

## HMA Land System

### ☑ Client

HMA Land is the Canada's very old company dealing in the various lands Project. HMA Land Services Ltd. is a trusted, professional Land Management and Consulting company with a solid reputation for routinely surpassing client expectations. Theirs attention to detail and leadership is evident by their record management process, commitment to safety and by the positive industry association recognition they have gained.

### ☑ Situation

HMA was running system with forms designed in the MS-Access and included all reports. Company is situated in many geographic locations. But all things were need to do in a central system. Each office could not able to manipulate or access data. They can send by email or inform on the phones. It was very difficult to maintain all data smoothly.

Due to all above situation we have decided to build application that fulfill all requirements of HMA and give ability to access system wisely from everywhere but at the same time user experience should be compromised. In a consequence we choose to develop windows application with the use of Web Service.

### ☑ Solution

After the couple of meetings with HMA managers we get draft of our system. As HMA are working with the large system and they have already running system including many live data. It's not possible to build whole system and replace the old one.

So we have decided to develop system by agile method. Develop system with iteration by referencing old system, move to the new system once that module is complete. Merge new iteration with old iteration.

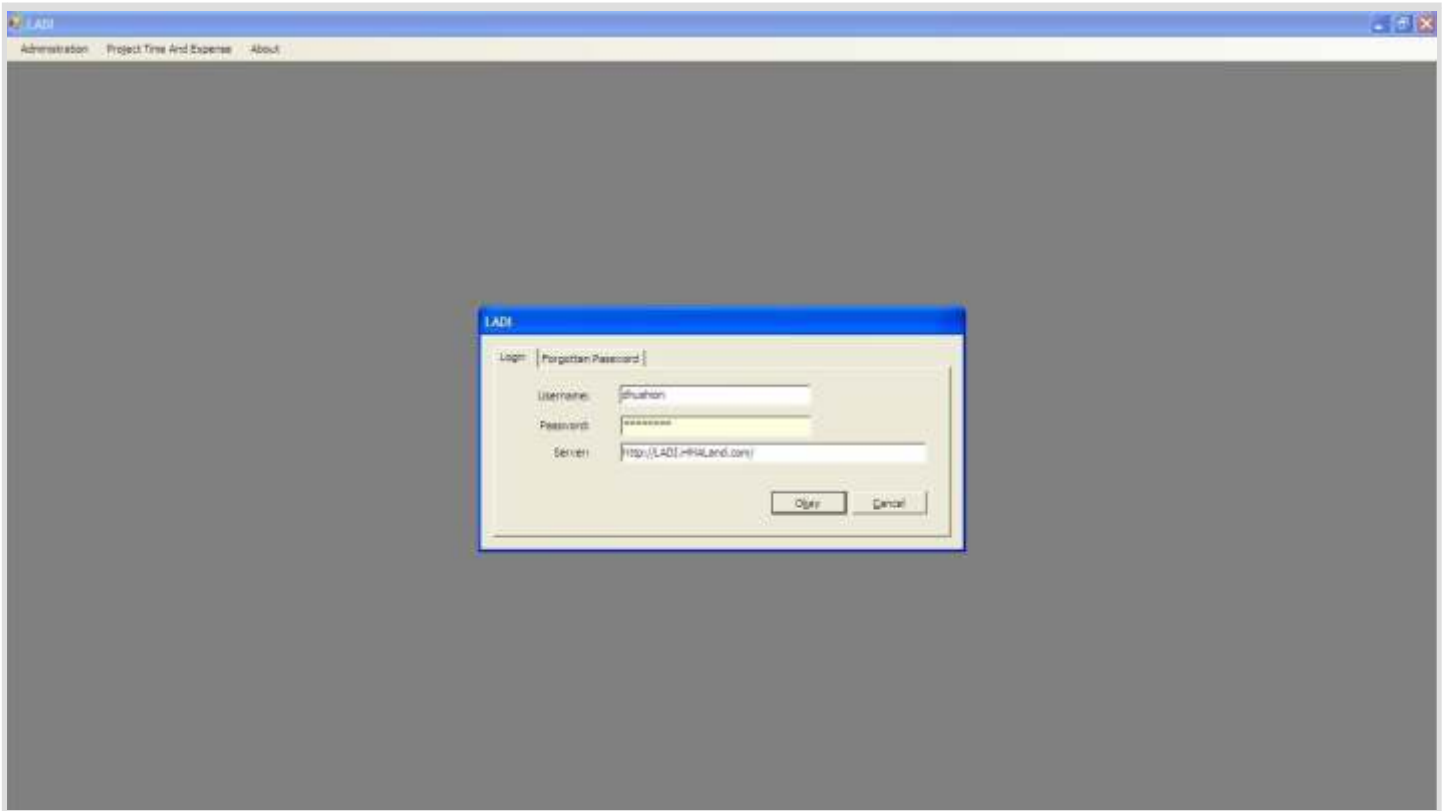
For Database we have used SQL Server 2005, Development with Visual studio 2008 with base of .net Framework 3.5. Web service is used for the central database and rich user experience of windows forms.

Our main technology to develop system was Strongly Typed Dataset architecture, Due to this approach we are able to complete iteration very fast as well as development and validations are very performance.

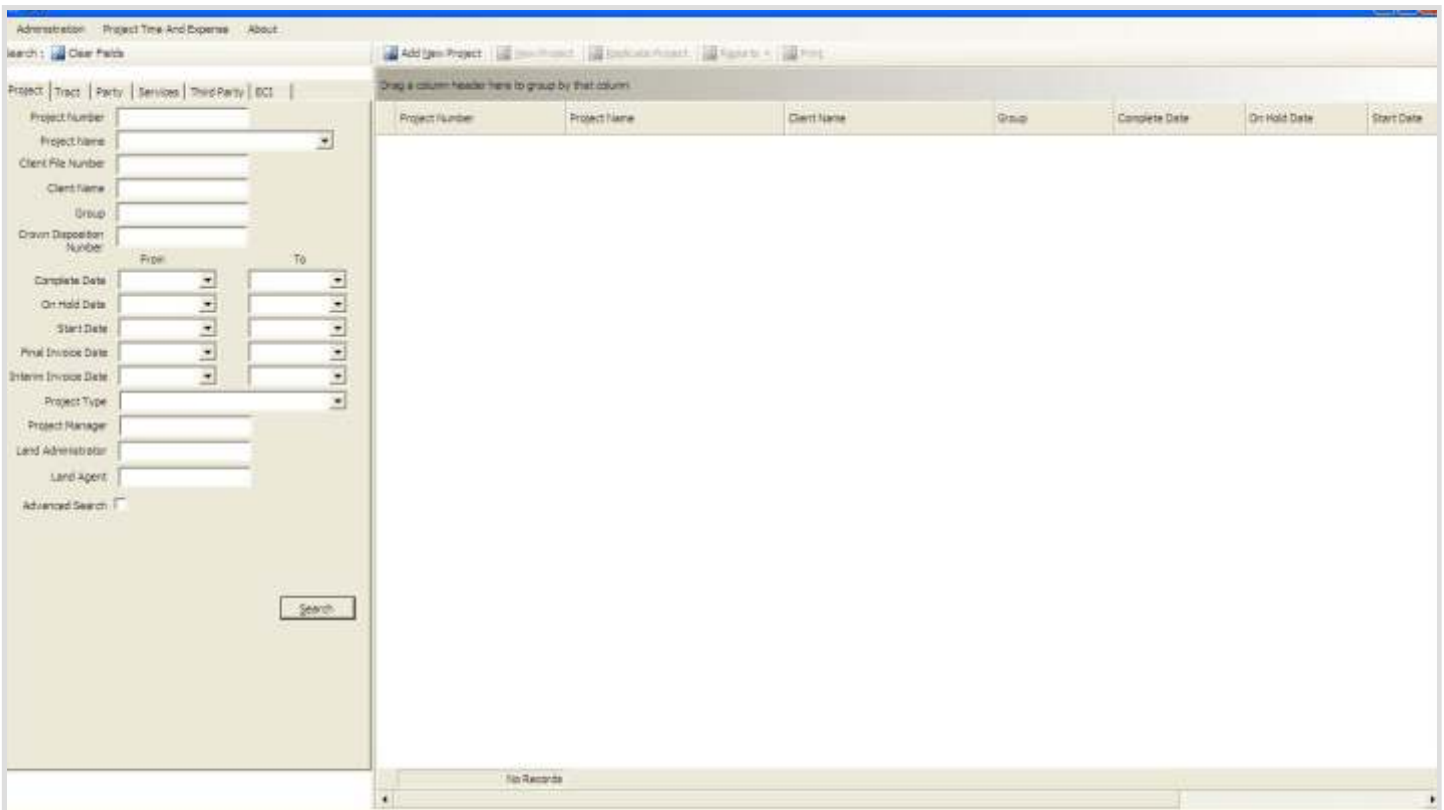
On the Forms we used two way data bindings for textbox and other controls. Data is directly updated to the underlying data source. This dataset or data table passed to server with web service method. It will be validated and if there will be no error database operations occurred.

Below are some of the screen shots of HMA System.

☑ Login screen



☑ Main Screen After successful login



## ☑ Project Search

The screenshot shows the AEGIS Project Search interface. On the left is a search criteria panel with fields for Project Number, Project Name, Client File Number, Client Name, Group, Crown Disposition Number, Complete Date, On Hold Date, Start Date, Final Invoice Date, Interim Invoice Date, Project Type, Project Manager, Land Administrator, and Land Agent. A 'Search' button is at the bottom of this panel. The main area displays a table with 14 records found. The table has columns for Project Number, Project Name, Client Name, Group, Complete Date, On Hold Date, and Start Date. The first record is highlighted in blue.

Project Number	Project Name	Client Name	Group	Complete Date	On Hold Date	Start Date
01-0002	ALLIANCE ARBITRATION SETTLEMENT O...	ALLIANCE PIPELINE LTD - ALLIANCE PE...				25/01/2003
01-0002	ALLIANCE PIPELINE LTD - ARBITRATION	ALLIANCE PIPELINE LTD - ALLIANCE PE...			20/04/2009	25/03/2004
01-0002	WHEBLEY JUNCTION SITE - MEADOWWIL...	HMA LAND SERVICES LTD - HMA LAND ...				20/10/2008
01-0003	HMA BUSINESS DEVELOPMENT(OVERHEAD)	HMA LAND SERVICES LTD - HMA LAND ...				30/12/2000
01-0005	ALTERNATE CROSSFIELD ENERGY STATION	HUTTERIGH BRETHERN CHURCH OF SC...		25/03/2004		04/10/2002
01-0006	CROSSFIELD ENERGY STATION	HUNT POWER COMPANY OF CANADA - ...		25/03/2004		01/02/2002
01-0006	PREFERRED CROSSFIELD ENERGY STATION	HUNT POWER COMPANY OF CANADA - ...		25/03/2004		25/10/2002
01-0500	OUTSTANDING UNBILLABLE	HMA LAND SERVICES LTD - HMA LAND ...		02/04/2009		02/04/2009
01-1900	HMA VACATION DAYS	HMA LAND SERVICES LTD - HMA LAND ...				30/11/2000
01-2000	HMA GENERAL HOLIDAYS (STAT)	HMA LAND SERVICES LTD - HMA LAND ...				30/11/2000
01-3000	HMA FLEX DAYS	HMA LAND SERVICES LTD - HMA LAND ...				30/11/2000
01-3100	HMA PERSONAL DAYS	HMA LAND SERVICES LTD - HMA LAND ...		03/02/2009		01/01/2008
01-4000	HMA DAYS WITHOUT PAY	HMA LAND SERVICES LTD - HMA LAND ...		28/07/2008		01/01/2004
01-9000	ABC OIL AND GAS	HMA LAND SERVICES LTD - HMA LAND ...				27/10/2005

As we know software is used to manipulate data after manipulation we need some formatted data. This data can be shown to different formats like document, pdf ,excel or anything. To achieve this we have used Crystal report in the HMA System.

### Working Flow:

Initially when we run application

- We have different search
- Search records by filling search criteria
- You will get search result in(One or many records depends on criteria)
- From the reports menu select any type of report
- Supply parameter to reports(Report name or any other thing required for report)
- Report will be generated
- You can export this to any format(Excel, pdf ,document)

### ☑ Description:

When we get result record by searching. We can choose to run any reports from the available menu. Once we click on it, we get a dialog box with asking parameter for the report. After providing parameter it will insert all displayed records id to the criteria for the report.

Once criteria table is generated, it will be passed to the server. Server will generate XML string from the criteria table and that will be sent to the SQL server stored procedure.

We have built so many reports with HMA solutions. Below are the some of the reports so far we have built on.

## ☑ Project Status Report

Project Status shows the project status information i.e. Project Name, Project Manager, complete date if it's completed etc.

Project #	Client File #	Project Name	Project Start Date	Project Manager	Lead Administrator	Lead Agent	Project Complete Date
01-0003		HMA BUSINESS DEVELOPMENT/OVERHEAD	Nov-10-2000	GKNEBERG	DHARRISON		
01-1000		HMA VACATION DAYS	Nov-10-2000	GKNEBERG	DHARRISON		
01-2000		HMA GENERAL HOLIDAYS (STAT)	Nov-10-2000	GKNEBERG	DHARRISON		
01-3000		HMA FLEX DAYS	Nov-10-2000	GKNEBERG	DHARRISON		
01-0002		ALLIANCE PIPELINE LTD. ARBITRATION	Mar-25-2004	MMCCALL	JPOITNER		
01-0002		ALLIANCE ARBITRATION SETTLEMENT OFFER PROJECT	Feb-15-2006	MMCCALL	KZOMBOR		
01-8000		AEC OIL AND GAS	Oct-27-2005	DHUGGARD	DHUGGARD		
01-0002		WEMBLEY JUNCTION SITE- MEADOWVILLE HOLDINGS	Oct-25-2008	EWARNER	KZOMBOR	CSNELL	
01-0006		CROSSFIELD ENERGY STATION	Feb-01-2002	DHUGGARD	EMOFFAT		Mar-25-2004
01-0006		ALTERNATE CROSSFIELD ENERGY STATION	Oct-04-2002	DHUGGARD	CHANDEN		Mar-25-2004
01-0006		PREFERRED CROSSFIELD ENERGY STATION	Oct-25-2002	EWARNER	EMOFFAT		Mar-25-2004
01-4000		HMA DAYS WITHOUT PAY	Jan-01-2004	GKNEBERG	DHARRISON		Jul-25-2008
01-3100		HMA PERSONAL DAYS	Jan-01-2008	GKNEBERG	DHARRISON		Feb-03-2008
01-0500		OUTSTANDING UNBILLABLE	Apr-02-2009	GKNEBERG	GKNEBERG		Apr-02-2009

## ☑ Tract Technical Pipe Line Report

Report contains the data of Tract and its all value report will generated by its project associated to the Tract.

Tract Number	ROW Area	ROW Area Price (\$)	ROW GIT Amount (\$)	ROW Value (\$)	TWS Area	TWS Area Price (\$)	TWS GIT Amount (\$)	TWS Value (\$)	Entry Fee (\$)	Min Comp. (\$)	Acquisition Total (\$)	Guarantee Payable (\$)	Bonus (\$)	License	Total License Payable (\$)	Total Compensation (\$)	Overage Payable Amount (\$)
AB-ELMW-0033.1	1.18	\$960.00	\$0.00	\$1,121.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,121.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,121.00	\$0.00
AB-ELMW-0004	3.01	\$960.00	\$0.00	\$2,889.60	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,889.60	\$0.00	\$0.00	\$0.00	\$0.00	\$2,889.60	\$0.00
AB-ELMW-0005	1.46	\$960.00	\$0.00	\$1,377.50	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,377.50	\$0.00	\$0.00	\$0.00	\$0.00	\$1,377.50	\$0.00
AB-FJCH-0014	3.81	\$960.00	\$0.00	\$3,429.60	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,429.60	\$0.00	\$0.00	\$0.00	\$0.00	\$3,429.60	\$0.00
AB-HYTH-0011	3.34	\$960.00	\$0.00	\$3,173.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,173.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,173.00	\$0.00
AB-HYTH-0012	3.98	\$960.00	\$0.00	\$3,401.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,401.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,401.00	\$0.00
AB-HYTH-0013	3.58	\$960.00	\$0.00	\$3,401.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,401.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,401.00	\$0.00
AB-HYTH-0039	2.20	\$960.00	\$0.00	\$2,090.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,090.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,090.00	\$0.00
AB-HYTH-0047	3.98	\$960.00	\$0.00	\$3,401.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,401.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,401.00	\$0.00
AB-HYTH-0048	3.58	\$960.00	\$0.00	\$3,401.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,401.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,401.00	\$0.00
AB-HYTH-0083	0.14	\$960.00	\$0.00	\$133.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$133.00	\$0.00	\$0.00	\$0.00	\$0.00	\$133.00	\$0.00
AB-MANH-0177	3.81	\$960.00	\$0.00	\$3,819.60	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,819.60	\$0.00	\$0.00	\$0.00	\$0.00	\$3,819.60	\$0.00
AB-MANH-0946	3.80	\$0.00	\$0.00	\$0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AB-SPRF-0022	4.23	\$960.00	\$0.00	\$4,018.80	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,018.80	\$0.00	\$0.00	\$0.00	\$0.00	\$4,018.80	\$0.00
AB-SPRF-0023	1.72	\$960.00	\$0.00	\$1,634.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,634.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,634.00	\$0.00
AB-TEPE-0010	3.99	\$960.00	\$0.00	\$3,696.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,696.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,696.00	\$0.00
AB-TEPE-0010.1	0.00	\$0.00	\$0.00	\$0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AB-TEPE-0014	0.08	\$960.00	\$0.00	\$76.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$76.00	\$0.00	\$0.00	\$0.00	\$0.00	\$76.00	\$0.00
AB-TEPE-0016.1	3.68	\$960.00	\$0.00	\$3,401.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,401.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,401.00	\$0.00
AB-TEPE-0017.1	3.14	\$960.00	\$0.00	\$2,983.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,983.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,983.00	\$0.00
AB-TEPE-0044.1	4.18	\$960.00	\$0.00	\$3,971.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,971.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,971.00	\$0.00
AB-TEPE-0046	0.20	\$960.00	\$0.00	\$190.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$190.00	\$0.00	\$0.00	\$0.00	\$0.00	\$190.00	\$0.00
BC-AITK-0001	0.00	\$0.00	\$0.00	\$0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BC-AITK-0002	0.00	\$0.00	\$0.00	\$0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BC-AITK-0008	0.00	\$0.00	\$0.00	\$0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BC-AITK-0009	0.00	\$0.00	\$0.00	\$0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BC-FJCH-0101	1.75	\$960.00	\$0.00	\$1,662.80	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,662.80	\$0.00	\$0.00	\$0.00	\$0.00	\$1,662.80	\$0.00
BC-FJCH-0102	1.81	\$960.00	\$0.00	\$1,629.60	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,629.60	\$0.00	\$0.00	\$0.00	\$0.00	\$1,629.60	\$0.00

## ☑ Tract Party Line List Report

Report contains the data of Tract Party by its Tract Type and also it contains the data of each Tract Party along with the Party address and contact information.

Tract Type	Party Legal Name	Party Type - Description Number	Tract Other Legal Description	Tract Number
DR	340154 ALBERTA LTD. BOX 1027 GRANDEPRAIRIE, ALBERTA, T5V 4B6	UNDIVIDED 1/2 INTEREST	NW22-074-02W8J	AB-HYTH-000
DR	ADA GWENODOLYN RICHARDS R.R. 1 SEXSMITH, ALBERTA, T5H 3C0	JOINT TENANT	NE27-073-06W8J	AB-TEPE-000
DR	ADA GWENODOLYN RICHARDS R.R. 1 SEXSMITH, ALBERTA, T5H 3C0	OWNER	NE27-073-06W8J	AB-TEPE-0010.1
DR	ALBERT JOSEPH SLATER BOX 365 SEXSMITH, ALBERTA, T5H 3C0	OWNER	NE32-073-06W8J	AB-TEPE-0044.1
DR	BRIAN ARTHUR MACE BOX 122 VALHALLA CENTRE, ALBERTA, T5H 3M0	JOINT TENANT	NE29-073-06W8J	AB-HYTH-002
DR	BRYAN FLOYD ELLINGSON BOX 33 BONAVILLE, ALBERTA, T5H 0K0	JOINT TENANT	SE32-079-12W8M	AB-FJON-004
DR	CATHERINE JONES BOX 666 HYTHE, ALBERTA, T5H 2C0	JOINT TENANT	NW06-074-11W8J	AB-HYTH-006
DR	CHARLES ADAM EVASKEVICH BOX 38 HYTHE, ALBERTA	JOINT TENANT	NW02-074-11W8M	AB-HYTH-008
DR	CORNIE SCHMIDT GENERAL DELIVERY BEAVER LODGE, ALBERTA, T5H 5C0	JOINT TENANT	NW23-070-11W8M SE23-070-11W8M NW23-070-11W8M	AB-ELMV-0033.1 AB-ELMV-006 AB-ELMV-004
DR	DONALD M'LELLAND R.R. 1 SEXSMITH, ALBERTA, T5H 2C0	OWNER	NE25-073-06W8J	AB-TEPE-004
DR	ELAINE ANNETTE GLADMAN BOX 11 BRUORHEM, ALBERTA, T5N 0S0	JOINT TENANT	NE08-066-20W8J	AB-MAVH-006
DR	FERN JONES BOX 159 HYTHE, ALBERTA, T5H 2C0	JOINT TENANT	NE09-074-11W8M NW06-074-11W8M	AB-HYTH-0047 AB-HYTH-0048
DR	FRANKLIN L MOLLER SEXSMITH, ALBERTA	OWNER	NW33-073-06W8J	AB-TEPE-006

## ☑ Service By Client Report

Report contains the data of service with grouped by the Service Type and also it shows the total count and total amount by service type.

Client Name	Order Number	Count	Service Amount	Billing Date	Total
ALLIANCE PIPELINE LTD. - ALLIANCE PIPELINE LTD. Project Number: 01-0002	Service Type: 3 HOURS				
	96066	1	8.00	Feb-07-2006	8.00
	36103	1	8.00	Mar-29-2006	8.00
	43028	1	8.00	Apr-06-2006	8.00
	81494	1	8.00	Apr-15-2006	8.00
	77424	1	8.00	Apr-27-2006	8.00
	77421	1	8.00	Apr-27-2006	8.00
	14246	1	8.00	Mar-03-2006	8.00
	21847	1	8.00	Mar-13-2006	8.00
	44427	1	8.00	Apr-04-2006	8.00
	825	1	10.00	Mar-14-2006	10.00
	708	1	10.00	Mar-17-2006	10.00
	752 103008	1	10.00	Oct-30-2006	10.00
	704 112008	1	10.00	Nov-20-2006	10.00
<b>TOTALS</b>	<b>13</b>	<b>112.00</b>		<b>112.00</b>	
Service Type: AB LAND TITLE					
3363048	1	5.00	Aug-17-2006	5.00	
4380000	16	80.00	Jan-13-2006	80.00	
4401880	2	10.00	Jan-17-2006	10.00	
4402015	1	5.00	Jan-17-2006	5.00	
12963478	1	5.00	Oct-20-2006	5.00	
<b>TOTALS</b>	<b>21</b>	<b>105.00</b>		<b>112.25</b>	
Service Type: BOARD DECISION COPY					
870106	1	10.00	Mar-31-2006	10.00	
980046	1	10.00	Mar-31-2006	10.00	
<b>TOTALS</b>	<b>2</b>	<b>20.00</b>		<b>21.40</b>	
Service Type: BOARD ORDER COPY					
025198	1	4.00	Mar-31-2006	4.00	
040198	1	4.00	Mar-31-2006	4.00	
030699	1	4.00	Mar-31-2006	4.00	
181697	1	4.00	Mar-31-2006	4.00	
181997	1	4.00	Mar-31-2006	4.00	
<b>TOTALS</b>	<b>5</b>	<b>20.00</b>		<b>21.40</b>	

## ☑ Third Party Consent Request Report

Report is like a letters, it generates the Letters along with the data inserted for the record and also in the next page it contains the sub data if exist anything.



January 28, 2010

**ALAN BRUCE CLARKE** **VIA PHONE**  
**BOX 543**  
**BUCK LAKE, ALBERTA, T0C 0T0**

*Attention :*

*Re:* HMA BUSINESS DEVELOPMENT/OVERHEAD  
ACCESS ROAD CROSSING RAILWAY

*HMA File:* 01-0003

*Client File Nbr:*

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Please accept this letter as application on behalf of HMA LAND SERVICES LTD to SADFASDF at the location(s) shown on the attached survey plan(s).

**If you have no objections to this request, please forward your agreement to the undersigned for further handling.**

For your reference, HMA LAND SERVICES LTD's address for service is SUITE 100, 7710 - 5 TH STREET, CALGARY ALBERTA CANADA T2H 2L9

Should your have any questions or concerns regarding the foregoing, do not hesitate to contact the writer at (403) 692-0850.

Yours truly,  
**HMA Land Services Ltd.**

BILL GIESE  
Land Administrator  
bgiese@hmaland.com  
/encl.




**Schedule A**

<i>HMA Tract Number</i>	<i>Tract Short Legal</i>	<i>LCI</i>
	JOHREERE	32

## Daily Time Sheet Report

Report shows the project time spent in the particular project at a date along with the project name. It also shows the total project time for each date.

 <b>Daily Timesheet</b>				
Project Date	HMA Role	Project Time	Project Number	Project Name
Nov-03-2009	DANIEL WUSHON			
	PROJECT DIRECTOR	45.00	02-0000	WHITECOURT METER STATION
	PROJECT MANAGER	23.00	02-0000	WHITECOURT METER STATION
		<b>Nov-03-2009 TOTAL</b>		
		<b>68.00</b>		
Nov-04-2009				
	PROJECT DIRECTOR	33.00	02-0000	WHITECOURT METER STATION
		<b>Nov-04-2009 TOTAL</b>		
		<b>33.00</b>		
Nov-23-2009				
	LAND MANAGEMENT	0.75	09-2600	TESTEPROJECT SCENARIOS
		<b>Nov-23-2009 TOTAL</b>		
		<b>0.75</b>		
Nov-25-2009				
	LAND MANAGEMENT	25.00	01-9000	ABC OIL AND GAS
		<b>Nov-25-2009 TOTAL</b>		
		<b>25.00</b>		
Nov-26-2009				
	LAND MANAGEMENT	54.00	01-3000	HMA FLEX DAYS
	PROJECT DIRECTOR	12.00	01-3000	HMA FLEX DAYS
	LAND MANAGEMENT	18.25	01-9000	ABC OIL AND GAS
		<b>Nov-26-2009 TOTAL</b>		
		<b>84.25</b>		
		<b>DANIEL WUSHON - TOTAL</b>		
		<b>206.00</b>		
		<b>GRAND TOTAL</b>		
		<b>206.00</b>		