March 23, 2012

SUBJECT

Middle Bakken/Three Forks Formations

Bakken – Three Forks B Pool (01 62B)

Daly Sinclair Field, Manitoba

Proposed Unitization of Ewart Unit No. 1

Application for Enhanced Oil Recovery Waterflood Project
Ewart Unit No. 1

INTRODUCTION

The Sinclair portion of the Daly Sinclair Oil Field is located in Ranges 28 and 29 W1 in both Townships 7 and 8. Since discovery in 2004, the main oilfield area was developed with vertical wells at 40 acre spacing on Primary Production. Since early 2009, a significant portion of the main oilfield has been Unitized and placed on Secondary Waterflood (WF) Enhanced Oil Recovery (EOR) Production, mainly from the Lyleton A & B members of the Three Forks Formation. Tundra Oil and Gas (Tundra) currently operates and continues to develop Sinclair Units 1, 2, 3, 5, 6, 7, and 8 as shown on Figure 1.

In the eastern part of the Sinclair field, potential exists for incremental production and reserves from a Waterflood EOR project in the Three Forks and Middle Bakken oil reservoirs. The following represents an application by Tundra to establish Ewart Unit No. 1 and implement a Secondary Waterflood EOR scheme within the Three Forks and Middle Bakken formations as outlined on Figure 2.

The proposed project area falls within the existing designated 01-62B Bakken - Three Forks B pool of the Daly Sinclair Oilfield (Figure 3).

CONCLUSIONS

1. The proposed Ewart Unit No. 1 will include 8 producing wells within 8 Legal Sub Divisions (LSD) of the Middle Bakken/Three Forks producing reservoir. The project is located east of the existing Sinclair Unit No. 3 and northeast of the existing Sinclair Unit No. 5 (Figure 2).

2. Total Net Original Oil in Place (OOIP) in the project area has been calculated to be 1,523.1 thousand barrels (Mbbl) using a third party engineering evaluation.

3. Cumulative production current to December 31, 2011 from the 8 producing wells within the proposed Ewart Unit No. 1 project area was 112.4 Mbbl of oil, and 102.7 Mbbl of water, representing a 7.4% Recovery Factor (RF) of the Net OOIP.

4. Estimated Ultimate Recovery (EUR) of Primary Proved Producing oil reserves in the proposed Ewart Unit No. 1 project area has been calculated to be 1,237.7 Mbbl, with 72.6 Mbbl remaining as of the end of December 31, 2011.

5. Ultimate oil recovery of the proposed Ewart Unit No. 1 OOIP, under the current Primary Production method, is forecasted to be 12.1%.

6. Figure 4 shows the production from the proposed area which peaked in March 2008 at 185 bbl of oil per day (OPD). As of November 2011, production was 37 bbl OPD, 30 bbl of water per day (WPD) and a 44% watercut.

7. In March 2008, production averaged 23.1 bbl OPD per well. As of November 2011, average per well production has declined to 4.5 bbl OPD. Decline analysis of the group primary production data forecasts total oil to continue declining at an annual rate of approximately 16% in the project area.

8. Based on waterflood response in the adjacent main portion of the Sinclair field, the Three Forks and Middle Bakken Formations in the proposed project area are believed to be suitable reservoirs for WF EOR operations.

9. Estimated Ultimate Recovery (EUR) of oil reserves under Secondary WF EOR for the proposed Ewart Unit No. 1 is estimated to be 277.5 Mbbl, with 165.1 Mbbl remaining. An incremental 92.5 Mbbl of oil reserves, or 6.1%, are forecasted to be recovered under the proposed Unitization and Secondary EOR production vs the existing Primary Production method.

10. Total RF under Secondary WF in the proposed Ewart Unit No. 1 is estimated to be 18.2%.

11. A horizontal injector, with multi-stage hydraulic fractures, will be constructed between the 8 existing vertical producing wells, as shown in Figure 5, within the proposed Ewart Unit No. 1, to complete a waterflood pattern with effective 20 acre spacing similar to that of Sinclair Unit No.1, 2, 3, 6, 7 & 8.

DISCUSSION

RESOURCE POTENTIAL IN PROPOSED EWART UNIT NO. 1

The proposed Ewart Unit No. 1 project area is located within the South half of Section 9, Township 8, Range 28 W1 of the Daly Sinclair oil field. The proposed Ewart Unit currently consists of 8 existing producing vertical wells within an area covering a half section (Figure 2). This includes the south half of Section 09-008-28W1. A project area well list complete with recent production statistics is attached as Appendix 15.

Geology

Stratigraphy:

The stratigraphy of the producing section in Ewart Unit 1 is shown on the structural cross section attached as Appendix 1. The line of section is shown on each of the maps attached as appendices and runs West to East through the top row of lsds in Ewart Unit 1. The producing section in Ewart Unit 1 consists of the Upper Bakken Shale, the Middle Bakken Siltstone, the Lyleton B Siltstone and the Torquay silty shale. The reservoir units are represented by the Middle Bakken, and Lyleton B Siltstones. The Upper Bakken Shale is a black, organic rich, platy shale which forms the top seal for the underlying Middle Bakken and Lyleton reservoirs. The Torquay (Three Forks) shale forms the base seal for the Middle Bakken and Lyleton B reservoirs.

Sedimentology:

The Middle Bakken reservoir consists of fine to coarse grained grey siltstone to fine sandstone which may be subdivided on the basis of lithologic characteristics into upper and lower units. The upper portion is very often heavily bioturbated and is generally non-reservoir. These bioturbated beds often contain an impoverished fauna consisting of abraded brachiopod, coral and occasional crinoid fragments suggesting deposition in a marginal marine environment. The lower part of the Middle Bakken is generally finely laminated with alternating light and dark laminations with occasional to moderate bioturbation. Reservoir quality is highly variable within the Unit area. Within Ewart Unit 1 the Middle Bakken is generally about 2.5 to 4 m thick (Appendix 6).

The Lyleton B in Ewart Unit 1 consists of thinly interbedded tan coloured reservoir siltstone and grey-green very fine grained non-reservoir siltstone. The Lyleton B reservoir beds also display variable reservoir quality similar to the Middle Bakken reservoir. The Lyleton B is about 4 m thick in Ewart Unit 1. It shows slight erosional thinning toward the northeast, but no significant thinning within the Unit area (Appendix 8).

Structure:

Structure contour maps are provided for the top of each major reservoir unit and for the non-reservoir Red Shale unit as well as the Torquay (Three Forks) Formation (Appendices 2-5). The structure within the area of Ewart Unit 1 generally consists of a gentle dip to the SE. Structural features such as the low, shown on the Upper Bakken Structure map (Appendix 2) in Section 8, are likely the result of post-Upper Bakken dissolution of the underlying Prairie Evaporites. The low is shifted on the Lyleton B structure map (Appendix 4) suggesting the locus of salt dissolution shifted slightly

through time. The apparent lack of such features on the Torquay structure map (Appendix 5) is the result of less structure control. The structure maps are drawn on data from both the vertical and horizontal wells, however, the horizontal wells only infrequently contact the Torquay as they are generally placed in the lower part of the Middle Bakken or upper part of the Lyleton B. Solution lows such as this represent potential hazards when drilling and later completing horizontal injectors but do not appear to represent continuous barriers to lateral fluid flow within the reservoir as they do not appear to interrupt the lateral continuity of the reservoir beds (see cross section Appendix 1).

Reservoir Continuity:

Lateral continuity of the reservoir units is an essential requirement of a successful water flood and as demonstrated by the cross section (Appendix 1) and the isopach maps, the lateral continuity of the reservoirs in Ewart Unit 1 is very good. None of the major reservoir units can be shown to be depositionally thin laterally and where thinning does occur it can be demonstrated to be by pre-Middle Bakken erosion removing the upper part of the Lyleton B reservoir. Vertical continuity between the Middle Bakken and underlying Lyleton B reservoir is also good as there is no evidence of an intervening aquitard between these units. In fact it is often difficult on logs to pick the unconformity surface between these units. In the Sinclair units located west of Ewart Unit 1 there is a Red Shale interval that intervenes between the MBKKN/Lyleton A reservoir sequence and the Lyleton B reservoir. This aquitard has been removed by pre-Middle Bakken erosion and is absent in the area of Ewart Unit 1. The erosional edge of the Red Shale is shown on the Lyleton B Isopach map and the Phi-h and k-h maps of the Lyleton B reservoir units for reference. The Red Shale Marker is present south, southwest and west of the brick red line shown on Appendices 8, 9, 10, 11, 12.

Reservoir Quality:

Porosity (Phi-h in *por**m) and permeability (k-h in mD*m) maps for the three main reservoir units are provided. These maps are generated using core data and are generated as follows. First the core is divided into the reservoir units present. This data is then subject to a 1.0 md cutoff on the permeability and intervals that meet or exceed this criteria are multiplied by the interval thickness and then summed to get the total value for the Phi-h or k-h for that particular reservoir unit. This cutoff is similar to the cutoff used to generate the OOIP, but doesn't utilize the 12 percent porosity cutoff since for core data the 1 md cutoff effectively removes any porosity less than 12 percent.

It is important to note however that the 1.0 md cutoff effectively ignores a considerable pore volume with permeability between 0.2 and 0.99 md that may contain moveable oil based on NMR log analysis. Maps of Phi-h and k-h for the Middle Bakken are included as Appendices 9 and 10, and Lyleton B maps for the Unit area as Appendices 11 and 12.

Fluid Contacts:

The oil/water contact for the Middle Bakken and Lyleton reservoir is estimated from production to be at about -525 m subsea. In tight reservoirs such as these the transition zone could be considerable and the top of the transition zone is estimated to be at about -490 m subsea based on production and simulation studies of the reservoir. As mapped these contacts are too far down dip to appear on any of the maps in this application as

the minimum structure displayed on the Top Middle Bakken structure map is about -434 m subsea.

OOIP Estimates

Total volumetric OOIP for the Middle Bakken, and Lyleton B members of the Three Forks formation, within the proposed Ewart Unit No. 1 area, has been calculated to be 1,523.1 Mbbl. Appendix 13 outlines the proposed Ewart Unit No. 1 volumetric OOIP estimates on an individual LSD basis by formation. Average OOIP by individual LSD was determined to be 190.4 Mbbl. OOIP values were calculated with 1.0 millidarcy (mD) permeability and 12% porosity net pay cutoffs.

The OOIP values were determined independently by a third party engineering company.

A listing of Middle Bakken/Three Forks formation rock and fluid properties used to characterize the reservoir are provided in Appendix 14.

Historical Production

A historical group production history plot for the proposed Ewart Unit No. 1 is shown as Figure 4. Oil production commenced from the proposed Unit area in November 2005 and peaked during March 2008 at 185 bbl OPD. As of December 2011, production was 36 bbl OPD, 27 bbl WPD and had a 44% watercut.

Oil production is declining at an annual rate of approximately 16% under the current Primary Production method.

Cumulative production to end December 2011 from the 8 wells within the proposed Ewart Unit No. 1 project area was 112.4 Mbbl of oil, and 102.7 Mbbl of water, representing a 7.4% RF of the Net OOIP.

Based on the geological description, primary production decline rate, and waterflood response in the adjacent main portion of the Sinclair field, the Three Forks and Middle Bakken Formations in the project area are believed to be suitable reservoirs for WF EOR operations.

UNITIZATION

Unitization and implementation of a Waterflood EOR project is forecasted to increase overall recovery of OOIP from the proposed project area.

Unit Name

Tundra proposes that the official name of the new Unit shall be Ewart Unit No. 1.

Unit Operator

Tundra Oil and Gas Partnership (Tundra) will be the Operator of record for Ewart Unit No. 1.

Unitized Zone

The Unitized zones to be waterflooded in the Ewart Unit No. 1 will be the Middle Bakken and Three Forks formations.

Unit Wells

The 8 wells to be included in the proposed Ewart Unit No. 1 are outlined in Appendix 15.

Unit Lands

The Ewart Unit No. 1 will consist of 1 half Section as follows:

LSD’s 1-8 of Section 9 of Township 8, Range 28, W1M.

Ewart Unit No. 1 will consist of 8 LSD's. The lands included in the 40 acre tracts are outlined in Appendix 16.

Tract Factors

The proposed Ewart Unit No. 1 will consist of Tracts, based on the 40 acre LSD’s containing the existing 8 vertical producing wells.

OOIP by LSD per well, minus the cumulative production of oil produced by LSD per well, was used to determine the proposed Unit tract factors.

Tract Factor calculations for all individual LSD’s based on the above methodology are outlined within Appendix 17.

Working Interest Owners

Appendix 16 also outlines the working interest (WI) for each recommended Tract within the proposed Ewart Unit No. 1. Tundra Oil and Gas Partnership holds a 100% WI ownership in all the proposed Tracts.

Tundra Oil and Gas Partnership will have a 100% WI in the proposed Ewart Unit No. 1.

WATERFLOOD EOR DEVELOPMENT

Waterflood EOR Development

Technical Studies

Due to the unconventional nature of the reservoir, Tundra has not been able to use reservoir simulation to accurately predict ultimate recoveries and sweep efficiency of the proposed waterflood. The lack of water breakthrough in our existing Sinclair Pilot Waterflood (WF) introduces an immense uncertainty in simulation modeling as it is very difficult to match a production profile that has not been observed.

Although in an early stage, Tundra believes the existing Unit 1 WF Pilot area reservoir and waterflood response is a suitable analogy based upon the following:

- Both Sinclair Pilot WF and the proposed Ewart Unit No. 1 reservoirs have been developed with the same vertical producing well spacing and completion practices
- Proposed waterflood pattern development within Ewart Unit No. 1 is similar to the Sinclair Pilot WF with 8 existing vertical producing wells and a horizontal injector resulting in 20 acre spacing
- Since peak production in March 2008, average oil rate per producing well in the proposed Ewart Unit No. 1 has fallen dramatically (Figure 4) with an initial primary decline similar to the Section 04-008-29 Pilot WF wells primary decline (Figure 6).
- The proposed Ewart Unit No. 1 WF RF has been forecasted at 18.2% of OOIP which is below the 24 to 25.5% RF expected from the Sinclair WF Units. This is reasonable as this area of the Bakken-Three Forks Pool is of a slightly poorer quality than that of Unit 1

Proposed Ewart Unit No. 1 Reservoir Pressure Predictions

No recent or representative pressure surveys are currently available from the vertical producing wells within the proposed Ewart Unit No. 1 project area. Tundra has however developed an empirical method of using observed pressure data from Sinclair Unit 1 to generate a regression analysis of cumulative fluid produced from a given pattern vs. measured pressure from the pattern injector. A pattern is considered as 6 or 8 vertical wells offsetting a horizontal injector with an allocation factor of 0.5 for fluid produced by the vertical wells. This analysis is used to directionally determine the expected range of pressure for the future injector wells using the cumulative production of that pattern. This method has been reasonably accurate in predicting expected pressures for injectors in Sinclair Units 2 and 3. Tundra has also attempted using more rigorous material balance method to predict the expected pressures but given the uncertainty of available PVT and formation compressibility data, this effort has not yielded any meaningful pressure estimate improvements over the empirical method to date. Tundra therefore believes the regression method is currently the best and most reliable tool available. Utilizing the method described, reservoir pressure in the proposed Ewart Unit No. 1 project area has been estimated to range between 3000 – 5400 kPa.

Pre-Production of New Horizontal Injection Wells

A new horizontal injection well will be constructed between the existing vertical producing wells as shown in Figure 5. Tundra proposes to construct 1 new horizontal water injection well (WIW), which will result in an effective 20 acre line drive waterflood pattern within Ewart Unit No. 1.

Primary production from the vertical wells in the proposed Ewart Unit No. 1 has declined significantly from peak rate indicating a need for secondary pressure support. However, through the process of developing similar waterfloods, Tundra has measured a significant and ever increasing incidence of variation in reservoir pressure depletion by the existing primary vertical producing wells. Placing new horizontal wells immediately on water injection in areas without significant reservoir pressure depletion has been particularly problematic in similar low permeability formations. As a result, the following conditions have been observed which Tundra believes negatively impact the ultimate total recovery factor of OOIP:

- Lower initial and peak water injection rates
- Rapid increases in injection wellhead pressures to the maximum allowable
- Lower sustained water injection rates at maximum allowable pressure
- Lower monthly instantaneous and cumulative voidage replacement ratio
- Delayed secondary oil production response
- Secondary oil production response of lower magnitude

Considering the expected reservoir pressures and reservoir lithology described, Tundra believes an initial period of 2 to 6 months of producing the new horizontal well prior to placing them on permanent water injection is essential and all Unit mineral owners will benefit as follows:

- Near term primary oil production increase
- Relatively higher injection rates following initial production due to oil and pressure depletion of the near horizontal well region
- Pre-producing injectors will yield more effective future injection wells as the fracture network and flowpaths within the stimulated region may be enhanced
- More efficient voidage replacement during first few years of the waterflood
- Secondary oil recovery factor may be higher than the current prediction if the primary to secondary recovery factor remains constant

Primary Production Forecast

Primary production performance predictions for the proposed Ewart Unit No. 1 are based on recent internal engineering studies performed by the Tundra reservoir engineering group and external Consultants.

Cumulative production in the Ewart Unit No. 1 project area, to the end of December 2011, was 112.4 Mbbl of oil, and 102.7 Mbbl of water for a recovery factor of 7.4% of the calculated Net OOIP.

The forecasted production rates for the Ewart Unit No. 1 injector well are estimated from Tundra’s observation of initial production rates attained from Unit 5 injector wells which

are placed on production for the same reasons as described earlier. Tundra has used the actual rates obtained from Unit 5 and adjusted them based on estimated recovery factor of Ewart Unit No. 1 to account for the difference in cumulative depletion by the time injector wells are drilled and then multiplied the rate of the new injection well that will be drilled in Ewart Unit No. 1. This represents the first peak on Figures 9 and 10. The injection well is expected to produce for a period of two to six months and then be converted to injection. Tundra has used the same methodology as in previous Unit applications to forecast the response from the waterflooding of this Unit. Previous Units 1 to 3 had shown a response from flooding within 3 months of start of injection. This response is represented as the second peak on Figures 9 and 10. This is because Tundra does not have any concrete evidence that producing these injectors will result in improved recovery.

Ultimate Proved Producing oil reserves recovery for Ewart Unit No. 1 has been estimated to be 185.0 Mbbl, or a 12.1% Recovery Factor (RF) of OOIP. Remaining Producing Primary Reserves has been estimated to be 72.7 Mbbl. The expected production decline and forecasted cumulative oil recovery under continued Primary Production is shown in Figures 7 and 8.

Pre-Production Schedule/Timing for Conversion of Horizontal Wells to Water Injection

Tundra has designed the following horizontal well development schedule to allow for the most expeditious development of the waterflood within the proposed Ewart Unit No. 1:

- Immediate Unitization of the project area provides a mechanism for primary production allocation during the pre-production period, regardless of oil rate or time on production
- Unitization allows the Unit Operator to develop the horizontal (future injection) well in the most expeditious and operationally efficient manner
- Efficient execution of the new horizontal well's drilling and completions operations will ensure the horizontal (future injection) well will begin production by August 2012
- Calculate and/or obtain reservoir pressure and observe production rate profile characteristics on the new horizontal and existing vertical producing wells during late 2012 or early 2013
- Expect to convert the horizontal well to WIW service by by late 2012 to early 2013
- Secondary oil rate response at vertical producing wells is forecasted to begin within 2 to 4 months following conversion of the horizontal well to water injection service

Criteria for Conversion to Water Injection Well

Tundra will monitor the following parameters to assess the best timing for each individual horizontal well to be converted from primary production to water injection service.

- Measured reservoir pressures at start of and/or through primary production
- Fluid production rates and any changes in decline rate
- Any observed production interference effects with adjacent vertical wells
- Pattern mass balance and/or oil recovery factor estimates
- Reservoir pressure relative to bubble point pressure

The horizontal wells is planned to be constructed for pre-production followed by permanent water injection service as shown in Figure 5. No existing vertical producer wells within the proposed Ewart Unit No. 1 project are planned for conversion to water injection, as oil production response is better with horizontal injectors than with four vertical injectors.

The above schedule allows for the proposed Ewart Unit No. 1 project to be developed equitably, efficiently, and moves the project to the best condition for the start of waterflood as quickly as possible. It also provides the Unit Operator flexibility to manage the reservoir conditions and response to help ensure maximum ultimate recovery of OOIP.

Secondary EOR Production Forecast

The proposed project oil production profile under Secondary Waterflood has been developed based on the response observed to date in the Sinclair Pilot WF (Figure 6).

The proposed Ewart Unit No. 1 Secondary Waterflood oil production forecast over time is plotted on Figure 9. EOR recoverable reserves in the proposed Ewart Unit No. 1 project under Secondary WF has been estimated at 277.5 Mbbl (Figure 10), resulting in an 18.2% overall RF of calculated Net OOIP.

An incremental 92.5 Mbbl of oil reserves are forecasted to be recovered under the proposed Unitization and Secondary EOR production scheme vs. the existing Primary Production method. Incremental Secondary RF is forecasted to be 6.1% of the calculated OOIP. Average incremental reserves recovery per project producing well is forecasted to be 11.6 Mbbl.

Estimated Fracture Pressure

Completion data from the existing producing wells within the project area indicate an actual fracture pressure gradient range of 19.0 to 20.9 kPa/m true vertical depth (TVD). Tundra expects the fracture gradient encountered during completion of the proposed horizontal injection well will be somewhat lower than these values due to expected reservoir pressure depletion.

Waterflood Operating Strategy

Water Source and Injection Wells

The injection water for the proposed Sinclair Ewart Unit No. 1 water will be supplied from the existing source and injection water system for Sinclair Units 1 – 3. All Unit 1 injection water is obtained from the Lodgepole formation in the 102/16-32-7-29W1 licensed water source well. Lodgepole water from the 102/16-32 source well is pumped to the main Unit 1 Water Plant at 03-04-008-29W1, filtered, and pumped up to injection system pressure. A diagram of the Sinclair water injection system and new pipeline connection to the proposed Ewart Unit No. 1 injection well is shown as Figure 11.

Produced water is not currently used for any water injection in the Tundra operated Sinclair Units and there are no current plans to use produced water as a source supply for Ewart Unit No. 1 injection.

Since all producing Middle Bakken/Three Forks wells in the Daly Sinclair areas, whether vertical or horizontal, have been hydraulically fractured, produced waters from these wells are inherently a mixture of Three Forks and Bakken native sources. This mixture of produced waters has been extensively tested for compatibility with 102/16-32 source Lodgepole water, by a highly qualified third party, prior to implementation by Tundra in Sinclair Unit 1. All potential mixture ratios between the two waters, under a range of temperatures, have been simulated and evaluated for scaling and precipitate producing tendencies. Testing of multiple scale inhibitors has also been conducted and minimum inhibition concentration requirements for the source water volume determined. At present, continuous scale inhibitor application is maintained into the source water stream out of the Sinclair injection water facility. Review and monitoring of the source water scale inhibition system is also part of an existing routine maintenance program. Injection well rates vs. time plots are routinely monitored for evidence of any injection restriction due to scaling and Tundra sees no operational problems with the system design at this time.

The new water injection well for the proposed Sinclair Ewart Unit No. 1 will be drilled, cleaned out, produced, and then configured for downhole injection as shown in Figure 12. The horizontal injection well will be stimulated by multiple hydraulic fracture treatments to obtain suitable injection rates. Tundra has extensive experience with horizontal fracturing in the area, and all jobs are rigorously programmed and monitored during execution. This helps ensure optimum placement of each fracture stage to prevent, or minimize, the potential for out-of-zone fracture growth and thereby limit the potential for future out-of-zone injection.

The new water injection well will be placed on injection after the pre-production period and approval to inject. Wellhead injection pressures will be maintained below the least value of either:

- the area specific known and calculated fracture gradient, or
- the licensed surface injection Maximum Allowable Pressure (MOP)

Tundra has a thorough understanding of area fracture gradients. A management program will be utilized to set and routinely review injection target rates and pressures vs. surface MOP and the known area formation fracture pressures.

The new water injection well will be surface equipped with injection volume metering and rate/pressure control (Figure 13). An operating procedure for monitoring water injection volumes and meter balancing will also be utilized to monitor the system measurement and integrity on a daily basis.

The proposed Ewart Unit No. 1 horizontal water injection well rate is forecasted to average 95 – 220 bbl WPD based on expected reservoir conditions.

Reservoir Pressure Management during Waterflood

Tundra expects to inject water for a minimum 2 – 4 year period to re-pressurize the reservoir due to cumulative primary production voidage and pressure depletion. Initial monthly Voidage Replacement Ratio (VRR) is expected to average approximately 1.25

to 2.00 within the pattern during the fill up period. As the cumulative VRR approaches 1, target reservoir operating pressure for waterflood operations will be 75 – 90% of original reservoir pressure.

Waterflood Surveillance and Optimization

Ewart Unit No. 1 EOR response and waterflood surveillance will consist of the following:

- Regular production well rate and WCT testing
- Daily water injection rate and pressure monitoring vs target
- Water injection rate/pressure/time vs. cumulative injection plot
- Reservoir pressure surveys as required to establish pressure trends
- Pattern VRR
- Potential use of chemical tracers to track water injector/producer responses
- Use of some or all of: Water Oil Ratio (WOR) trends, Log WOR vs Cum Oil, Hydrocarbon Pore Volumes Injected, Conformance Plots

The above surveillance methods will provide an ever increasing understanding of reservoir performance, and provide data to continually control and optimize the Ewart Unit No. 1 waterflood operation. Controlling the waterflood operation will significantly reduce or eliminate the potential for out-of-zone injection, undesired channeling or water breakthrough, or out-of-Unit migration. The monitoring and surveillance will also provide early indicators of any such issues so that waterflood operations may be altered to maximize ultimate secondary reserves recovery from the proposed Ewart Unit No. 1.

On Going Reservoir Pressure Surveys

For the proposed horizontal injection well, a measured reservoir pressure will be obtained prior to water injection. Tundra expects useful reservoir pressure data may be obtained from existing vertical wells within the project area after WF start up. These pressures will be reported within the Annual Progress Reports for Ewart Unit No. 1 as per Section 73 of the Drilling and Production Regulation.

Economic Limits

Under the current Primary recovery method, existing wells within the proposed Ewart Unit No. 1 will be deemed uneconomic when the net oil rate and net oil price revenue stream becomes less than the current producing operating costs. With any positive oil production response under the proposed Secondary recovery method, the economic limit will be significantly pushed out into the future. The actual economic cut off point will then again be a function of net oil price, the magnitude and duration of production rate response to the waterflood, and then current operating costs. Waterflood projects generally become uneconomic to operate when Water Oil Ratios (WOR's) exceed 100.

Water Injection Facilities

The Ewart Unit No. 1 waterflood operation will utilize the existing Tundra operated source well supply and water plant (WP) facilities located at 03-04-008-29 W1M.

A complete description of all planned system design and operational practices to prevent corrosion related failures is shown in Appendix 18.

Notification of Mineral and Surface Rights Owners

Tundra is in the process of notifying all mineral rights and surface rights owners of this proposed EOR project and formation of Ewart Unit No. 1. Copies of the Notices, and proof of service, to all surface rights owners will be forwarded to the Petroleum Branch, when available, to complete the Ewart Unit No. 1 Application.

Ewart No. 1 Unitization, and execution of the formal Ewart Unit No. 1 Agreement by affected Mineral Owners, is expected before the end of April 2012. Copies of same will be forwarded to the Petroleum Branch, when available, to complete the Ewart Unit No. 1 Application.

TUNDRA OIL & GAS PARTNERSHIP

Calgary, AB

Proposed Ewart Unit No. 1

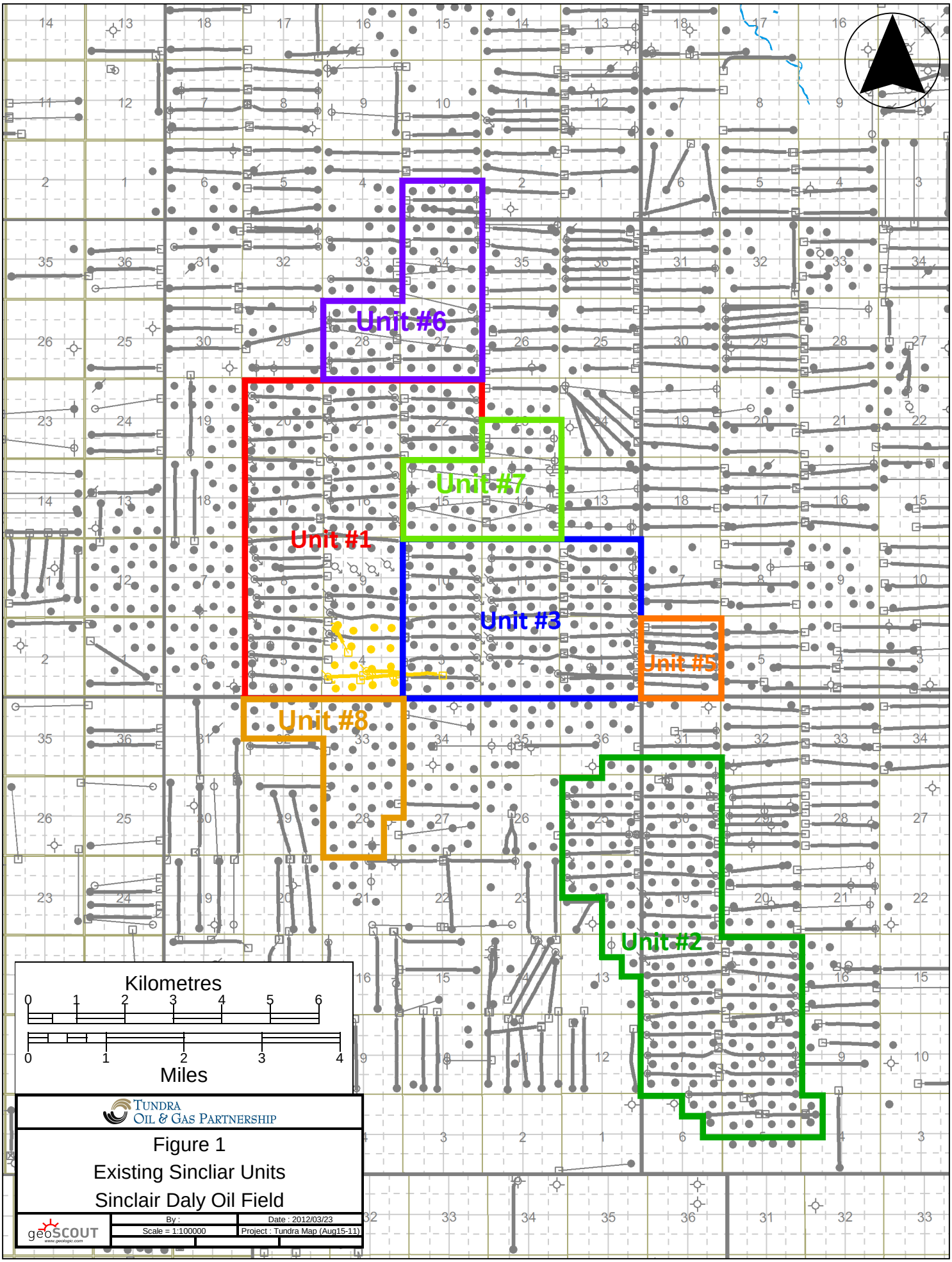
Application for Enhanced Oil Recovery Waterflood Project

LIST OF FIGURES

Proposed Ewart Unit No. 1

Application for Enhanced Oil Recovery Waterflood Project

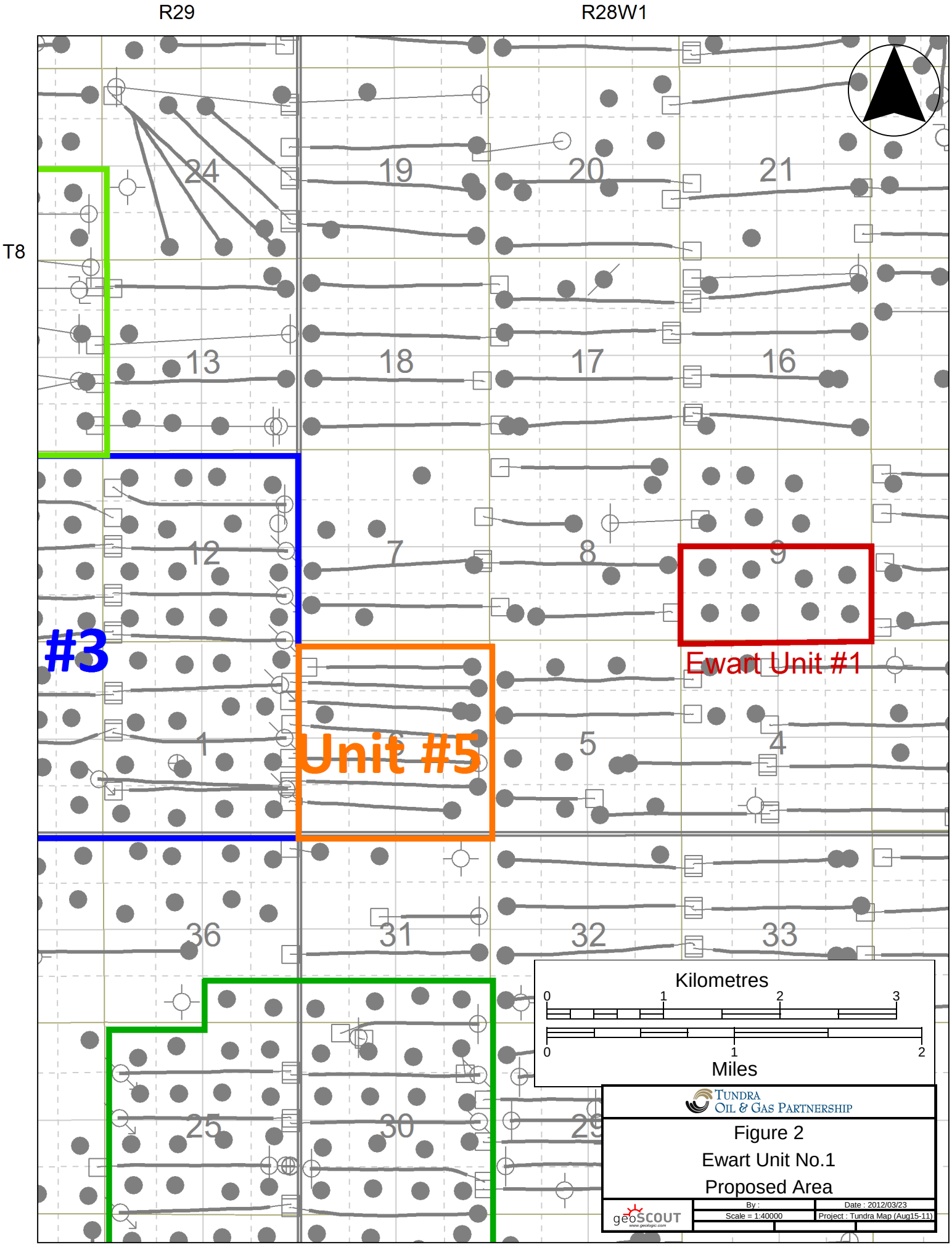
LIST OF APPENDICES

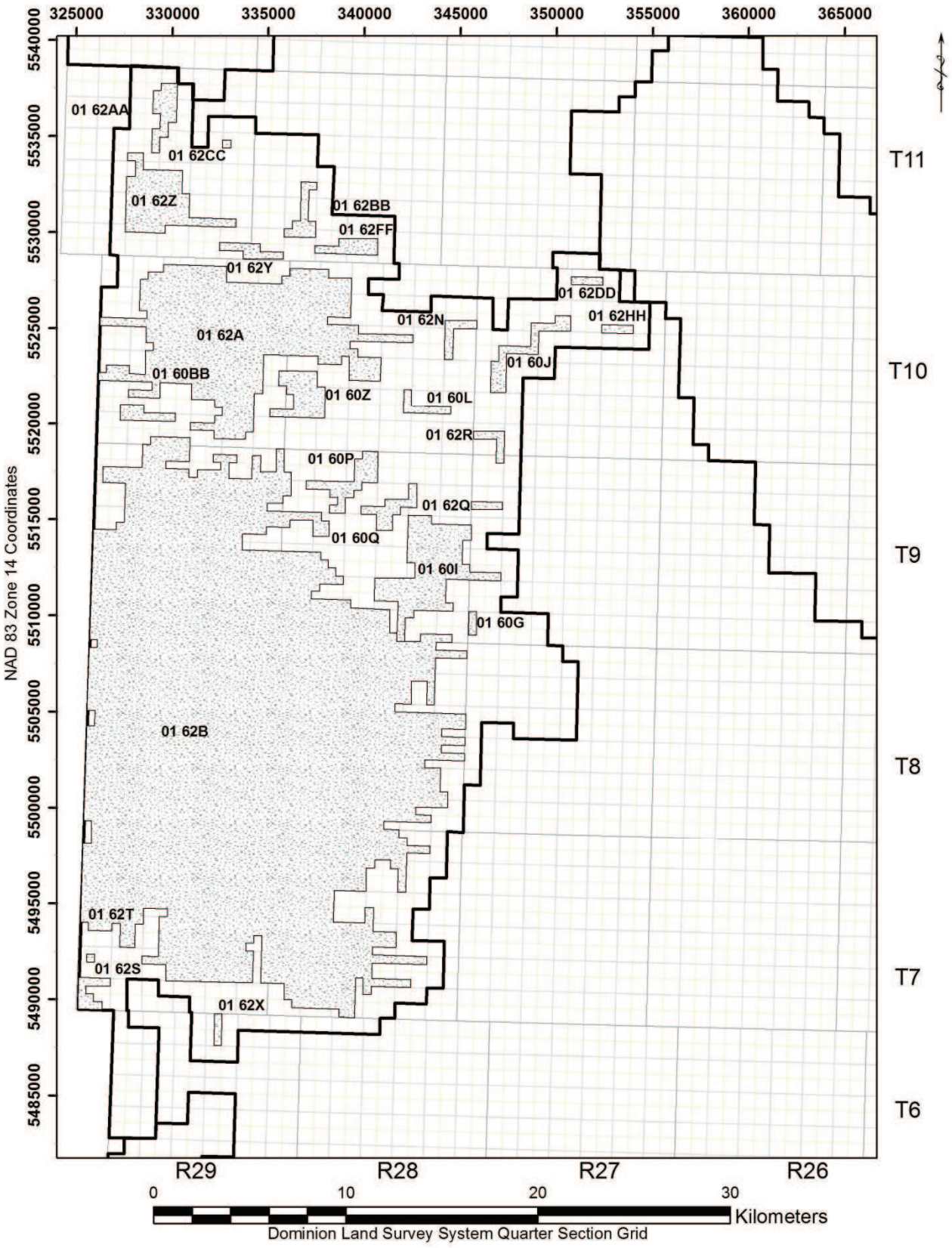


TUNDRA OIL & GAS PARTNERSHIP

Figure 1
Existing Sincliar Units
Sinclair Daly Oil Field

geoSCOUT	By :	Date : 2012/03/23
	Scale = 1:100000	Project : Tundra Map (Aug15-11)

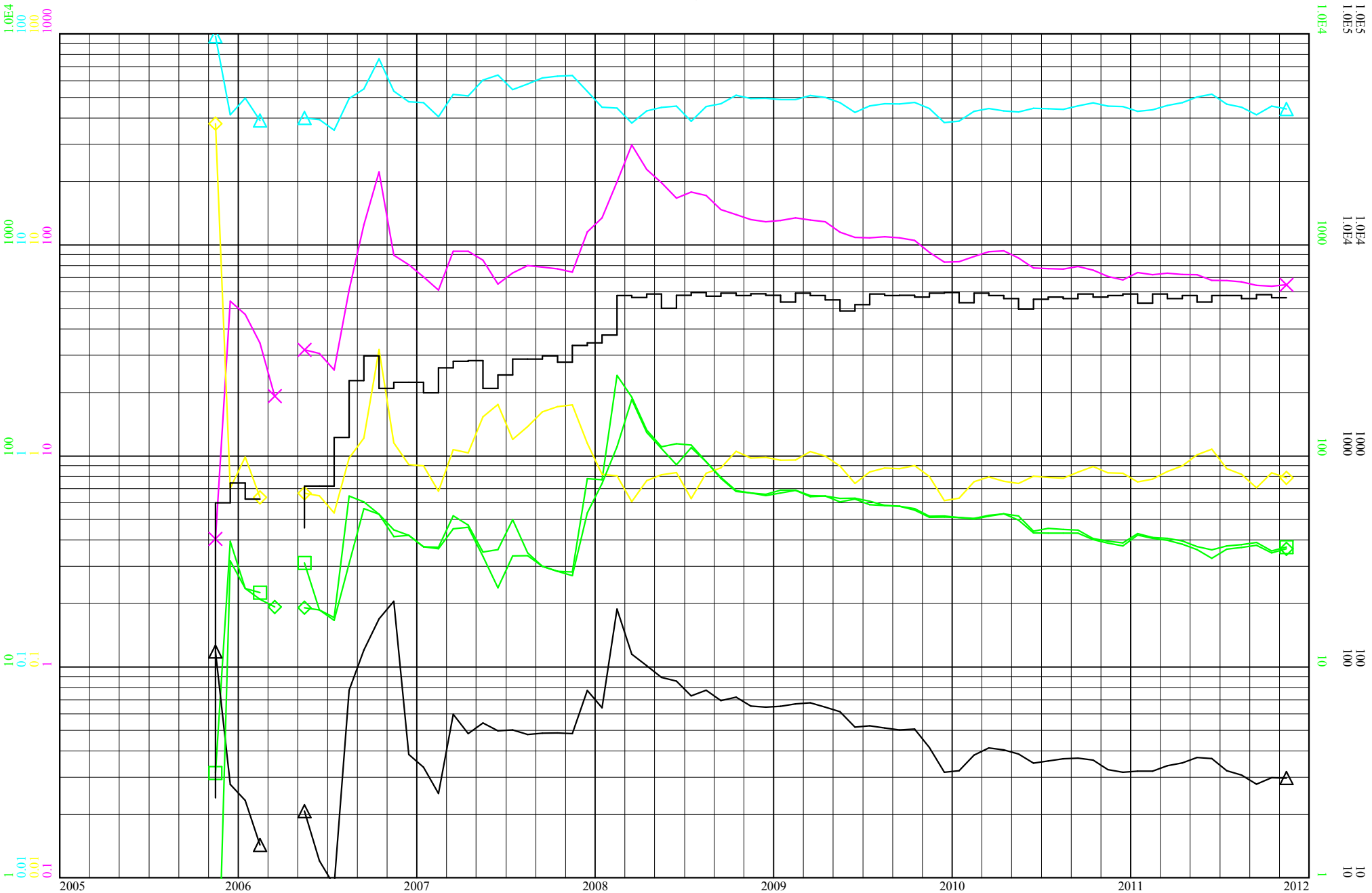

R29
R28W1
T8
24
19
20
21
13
18
17
16
12
7
8
9
#3
Ewart Unit #1
Unit #5
1
6
5
4
36
31
32
33
25
30
29
Kilometres
0
1
2
3
0
1
2
Miles
Tundra Oil & Gas Partnership
Figure 2
Ewart Unit No.1
Proposed Area
geoSCOUT
By :
Date : 2012/03/23
Scale = 1:40000
Project : Tundra Map (Aug15-11)



DALY SINCLAIR BAKKEN & BAKKEN-THREE FORKS POOLS
(01 60A - 01 60BB & 01 62A – 01 62CC)

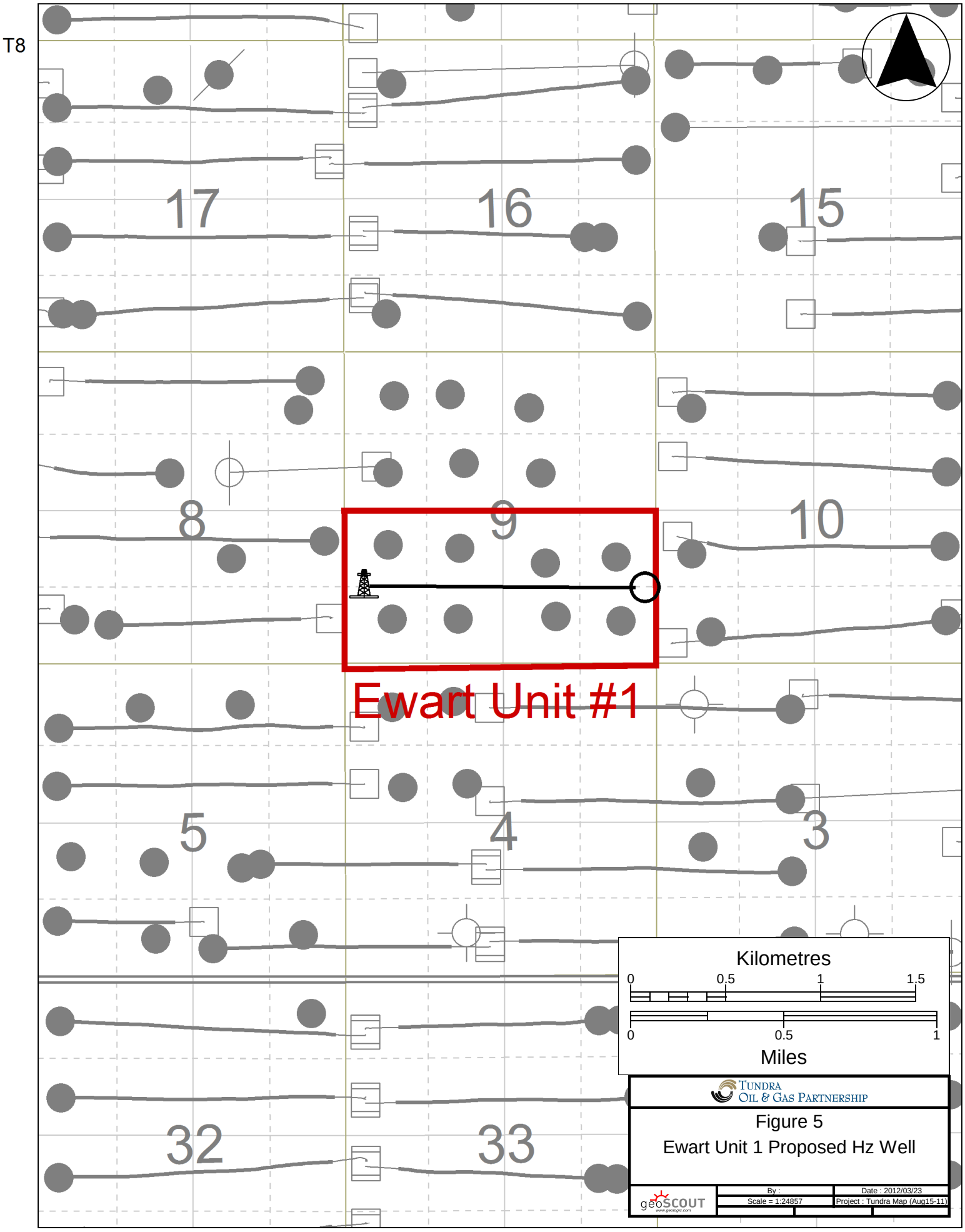
Figure 3

Ewart S!2 Sec9-8-283.wls
March 16, 2012



Cum Oil/Cnd (bbl):	111328
Cum Gas (mcf):	0
Cum Wtr (bbl):	101768

Figure 4

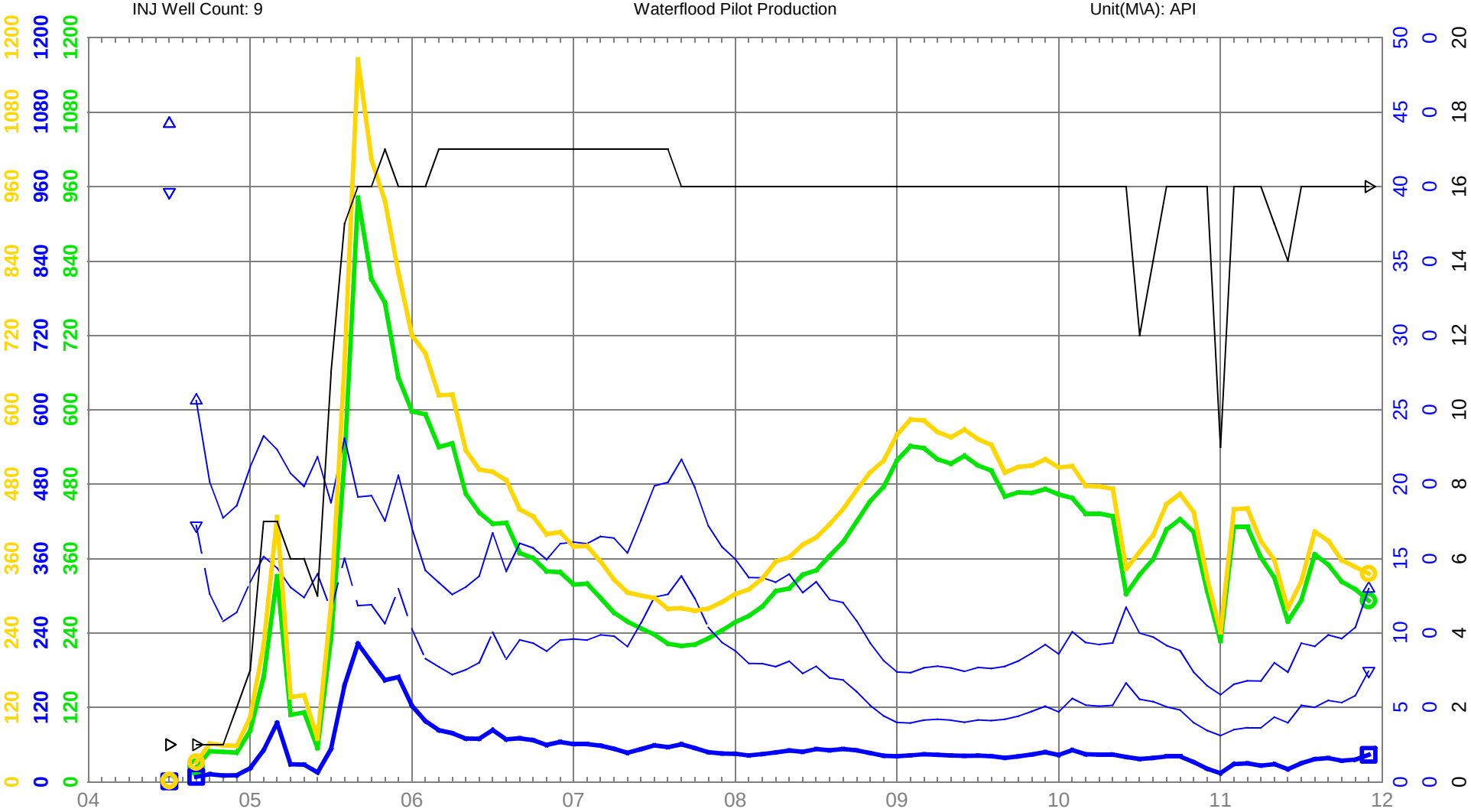

R28W1
T8
17
16
15
8
9
10
Ewart Unit #1
5
4
3
32
33
Kilometres
0
0.5
1
1.5
0
0.5
1
Miles
Tundra Oil & Gas Partnership
Figure 5
Ewart Unit 1 Proposed Hz Well
geoSCOUT
By :
Date : 2012/03/23
Scale = 1:24857
Project : Tundra Map (Aug15-11)

SELECTED WELLS PRODUCTION/INJECTION

Well List: Default Well List
PRD Well Count: 18
INJ Well Count: 9

Figure 6
Sinclair Unit No.1 Section 4
Waterflood Pilot Production

From: 2004-07
To: 2011-12
Unit(M\A): API



PRD Cal-Day Avg OIL Bbl/day
PRD Cal-Day Avg WTR Bbl/day
PRD Cal-Day Avg FLD Bbl/day

Cum PRD OIL	984,994.6	Bbl
Cum PRD WTR	145,232.1	Bbl
Cum INJ WTR	41,727,324.8	Bbl

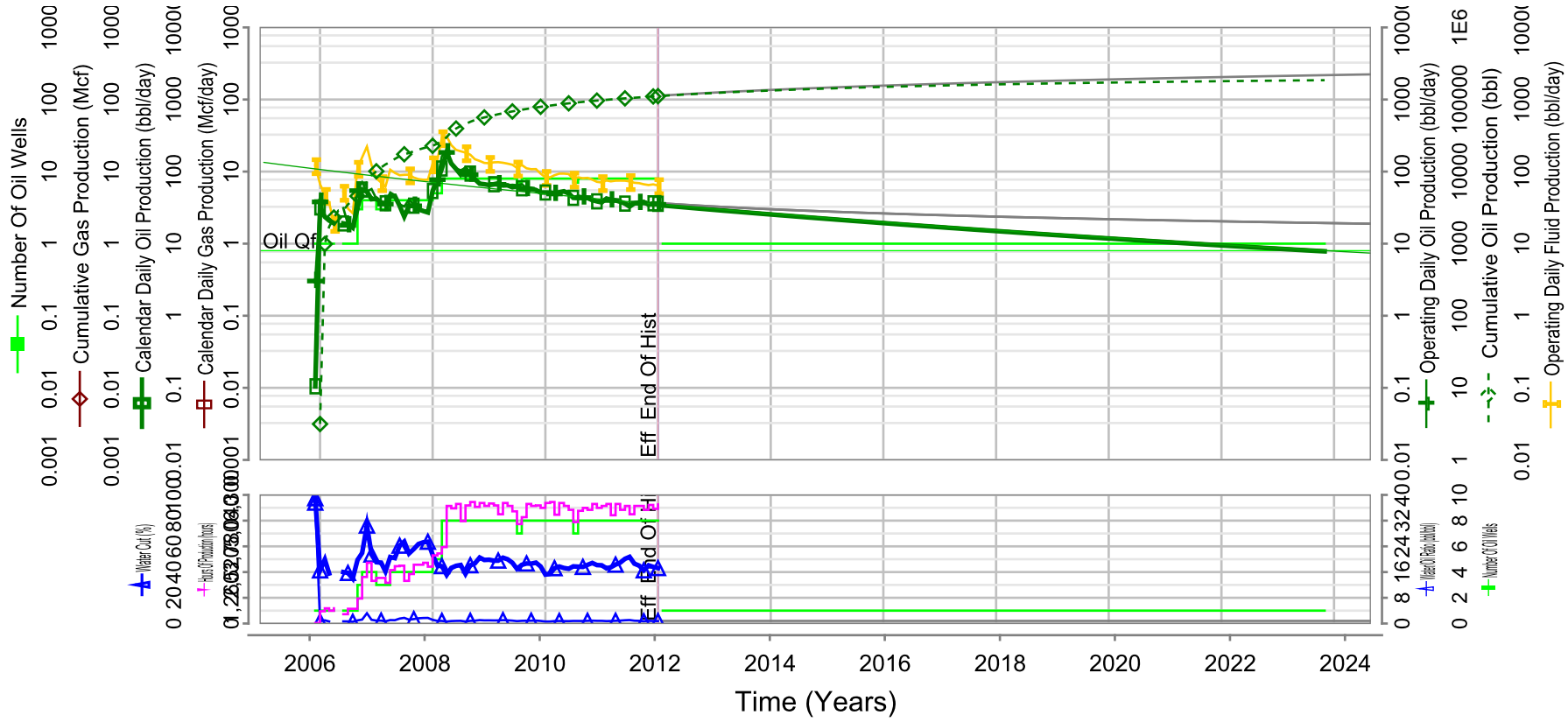
PRD Percent: WTR Cut %
PRD Ratio: WTR/OIL Bbl/Bbl
PRD Well Count

Proposed Ewart Unit No. 1
CHART - PRODUCTION AND FORECAST

Effective January 01, 2012

Operator:
Province: Manitoba
Field: multi zone (8)
Pool: multi zone (8)
Unit: multi zone (8)
Status:

Sinclair
Proposed Ewart Unit No. 1
PDP



Cum Oil	(bbl)	112,436	Cum Gas	(Mcf)	0	Cum Water	(bbl)	102,556	Cum Cond	(bbl)	0
Forecast Start		01/01/2012	Calculation Type		Undefined	Est. Cum Prod	(bbl)	112,436	Decline Exponent		0.300
Forecast End		10/26/2023	(bbl) OVIP		0	Remaining	(bbl)	73,000	Intial Decline (%/yr)		14.9
Initial Rate	(bbl/day)	35.0	Recovery Factor		0.000	Surface Loss		0.0	Life Index		6.31
Final Rate	(bbl/day)	8.0	Ult. Recoverable	(bbl)	185,436	Total Sales	(Mcf)	0	Half Life (years)		3.84

Report Time: Thu, 22 Mar 2012 14:23 Working Data
Economic Case: January 1, 2011 Forecast Prices Effective Jan-12
Hierarchy: Reserves
DB: MOSAIC_27 : mosaic10 Version: 2010.8.4304

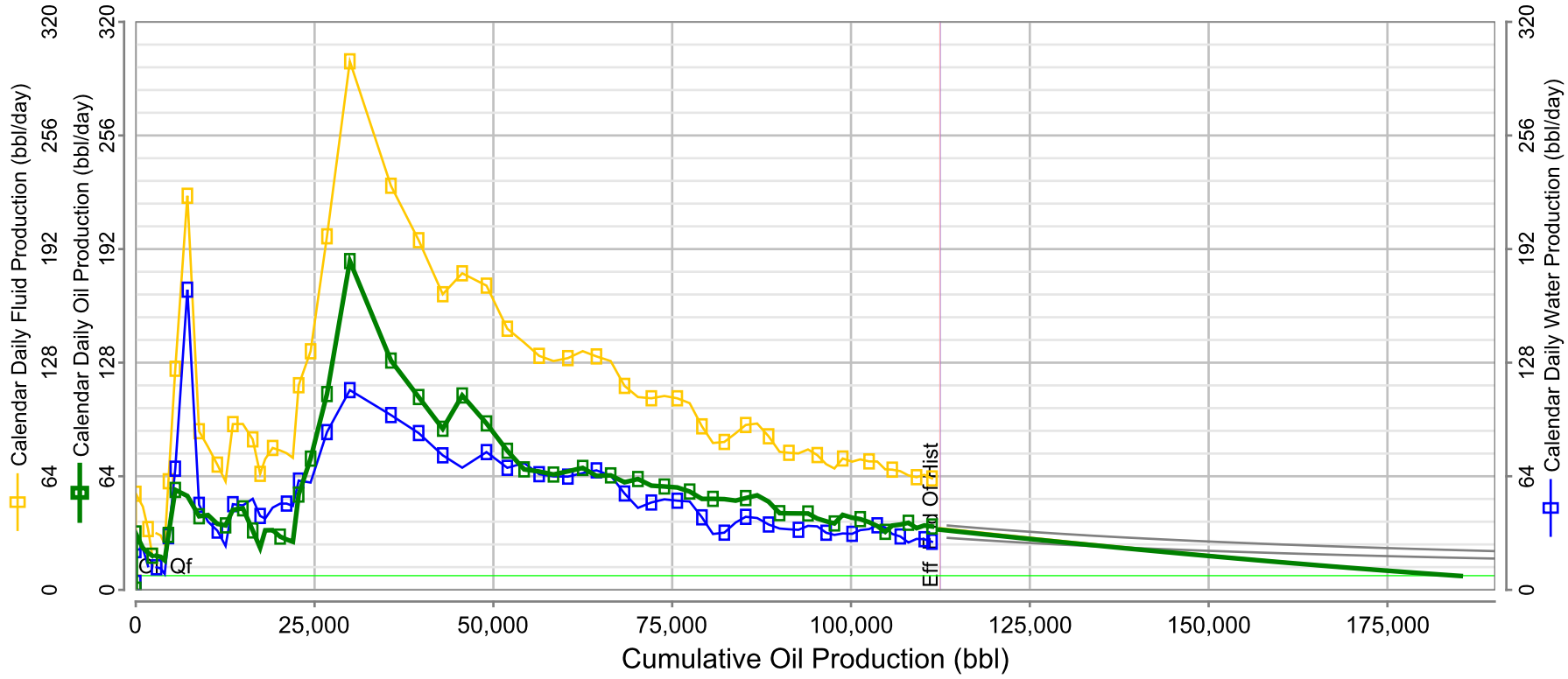
Figure 7

Proposed Ewart Unit No. 1
CHART - PRODUCTION AND FORECAST

Effective January 01, 2012

Operator:
Province: Manitoba
Field: multi zone (8)
Pool: multi zone (8)
Unit: multi zone (8)
Status:

Sinclair
Proposed Ewart Unit No. 1
PDP



Cum Oil	(bbl)	112,436	Cum Gas	(Mcf)	0	Cum Water	(bbl)	102,556	Cum Cond (bbl)	0
Forecast Start		01/01/2012	Calculation Type		Undefined	Est. Cum Prod	(bbl)	112,436	Decline Exponent	0.300
Forecast End		10/26/2023	(bbl) OVIP		0	Remaining	(bbl)	73,000	Intial Decline (%/yr)	14.9
Initial Rate	(bbl/day)	35.0	Recovery Factor		0.000	Surface Loss		0.0	Life Index	6.31
Final Rate	(bbl/day)	8.0	Ult. Recoverable	(bbl)	185,436	Total Sales	(Mcf)	0	Half Life (years)	3.84

Report Time: Thu, 22 Mar 2012 14:23 Working Data
Economic Case: January 1, 2011 Forecast Prices Effective Jan-12
Hierarchy: Reserves
DB: MOSAIC_27 : mosaic10 Version: 2010.8.4304

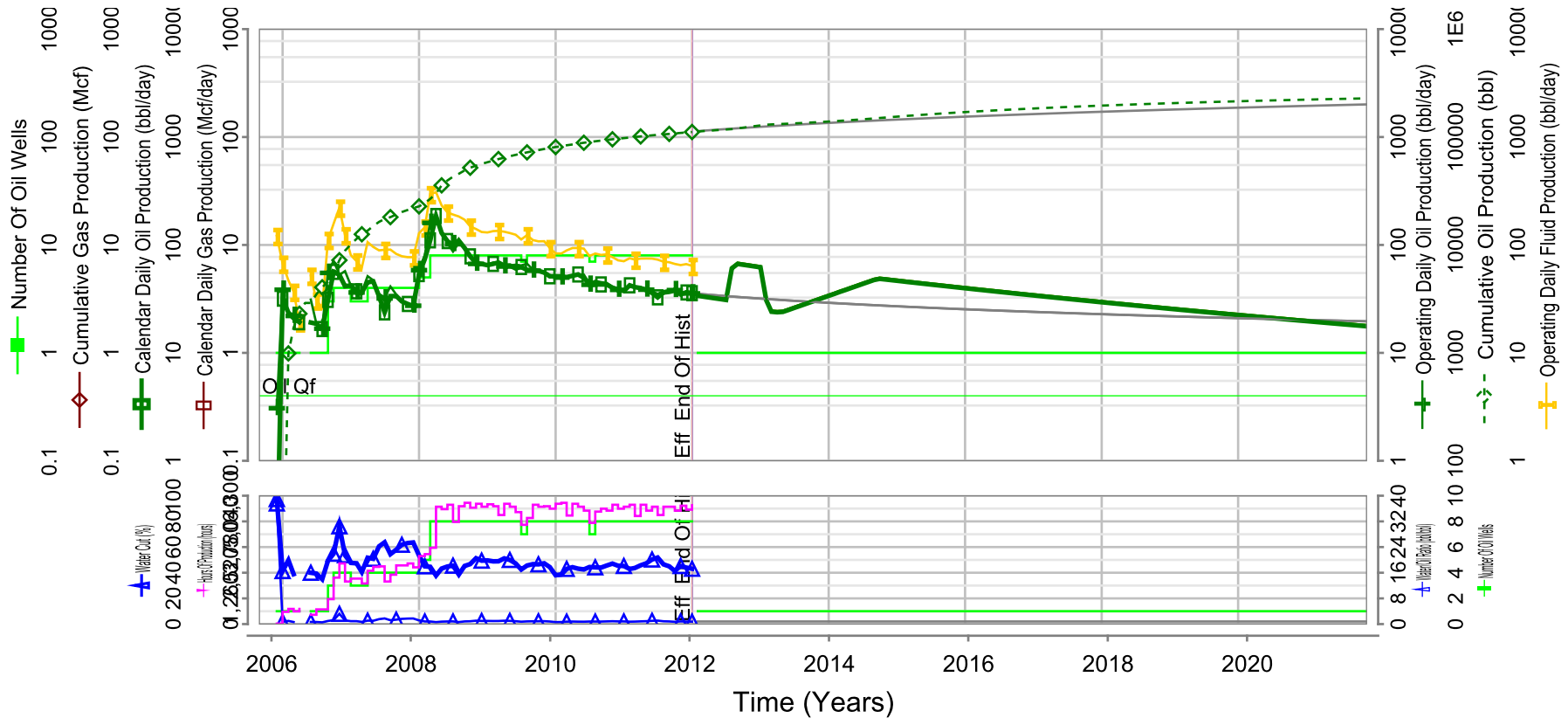
Figure 8

Proposed Ewart Unit No. 1
CHART - PRODUCTION AND FORECAST

Effective January 01, 2012

Operator:
Province: Manitoba
Field: multi zone (8)
Pool: multi zone (8)
Unit: multi zone (8)
Status:

Sinclair
Proposed Ewart Unit No. 1 WF
1P



Cum Oil	(bbl)	112,436	Cum Gas	(Mcf)	0	Cum Water	(bbl)	102,556	Cum Cond	(bbl)	0
Forecast Start		01/01/2012	Calculation Type		Undefined	Est. Cum Prod	(bbl)	112,436	Decline Exponent		0.300
Forecast End		06/09/2037	(bbl) OVIP		0	Remaining	(bbl)	165,064	Intial Decline (%/yr)		20.0
Initial Rate	(bbl/day)	35.0	Recovery Factor		0.000	Surface Loss		0.0	Life Index		9.39
Final Rate	(bbl/day)	4.0	Ult. Recoverable	(bbl)	277,500	Total Sales	(Mcf)	0	Half Life (years)		3.18

Report Time: Thu, 22 Mar 2012 14:22 Working Data
Economic Case: January 1, 2011 Forecast Prices Effective Jan-12
Hierarchy: Reserves
DB: MOSAIC_27 : mosaic10 Version: 2010.8.4304

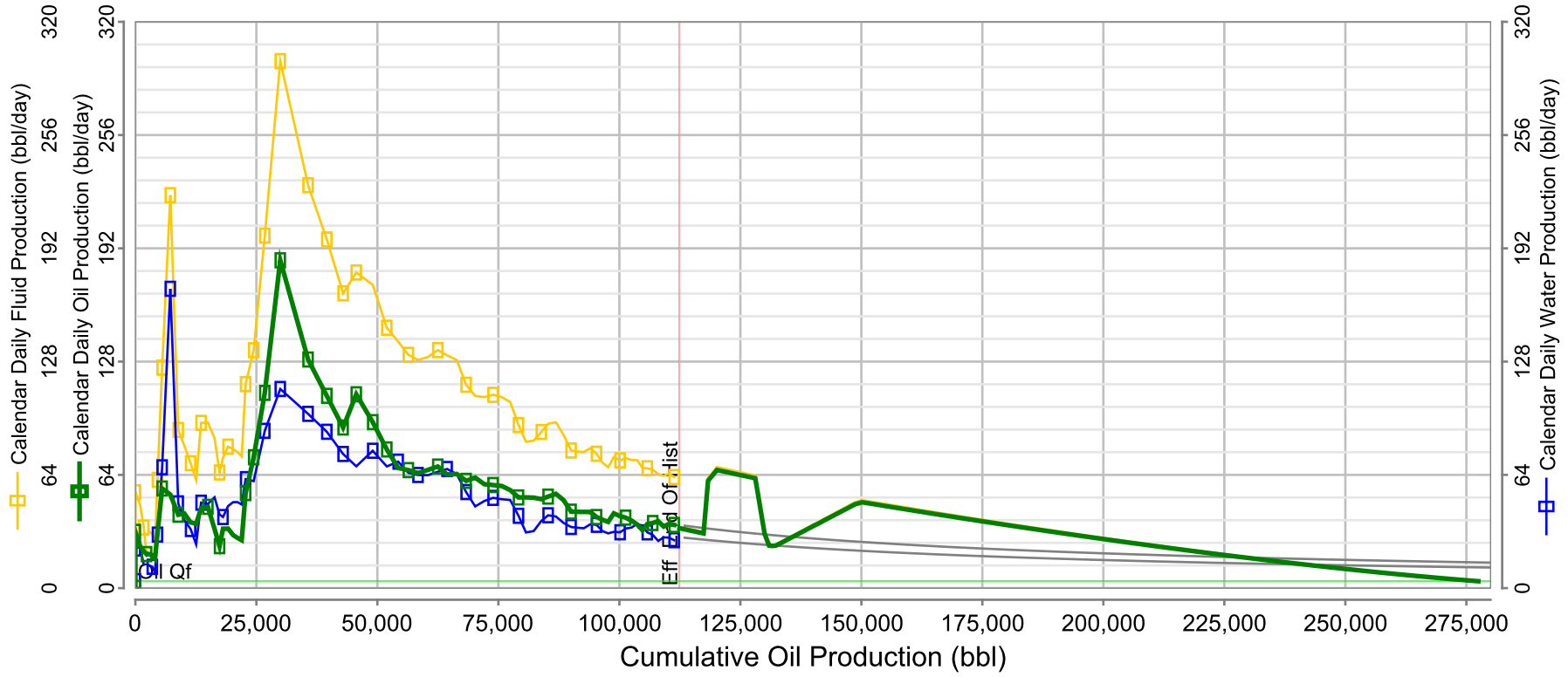
Figure 9

Proposed Ewart Unit No. 1
CHART - PRODUCTION AND FORECAST

Effective January 01, 2012

Operator:
Province: Manitoba
Field: multi zone (8)
Pool: multi zone (8)
Unit: multi zone (8)
Status:

Sinclair
Proposed Ewart Unit No. 1 WF
1P

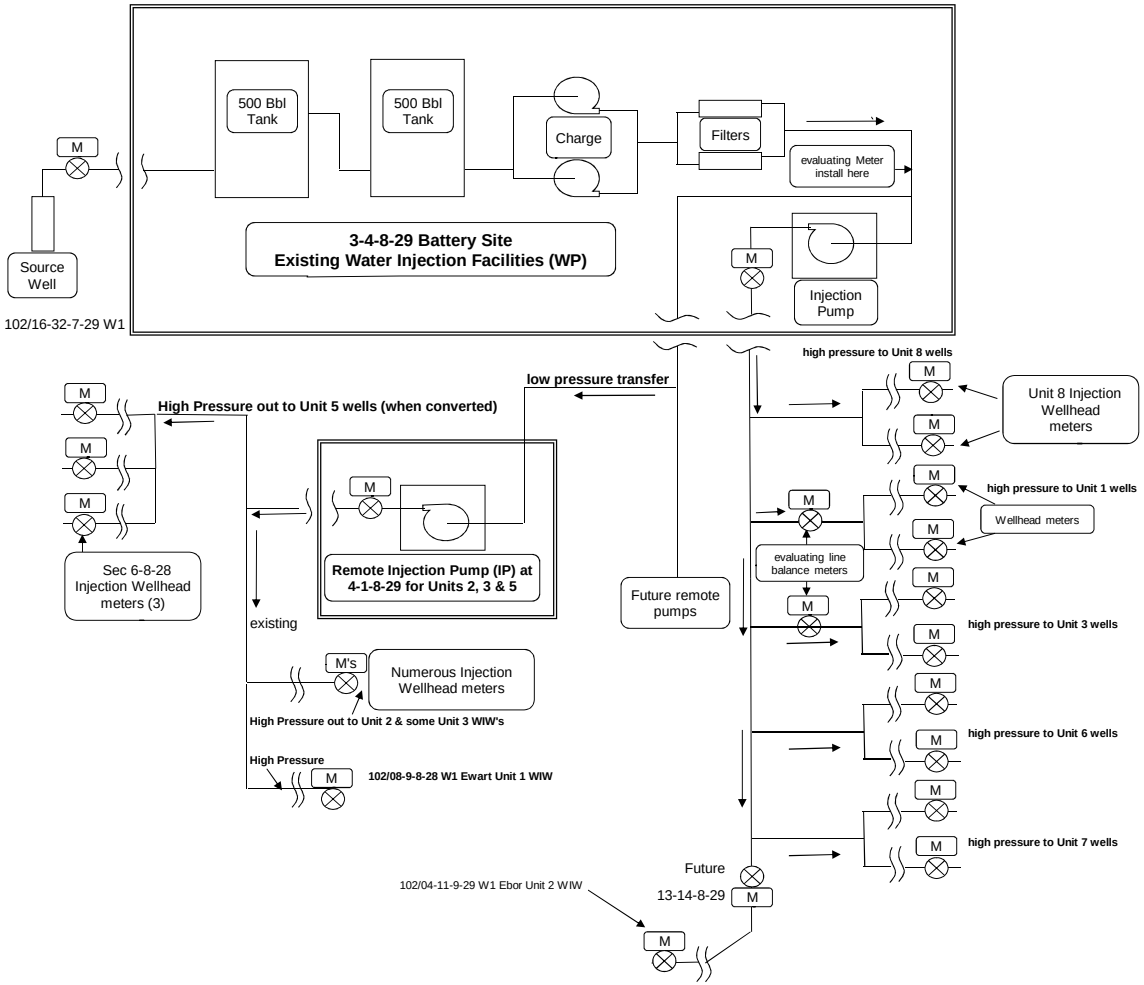


Cum Oil	(bbl)	112,436	Cum Gas	(Mcf)	0	Cum Water	(bbl)	102,556	Cum Cond (bbl)	0
Forecast Start		01/01/2012	Calculation Type		Undefined	Est. Cum Prod	(bbl)	112,436	Decline Exponent	0.300
Forecast End		06/09/2037	(bbl) OVIP		0	Remaining	(bbl)	165,064	Intial Decline (%/yr)	20.0
Initial Rate	(bbl/day)	35.0	Recovery Factor		0.000	Surface Loss		0.0	Life Index	9.39
Final Rate	(bbl/day)	4.0	Ult. Recoverable	(bbl)	277,500	Total Sales	(Mcf)	0	Half Life (years)	3.18

Report Time: Thu, 22 Mar 2012 14:22 Working Data
Economic Case: January 1, 2011 Forecast Prices Effective Jan-12
Hierarchy: Reserves
DB: MOSAIC_27 : mosaic10 Version: 2010.8.4304

Figure 10

Sinclair Water Injection System



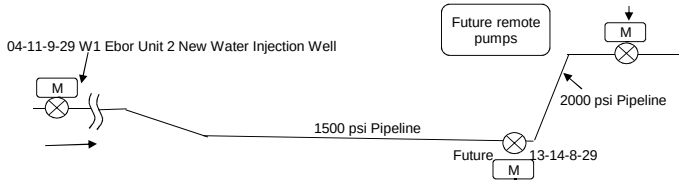
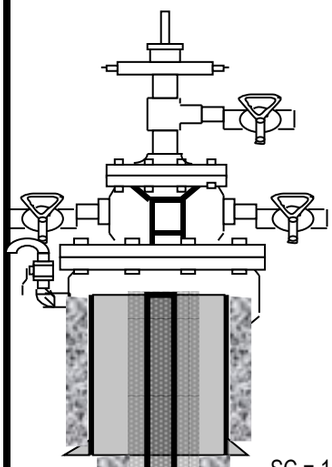


Figure 11

Tundra Oil And Gas Partnership

TYPICAL WATER INJECTION WELL DOWNHOLE DIAGRAM

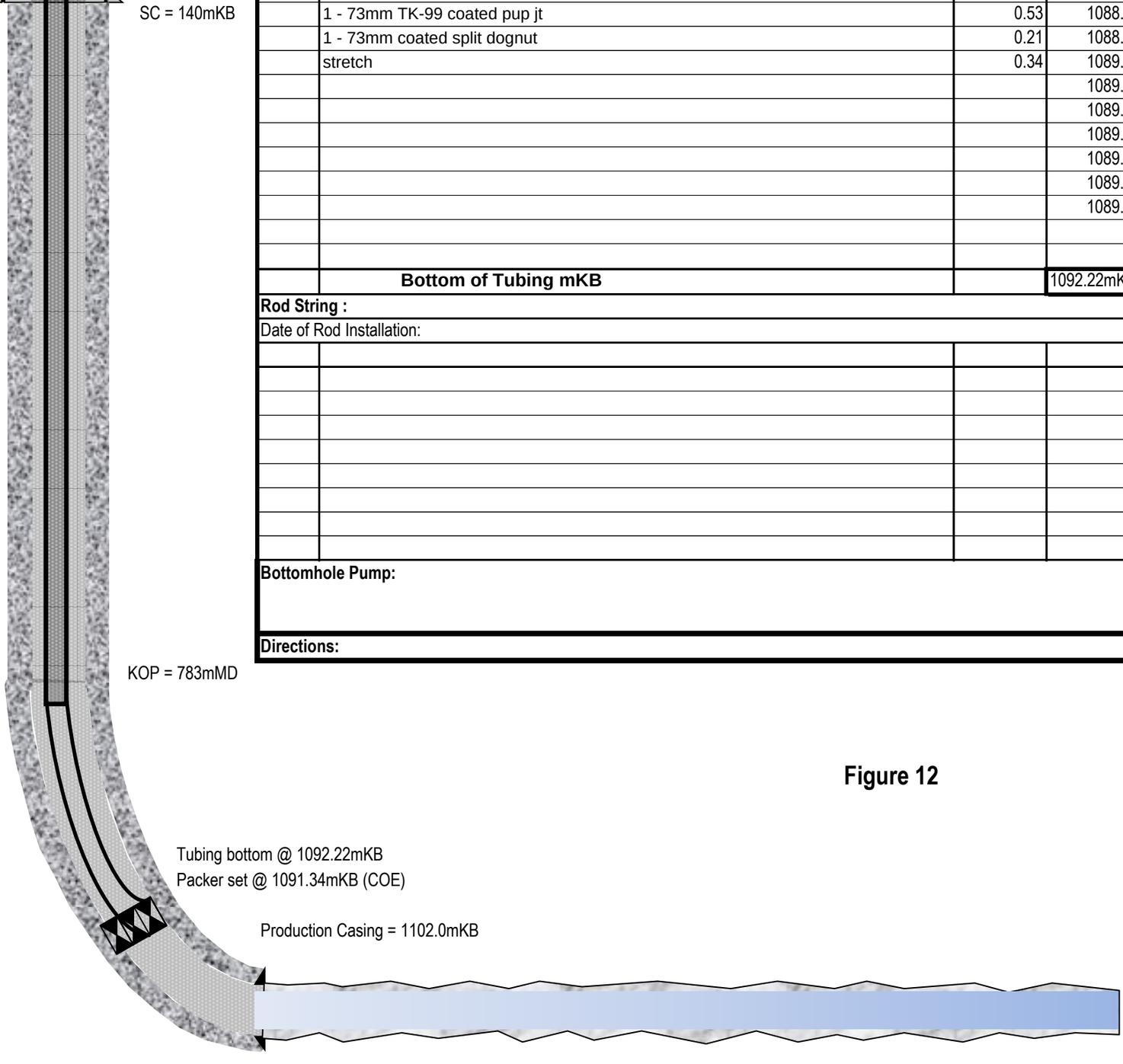


SC = 140mKB

KOP = 783mMD

Tubing bottom @ 1092.22mKB
Packer set @ 1091.34mKB (COE)

Production Casing = 1102.0mKB



WELL NAME:	**Tundra Ewart Unit 1 HZNTL WIW**				**WELL LICENCE:**	
Prepared by				Date:		
Elevations :						
KB [m]			KB to THF [m]		TD [m]	2380.0
GL [m]			CF (m)		PBTD [m]	
Current Perfs:	Openhole or Cemented Liner			1102.0	to	2380.0
Current Perfs:					to	2133.0
KOP:	783m MD		Total Interval		to	
Tubulars	**Size [mm]**	**Wt - Kg/m**	**Grade**	**Landing Depth [mKB]**		
Surface Casing	244.5	48.07	H-40 - ST&C	Surface	to	140.0
Product. Casing	177.8	34.23	J-55 - LT&C	Surface	to	1102.0
Tubing	73.0 - TK-99	9.67	J-55	Surface	to	1092.2

Date of Tubing Installation:		5-Nov-08		Length	Top @
Item	Description		K.B.--Tbg. Flg.	0.00	m KB
	1 - Weatherford HRP coated packer			1.75	1.75
	113 - 73mm TK-99 coated tbg			1086.31	1088.06
	1 - 73mm TK-99 coated pup jt			0.53	1088.59
	1 - 73mm coated split dognut			0.21	1088.80
	stretch			0.34	1089.14
					1089.14
					1089.14
					1089.14
					1089.14
					1089.14
					1089.14
	Bottom of Tubing mKB				1092.22mKB

Rod String :	
Date of Rod Installation:	

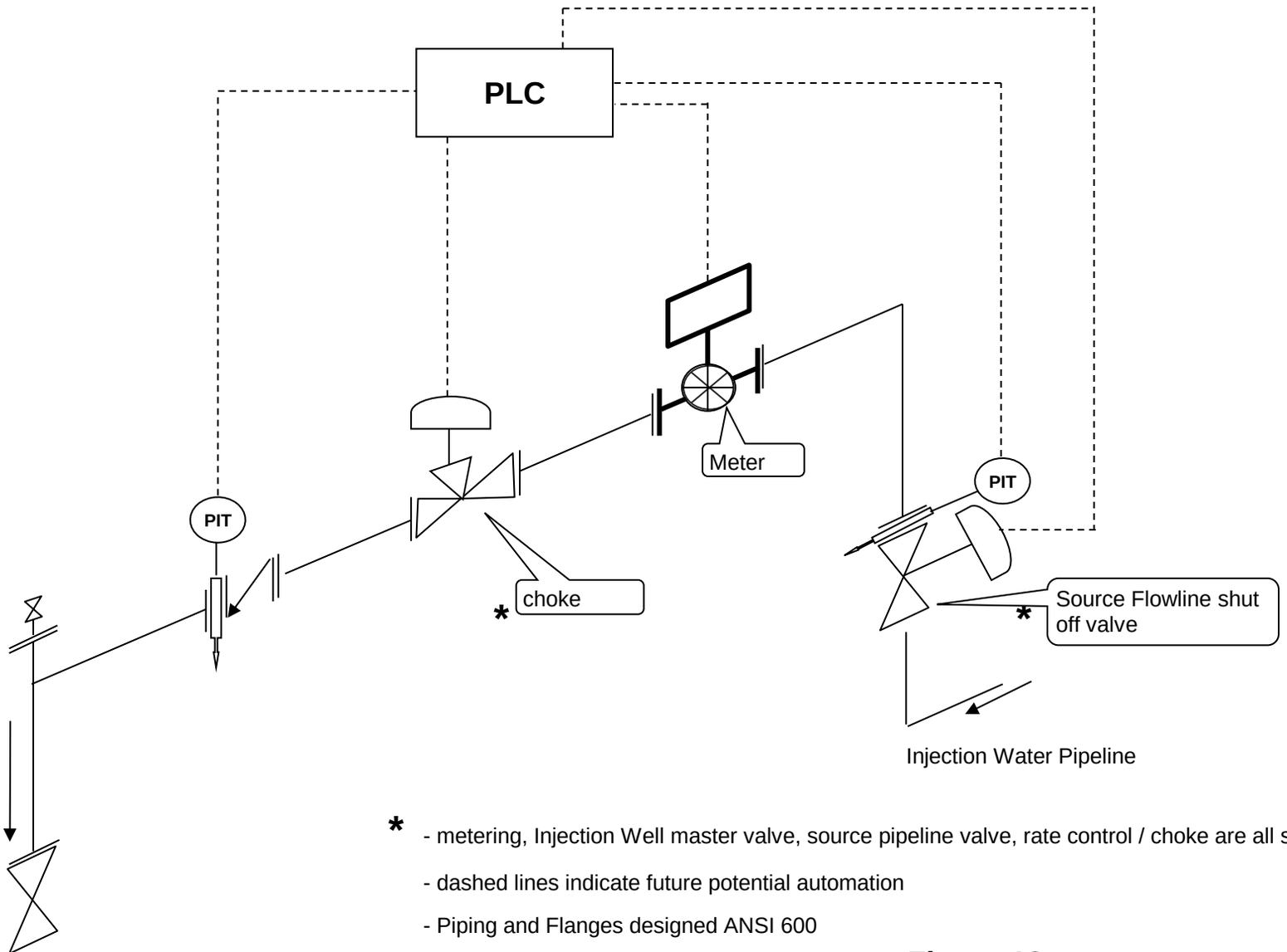
Bottomhole Pump:

Directions:

Figure 12

Ewart Unit No. 1

Proposed Injection Well Surface Piping P&ID



* - metering, Injection Well master valve, source pipeline valve, rate control / choke are all standard

- dashed lines indicate future potential automation

- Piping and Flanges designed ANSI 600

Figure 13

00/07-08-008-28W1/0

KB: 503.6 m RR: 2006-10-08
TD: 958.0 m [TVD] ● FormTD: TORQUAY
Mode: Prod Fluid: Oil
TUNDRA SINCLAIR 7-8-8-28 (WPM)

828.3m to next well >

DST Information

Prod	Oil (m3)	Gas (E3m3)	Water (m3)
Cum	2725.2	0.0	2092.3
Daily	1.5	0.0	1.2

00/05-09-008-28W1/0

KB: 500.5 m RR: 2007-11-11
TD: 943.0 m [TVD] ● FormTD: BAKKEN
Mode: Prod Fluid: Oil
TUNDRA SINCLAIR 5-9-8-28 (WPM)

< 828.3m to previous well 377.5m to next well >

DST Information

Prod	Oil (m3)	Gas (E3m3)	Water (m3)
Cum	2790.5	0.0	1118.9
Daily	2.0	0.0	0.8

00/06-09-008-28W1/0

KB: 500.6 m RR: 2008-01-26
TD: 944.0 m [TVD] ● FormTD: TORQUAY
Mode: Prod Fluid: Oil
TUNDRA SINCLAIR 6-9-8-26 (WPM)

< 377.5m to previous well 459.6m to next well >

DST Information

Prod	Oil (m3)	Gas (E3m3)	Water (m3)
Cum	2609.7	0.0	1139.6
Daily	2.0	0.0	0.9

00/07-09-008-28W1/0

KB: 498.8 m RR: 2006-08-08
TD: 944.0 m [TVD] ● FormTD: TORQUAY
Mode: Prod Fluid: Oil
TUNDRA SINCLAIR 7-9-8-28 (WPM)

< 459.6m to previous well 373.8m to next well >

DST Information

Prod	Oil (m3)	Gas (E3m3)	Water (m3)
Cum	1941.3	0.0	1280.1
Daily	1.0	0.0	0.7

00/08-09-008-28W1/0

KB: 498.3 m RR: 2006-09-07
TD: 941.0 m [TVD] ● FormTD: TORQUAY
Mode: Prod Fluid: Oil
TUNDRA SINCLAIR 8-9-8-28 (WPM)

< 373.8m to previous well 399.8m to next well >

DST Information

Prod	Oil (m3)	Gas (E3m3)	Water (m3)
Cum	882.5	0.0	5891.1
Daily	0.5	0.0	3.5

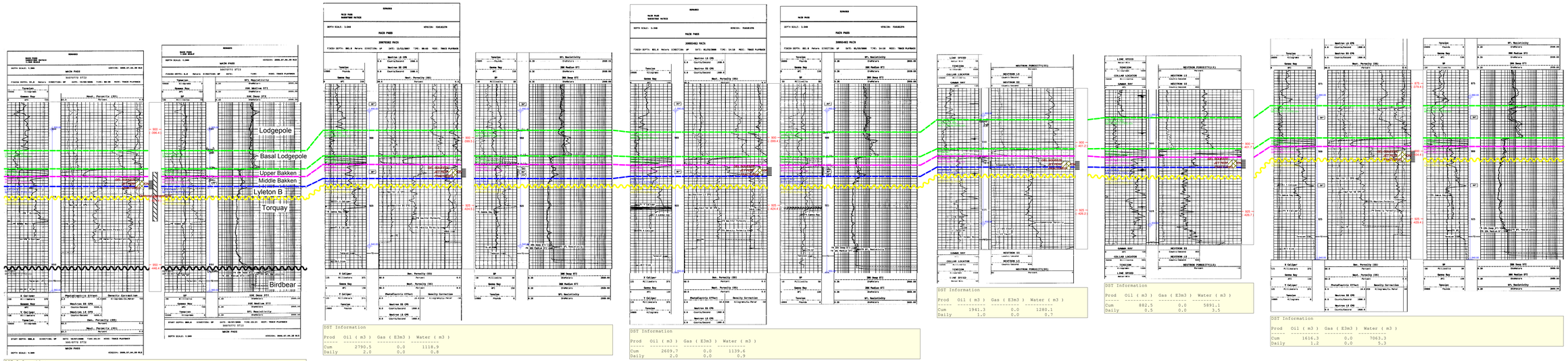
00/05-10-008-28W1/0

KB: 495.6 m RR: 2007-12-18
TD: 937.0 m [TVD] ● FormTD: TORQUAY
Mode: Prod Fluid: Oil
TUNDRA SINCLAIR 5-10-8-28 (WPM)

< 399.8m to previous well

DST Information

Prod	Oil (m3)	Gas (E3m3)	Water (m3)
Cum	1616.3	0.0	7063.3
Daily	1.2	0.0	5.3



Legend

● Oil

Tundra Oil and Gas Ltd.

Ewart Unit Number 1
W-E Structural Cross-section
Through Unit
Appendix 1

Produced by
AccuLogs Cross Section
Version 7.11.0.43505
Datum: NAD27

Copyright 2011, IHS

Author: bwilanson
Modified On: Wednesday, March 14, 2012 03:21PM
Printed On: Wednesday, March 14, 2012 03:21PM
Start Formation: 20m, above BAKKENU
End Formation: 5m, below Total Depth
Cross Section Name: DAUYOZ

Rge 28W1M

Twp 8

0 1000 2000

CI=0.5 m

Ewart Unit 1 Boundary

Cross section

Oilwell (including producing Hz wells)

Abnd Oilwell

Hz Surface

Intermediate Casing

Top in Hz wellbore

Injector

Location

Dry and Abandoned Well

Asdrilled Hz well

Hz well location

Proposed Ewart Unit 1
Middle Bakken Isopach
Appendix 6

Barry W. Larson
March 2012

Rge 28W1M

Twp 8

CI=0.5 m

0 1000 2000

Ewart Unit 1 Boundary
Cross section
Red Shale Zero Edge

Oilwell (including producing Hz wells)
Abnd Oilwell
Hz Surface
Intermediate Casing
Top in Hz wellbore
Injector
Location
Dry and Abandoned Well

Asdrilled Hz well
Hz well location

Proposed Ewart Unit 1
Red Shale Isopach
Appendix 7

Barry W. Larson
March 2012

Rge 28W1M

Twp 8

N

CI=0.5 m

0 1000 2000

Ewart Unit 1 Boundary
Cross section
Red Shale Zero Edge

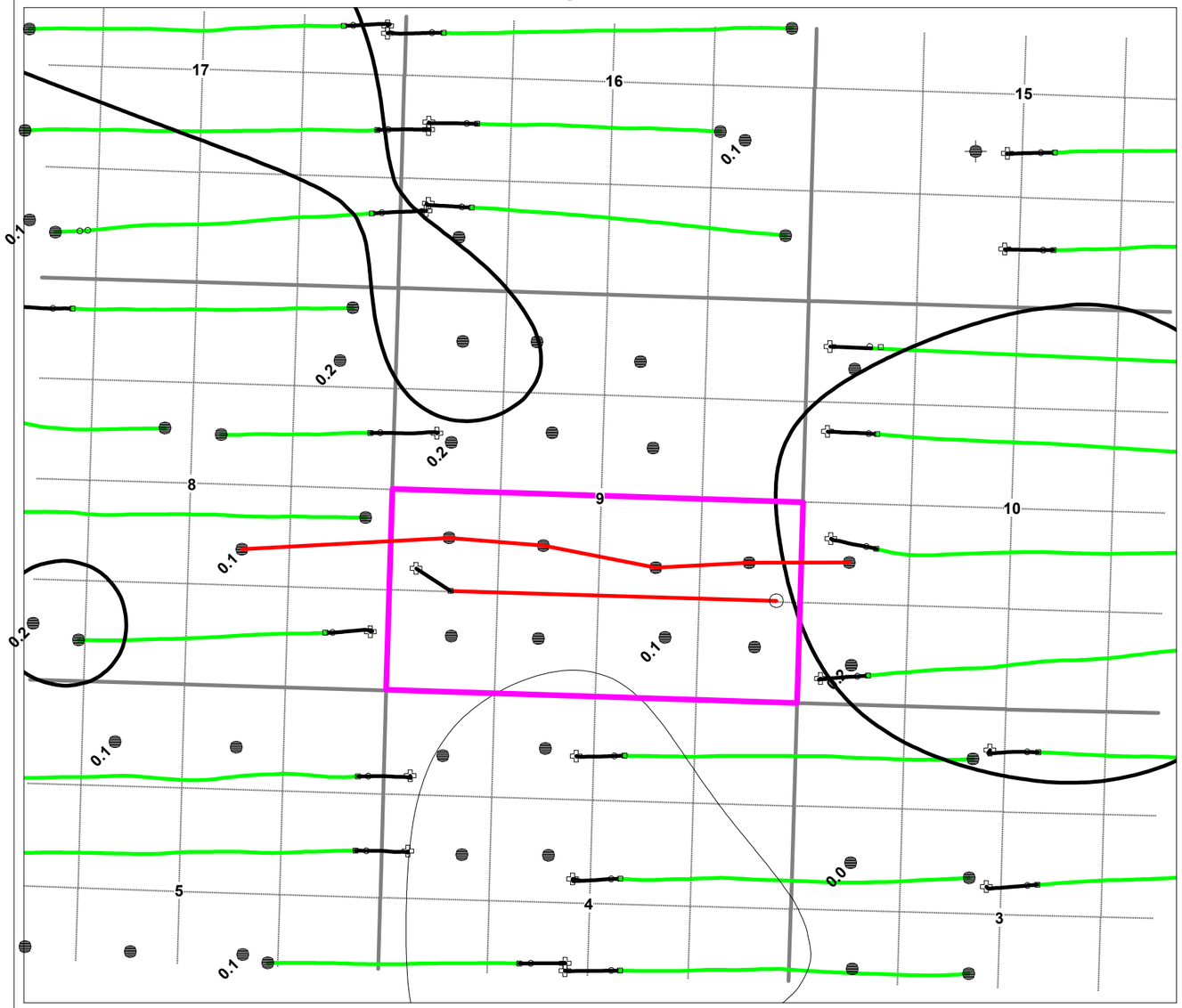
Oilwell (including producing Hz wells)
Abnd Oilwell
Hz Surface
Intermediate Casing
Top in Hz wellbore
Injector
Location
Dry and Abandoned Well

Asdrilled Hz well
Hz well location

Proposed Ewart Unit 1
Lyleton B Isopach
Appendix 8

Barry W. Larson
March 2012

Rge 28W1M



Twp 8

0 1000 2000

CI=0.2 por*m

Ewart Unit 1 Boundary

Cross section

Red Shale Zero Edge

Oilwell (including producing Hz wells)

Abnd Oilwell

Hz Surface

Intermediate Casing

Top in Hz wellbore

Injector

Location

Dry and Abandoned Well

Asdrilled Hz well

Hz well location

Proposed Ewart Unit 1
Middle Bakken Phi-h
Appendix 9

Barry W. Larson
March 2012

Rge 28W1M

Twp 8

CI=0.5 k*m

0 1000 2000

Ewart Unit 1 Boundary
Cross section
Red Shale Zero Edge

Oilwell (including producing Hz wells)
Abnd Oilwell
Hz Surface
Intermediate Casing
Top in Hz wellbore
Injector
Location
Dry and Abandoned Well

Asdrilled Hz well
Hz well location

Proposed Ewart Unit 1
Middle Bakken k-h
Appendix 10

Barry W. Larson
March 2012

Rge 28W1M

Twp 8

CI=0.2 por*m

0 1000 2000

Ewart Unit 1 Boundary
Cross section
Red Shale Zero Edge

Oilwell (including producing Hz wells)
Abnd Oilwell
Hz Surface
Intermediate Casing
Top in Hz wellbore
Injector
Location
Dry and Abandoned Well

Asdrilled Hz well
Hz well location

Proposed Ewart Unit 1
Lyleton B Phi-h
Appendix 11

Barry W. Larson
March 2012

Rge 28W1M

Twp 8

0 1000 2000

CI=0.5 k*m

Ewart Unit 1 Boundary
Cross section
Red Shale Zero Edge

Oilwell (including producing Hz wells)
Abnd Oilwell
Hz Surface
Intermediate Casing
Top in Hz wellbore
Injector
Location
Dry and Abandoned Well

Asdrilled Hz well
Hz well location

Proposed Ewart Unit 1
Lyleton B k-h
Appendix 12

Barry W. Larson
March 2012

Appendix 13

Proposed Ewart Unit No. 1
Original Oil-in-Place Calculation

	Lyleton "B"		Mid Bakken		Total OOIP
LSD	phi*h*a (ac-ft)	OOIP (Mbbl)	phi*h*a (ac-ft)	OOIP (Mbbl)	(Mbbl)
00/01-09-008-28W1/0	22.47	94.2	20.41	85.5	179.7
00/02-09-008-28W1/0	14.95	62.7	11.85	49.7	112.3
00/03-09-008-28W1/0	28.72	120.4	21.78	91.3	211.7
00/04-09-008-28W1/0	34.5	144.6	21.36	89.5	234.1
00/05-09-008-28W1/0	26.53	111.2	27.37	114.7	225.9
00/06-09-008-28W1/0	22.48	94.2	28.9	121.1	215.4
00/07-09-008-28W1/0	15.46	64.8	24.09	101	165.8
00/08-09-008-28W1/0	17.49	73.3	25.02	104.9	178.2
Total OOIP (Mbbl)		**765.4**		**757.7**	**1523.1**
Avg SW (frac)		**0.45**		**0.45**	
Boi (rb/stb)		**1.018**		**1.018**	

Appendix 14

Proposed Ewart Unit No. 1

LYLETON / THREE FORKS FORMATION ROCK & FLUID PARAMETERS

Formation Pressure		9,200 kPa	Initial Average Reservoir Pressure
Formation Temperature		30°C	
Saturation Pressure		2,034 Kpa	Bubble Point
GOR		6 - 10 m3/m3	Gas Oil Ratio
API Oil Gravity		40	
Swi (fraction)		0.40	Initial Water Saturation
Produced Water Specific Gravity		1.08	
Produced Water pH		7.1 - 7.3	
Produced Water TDS		125,000	
Wettability		Moderately oil-wet	
Average Air Permeability*	Middle Bakken Lyleton B	1.50 mD 0.6 mD	
Average Porosity (fraction)*	Middle Bakken Lyleton B	0.160 0.160	

Appendix 15: Ewart Proposed Unit No. 1 Well List											
UWI	***Prod Date***	***Monthly Oil (bbl)***	***Avg Dly Oil (bbl/d)***	***Cal Dly Oil (bbl/d)***	***Cum Prd Oil (bbl)***	***Monthly Water (bbl)***	***Avg Dly Water (bbl/d)***	***Cal Dly Water (bbl/d)***	***Cum Prd Water (bbl)***	***WCT (%)***	***OCT (%)***
100/01-09-008-28W1/0	Nov-2011	112.6	3.8	3.8	12476.2	132.2	4.4	4.4	17026.0	54.0	46.0
100/02-09-008-28W1/0	Nov-2011	107.0	3.8	3.6	18406.0	66.1	2.4	2.2	10341.1	38.2	61.8
100/03-09-008-28W1/0	Nov-2011	163.0	5.4	5.4	14231.3	80.5	2.7	2.7	8170.7	33.1	66.9
100/04-09-008-28W1/0	Nov-2011	189.4	6.3	6.3	14461.6	60.4	2.0	2.0	6890.7	24.2	75.8
100/05-09-008-28W1/0	Nov-2011	161.1	5.8	5.4	17560.3	68.6	2.4	2.3	7041.1	29.9	70.1
100/06-09-008-28W1/0	Nov-2011	197.6	6.6	6.6	16422.5	44.1	1.5	1.5	7171.4	18.2	81.8
100/07-09-008-28W1/0	Nov-2011	108.2	3.6	3.6	12216.3	45.3	1.5	1.5	8055.5	29.5	70.5
100/08-09-008-28W1/0	Nov-2011	49.1	1.8	1.6	5553.5	359.3	12.8	12.0	37071.9	88.0	12.0

Appendix 16

Proposed EWART UNIT NO. 1

Attached to and made part of an Agreement Entitled
Ewart Unit No. 1 - Unit Agreement

		Working Interest		Royalty Interest		
Tract No.	**Land Description**	**Owner**	**Share %**	**Owner**	**Share %**	**Tract Participation**
1	LSD 1-9-8-28	Tundra Oil & Gas Partnership	100%	PetroBank Energy Ltd.	100%	0.118052967
2	LSD 2-9-8-28	Tundra Oil & Gas Partnership	100%	PetroBank Energy Ltd.	100%	0.072649056
3	LSD 3-9-8-28	Tundra Oil & Gas Partnership	100%	1093105 Ontario Inc.	100%	0.139122683
4	LSD 4-9-8-28	Tundra Oil & Gas Partnership	100%	1093105 Ontario Inc.	100%	0.153979873
5	LSD 5-9-8-28	Tundra Oil & Gas Partnership	100%	1093105 Ontario Inc.	100%	0.148201916
6	LSD 6-9-8-28	Tundra Oil & Gas Partnership	100%	1093105 Ontario Inc.	100%	0.141349257
7	LSD 7-9-8-28	Tundra Oil & Gas Partnership	100%	PetroBank Energy Ltd.	100%	0.108847860
8	LSD 8-9-8-28	Tundra Oil & Gas Partnership	100%	PetroBank Energy Ltd.	99.025%	0.116647874
9	LSD 8-9-8-28	Tundra Oil & Gas Partnership	100%	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF MANITOBA	0.975%	0.001148515
					TOTAL	1.000000000

TUNDRA OIL & GAS LIMITED

Appendix 17

EWART UNIT NO. 1

TRACT FACTORS BASED ON OIL-IN-PLACE (OOIP) MINUS CUMULATIVE OIL PRODUCED METHOD

Determination of Working Interests in Proposed Unit

LSD	OOIP [m3]	Cum Oil Dec31-11 [m3]	OOIP - Cum Oil [m3]	Tract Factor OOIP - Cum Oil
1-9-8-28W1	28,569	318	28,251	0.118052967
2-9-8-28W1	17,854	468	17,385	0.072649056
3-9-8-28W1	33,657	364	33,293	0.139122683
4-9-8-28W1	37,218	369	36,848	0.153979873
5-9-8-28W1	35,914	449	35,466	0.148201916
6-9-8-28W1	34,245	419	33,826	0.141349257
7-9-8-28W1	26,359	311	26,048	0.108847860
8-9-8-28W1	28,331	141	28,189	0.117796389
TOTAL S/2 9-8-28W1	**242,146**		**239,306**	**1.000000000**

Ewart Unit No. 1

EOR Waterflood Project

Planned Corrosion Control Program **

Source Well

- Continuous downhole corrosion inhibition
- Continuous surface corrosion inhibitor injection
- Downhole scale inhibitor injection
- Corrosion resistant valves and internally coated surface piping

Pipelines

- Source well to 3-4-8-29 Water Plant – Fiberglass
- New High Pressure Pipeline to Unit 7 injection wells – 2000 psi high pressure Fiberglass

Facilities

- 3-4-8-29 Water Plant and New Injection Pump Station
    - Plant piping – 600 ANSI schedule 80 pipe, Fiberglass or Internally coated
    - Filtration – Stainless steel bodies and PVC piping
    - Pumping – Ceramic plungers, stainless steel disc valves
    - Tanks – Fiberglass shell, corrosion resistant valves

Injection Wellhead / Surface Piping

- Corrosion resistant valves and stainless steel and/or internally coated steel surface piping

Injection Well

- Casing cathodic protection where required
- Wetted surfaces coated downhole packer
- Corrosion inhibited water in the annulus between tubing / casing
- Internally coated tubing surface to packer
- Surface freeze protection of annular fluid
- Corrosion resistant master valve
- Corrosion resistant pipeline valve

Producing Wells

- Casing cathodic protection where required
- Downhole batch corrosion inhibition as required
- Downhole scale inhibitor injection as required

Appendix 18

** subject to final design and engineering