, Enforcement Orders, Enforcement Orders Concerning Waste, Environmental Protection Orders, Emergency Environmental Protection Orders, Emission Control Orders, Chemical Control Orders, Water Quality Control Orders and Stop Orders. This search is limited to the following enforcement actions under the Water Act: Prosecutions, Administrative Penalties, Water Management Orders, Warnings and Enforcement Orders. It does not include Clean Up Orders issued under the Litter Act or Environmental Protection Orders respecting unsightly property issued under EPEA; this information may be available from the local municipality.

Enforcement actions are entered in the database following: (1) the decision date, for prosecutions; (2) the date an administrative penalty was paid or due (30 days after issuance), whichever is sooner; and (3) the date the document was issued for all other enforcement actions.

These search results are based on information provided by Alberta Environment ("AENV"). AENV advises that they try to provide the best information possible. However, AENV advises that it cannot guarantee that the information provided is complete or accurate and that any person relying on these search results does so at their own risk. More information may be gained by referring to original enforcement documents.

Copies of orders are available from the Environmental Law Centre. Any other enforcement information may be available directly from Alberta Environment.

Yours sincerely,

Cindy Dewing
Enforcement Search Service
Encl.

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION NUMBER	DATE (D/M/Y)	PARTICULARS
762 098 117	07/06/1976	UTILITY RIGHT OF WAY GRANTEE - GULL LAKE GAS CO-OP LIMITED. "AS TO SOUTH EAST"
772 051 474	25/03/1977	UTILITY RIGHT OF WAY GRANTEE - GULL LAKE DEER CREEK GAS CO-OP LTD.. BOX370 BENTLEY ALBERTA T0C0J0 (DATA UPDATED BY: CHANGE OF NAME 962044958)
992 054 522	04/03/1999	MORTGAGE MORTGAGEE - PARKLAND SAVINGS AND CREDIT UNION, LIMITED. BOX 237 BENTLEY ALBERTA T0C0J0 ORIGINAL PRINCIPAL AMOUNT: $200,000

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN ACCURATE REPRODUCTION OF THE CERTIFICATE OF TITLE REPRESENTED HEREIN THIS 11 DAY OF MARCH, 2008 AT 05:47 P.M.

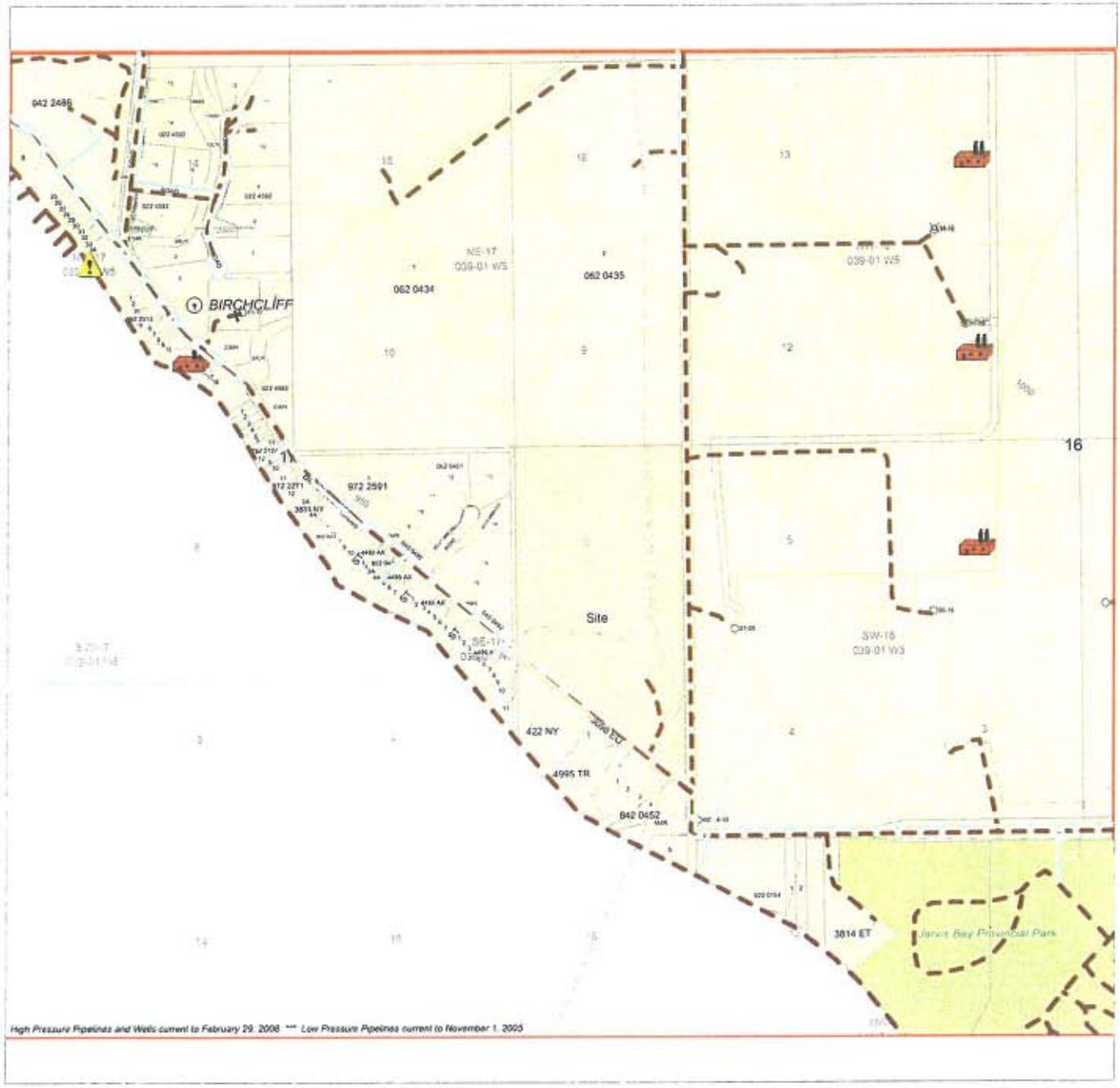
ORDER NUMBER:10754185

CUSTOMER FILE NUMBER:

REGISTRAR OF LAND TITLES

END OF CERTIFICATE

EE24888



N

Wellheads
- Abandoned Wellhead
- Suspended Gas Wellhead
- Suspended Oil Wellhead
- Flowing Gas Wellhead
- Location Wellhead
- Flowing Oil Wellhead
- Miscellaneous Wellhead
- Water Wellhead
- Well Downhole Location
- Newly Licenced Well
- Newly Spudded Well

High Pressure Pipelines
- Gas Pipeline
- Oil Pipeline
- Water Pipeline
- LVP/HVP Pipeline
- Foreign Pipeline (Only when a company is specified)

Low Pressure Pipelines
- Gas Co-op Pipeline

PRINT REPORT | VIEW IN EXCEL | CLOSE REPORT

LOCATION: 01-17-039-01W5M
There are no Spill/Complaint Incidents for this LSD.
LOCATION: 02-17-039-01W5M
There are no Spill/Complaint Incidents for this LSD.
LOCATION: 07-17-039-01W5M
There are no Spill/Complaint Incidents for this LSD.
LOCATION: 08-17-039-01W5M
There are no Spill/Complaint Incidents for this LSD.

EUB DATA | ATTACHED FILES

Close Screen

WELL INFORMATION
CURRENT TO FEBRUARY 29, 2008

EVENT: 2

WELL ID:	00 / 07-08-039-01 W5 / 2				
LICENCE #:	0116694		LICENCE DATE:	AUGUST 6, 1985	
WELL NAME:	DELTA ET AL PREVO 7-8-39-1				
WITHIN:	05-16-039-01 W5		H2S (mol/kmol):	NOT AVAILABLE	
LICENCEE:	DELTA RESOURCES INC.				
SPUD DATE:	AUGUST 17, 1985		FINAL DRILL DATE:	SEPTEMBER 20, 1985	
STATUS:	DRL&C		ABANDONED DATE:		
SURFACE:			DOWNHOLE:		
OFFSETS:	N 419 E 85.9		OFFSETS:	N 676.4 W 531.9	
LATITUDE:	52.352535		LATITUDE:	52.340205	
LONGITUDE:	114.096165		LONGITUDE:	114.105496	
GROUND ELEVATION:	978.3 m	3210 '	TOTAL DEPTH:	2674.5 m	8775 '
WELL TYPE:	NOT AVAILABLE		SUBSTANCE:	NOT AVAILABLE	

OPTIONS

Open Well Plat

Request Divestco Log

Create CBM Report

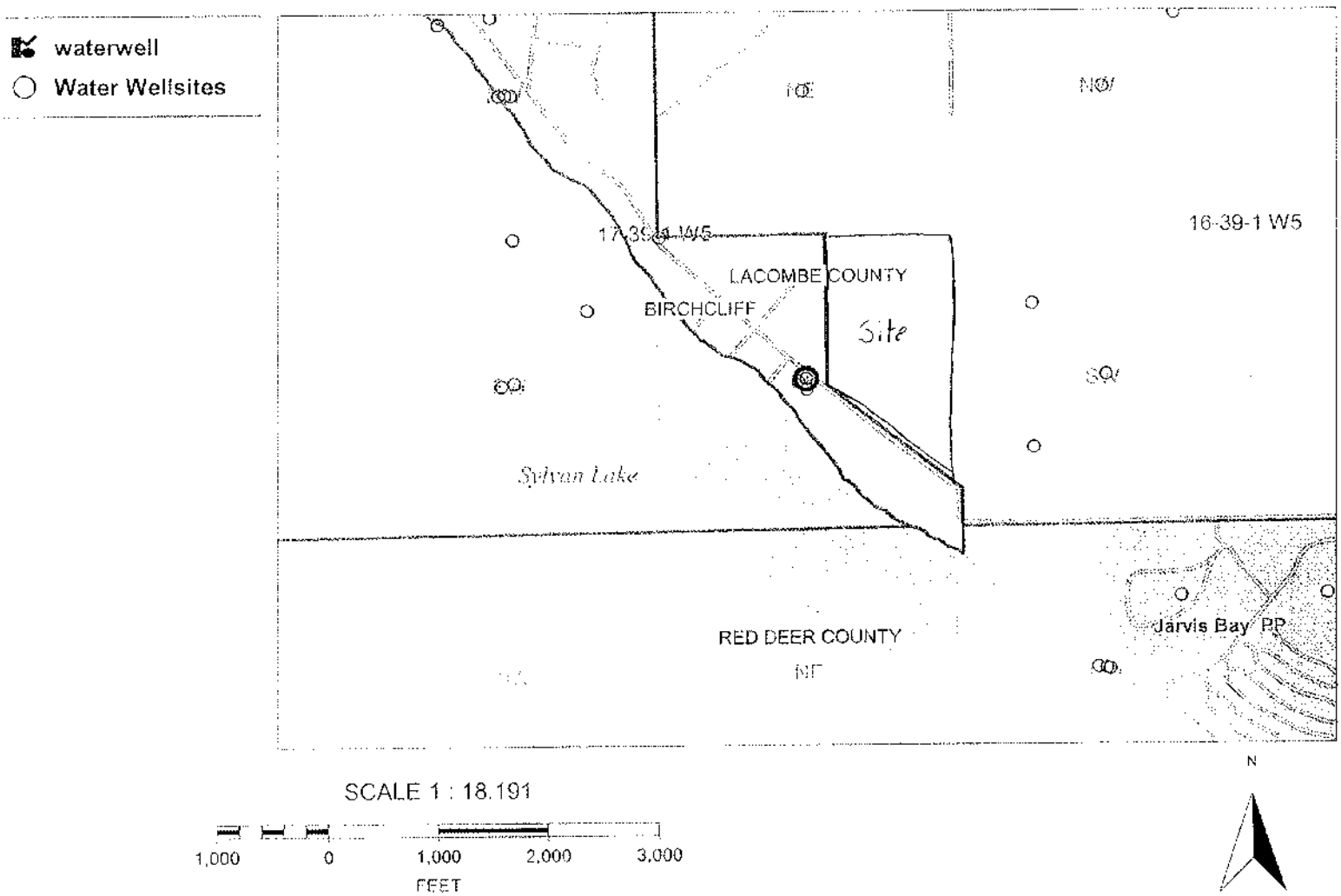
Add To Custom Well List

Print Screen

MORE INFO

Select Info to View

TELUS Geomatics - Alberta Map



Alberta Environment

Water Well Drilling Report

The data contained in this report is supplied by the Driller. The province disclaims responsibility for its accuracy.

Well I.D.:	0359301
Map Verified:	Map
Date Report Received:	1985/10/17
Measurements:	Metric

1. Contractor & Well Owner Information

Company Name: UNKNOWN DRILLER		Drilling Company Approval No.: 99999
Mailing Address: UNKNOWN	City or Town: UNKNOWN AB CA	Postal Code:
WellOwner's Name: MCCAFFERY, TERRENCE	Well Location Identifier:	
P.O. Box Number:	Mailing Address: 633 6 AVE SW, CALGARY	Postal Code:
City:	Province:	Country:

2. Well Location

1/4 or LSD	Sec	Twp	Rge	Westof M
SE	17	039	01	5

Location in Quarter
0 M from Boundary
0 M from Boundary

Lot Block Plan

Well Elev: 944.88 M
How Obtain: Estimated

3. Drilling Information

Type of Work: Chemistry Reclaimed Well
Date Reclaimed: Materials Used:
Method of Drilling: Not Applicable
Flowing Well: No Rate: Liters
Gas Present: Oil Present:

Proposed well use: Domestic
Anticipated Water Requirements/day 0 Liters

4. Formation Log

Depth from ground level (meters)	Lithology Description

5. Well Completion

Date Started(yyyy/mm/dd): Date Completed (yyyy/mm/dd):

Well Depth: 38.1 M Borehole Diameter: 0 CM

Casing Type:	Liner Type:
Size OD: 0 CM	Size OD: 0 CM
Wall Thickness: 0 CM	Wall Thickness: 0 CM
Bottom at: 0 M	Top: 0 M Bottom: 0 M

Perforations	Perforations Size:
from: 0 M to: 0 M	0 CM x 0 CM
from: 0 M to: 0 M	0 CM x 0 CM
from: 0 M to: 0 M	0 CM x 0 CM

Perforated by:

Seal: from: 0 M	to: 0 M
Seal: from: 0 M	to: 0 M
Seal: from: 0 M	to: 0 M

Screen Type: from: 0 M to: 0 M	Screen ID: 0 CM Slot Size: 0 CM
Screen Type: from: 0 M to: 0 M	Screen ID: 0 CM Slot Size: 0 CM

Screen Installation Method:

Fittings
Top: Bottom:

Pack:
Grain Size: Amount: 0

Geophysical Log Taken:
Retained on Files:

Additional Test and/or Pump Data
Chemistries taken By Driller: No
Held: 1 Documents Held: 1

Pitless Adapter Type:
Drop Pipe Type:
Length: Diameter:

Comments:

6. Well Yield

Test Date (yyyy/mm/dd): Start Time:
Test Method:
Non pumping static level: M
Rate of water removal: Liters/Min
Depth of pump intake: M
Water level at end of pumping: M
Distance from top of casing to ground level: CM

Depth To water level (meters)
Elapsed Time
Drawdown Minutes:Sec Recovery

Total Drawdown: M

If water removal was less than 2 hr duration, reason why:

Recommended pumping rate: Liters/Min
Recommended pump intake: M

Type pump installed
Pump type:
Pump model:
H.P.:
Any further pumptest information?

7. Contractor Certification

Driller's Name: UNKNOWN DRILLER
Certification No.:
This well was constructed in accordance with the Water

Water Well Drilling Report

Alberta Environment

The data contained in this report is supplied by the Driller. The province disclaims responsibility for its accuracy.

Well I.D.:	0359305
Map Verified:	Not Verified
Date Report Received:	
Measurements:	Metric

1. Contractor & Well Owner Information

Company Name: ERICKSON & KANGAS		Drilling Company Approval No.: NONE
Mailing Address: UNKNOWN	City or Town:	Postal Code:
WellOwner's Name: MANNING	Well Location Identifier:	
P.O. Box Number:	Mailing Address: SYLVAN LAKE	Postal Code:
City:	Province:	Country:

2. Well Location

1/4 or LSD	Sec	Twp	Rge	West of M
SE	17	039	01	5

Location in Quarter
0 M from Boundary
0 M from Boundary

Lot Block Plan

Well Elev: 944.88 M
How Obtain: Estimated

3. Drilling Information

Type of Work: New Well
Reclaimed Well
Date Reclaimed: Materials Used:
Method of Drilling: Cable Tool
Flowing Well: No Rate: Liters
Gas Present: Oil Present:
Proposed well use: Domestic
Anticipated Water Requirements/day 0 Liters

4. Formation Log

Depth from ground level (meters)	Lithology Description
4.57	Brown Clay & Rocks
9.75	Blue Clay
13.72	Brown Water Bearing Sand
17.98	Dark Shale
22.56	Gray Water Bearing Shale

5. Well Completion

Date Started(yyyy/mm/dd):
Date Completed (yyyy/mm/dd): 1966/05/25

Well Depth: 22.56 M
Borehole Diameter: 0 CM

Casing Type: Steel
Liner Type:

Size OD: 11.1 CM
Size OD: 0 CM

Wall Thickness: 0 CM
Wall Thickness: 0 CM

Bottom at: 17.98 M
Top: 0 M Bottom: 0 M

Perforations
from: 0 M to: 0 M
from: 0 M to: 0 M
from: 0 M to: 0 M
Perforations Size:
0 CM x 0 CM
0 CM x 0 CM
0 CM x 0 CM

Perforated by:

Seal:
from: 0 M to: 0 M
Seal:
from: 0 M to: 0 M
Seal:
from: 0 M to: 0 M

Screen Type:
from: 0 M to: 0 M
Screen ID: 0 CM
Slot Size: 0 CM

Screen Type:
from: 0 M to: 0 M
Screen ID: 0 CM
Slot Size: 0 CM

Screen Installation Method:

Fittings
Top: Bottom:

Pack:
Grain Size: Amount: 0

Geophysical Log Taken:
Retained on Files:

Additional Test and/or Pump Data
Chemistries taken By Driller: Yes
Held: 0 Documents Held: 1

Pitless Adapter Type:
Drop Pipe Type:
Length: M Diameter: CM

Comments:
MEDIUM HARD WATER.

6. Well Yield

Test Date (yyyy/mm/dd): 1966/05/25
Start Time: 11:00 AM
Test Method: Pump
Non pumping static level: 9.75 M
Rate of water removal: 54.55 Liters/Min
Depth of pump intake: 0 M
Water level at end of pumping: 9.75 M
Distance from top of CM casing to ground level:

Depth To water level (meters)
Elapsed Time Drawdown Minutes:Sec Recovery

0	5:00	10.97
0	10:00	9.75

Total Drawdown: 0 M
If water removal was less than 2 hr duration, reason why:

Recommended pumping rate: 0 Liters/Min
Recommended pump intake: 16.76 M
Type Pump installed
Pump Type: JET
Pump Model: JACUZZI
H.P.:
Any further pumptest information?

7. Contractor Certification

Driller's Name: UNKNOWN DRILLER
Certification No.:
This well was constructed in accordance with the Water

Water Well Drilling Report

Alberta Environment

The data contained in this report is supplied by the Driller. The province disclaims responsibility for its accuracy.

Well I.D.:	0371572
Map Verified:	Not Verified
Date Report Received:	1993/10/18
Measurements:	Metric

1. Contractor & Well Owner Information

Company Name: ALBERTA EAGLE DRILLING LTD.		Drilling Company Approval No.: 117793
Mailing Address: BOX 9036	City or Town: SYLVAN LAKE AB CA	Postal Code: T4S 1S6
WellOwner's Name: DENSMORE, ART	Well Location Identifier:	
P.O. Box Number:	Mailing Address: CALGARY	Postal Code:
City:	Province:	Country:

2. Well Location

1/4 or LSD	Sec	Twp	Rge	West of M
SE	17	039	01	5

Location in Quarter
0 M from Boundary
0 M from Boundary

Lot Block Plan

Well Elev: M
How Obtain: Not Obtain

3. Drilling Information

Type of Work: New Well
Reclaimed Well
Date Reclaimed: Materials Used:
Method of Drilling: Combination
Flowing Well: Rate: Liters
Gas Present: No Oil Present: No

Proposed well use: Domestic
Anticipated Water Requirements/day 0 Liters

4. Formation Log

Depth from ground level (meters)	Lithology Description
5.49	Brown Clay
19.81	Brownish Gray Sandstone

5. Well Completion

Date Started(yyyy/mm/dd): 1993/06/02	Date Completed (yyyy/mm/dd): 1993/06/02
Well Depth: 19.81 M	Borehole Diameter: 0 CM
Casing Type: Plastic	Liner Type: Plastic
Size OD: 14.12 CM	Size OD: 11.43 CM
Wall Thickness: 0.95 CM	Wall Thickness: 0.54 CM
Bottom at: 16.76 M	Top: 13.72 M Bottom: 19.81 M

Perforations from: 16.76 M to: 19.81 M — Perforations Size: 1.59 CM x 0 CM
from: 0 M to: 0 M — 0 CM x 0 CM
from: 0 M to: 0 M — 0 CM x 0 CM
Perforated by: Machine

Seal: Driven & Bentonite from: 9.14 M to: 16.15 M
Seal: from: 0 M to: 0 M
Seal: from: 0 M to: 0 M

Screen Type: from: 0 M to: 0 M — Screen ID: 0 CM Slot Size: 0 CM
Screen Type: from: 0 M to: 0 M — Screen ID: 0 CM Slot Size: 0 CM
Screen Installation Method:

Fittings
Top: Bottom:
Pack:
Grain Size: Amount:

Geophysical Log Taken:
Retained on Files:

Additional Test and/or Pump Data
Chemistries taken By Driller: No
Held: 0 Documents Held: 1

Pitless Adapter Type:
Drop Pipe Type:
Length: M Diameter: CM

Comments:

6. Well Yield

Test Date (yyyy/mm/dd): 1993/06/02	Start Time: 11:00 AM
Test Method: Air	
Non pumping static level:	10.67 M
Rate of water removal:	386.41 Liters/Min
Depth of pump intake:	19.81 M
Water level at end of pumping:	19.81 M

Distance from top of CM casing to ground level:

Depth To water level (meters)
Elapsed Time
Drawdown Minutes:Sec Recovery
Total Drawdown: 9.14 M

If water removal was less than 2 hr duration, reason why:

Recommended pumping rate: 45.46 Liters/Min
Recommended pump intake: 15.24 M

Type Pump Installed
Pump Type: 10S05-9
Pump Model:
H.P.:
Any further pumptest information?

7. Contractor Certification

Driller's Name: UNKNOWN DRILLER
Certification No.: 2294A
This well was constructed in accordance with the Water

Water Well Drilling Report

The data contained in this report is supplied by the Driller. The province disclaims responsibility for its accuracy.

Well I.D.:	0491509
Map Verified:	Not Verified
Date Report Received:	1998/09/08
Measurements:	Metric

1. Contractor & Well Owner Information

Company Name: GORDON'S DRILLING LTD.		Drilling Company Approval No.: 48519
Mailing Address: RR 2	City or Town: LEDUC AB CA	Postal Code: T9E 2X2
WellOwner's Name: HINES, DENIS/MARIE	Well Location Identifier:	
P.O. Box Number:	Mailing Address: SUMER VILLAGE OF BIRCHCLIFF, SYLVAN LAKE	Postal Code:
City:	Province:	Country:

2. Well Location

1/4 or LSD	Sec	Twp	Rge	West of M
SE	17	039	01	5

Location in Quarter
0 M from Boundary
0 M from Boundary

Lot Block Plan

Well Elev: M
How Obtain: Not Obtain

3. Drilling Information

Type of Work: New Well
Reclaimed Well
Date Reclaimed: Materials Used:
Method of Drilling: Rotary
Flowing Well: No Rate: Liters
Gas Present: No Oil Present: No

Proposed well use: Domestic
Anticipated Water Requirements/day 1363.8 Liters

4. Formation Log

Depth from ground level (meters)	Lithology Description
6.71	Clay
8.23	Tight Sandstone
11.89	Sandstone

5. Well Completion

Date Started(yyyy/mm/dd): 1998/05/30	Date Completed (yyyy/mm/dd): 1998/05/30
Well Depth: 11.89 M	Borehole Diameter: 0 CM
Casing Type: Plastic	Liner Type: Plastic
Size OD: 15.24 CM	Size OD: 11.43 CM
Wall Thickness: 0.1 CM	Wall Thickness: 0.54 CM
Bottom at: 8.23 M	Top: 5.79 M Bottom: 11.89 M
Perforations from: 8.23 M to: 11.89 M from: 0 M to: 0 M from: 0 M to: 0 M	Perforations Size: 0.05 CM x 6.35 CM 0 CM x 0 CM 0 CM x 0 CM
Perforated by: Machine	
Seal: Driven from: 7.62 M	to: 8.23 M
Seal: from: 0 M	to: 0 M
Seal: from: 0 M	to: 0 M
Screen Type: from: 0 M to: 0 M	Screen ID: 0 CM Slot Size: 0 CM
Screen Type: from: 0 M to: 0 M	Screen ID: 0 CM Slot Size: 0 CM
Screen Installation Method:	
Fittings Top:	Bottom:
Pack: Grain Size:	Amount:
Geophysical Log Taken: Retained on Files:	
Additional Test and/or Pump Data Chemistries taken By Driller: No Held: 0	Documents Held: 1
Pitless Adapter Type: Drop Pipe Type: Length: M	Diameter: CM

Comments:
DRILLER REPORTS DISTANCE FROM TOP OF CASING TO GROUND LEVEL: 16". NOTE: UNABLE TO TAKE RECOVERY TEST WELL CAME TO STATIC IN SEC.

6. Well Yield

Test Date (yyyy/mm/dd): 1998/05/30	Start Time: 11:00 AM
Test Method: Air	
Non pumping static level:	5.49 M
Rate of water removal:	227.3 Liters/Min
Depth of pump intake:	8.53 M
Water level at end of pumping:	8.53 M

Distance from top of CM casing to ground level:

Depth To water level (meters)
Elapsed Time
Drawdown Minutes:Sec Recovery
Total Drawdown: 3.05 M

If water removal was less than 2 hr duration, reason why:

Recommended pumping rate: 227.3 Liters/Min

Recommended pump intake: 8.53 M

Type Pump Installed
Pump Type: SUB
Pump Model:
H.P.: .5
Any further pumptest information?

7. Contractor Certification

Driller's Name:	UNKNOWN DRILLER
Certification No.:	3434

Water Well Drilling Report

The data contained in this report is supplied by the Driller. The province disclaims responsibility for its accuracy.

Well I.D.:	0359304
Map Verified:	Not Verified
Date Report Received:	
Measurements:	Metric

1. Contractor & Well Owner Information

Company Name: SATELLITE DRILLING LTD.		Drilling Company Approval No.:
Mailing Address:	City or Town:	Postal Code:
WellOwner's Name: ARTHUR, COLLIN	Well Location Identifier:	
P.O. Box Number: 645	Mailing Address: SYLVAN LAKE	Postal Code:
City:	Province:	Country:

2. Well Location

1/4 or LSD	Sec	Twp	Rge	West of M
SE	17	039	01	5

Location in Quarter
0 M from Boundary
0 M from Boundary

Lot Block Plan

Well Elev: 958.6 M
How Obtain: Estimated

3. Drilling Information

Type of Work: New Well
Reclaimed Well
Date Reclaimed: Materials Used:
Method of Drilling: Rotary
Flowing Well: No
Gas Present:
Rate: Liters
Oil Present:
Proposed well use: Domestic
Anticipated Water Requirements/day 0 Liters

6. Well Yield

Test Date (yyyy/mm/dd): 1977/02/24	Start Time: 11:00 AM
Test Method: Air	
Non pumping static level:	10.97 M
Rate of water removal:	136.38 Liters/Min
Depth of pump intake:	0 M
Water level at end of pumping:	42.67 M
Distance from top of CM casing to ground level:	

Depth To water level (meters)
Elapsed Time
Drawdown Minutes:Sec Recovery
Total Drawdown: 31.7 M

If water removal was less than 2 hr duration, reason why:

Recommended pumping rate: 0 Liters/Min

Recommended pump intake: 0 M

Type Pump Installed
Pump Type:
Pump Model:
H.P.:
Any further pumptest information?

4. Formation Log

Depth from ground level (meters)	Lithology Description
10.67	Brown Clay & Rocks
22.86	Brown Soft Sandstone
30.48	Gray Shale
33.53	Gray Soft Shale
34.14	Gray Sandstone
35.05	Blue Shale
35.36	Gray Water Bearing Sandstone
35.97	Brown Shale
36.58	Gray Shale
38.4	Gray Water Bearing Sandstone
39.01	Gray Shale
39.62	Blue Shale
42.37	Gray Water Bearing Sandstone
42.67	Gray Shale

5. Well Completion

Date Started(yyyy/mm/dd): 1977/02/24	Date Completed (yyyy/mm/dd): 1977/02/24
Well Depth: 42.67 M	Borehole Diameter: 0 CM
Casing Type: Galvanized Steel	Liner Type:
Size OD: 11.43 CM	Size OD: 0 CM
Wall Thickness: 0.36 CM	Wall Thickness: 0 CM
Bottom at: 33.22 M	Top: 0 M Bottom: 0 M
Perforations from: 0 M to: 0 M from: 0 M to: 0 M from: 0 M to: 0 M	Perforations Size: 0 CM x 0 CM 0 CM x 0 CM 0 CM x 0 CM
Perforated by:	
Seal: Drive Shoe from: 0 M	to: 33.22 M
Seal: from: 0 M	to: 0 M
Seal: from: 0 M	to: 0 M
Screen Type: from: 0 M to: 0 M	Screen ID: 0 CM Slot Size: 0 CM
Screen Type: from: 0 M to: 0 M	Screen ID: 0 CM Slot Size: 0 CM
Screen Installation Method:	
Fittings Top:	Bottom:
Pack: Grain Size:	Amount: 0
Geophysical Log Taken: Retained on Files:	
Additional Test and/or Pump Data Chemistries taken By Driller: No Held: 1	Documents Held: 2
Pitless Adapter Type: Drop Pipe Type: Length: M	Diameter: CM
Comments:	

7. Contractor Certification

Driller's Name: UNKNOWN DRILLER
Certification No.:
This well was constructed in accordance with the Water

Alberta
ENVIRONMENT

FOIP, Records and
Corporate Support Branch

6th Floor, Petroleum Plaza South
9915 – 108 Street
Edmonton, AB T5K 2G6

Telephone: (780) 427-4429
Fax: (780) 427-9838

Mr. Silvan Zorzut
AMEC Earth & Environmental
4810–93 Street
Edmonton, AB T6E 5M4

[Fax:] (780) 435 - 8425

March 27, 2008

Your File # EE24888

Dear Mr. Zorzut:

Re: Routine Disclosure Request 0520-RD-08 for information routinely available under the Environmental Protection and Enhancement (EPEA) Legislation.

Our office received your request dated March 13, 2008 for the following subject records.

Location: **SE Sec 17-Twp 39-Rge 1 W5M, Sylvan Lake AB**

Names: **Christopher Shane Tronnes; Lillian Betty Lucille Tronnes**

Time Frame: **Historical Search**

Records: **Scientific/technical information which may include reports documenting the nature and extent of soil, ground and surface water contamination; remedial measures taken to clean-up the site or status of the site; and external correspondence between the submitter and the Department of Environment pertaining to the reports.**

Alberta Environment has conducted a search of department records; based on the search parameters you provided to this office and has not identified any routinely available records relating to the subject of your request. As a result of our findings, your Routine Disclosure request has been closed.

Enclosed is a receipt for the initial fee in the amount of $25.00, submitted to Alberta Environment to undertake your request for a search for these records.

If you have any further questions or concerns, please write or call Debbie Lawrence at (780) 644 - 1788.

Yours truly,

Iain Strathern
Advisor

Enclosure (Receipt 5 672)

APPENDIX B

Site Photographs and Historical Aerial Photographs

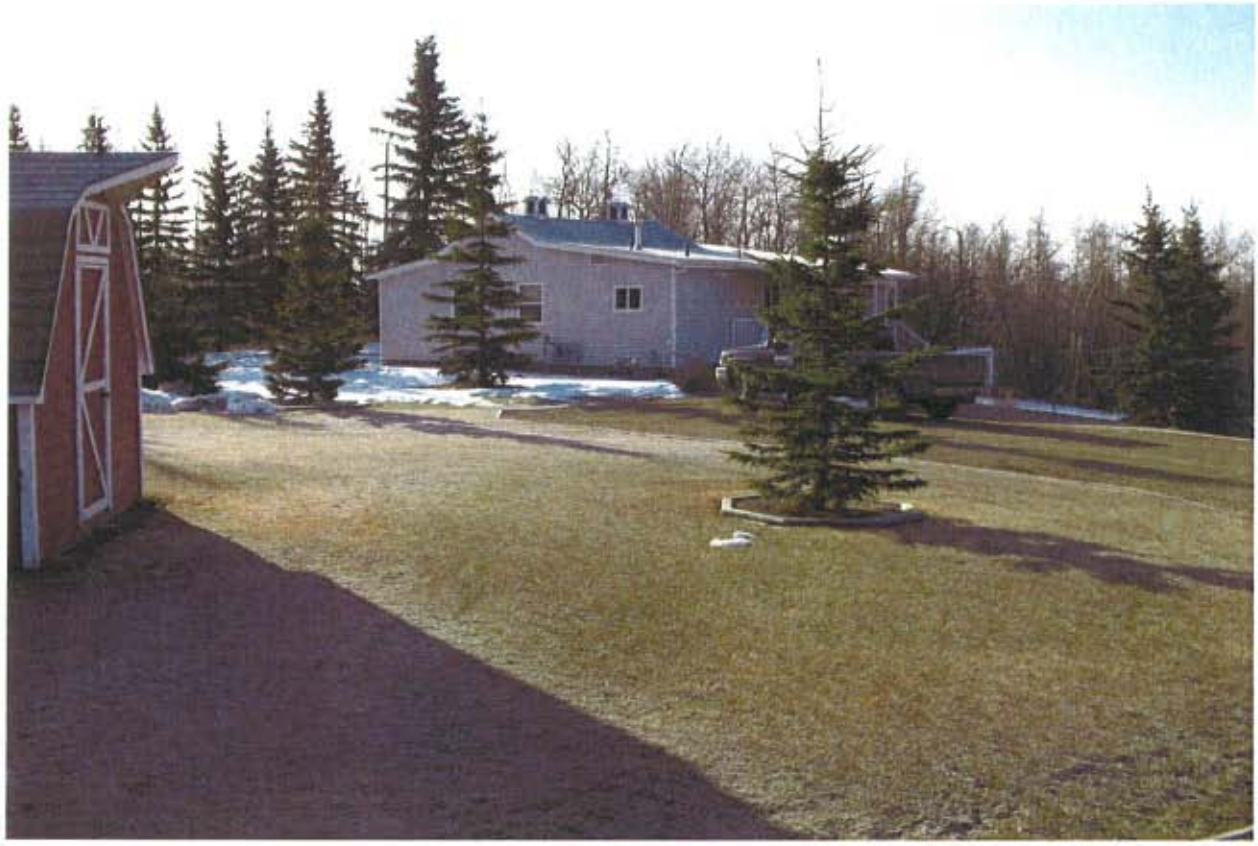


Plate 1: The house as viewed from the northwest. One of the many sheds on the Site is visible to the left.

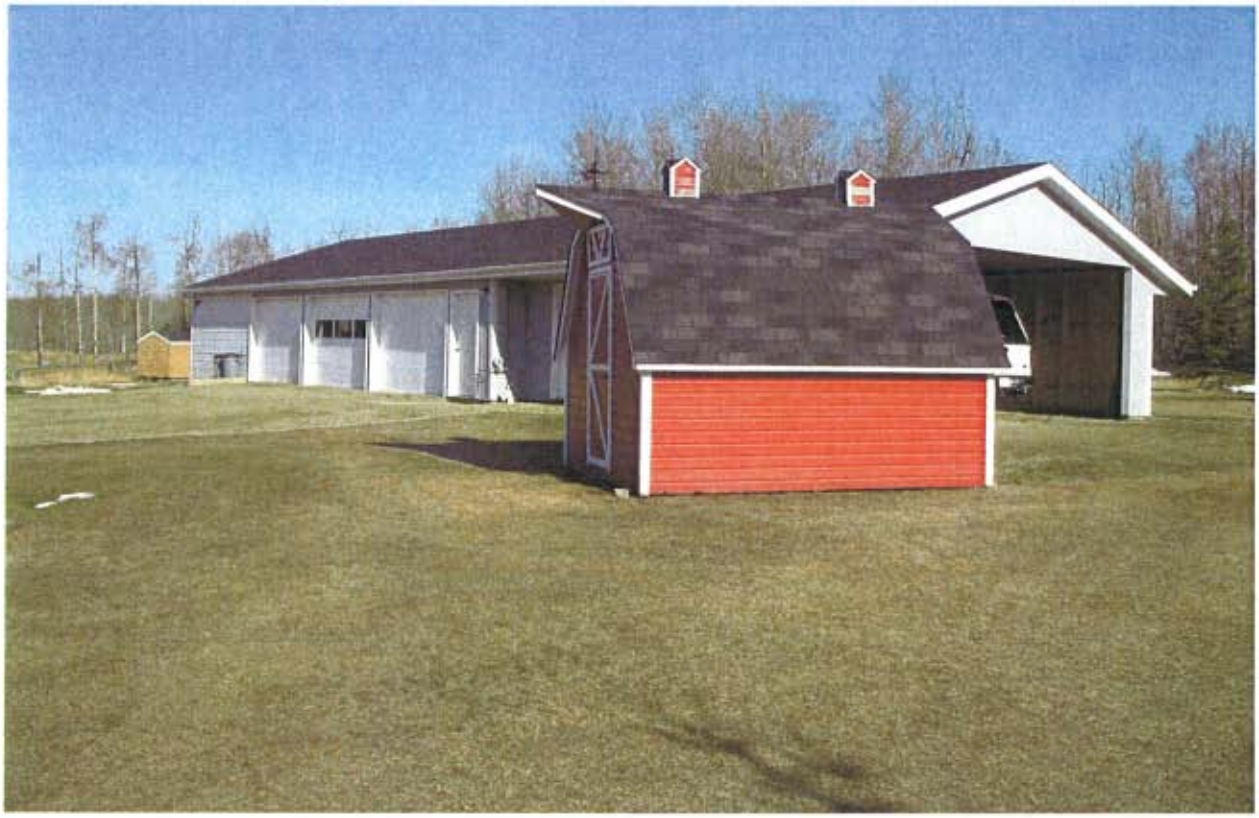


Plate 2: The shop and a shed as viewed from the southeast. The carport addition to the shop is visible on the right.

Plate 3: A view of the southeast portion of the storage building located to the northwest of the shop. Sheds are visible to the right and left.

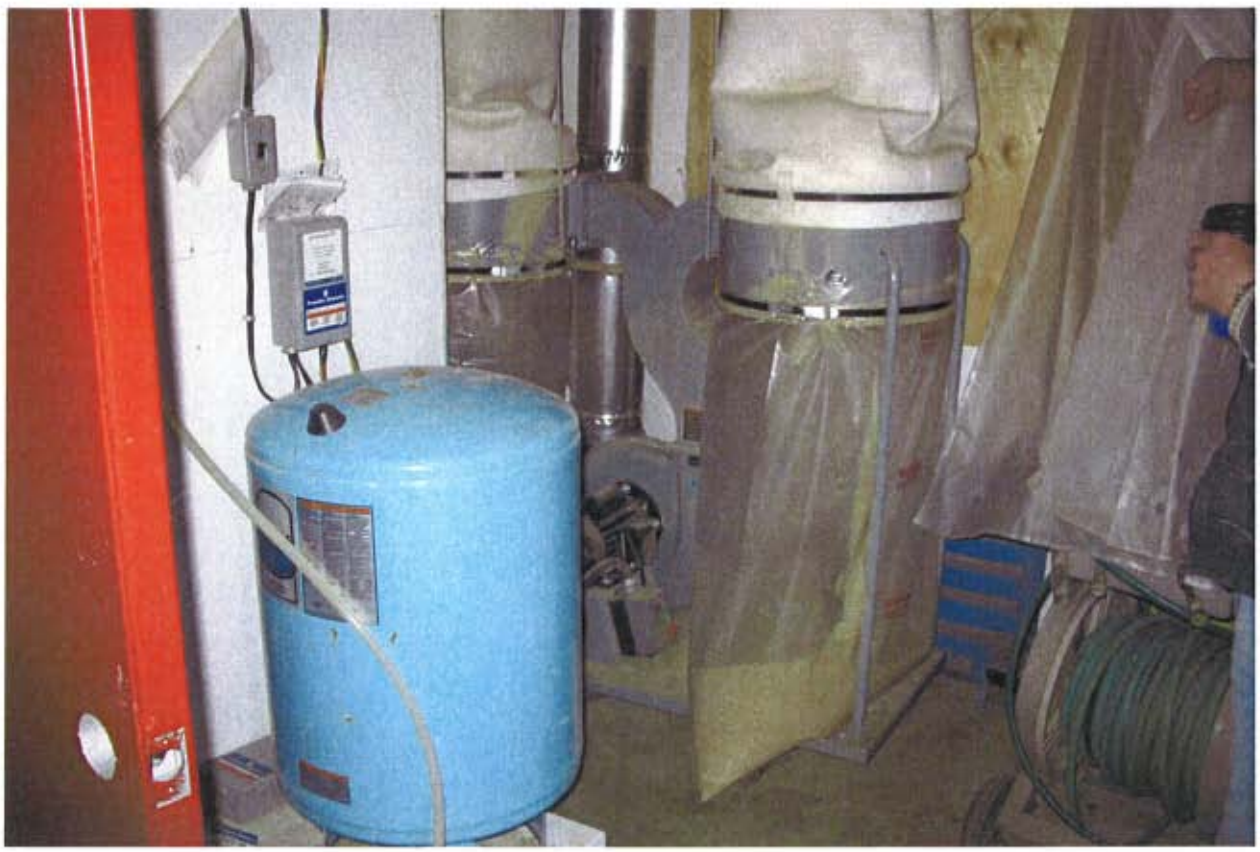
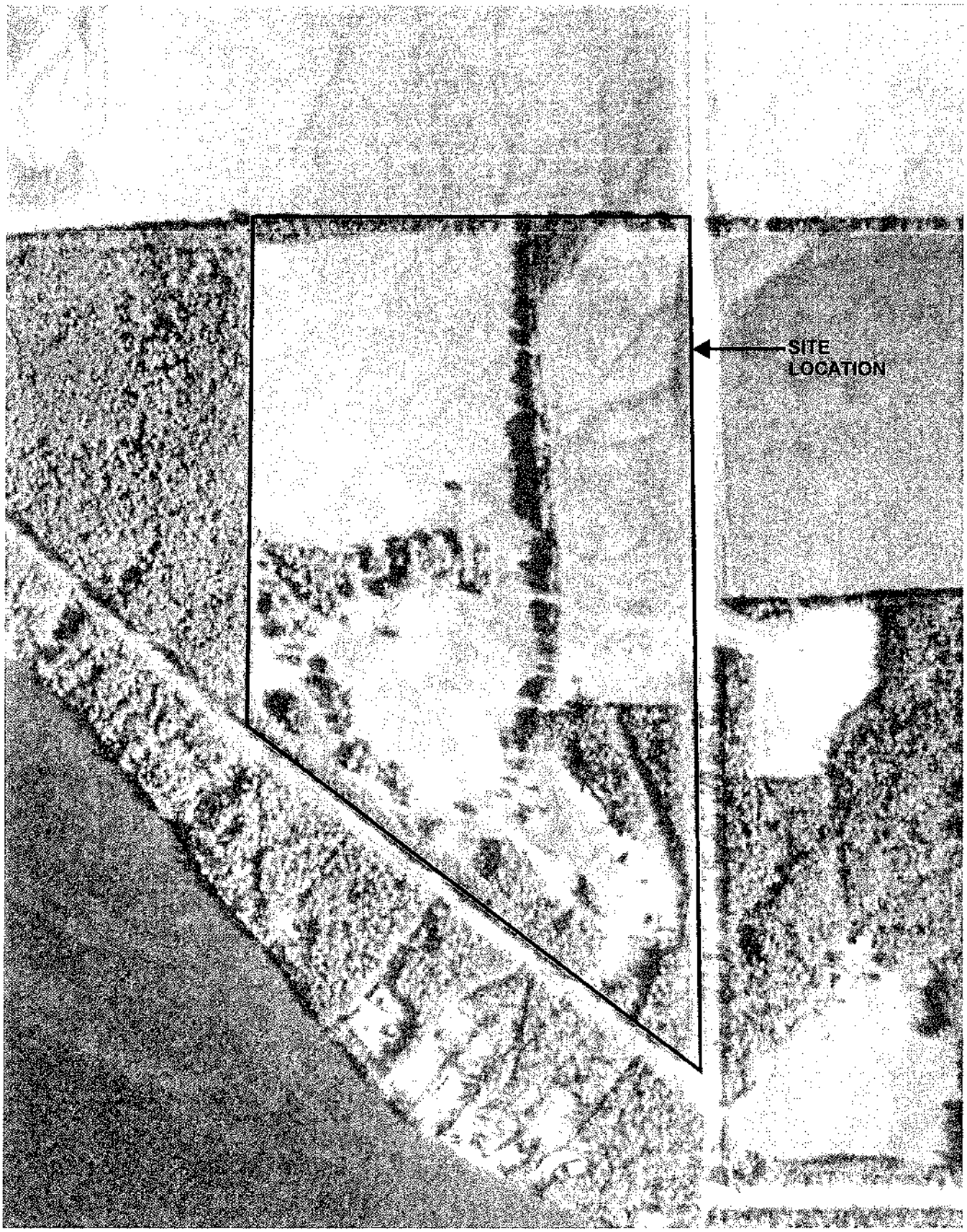


Plate 4: Air extraction systems are in place to collect sawdust from equipment used inside the shop. The sawdust is collected in a bag system, as shown above, for eventual disposal.

Plate 5: The Site as viewed from the north. Sylvan Lake is visible in the background.

Plate 6: An area showing evidence of excavation, as shown above, was noted approximately 150 metres to the northwest of the storage building. This disturbed area covered an area of approximately 1.5 hectares and was vegetated with grasses and other weedy growth. Pieces of concrete pipe and rocks were observed in this area and, according to the Site owner, were placed in this area to make an obstacle course for motorbike racing.



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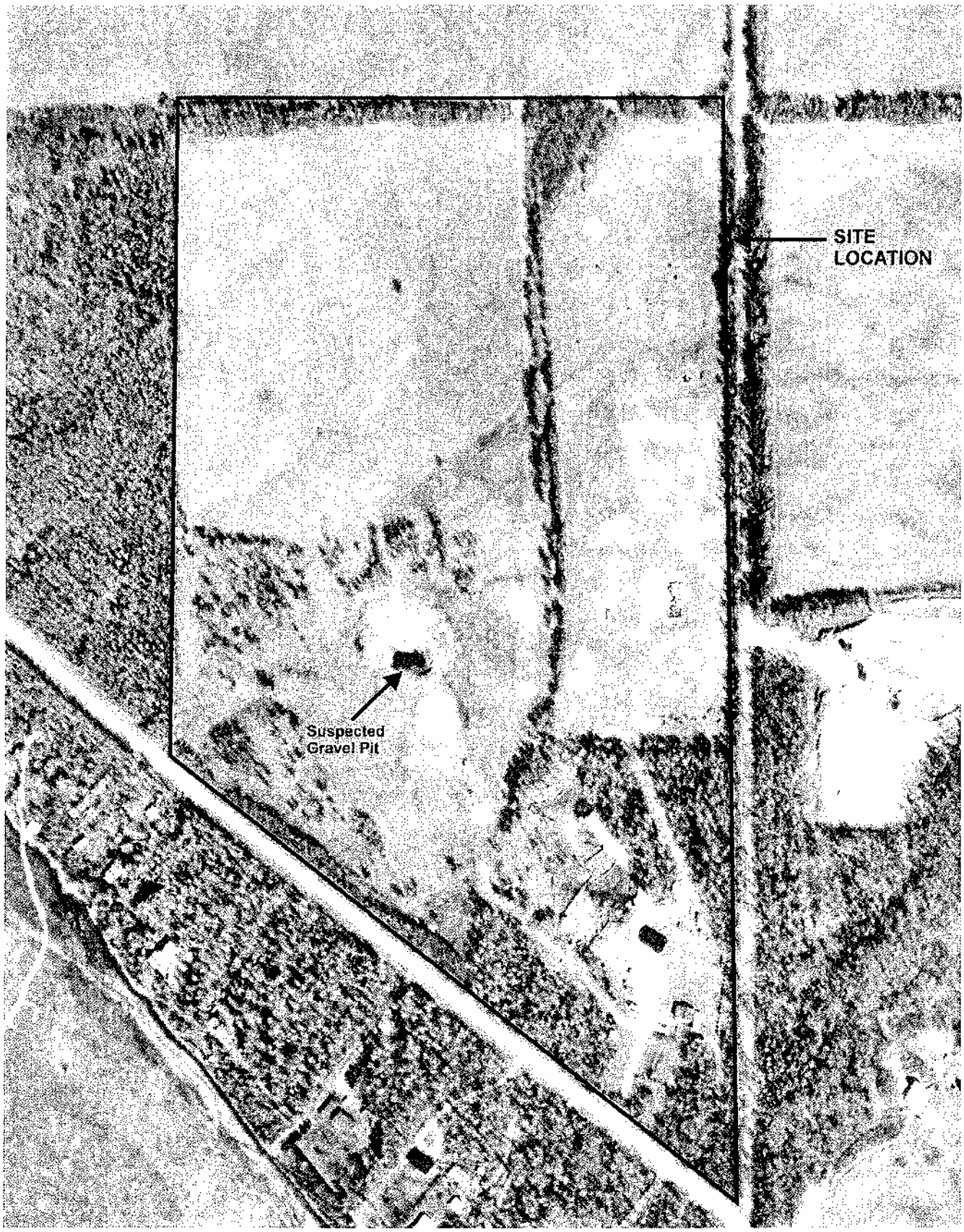
DATE 1998



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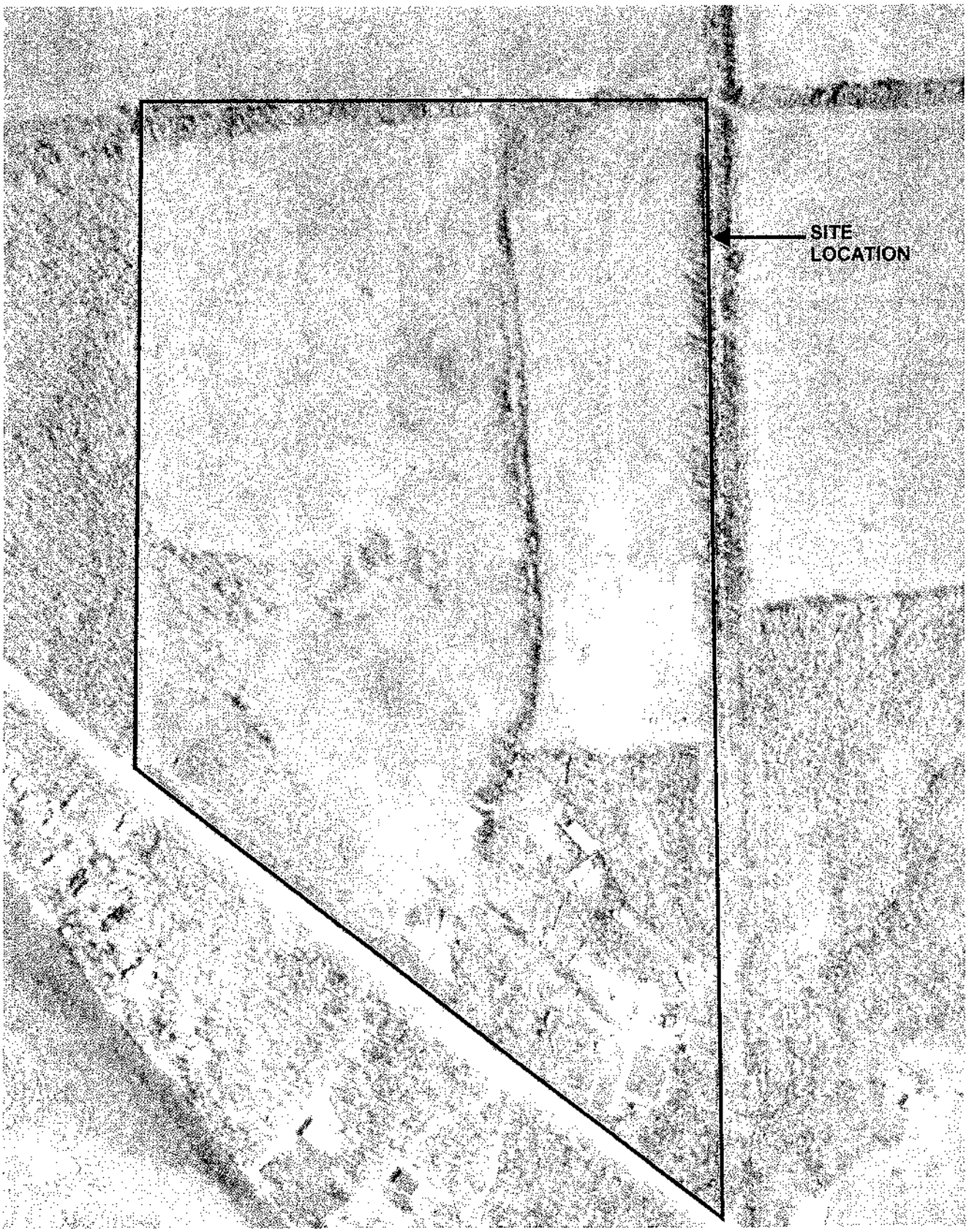
DATE 1986



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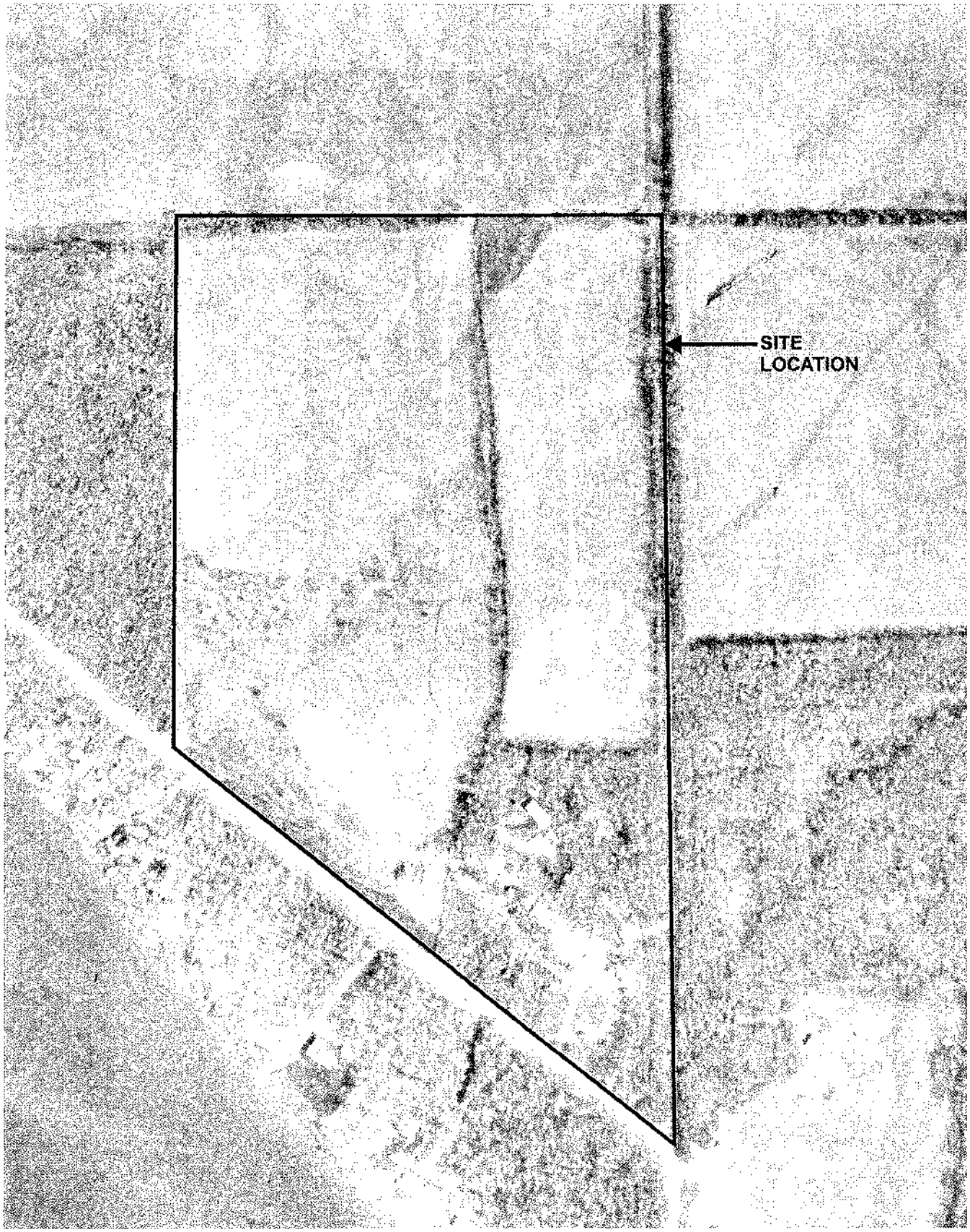
DATE 1978



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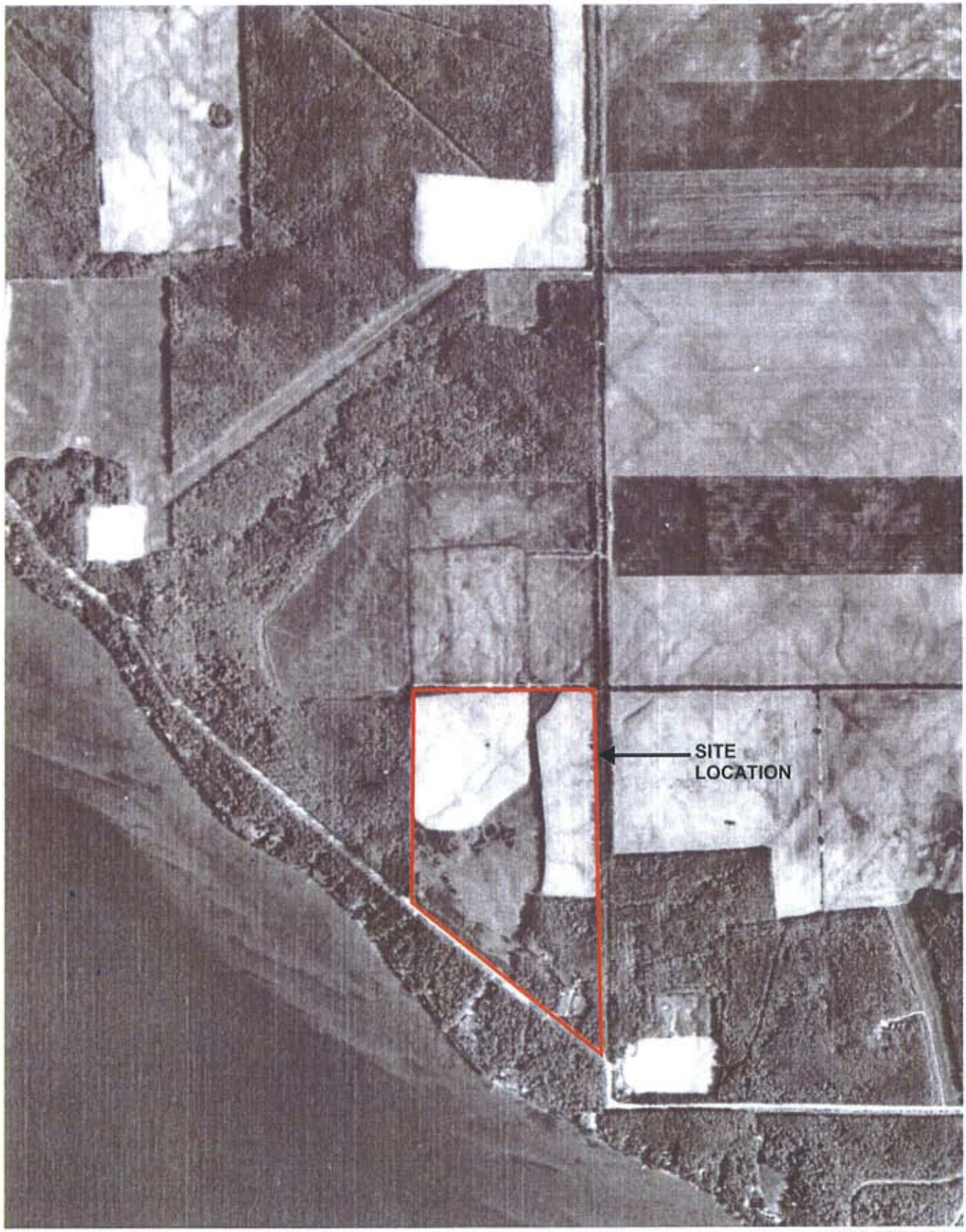
DATE 1975

N



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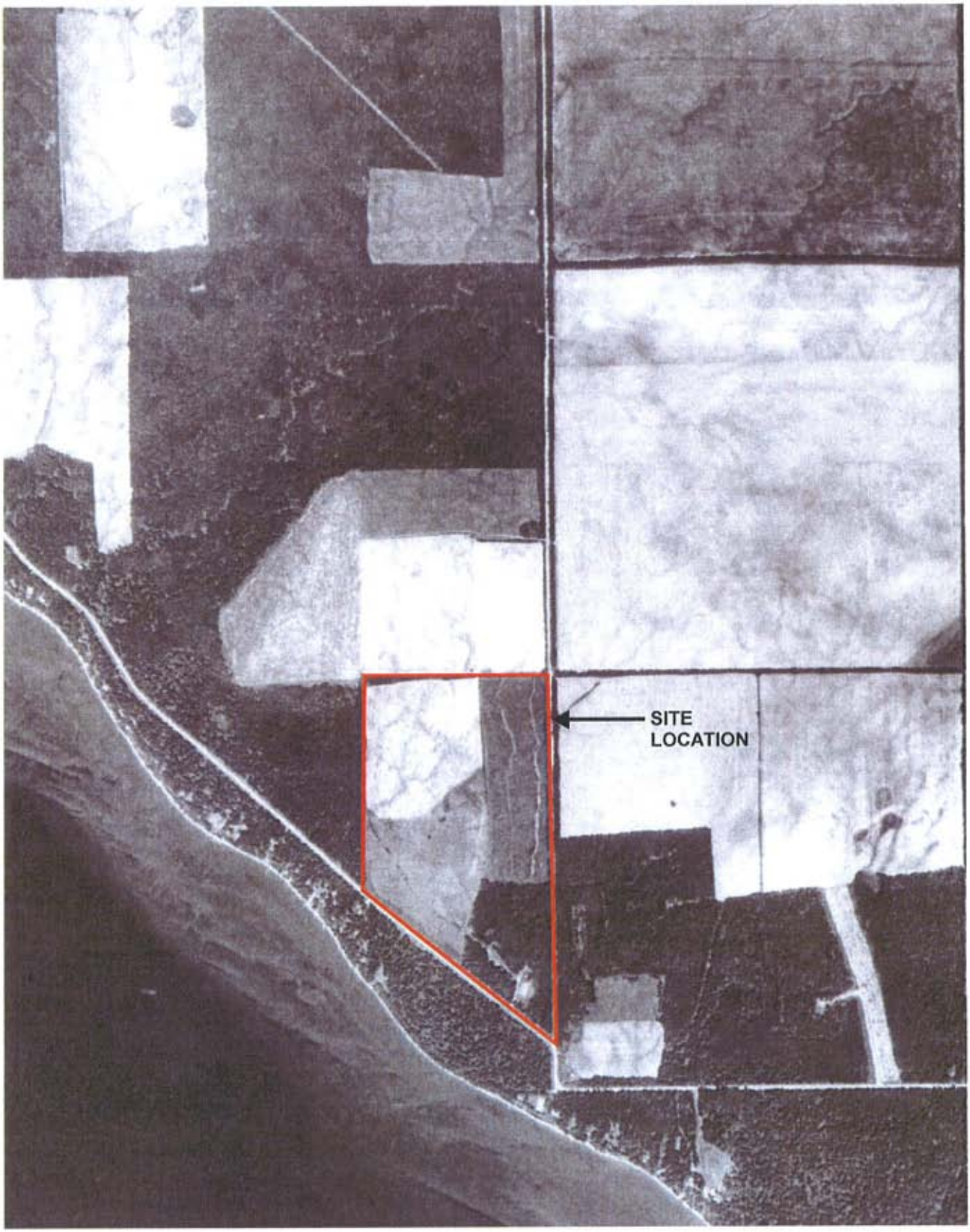
DATE 1969

N



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DATE 1962

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DATE 1950

APPENDIX C

Environmental Checklists

PHASE I ENVIRONMENTAL SITE ASSESSMENT CHECKLISTS

GENERAL INFORMATION PROJECT # EE24883

Property Name _____

Site Address 1402 Township Road 392

Telephone: (403) 887 4629 Fax: (___)

Legal Description: Plan _____ Blk _____ Lot(s) _____

Municipality/Township/County Lacombe County

Lsd. 14 Sec SE 17 Township 39 Range 01 W 5 M

Size of Property 19.63 (HA)/ACRES

Zoning: Agricultural

Any Buildings / Structures on Property? ___ no ✓ yes: how many? ~14 Describe:

#1 House
#2 Shop with carport
#3 Storage building
#4 To #14 storage sheds

Site Contact(s): Christopher Travnes

Manager: _____

Current Owner(s): Christopher and Lillian Travnes

Date current owner took title: 06/05/1993

SITE EXTERIOR PROJECT # EE21888

Uses of property

What are/were the past and current uses of the property (c for current; p for past)

___ vacant, developed land
___ vacant undeveloped land
___ industrial
___ commercial
___ recreational
c/p ✓ agricultural: ___ cropland ___✓ pasture ___✓ hayland ___ irrigated
c/p ✓ natural: ___✓ forest ___ prairie ___ other
c___ residential
___ other
___ unknown

Site Characteristics

Topography

___ flat land
___✓ hilly terrain
___ high elevation relative to adjacent lands
___ low elevation relative to adjacent lands
___ dry land
___ swampy land
___ rock outcrops
___✓ sloped: slope direction/drainage South
___ evidence of fill

Storm Drainage

___ well-drained
___✓ naturally drained
___ controlled, piped drainage
___ controlled, open drainage
___✓ poorly drained: some low-lying areas on Site where surface run-off is collected

Receiver:
___ municipal storm sewer
___ municipal sanitary sewer
___✓ general environment
___ collection pond
___ surface water body:

Locations of catch basins: On-Site
Adjacent Roads

Environmental Risks

Describe any easements on the property (roadways, pipelines) with potential environmental implications.

__✓__ none known

Are there any obvious physical signs of contamination observed on or around the property?

__✓__ none observed

___ stained soil or concrete

___ vegetation damage

___ evidence of dumping

___ ash or blackened areas

___ oily sheens or discolouration of surface water

___ other: _____

___ unnatural soil

___ foul or unusual odours

___ leachate seeps

___ trash / debris

Describe: _____

Describe any historical spills that have occurred on the property. Describe any other reported contamination of the soil on the property. (Provide copies of available documentation.)

__✓__ none known

Have underground or aboveground storage tanks (USTs/ASTs) been removed from the property? If so, describe contents, location, construction, known contamination associated with these tank, etc. (Provide copies of available documentation).

___ none removed

Are wastes incinerated on-site? ___ no ___ yes: Describe where, what, how.

Wood waste from wood working shop are burned in a barrel

Describe any compliance orders, enforcement actions, citations or suits (e.g. sewer-use infraction; remediation of groundwater or soil, etc.) (Attach documentation).

__✓__ none

ADJACENT PROPERTIES PROJECT # EE24888

North

Land Use

___ vacant, developed land
___ vacant, undeveloped land
✓ agricultural: ✓ cropland ___ pasture ___ hayland
___ commercial
___ industrial
___ residential
___ natural: ___ forest ___ prairie ___ other: _____
___ other: _____
___ unknown

Roads none
Topography sloping land
Surface water drainage direction south
Soil (disturbance/discolouration) none

Do the adjacent properties have any activities, chemical storage areas, above or underground storage tanks, waste dumps, or other conditions that could affect the subject property?

___ yes (give details) ✓ no ___ unknown

Distance (metres) to nearest (within 500 m):

>500 service or bulk station
>500 landfill or dump
>500 liquid storage terminal
_____ other: _____

>500 chemical plant
>500 heavy manufacturing
>500 railway

Names of neighbouring businesses:

East

Land Use

___ vacant, developed land
✓ vacant undeveloped land
✓ agricultural: ✓ cropland ✓ pasture ✓ hayland
___ commercial
___ industrial
✓ residential
✓ natural: ✓ forest ___ prairie ___ other: _____
___ other: _____
___ unknown

Roads Range Road 1-4
Topography Sloping land
Surface water drainage direction South
Soil (disturbance/discolouration) none

Do the adjacent properties have any activities, chemical storage areas, above or underground storage tanks, waste dumps, or other conditions that could affect the subject property?

___ yes (give details) ✓ no ___ unknown

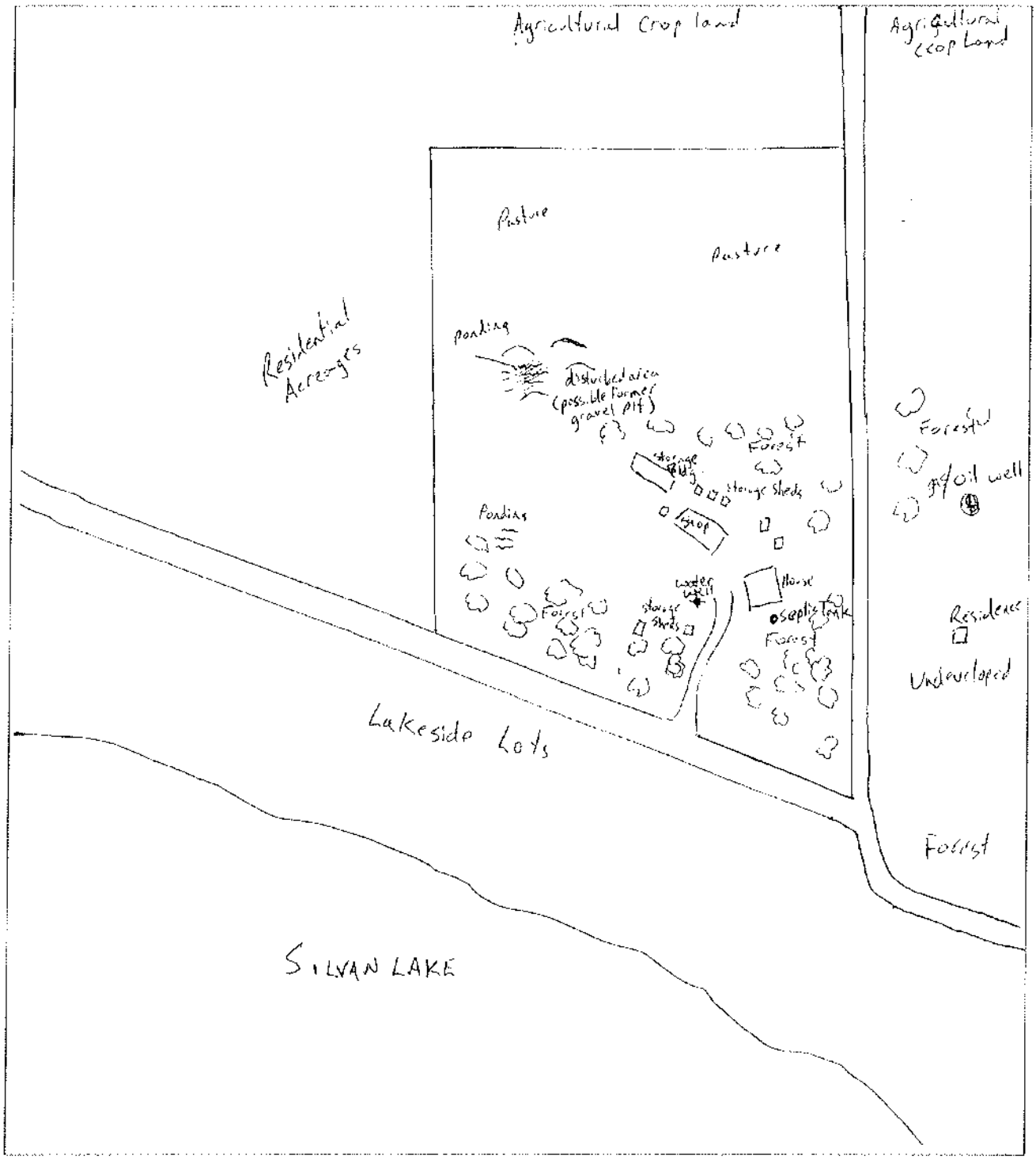
A drilled and cased oil well is located ~100 metres east of the site. There are no production records for this well.

Distance (metres) to nearest (within 500 m):

>500	service or bulk station	>500	chemical plant
>500	landfill or dump	>500	heavy manufacturing
>500	liquid storage terminal	>500	railway
~100	other: oil/gas well (drilled + cased)		

Names of neighbouring businesses:

Field sketch outlining site and surrounding properties



	Building #1	Building #2	Building #3	Building #4
Sumps				
Water Source				
None		✓	✓	✓
Municipal	✓			
Wells				
Cistern/reservoir				

Have major renovations been undertaken on the buildings? ✓ no ___ yes:
Date of renovations:
describe:

Are "As Built" plans available? ___ yes ✓ no

Condition of buildings: ___ excellent ✓ good House and shop and assorted sheds
✓ fair: describe problems: Storage building has some exterior damage
___ poor: describe problems:

List portions of the Site not seen during the inspection:

Environmental Issues Master Inventory:

	Yes	No
1. Are there any air emissions other than those from heating appliances?		✓
2. Is asbestos suspected to be present in the building?	✓	
3. Are there any chemical-using activities on the Site?		✓
4. Are chemicals; oils or fuels; or hazardous or bio-hazardous wastes stored:		
4a. in containers or drums?		✓
4b. in aboveground storage tanks?		✓
4c. in underground storage tanks?		✓
5. Are there air conditioners, large freezers or chillers, or Halon fire extinguishers on the Site which are known or suspected to contain ozone-depleting substances?		✓
6. Are there transformers, capacitors, or fluorescent light ballasts known or suspected to contain PCB's?	✓	
7. Are solid wastes, other than domestic trash, generated?		✓
8. Are hazardous wastes generated?		✓
9. Does wastewater discharge locally (eg. septic tank, local treatment system)?	✓	
Are liquid waste streams, other than domestic sewage, generated?		✓
10. Has there been reported or was there observed poor indoor human environment?		✓

Complete the supplemental checklist with the corresponding number for all "YES" answers above. Each item on the supplemental checklists must be rated as satisfactory (SAT), unsatisfactory (U/S) or not applicable (N/A).

Completed by: _____

Date: March 29 2004

Checklist #6: Polychlorinated Biphenyls (PCBs) PROJECT # EE24884

In Canada, PCBs were prohibited from being used in products, equipment, machinery, electrical transformers and capacitors which were manufactured or imported into the country after July 1, 1980. However, older equipment in use after this date may still contain PCBs if the equipment's fluid has not been changed, or if there was sufficient inventory of such equipment. Until about 1980, the insulating fluid in fluorescent lamp ballasts often contained PCBs.

List the quantity and location where the suspected PCB's are used:

Equipment	Location	Suspected	Confirmed
Transformers (owned by power provider)			
Transformers (owned by property owner)			
Capacitors			
Lamp Ballasts	Shop	✓	
Other			

		SAT	U/S	N/A
1	PCB-containing equipment has been clearly labelled with warning labels.			✓
2	Measures have been taken to prevent possible leakage from escaping to the environment (spill containment, weather protection, etc.)			✓
3	PCBs and PCB equipment have been disposed of as hazardous waste.		✓	
4	Records are available describing past disposals.			✓
5	There is a program in place to eliminate the use of PCBs.			✓
6	Trained personnel and proper equipment are available to deal with any emergencies related to the PCBs.			✓
7	A contingency plan is available to address any emergencies.			✓
8	There is a complete inventory of PCBs used or stored.			✓
9	PCB wastes are stored such that:			✓
	- they are protected from rain and snow			
	- they are within curbing which will contain at least twice the volume stored			
	- no liquid can escape to drains or openings			
	- floors and curbing are impervious and seamless			
	- the area is above the 100 year flood level			
	- the area is posted as containing PCB wastes			
	- the area can be locked and access can be controlled			
	- the area contains only PCB-contaminated materials			
	- storage drums are not greater than 205 litres capacity			
	- sorbents and solvents are readily available			
	- storage buildings are equipped with exhaust systems			
	- fire can be automatically detected or extinguished			

10 Notes / Comments: _____

Checklist #10: Indoor Human Environment **PROJECT #** EE24888

	SAT	U/S	N/A
1 Evaluate the following indoor environment criteria:			
- freshness of air	✓		
- odours	✓		
- air movement	✓		
- temperature	✓		
- humidity	✓		
- visible presence of molds, fungi, mildew	✓		
- lighting	✓		
- noise	✓		
- cleanliness	✓		
- tidiness	✓		
- level of upkeep	✓		

2 Describe reported health or wellness effects and suspected source(s):
None

3 List any recommendations for further study or for remedial action:
None

4 Other comments: House interior not viewed

APPENDIX D

Limitations

STANDARD LIMITATIONS

1. The work performed in the preparation of this report and the conclusions presented are subject to the following:

   (a) The Standard Terms and Conditions which form a part of our Professional Services Contract or which have been acknowledged;
   (b) The Scope of Services;
   (c) Time and Budgetary limitations as described in our Contract; and
   (d) The Limitations stated herein.

2. No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.

3. The conclusions presented in this report were based, in part, on visual observations of the site and attendant structures. Our conclusions cannot and are not extended to include those portions of the site or structures, which were not reasonably available, in AMEC's opinion, for direct observation.

4. The environmental conditions at the site were assessed, within the limitations set out above, having due regard for applicable environmental regulations as of the date of the inspection. A review of compliance by past owners or occupants of the site with any applicable local, provincial or federal by-laws, orders-in-council, legislative enactments and regulations was not performed.

5. The site history research included obtaining information from third parties and employees or agents of the owner. No attempt has been made to verify the accuracy of any information provided, unless specifically noted in our report.

6. Where testing was performed, it was carried out in accordance with the terms of our contract providing for testing. Other substances, or different quantities of substances testing for, may be present on site and may be revealed by different or other testing not provided for in our contract.

7. Because of the limitations referred to above, different environmental conditions from those stated in our report may exist. Should such different conditions be encountered, AMEC must be notified in order that it may determine if modifications to the conclusions in the report are necessary.

8. The utilization of AMEC's services during the implementation of any remedial measures will allow AMEC to observe compliance with the conclusions and recommendations contained in the report. AMEC's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.

9. This report is for the sole use of the party to whom it is addressed unless expressly stated otherwise in the report or contract. Any use which any third party makes of the report, in whole or the part, or any reliance thereon or decisions made based on any information or conclusions in the report, is the sole responsibility of such third party. AMEC accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on the report or anything set our therein.

10. This report is not to be given over to any third party for any purpose whatsoever without the written permission of AMEC.

11. Provided that the report is still reliable, and less than 12 months old, AMEC will issue a third-party reliance letter to parties that the client identifies in writing, upon payment of the then current fee for such letters. All third parties relying on AMEC's report, by such reliance agree to be bound by our proposal and AMEC's standard reliance letter. AMEC's standard reliance letter indicates that in no event shall AMEC be liable for any damages, howsoever arising, relating to third-party reliance on AMEC's report. No reliance by any party is permitted without such agreement.