Enhance Energy Inc. and North West Redwater Partnership

Division A:
SUMMARY REPORT
2011

ACTL

Government of Alberta

Natural Resources Canada | Ressources naturelles Canada
Canada

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Cover Page: "South Light", An Acrylic by Brent R. Laycock, A Local Alberta Artist

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Certification Letters

Certification on behalf of Enhance Energy Inc.

CERTIFIED on behalf of the Enhance Energy Inc., named in the "CCS Funding Agreement – The Alberta Carbon Trunk Line Project", to be true, accurate and complete, to the best of my knowledge, based on reasonable inquiry and due diligence, as of the date of this certification.

This Certification applies to the information supplied by Enhance Energy Inc. only and does not imply certification of information supplied by other Recipients.

Per: Enhance Energy Inc.

May 15/12

Date

Susan Cole
President
Enhance Energy Inc.

NWR
NORTH WEST REDWATER PARTNERSHIP

Certification on behalf of North West Redwater Partnership

CERTIFIED on behalf of the North West Redwater Partnership, named in the "CCS Funding Agreement – The Alberta Carbon Trunk Line Project", to be true, accurate and complete, to the best of my knowledge, based on reasonable inquiry and due diligence, as of the date of this certification.

The Certification applies to the information supplied by North West Redwater Partnership only and does not imply certification of information supplied by other Recipients.

Per: _____
Larry Vador
Senior Vice President
Operations & Development

Date: May 15/2012

Part A – Executive Summary

Enhance Energy Inc. ("Enhance") and North West Redwater Partnership ("NWR" or "NWRP") are developing a fully integrated Carbon Capture and Storage ("CCS") project, the Alberta Carbon Trunk Line ("ACTL"), incorporating:

- CO_2 capture from the existing Agrium Redwater fertilizer plant;
- CO_2 capture from the North West Sturgeon Refinery project under development using gasification and Rectisol® synthesis gas purification and conditioning technology;
- A 240 km CO_2 transportation trunk line; and
- Storage, including Enhanced Oil Recovery ("EOR").

The ACTL project will provide critical CO_2 gathering and distribution infrastructure to enable the cost-effective management of CO_2 emissions. The project also represents an opportunity to showcase how the Province's vast bitumen resources can provide competitive and environmentally sustainable energy amid tightening environmental standards.

This Summary Report will highlight the information contained in the attached Division B Detailed Report. The status and progress of each component (see Figure 1 below) of the ACTL will be summarized as well as the relevant financial information.

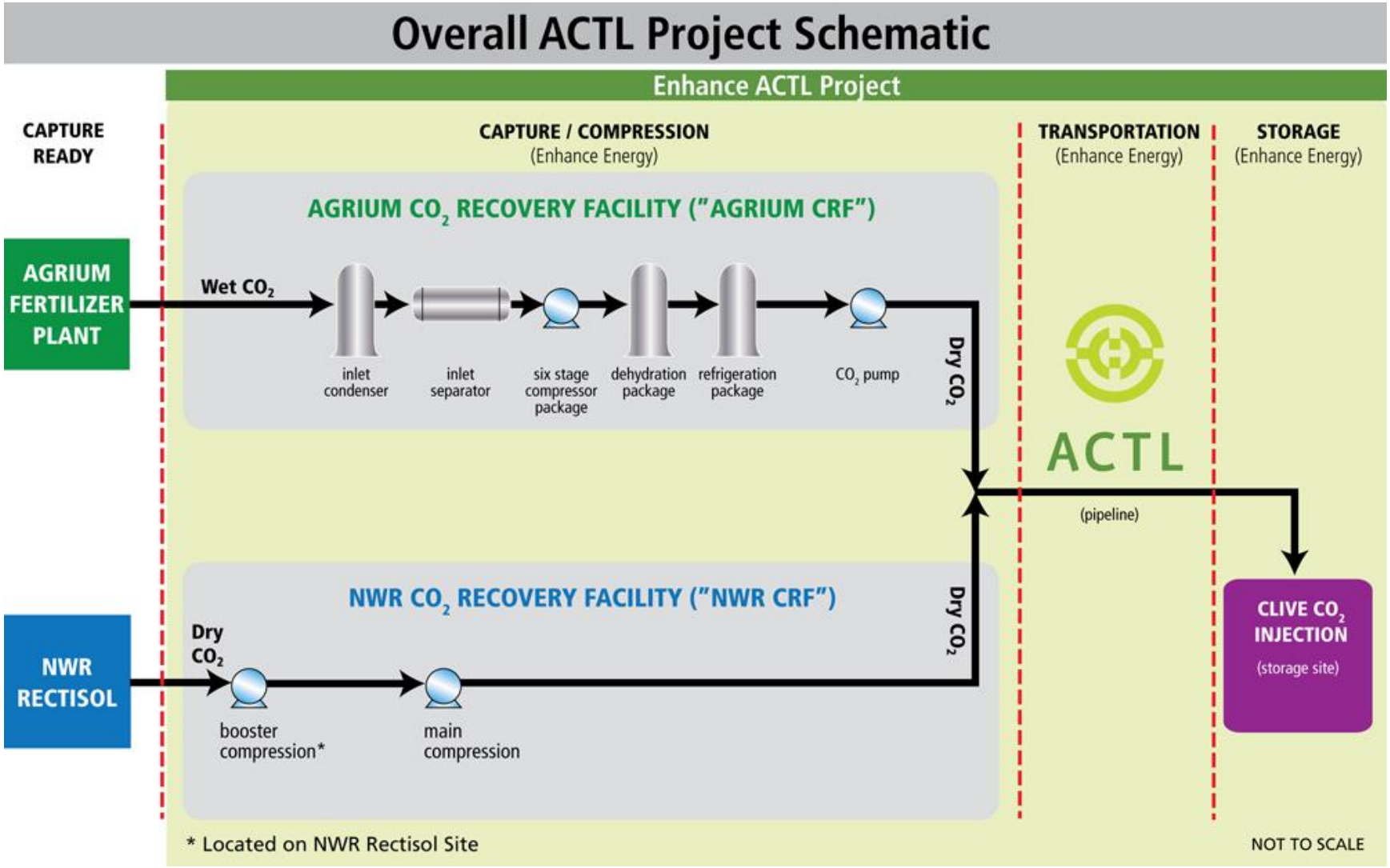


Figure 1 - Overall ACTL Project Schematic

Substantial progress has been made on the ACTL project; however, the operational phase of the project will not begin until 2014.

Key activities achieved during this past year include:

Agrium CO_2 Recovery Facility:

- Detailed Engineering and Design completed
- Tie-in of the CO_2 supply line within the Agrium fertilizer plant site
- Ordering of major equipment, including compressor
- Compressor manufacture significantly underway

NWR Rectisol:

- Completion of Design Basis Memorandum ("DBM")
- Engineering Design Specification ("EDS") nearing completion (as of April 2012)
- Transitioning to Detailed Engineering stage

NWR CO_2 Recovery Facility:

- CO_2 Booster Compression unit
    - Completion of DBM
    - EDS nearing completion (as of April 2012)
    - Transitioning to Detailed Engineering Design
- CO_2 Main Compression unit
    - Development of DBM
    - Preliminary cost estimates completed
    - Transitioning to Detailed Engineering Design

Transportation:

- Approval of Energy Resources Conservation Board ("ERCB") construction license
- 98% of Right of Way from landowners acquired
- Right of Way survey completed
- Environmental assessments completed
- Detailed alignment sheets significantly completed
- Horizontal Directional crossing designs significantly completed
- Pipe material testing completed

Storage:

- Pressure survey analysis completed
- Geological characterization of sedimentary succession above the oil reservoir underway

Part B – Project Status Overview and Commentary

The project is still in its design phase, and as such there is little to report in regard to variations or significant problems and successes. As the project is further developed and achieves commercial operation there will be more to report.

The ACTL project will employ technologies that are commercially mature. The primary innovation of the project is its scope and integration of various existing technology to demonstrate an economic carbon solution for Alberta.

Section 1: Facility Design

A) AGRIUM CO_2 Recovery Facility ("Agrium CRF")

Design of the CRF Facility (to date)

The design basis for the new Agrium Capture Facility is for economic recovery of CO_2 from the fertilizer plant's CO_2 emission streams. The streams pass through inlet cooling, separation, compression, dehydration, and refrigeration. This process produces liquefied CO_2 that is then pumped into the Alberta Carbon Trunk Line ("ACTL") at a pressure of 17,926 kPag [2600 psig], which transports the CO_2 to EOR fields at the end of the line for permanent storage.

The facility was designed to recover the highest percentage of CO_2 from the incoming feed stream. Various process options were discussed before arriving at the proposed process design. This current design utilizes a "fit for purpose" philosophy by incorporating typical oilfield/industrial technology, sourced and serviced locally.

Plot Plan and Facility Location

The plot plan (shown below) illustrates the layout of the CRF, which is located just outside the boundaries of Agrium's fertilizer plant in the Alberta Industrial Heartland.

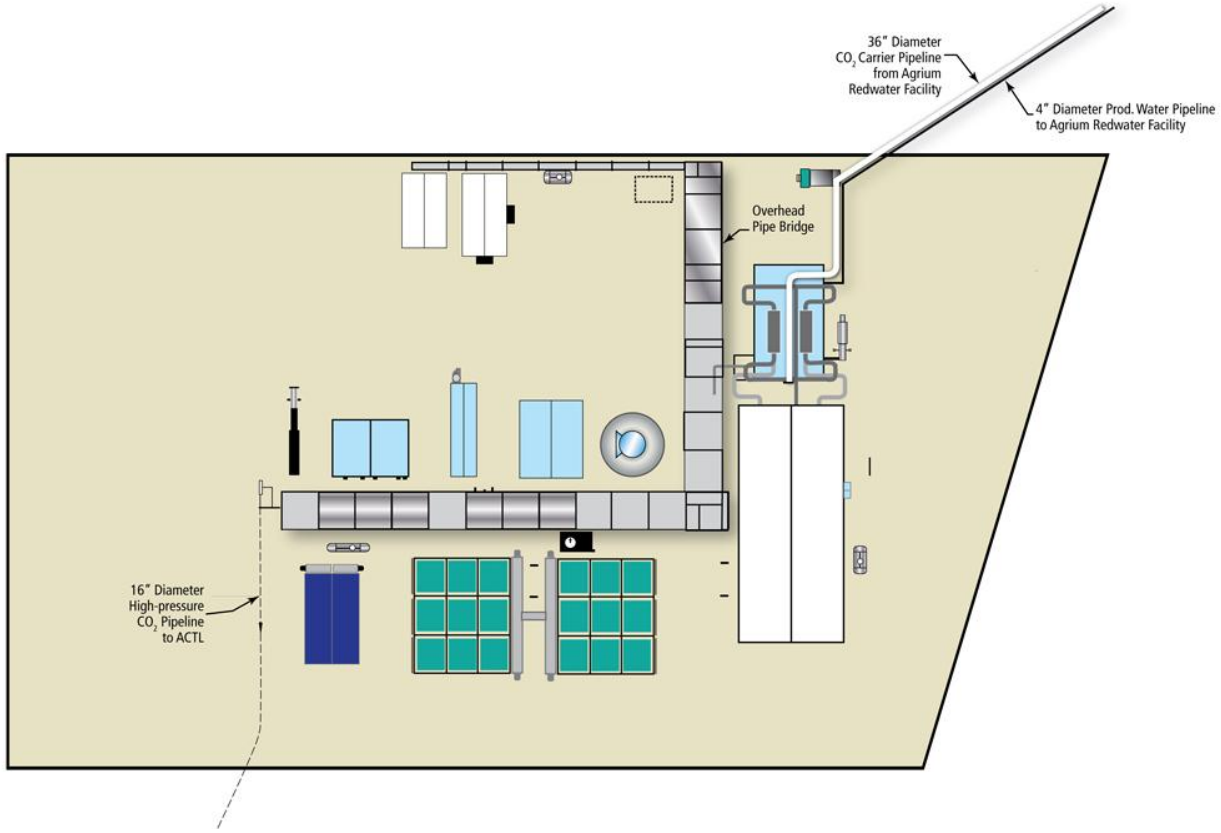


Figure 2 - Agrium CRF Plot Plan

** A higher resolution plot plan with more detail is available in Appendix vi of the Detailed Knowledge Sharing Report*

Separation Process Type and Description

As the CO_2 Enhance receives from Agrium is wet, a separation process is needed at the Agrium CRF before the CO_2 can be put into the pipeline. Accordingly, the cooled two-phase stream flows into a carbon steel inlet separator that separates the condensed water from the wet CO_2 gas stream. One electric driven produced water pump maintains the level in the inlet separator and pumps the condensed water to a waste drain at the Agrium site. Produced water disposal volumes will be metered. The produced water will be disposed through the Agrium facility into their existing deep disposal well system.

B) NWR Rectisol®

The NWR CO_2 capture system is heavily integrated into the design of the refinery's Gasification hydrogen supply unit. The Gasification unit uses the unconverted petroleum bottoms (asphaltene) generated in upgrading as a feedstock to produce synthesis gas (syngas). The technology selected to condition the syngas is the Rectisol® acid gas removal process licensed from Lurgi, a German engineering and construction firm. When operational, the Rectisol® unit will produce over 3,500 tonnes per day of pure and dehydrated CO_2. Rectisol® is a physical absorption process carried out at low temperatures and high pressures using cold methanol as

an absorption medium. The Rectisol® process is a mature technology that has been used for decades in the coal gasification, fertilizer and refinery industries. Increased demand for products derived from synthesis gas since 2000 has led to resurgence in Rectisol® installations around the world.

The NWR refinery will be built in the industrial heartland of Sturgeon County, approximately 45 km north-east of Edmonton. The plot plans shown below indicate the location of the gasification unit and Rectisol® unit within the refinery.

North West Sturgeon Refinery Plot Plan

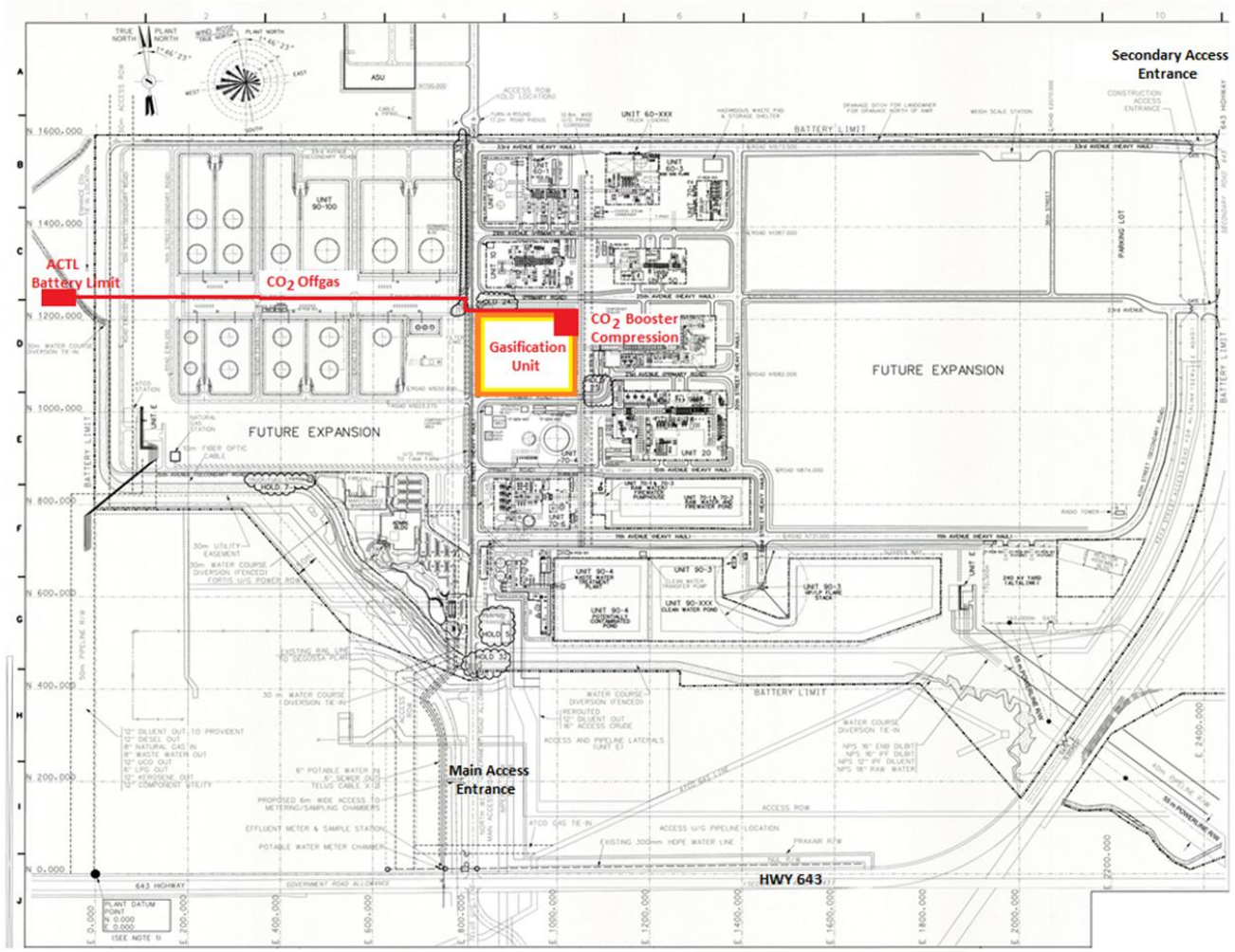


Figure 3 – North West Sturgeon Refinery Plot Plan

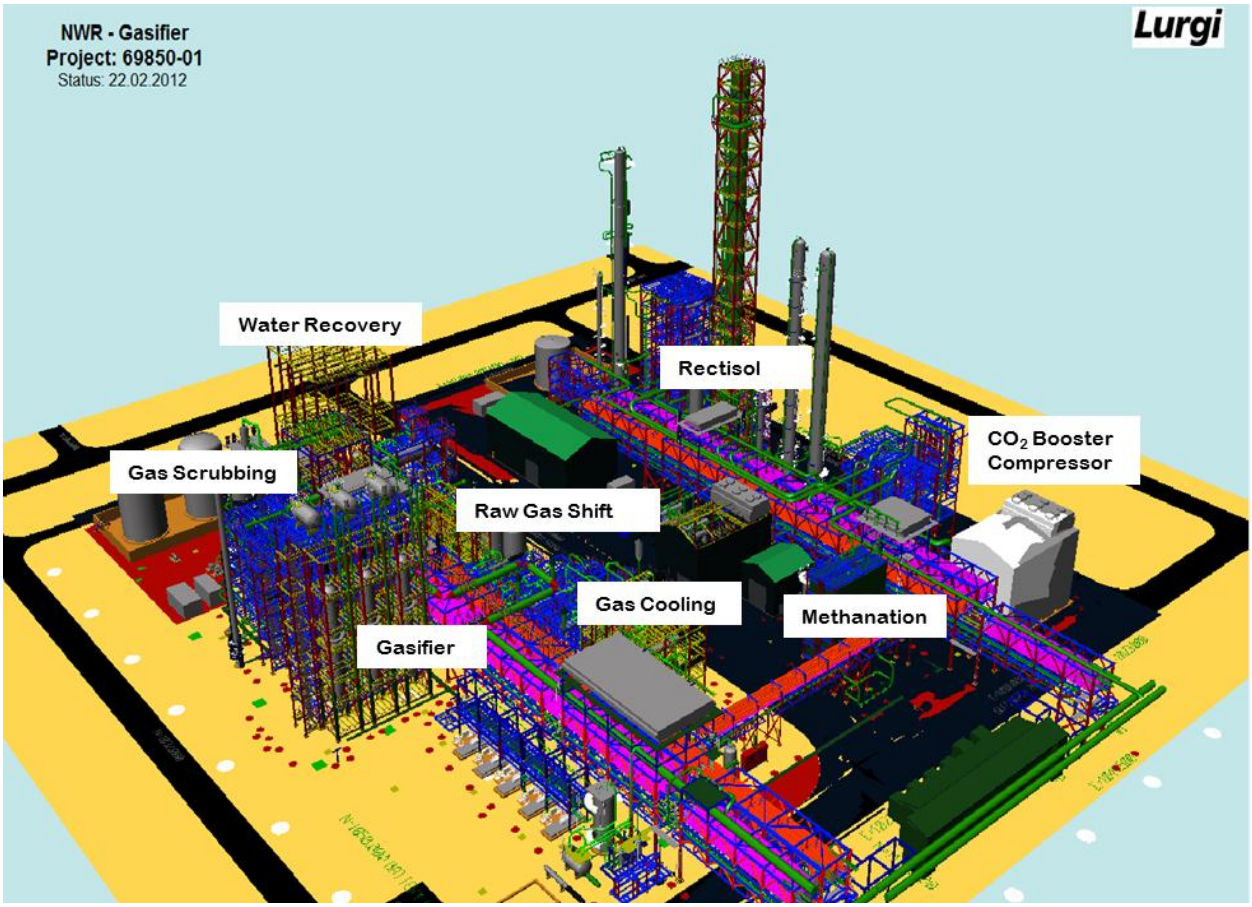


Figure 4 - Gasifier Unit 3D View

C) NWR CO_2 Recovery Facility ("NWR CRF")

The NWR CRF consists of a three stage CO_2 booster compressor unit to be located in the north-west corner of the Gasification site and a six stage main compressor unit which will be located outside the refinery in proximity to the Agrium plant. The booster compressor raises the NWR CO_2 from close to atmospheric pressure to approximately 1,400 kPag (200 psig) while the main compressor further increases the pressure of the CO_2 to a dense fluid state necessary for pipeline transportation.

D) Pipeline Facility

The ACTL pipeline will be 240 kilometers in length, and will begin in the Alberta Industrial Heartland, by the Agrium and NWR CRFs, and go south ending at the Clive storage field (shown in Figure 3). The detailed alignment sheets for the pipeline are 95% complete as are the construction plans and Horizontal Directional Drill ("HDD") crossing designs. Approximately 98%

of the Right of Way ("ROW") has been acquired from landowners. The remaining two percent of the ROW is currently undergoing final compensation negotiations, and is expected to be resolved shortly. Procurement of materials is underway. Pipe specifications have been finalized and pipeline, valves and actuators are currently being manufactured.

Figure 5 - ACTL Route Map

E) Injection Facility

The injection facility will be located at the end of the ACTL pipeline at the Clive storage site (shown in Figure 5). The exact location and number of the wells for the site is being finalized.

Section 2: Facility Construction

A) Agrium CO_2 Recovery Facility ("Agrium CRF")

Enhance completed the tie-ins on the existing Agrium plant in June of 2011, during a scheduled shutdown of the plant for maintenance. This timing was strategically planned to minimize any inconvenience to Agrium.

The construction of the Agrium CRF site has yet to begin, but is scheduled to start in the first calendar quarter of 2013.

B) NWR Rectisol®

Construction of the Rectisol unit is expected to start in the first calendar quarter of 2013. The Gasification unit, including Rectisol® will be among the first refinery process units to be brought on stream. However, the construction schedule and in-service date are interdependent on the overall refinery project development with other process units proceeding in parallel.

C) NWR CO_2 Recovery Facility ("NWR CRF")

Construction and operation of the Enhance CO_2 Booster Compressor is tied to the construction of the NWR Rectisol® unit, as it is located within the Gasifier boundary limits. Construction and operation of the Enhance Main Compressor is also tied to the construction of the Rectisol® unit, but will be located outside the NWR fence line. Accordingly, construction on the NWR CRF will begin in the first calendar quarter of 2013 to coordinate with the construction at the NWR Rectisol® site.

D) Pipeline Facility

Major equipment with long lead times, such as valves and actuators, has been purchased. Initial construction scoping along the pipeline route is set to begin in the fourth calendar quarter of 2012, including the major horizontal directional crossing and initial clearing and timber removal of portions of the line. The main construction for the ACTL will begin in the second calendar quarter of 2013.

E) Injection Facility

Well location and facility design is still being finalized. The construction of the injection facility is set to begin in in the first calendar quarter of 2014.

Section 3: Geological Formation Selection

Storage for Enhance's ACTL project will take place at the depleted hydrocarbon reservoir at Clive.

Summary of reasons for selecting the final site

Practical suitability
There are many practical reasons which make Clive a suitable storage site for CO_2. The Clive reservoirs are mature waterflooded oil reservoirs. In this context, they provide:

- Containment for CO_2 due to the fact that they have contained hydrocarbons for millions of years,
- Capacity for CO_2 storage due to significant production of oil and gas providing voidage,
- Injectivity for CO_2 due to substantial water injection operations for five decades, and
- Residual oil production to provide for economic support of large scale CO_2 sequestration.

The Clive reservoirs are also unitized, enabling common ownership and royalty interests across the reservoirs. This provides the opportunity to take advantage of the unique geology, with minimal complications due to competitive ownership interests, in order to maximize oil recovery and maximize sequestration of CO_2.

Geographical suitability
The storage site was also attractive due to its geographic location. As Clive is not adjacent to large residential developments, it makes it easier for surface access to design, build and operate a CCS EOR project with minimal disruptions to residents.

Potential EOR benefits
The potential EOR benefits of CO_2 sequestration sites are important criteria for consideration in the site selection process. This is due to the fact that the economic gains associated with EOR, and specifically the sale of incremental oil production, will financially support the cost of an expensive CCS scheme.

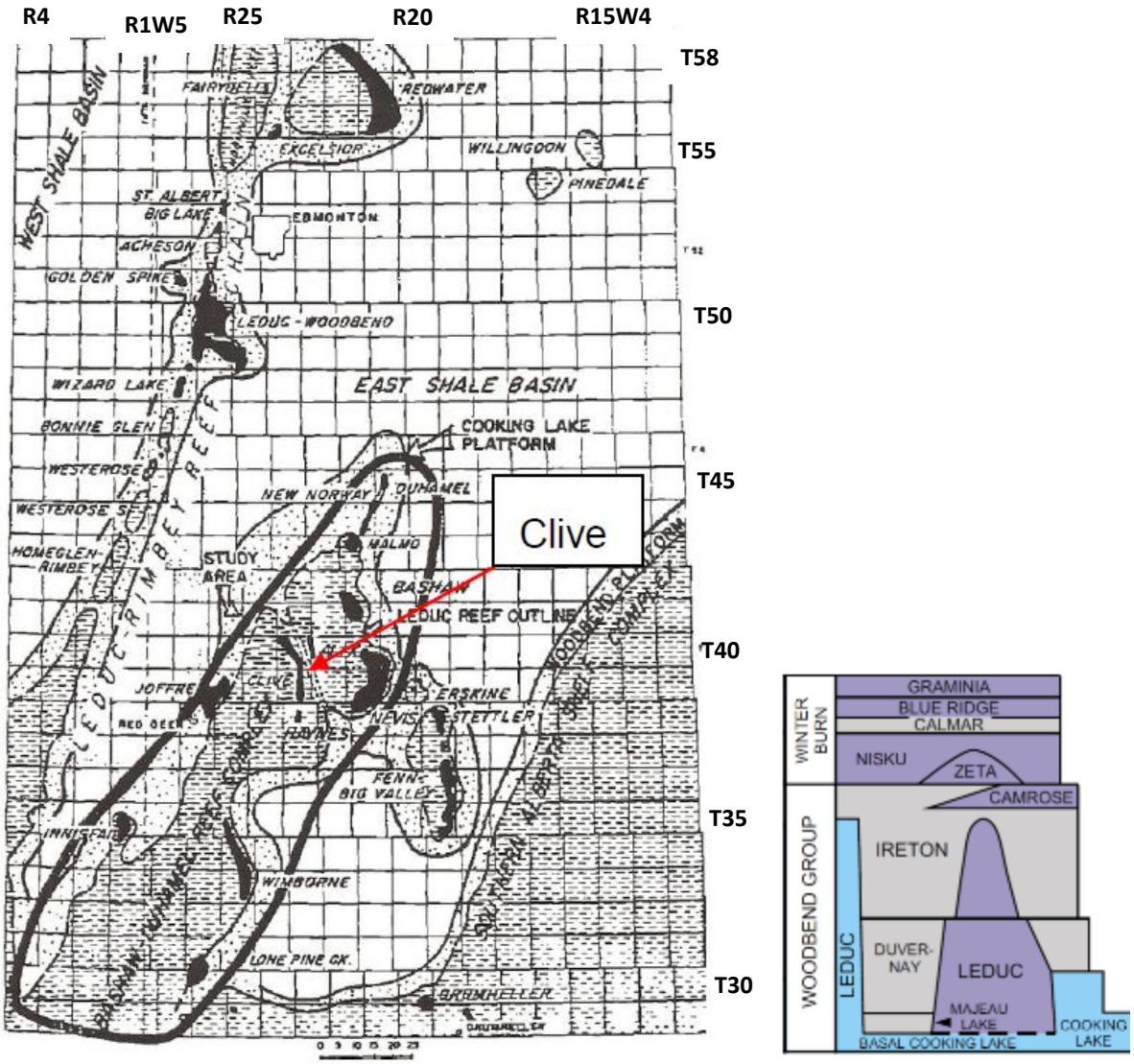
The EOR benefits extend beyond Enhance. Albertans benefits from this project through increased royalties to the Province and job creation. It is estimated that the project will create $19 billion in royalty revenue for the Alberta government over the next 30 years.

Additional social benefits are created through revitalization of economic activity in an oil and gas field that is near abandonment. Job creation for the initial ACTL project is estimated at 2,000 direct jobs during peak construction and an additional 8,000 indirect jobs over the life of the project. To date, it is estimated that approximately 80,000 man-hours have been expended

by suppliers, contractors and internal efforts. Ongoing job creation as the ACTL system expands is forecast to run in the tens of thousands.

Key characteristics of the geological formation

Location of injection reservoir: CO_2 will be injected into Clive, as shown in Figure 6.



Source: *Tsang, G. and Springer,S.J, —Innisfail-Clive-Nevis Reef Chain Revisited‖, CIM Paper 83-34-24, presented at the 34 ATM of the Petroleum Society, May 10-13, 1983, Banff.*

Figure 6 - Relative Location of Clive Reservoirs and its Stratigraphy

Depth and thickness of the reservoir
Comprehensive maps showing an interpretation of the storage formation's porosity tops, which also illustrate depth and thickness at the reservoir, are found in section 3.4 of the detailed report.

Injectivity of reservoir
Injectivity of CO_2 is derived from historical performance of water injection. The Clive reservoirs have shown tremendous capacity for water injectivity. Typical determination of injectivity is based on equivalent volumes at the same reservoir pressure and reservoir temperature.

Water injection wells for the Clive reservoirs have not seen any rate limitations as they have been able to take water on vacuum. Thus, CO_2 injectivity at any Clive reservoir is not expected to be constrained by reservoir parameters but may be impacted by wellbore configuration or surface facility design.

Porosity and permeability of the reservoir
Enhance contracted a study of the Clive reservoirs (Nisku and Leduc) in 2008 and in part, an examination was undertaken to determine the porosity, permeability and its interdependence for the Nisku and Leduc reservoirs. The following two graphs are a representation of this analysis.

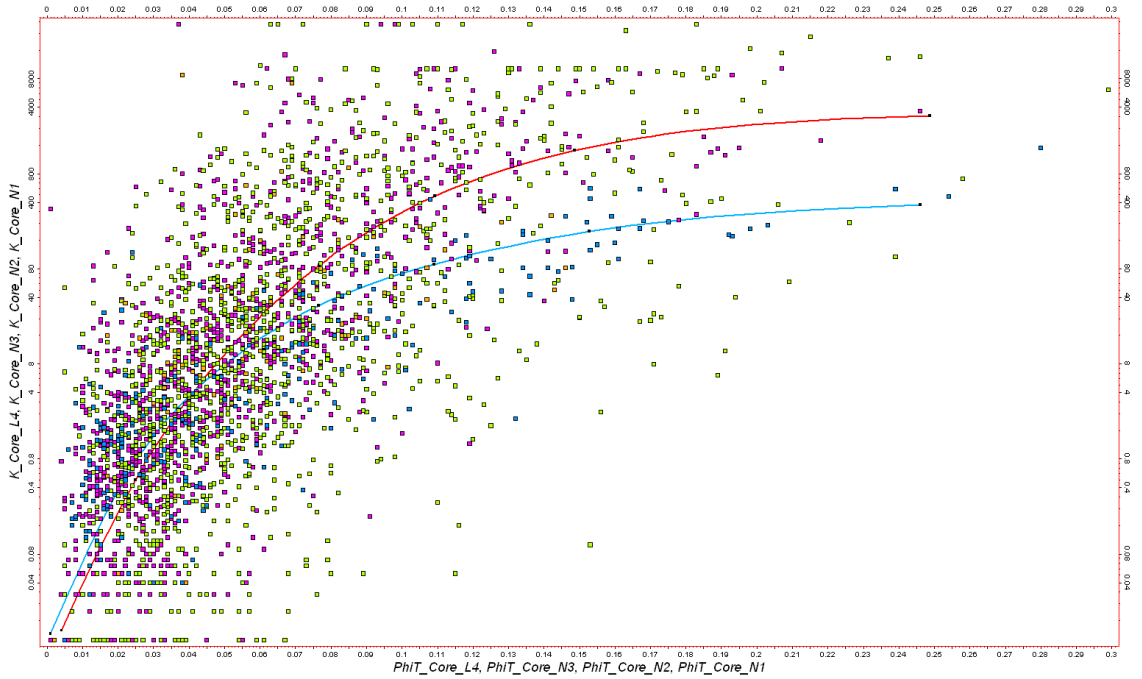


Figure 7 - Graph of Porosity, Permeability and its Interdependence at Nisku

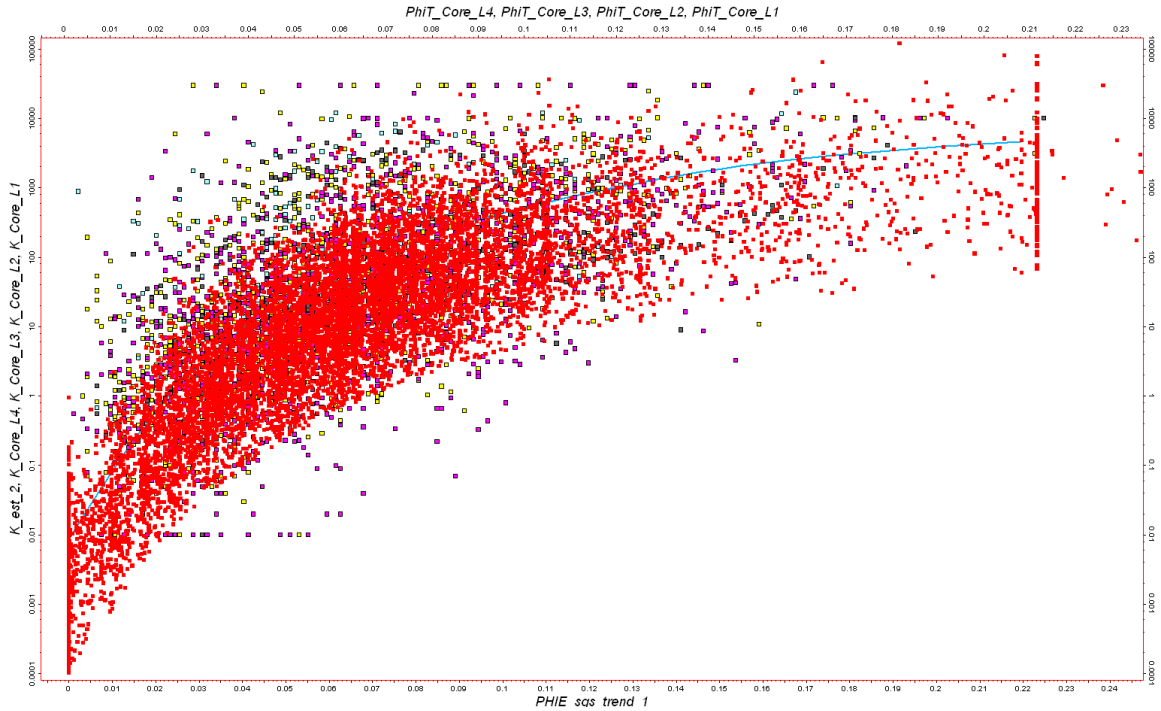


Figure 8 - Graph of Porosity, Permeability and its Interdependence at Leduc

Initial pressure and temperature: The temperature at the Clive reservoirs is 69°C (156°F) and its pressure 1813 psig.

Estimate of storage potential: The total CO_2 storage capacity at Clive due to replacement of produced oil and gas is estimated at 18.8 million tonnes ("MT") (a more detailed calculation of this estimate is found in section 3.2 of the detailed report.)

Risks of storage into the geological formations and the measures implemented to manage and reduce such risks:
Storage for Enhance's ACTL project will take place at the depleted hydrocarbon reservoir at Clive. As depleted hydrocarbon reservoirs have securely contained fluids for millions of years, these reservoirs are very well suited for containment and safe storage of injected CO_2 and pose very minimal risk of leakage. Depleted hydrocarbon reservoirs in Alberta have typically undergone waterflood operations whereby water has been used to replace produced hydrocarbons. The injectivity of CO_2 is typically estimated to be the same as injectivity of water at reservoir conditions. Such waterfloods have been conducted at Clive, again minimizing any risk of storage in this field.

Enhance is currently conducting comprehensive geological and geomechanical studies on the rock (from the bottom of the well to the well head). Once these studies have been completed and analyzed, Enhance will be able to finalize its comprehensive monitoring, measurement and verification ("MMV") plan for the storage site.

Section 4: Facility Operations – Capture

As the project is still in its design phase, the CO_2 capture facilities have yet to start-up. Information regarding the efficiency of each step, impact upon the operating efficiency of the base facility, and purity of the CO_2 is not available at this time.

Section 5: Facility Operations – Transportation

In its first phase, the pipeline will transport captured, compressed CO_2 from the Agrium fertilizer plant and the North West Sturgeon Refinery plant to selected EOR fields at the end of the pipeline.

Flow capacity: The maximum flow capacity of the pipeline, once filled to its full capacity, is 14.6 million tonnes of CO_2 a year.

Pipeline diameter: The pipeline will be 16" in diameter.

Design pressure and temperature: The maximum operating pressure is 17,926 kPag.

The operating temperature design of the pipeline is between -18°C to 60°C.

Wall thickness: The line pipe is a Nominal Pipe Size ("NPS") Grade 448 at 14.3 mm wall thickness.

Length: The pipeline will be 240 kilometers long.

Material: The 16" ACTL pipeline will be made of welded-body carbon steel.

Expected lifetime: the pipeline has an expected lifetime of 100 years or more

Cathodic protection: A cathodic protection system will be installed as part of the corrosion reduction program. The design of this system is underway as a part of the detailed design for the project. The system will incorporate the following considerations:

- Length of system and segments
- Coating specifications
- Locations of block valves
- Soil analysis and resistivity data
- Water table
- Proximity to other utilities

The pipeline will require cathodic protection test stations to be installed along the route of the pipeline at regular intervals. The pipeline will be fitted with insulating flanged gaskets at each end of the system.

The carbon dioxide water dew-point specification is less than 162mg/m3 (10 lbs/MMscf); therefore, free water is not present during normal operating conditions, and corrosion due to the formation of Carbonic acid cannot occur. Post hydrostatic testing procedures will be incorporated to ensure the pipeline is dry prior to commissioning and operation. In the event the water dew-point is exceeded at the source, an on-line hydrometer signals an emergency shutdown valve ("ESDV") to close diverting the off-spec gas to vent.

Section 6: Facility Operations – Storage and Monitoring

No CO_2 has been injected and stored, as the project is still in its design phase. Therefore there is no data regarding the injection and storage of CO_2 and its direct monitoring to report at this time.

The planned CO_2 injection rate is the entire available CO_2 supply volume currently estimated at 4,300 tonnes of CO_2 per day. The CO_2 injection stream composition, pressure and temperature are provided in Section 3.8 of the attached Division B Detailed Report.

Monitoring techniques that will be employed at the injection site are storage site specific and are still being developed with the assistance of technical experts and this work is currently underway. Injection rates and CO_2 recycle rates will be finalized as project moves into operations. Atmospheric CO_2 emissions in the scheme are limited to screwed connections for pipe 2" and smaller and flanged connections for pipe 3" and larger. Some emissions to the

atmosphere will also occur during facility shutdowns and start-up. However, these emissions are considered to be fugitive emissions and are negligible.

Section 7: Facility Operations – Maintenance and Repairs

As the ACTL is not yet operational, there are no maintenance and repair activities to report at this time.

Section 8: Regulatory Approvals

Enhance Approvals

No unusual hurdles were encountered throughout the application and approval process. The following table indicates approvals obtained by Enhance for the ACTL project:

Consent/Permit	General Timeline of Approval Receipt	Additional Hurdles Encountered
Canadian Environmental Assessment Agency ("CEAA")	Submitted: January 2010 Approved: September 7th, 2010	None
Development Permit (County Level)	Currently finalizing submission for Agrium Typically two months from submission for review and approval	None
Alberta Historical Resources Foundation ("AHRF")	Currently preparing application Typically three months from submission for review and approval	Ongoing routing changes delayed application process
ERCB Directive 56 Pipeline Installation Approval (incorporates Alberta Environment approval)	Public consultation process: October 2008 – March 2009 Applied: March 20, 2009 Approved: April 26, 2011 License Number: 53252	On-going consultation required after approval

Table 1 - Enhance Regulatory Approvals Table

NWR Approvals

All necessary regulatory approvals have been obtained to proceed with the construction and operation of the North West Sturgeon Refinery project. The table below describes the approvals obtained by NWR.

BODY/ACT/REGULATION	APPROVAL/PERMIT/DESCRIPTION
Energy Utilities Board/Oil and Gas Conservation Act/	Upgrader Approval No. 10994 dated September 6, 2007 / For construction and Operation of an oil sands bitumen upgrader, no expiry
Energy Utilities Board/Oil and Gas Conservation Act	Decision 2007-058 dated August 7, 2007 / Application to Construct and Operate an Oil Sands Upgrader in Sturgeon County
Alberta Environment/Environmental Protection and Enhancement Act	Approval No. 217118-00-00 as amended by Approval No. 00217118-00-01 dated February 13, 2008 / Amending Limited Scope Approval to now encompass construction, operation and reclamation of upgrader, expires September 1, 2017
Alberta Environment/Water Act	Approval No. 00227771-00-00 as amended by Approval No. 00227773-00-00 dated February 13, 2008 / Amending Limited Scope Approval to now encompass diversion of water from site Precipitation and NSR for process, expires September 1, 2017
Sturgeon County/Land Use Bylaw 819/96	Development and Building Permits 305-07-D0347 305-07-D0399 305-07-D0609 305-07-D0610 305-08-D0001 305-07-D0611 305-07-D0631
Alberta Transportation/Highways Development and Protection Act	Roadside development permit 2511/049/10

Alberta Sustainable Resource Development/Public Lands Act	Temporary Field Authorization for water course realignment TFA 074346 as extended by TFA 082441 / since expired
Alberta Community Development/ Historical Resources Act	Clearance Letter Release Date: February 1, 2006 Release Date: November 29, 2006
Industry Canada/Radio Communication Act and Regulations	Mobile radio licence for use by construction workforce 22-080294697, since expired

Table 2 - NWR Regulatory Approvals Table

Section 9: Public Engagement

Enhance

Enhance has undertaken an extensive and open public engagement program working with all directly or potentially impacted landowners and occupants, local authorities, industry stakeholders, and provincials regulators. Open houses were held in eight locations along the proposed pipeline route. A detailed account of Enhance's public engagement is found in Appendix xii of the detailed report.

Below is a table of the main questions and concerns raised at meetings and open houses along with Enhance's responses.

QUESTION	ENHANCE RESPONSE
How deep in the ground does the pipeline get constructed?	Typical construction practice of 1.2 meters unless special conditions warrant a change to cover depth.
What is the operating pressure of the pipeline?	In response this concern Enhance shared the following information with interested parties: - The proposed line pressure, which is 2600 psi; - The proposed wall thickness; and - The planned corrosion protection plan, including the intended inspection of the pipeline regulatory requirements.

How is the post construction vegetation going to be managed?	The Right of Way and Temporary Work Space lands will be fenced on pasture lands or lands identified by a landowner for a two year growing season to ensure proper regrowth.
Regarding fencing on the quarter section boundary line (existing and new), would Enhance clean up the brush on fence lines and establish new fence boundaries?	Fence lines would be established by way of survey and new fence will be constructed during final clean up if required.
What will be the means of access across the Right of Way during construction?	The necessary measures will be put in place (gates, plugs etc.) as required and arranged during initial acquisition process, and would also be discussed with the landowner during the pre-construction meeting.
Are there going to be Above Ground Structures?	No installation of any above ground structures required unless previously communicated and negotiated and accepted by the landowner.
What are the setbacks from the pipeline Right of Way?	The pipeline does not have any regulated setbacks other than the Right of Way boundary and outside of the regulated 30 meter safety zone.
What are the conditions of the Right of Way through a treed area/bush land?	The Right of Way will be left in a condition that would allow the landowner to work the land as with the adjoining lands on the quarter. Pasture land would be left as pasture, with the exception of any grazing lease lands, which under current regulations, have less stringent cleanup requirements but are still governed by best use land policy.
How is trespassing managed – What measures are in place to keep the workers within the area of construction activities?	All boundaries are staked out by the survey team, workers are informed of the work area limits and under normal circumstances workers will not be outside of the staked area. Landowners were advised that they (the landowners) are another set of eyes to monitor the situation, and if the workers are beyond the staked limits, the landowners should be contacting a company representative.

How much restriction will I (the landowner) endure with respect to moving farming equipment across the pipeline after it's in the ground?	Normal/Typical farming practises will be permitted to cross the pipeline Right of Way.

Table 3- Main Questions and Concerns

NWR

A commitment to extensive public consultation by NWR for use in project decision making was made in 2005 at the outset of the environmental impact assessment ("EIA") and regulatory application process. At that time, CCS solutions for the project were not well advanced. Subsequently, the project was described in regulatory applications and communications with stakeholders as being carbon capture ready with the view that reducing the CO_2 emissions for the project was an important goal.

NWRP conducted personal consultations with all stakeholders within the local area, as well as with any person or organization that expressed a direct interest in the project. A confidential stakeholder contact list was prepared and is maintained to facilitate stakeholder communications.

Open houses in Redwater, Alberta were held in February 2005 upon public disclosure of the project and in November 2005, after collection of environmental data. The two open houses were attended by over 300 persons representing a range of interests and which generated hundreds of questions and comments.

Issues and concerns expressed by stakeholders were primarily in regards to government policy including the need for new regulatory requirements, municipal land use planning, and civil and other social infrastructure including roads that support anticipated development in the industrial heartland area. NWR has committed to constructively participate with stakeholders, residents, industry and governments in the region to understand their ongoing issues concerns and develop workable solutions.

The ERCB Decision Report 2007-058 (August 7th, 2007) notes that "The Board considers North West's participant involvement program to be extensive. North West was proactive in its approach to involve the public at the early stages of project development and included both those potentially affected by the proposed project and others who expressed an interest in the project…. The board concludes that North West has met and exceeded the Board's public consultation requirements."

Since receiving ERCB approval to build the project in 2007, Project personnel have continued stakeholder consultation through personal consultations, participation in community advisory panel meetings, public information sessions and periodic public newsletters.

NWR is also a participant in multi-stakeholder committees facilitated by Alberta Environment and Water related to Cumulative Effects Management in Alberta generally, and the Industrial Heartland area specifically. CCS is one of the topics discussed, along with other emissions and project effects.

Section 10: Costs and Revenues

Costs

Enhance

Operating Cost

Compression	**Annual Average Cost**
Agrium CRF	
Electricity ($/MWh)	$ 81
Total Variable ($/tonne CO_2 captured)	$ 10
Total Maintenance and Turnaround ($/tonne CO_2 captured)	$ 4
Total Fixed ($/tonne CO_2 captured)	$ 5
NWR CRF (Booster and Main Compression)	
Electricity ($/MWh)	$ 83
Total Variable ($/tonne CO_2 captured)	$ 10
Total Maintenance and turnaround ($/tonne CO_2 captured)	$ 1
Total Fixed ($/tonne CO_2 captured)	$ 1
Pipeline	
Electricity ($/MWh)	$ 81
Total Variable ($/tonne CO_2 captured)	$ 0.4
Total Maintenance ($/tonne CO_2 captured)	$ 1

Total Fixed ($/tonne CO_2 captured)	$ 5
Clive	
MMV ($/tonne CO_2 captured)	$ 2
Injection Well Maintenance ($/tonne CO_2 captured)	$ 1

Table 4 - Enhance Operating Costs

The project is not yet operational, so there is no operational expenditure made to date data available yet.

Capital Costs

Capital Cost Estimates	CAD $MM
Agrium CRF	$ 45
NWR CRF (Booster and Main Compression)	$ 60
Pipeline	$ 245
Clive CO_2 Injection	$ 100
Total	**$ 450**

Table 5 - Enhance Capital Costs

Enhance has made $44.5 Million of eligible expenditures under the CCS funding Agreement to date (December 31st, 2011).

The project is not yet operational, so there is no operational expenditure made to date.

NWR Rectisol®

NWR Rectisol® Unit

The Rectisol® unit co-produces H_2, CO_2 and acid gas product streams as part of a highly integrated design complex in an industrial greenfield setting. While the CAPEX and OPEX cost estimates for the Rectisol® unit are useful for informational purposes, it would be inappropriate for use in benchmarking or direct comparison against other carbon capture technologies with unrelated objectives or in brownfield applications.

Capital Cost

The Rectisol® cost estimate prepared in 2007 is shown in Table 6 based on a 2007 EDS quality cost estimate for the Gasifier unit of $671.3 million. A cost estimate for the Gasifier unit of $663.8 million was prepared in 2011 (to a target accuracy of +30%/-20%). An updated allocation of Gasifier costs to the Rectisol® unit will be made after the revised EDS cost estimate is completed in 2012.

Rectisol® Capital Cost Estimate

Cost Estimate ($MM)			
Cost Components	**Gasifier**	**Gasifier**	**Rectisol®**
	Prepared in 2011	**Prepared in 2007**	**Prepared in 2007**
Major Equipment	$ 102.9	$ 127.1	$ 59.3
Material	$ 74.1	$ 83.6	$ 39.0
Sub-Contracts	$ 102.0	$ 67.8	$ 31.7
Labour	$ 136.5	$ 109.6	$ 51.2
Engineering	$ 81.3	$ 107.8	$ 41.9
Owners & Reserves	$ 110.0	$ 131.8	$ 61.5
Other	$ 57.0	$ 43.6	$ 20.4
Total	$ 663.8[1]	$ 671.3[1]	$ 305.0

Table 6 - Rectisol® Capital Costs

1) Gasifier unit includes Rectisol costs.

Operating Cost

The operating cost of the Rectisol® unit is provided for informational purposes and should not be used for comparing or benchmarking against other CCS projects.

Rectisol® OPEX Estimate (not for inclusion in carbon capture cost profile)

Categories	$/tonne CO_2	Percent
Direct Operating Costs		
- Steam and Electricity[2]	7.36	50
- Solvent	0.18	1
Total Direct Costs	**7.54**	**51**
Indirect Operating Costs		
- G&A	2.77	19
- Maintenance	2.97	20
- Turnaround	1.06	7
- Water Services	0.35	2
Total Indirect Costs	**7.15**	**49**
Total Operating Cost	**14.69**	**100**

Table 7 - Rectisol® Operating Costs

2) Based on forecast avoided emissions of 1,170,280 tonnes/year.
3) Assumed cost of electricity is $60/MWh.

Revenues

No industry benchmarks are available at this time. There is no revenue to report at this time.

Section 11: Project Timeline

Enhance Timeline

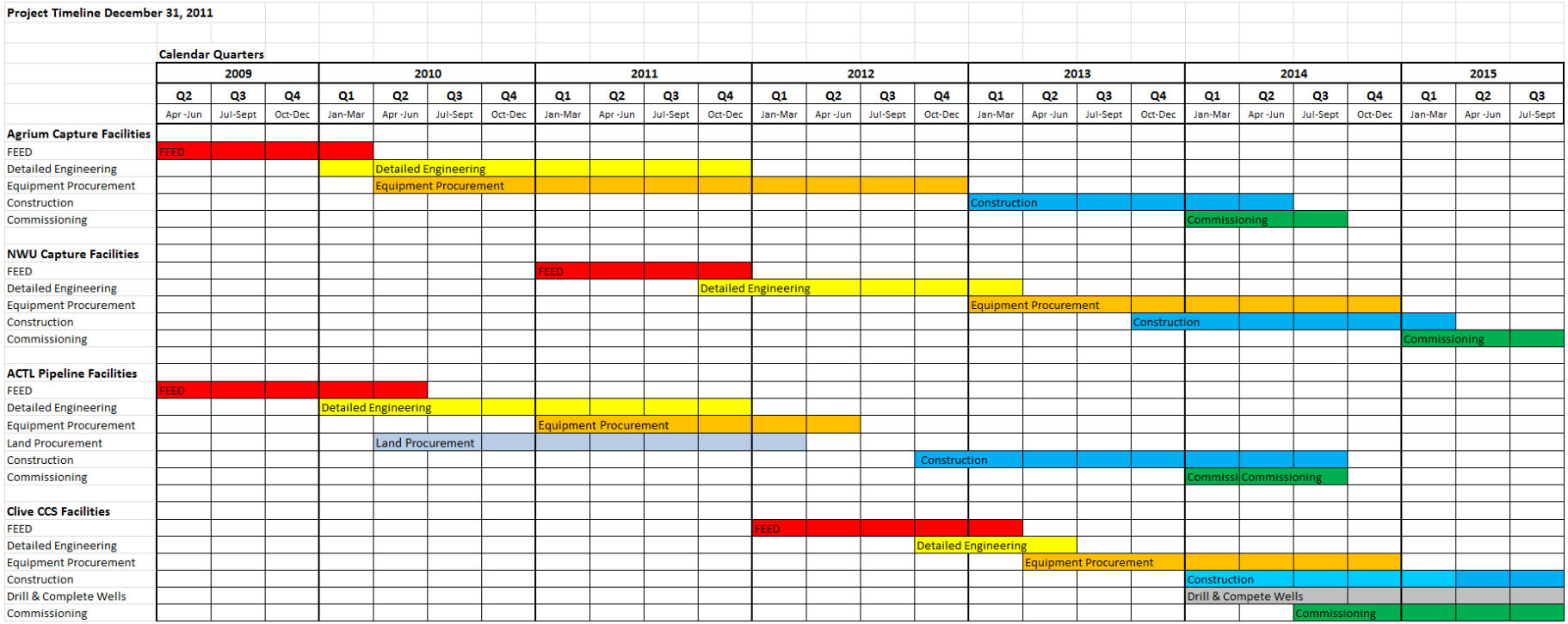


Figure 9 - Enhance Project Timeline

Above is the Enhance timeline as of December 31st, 2011.

NWR Timeline

The up to date NWR schedule of project milestones is shown below.

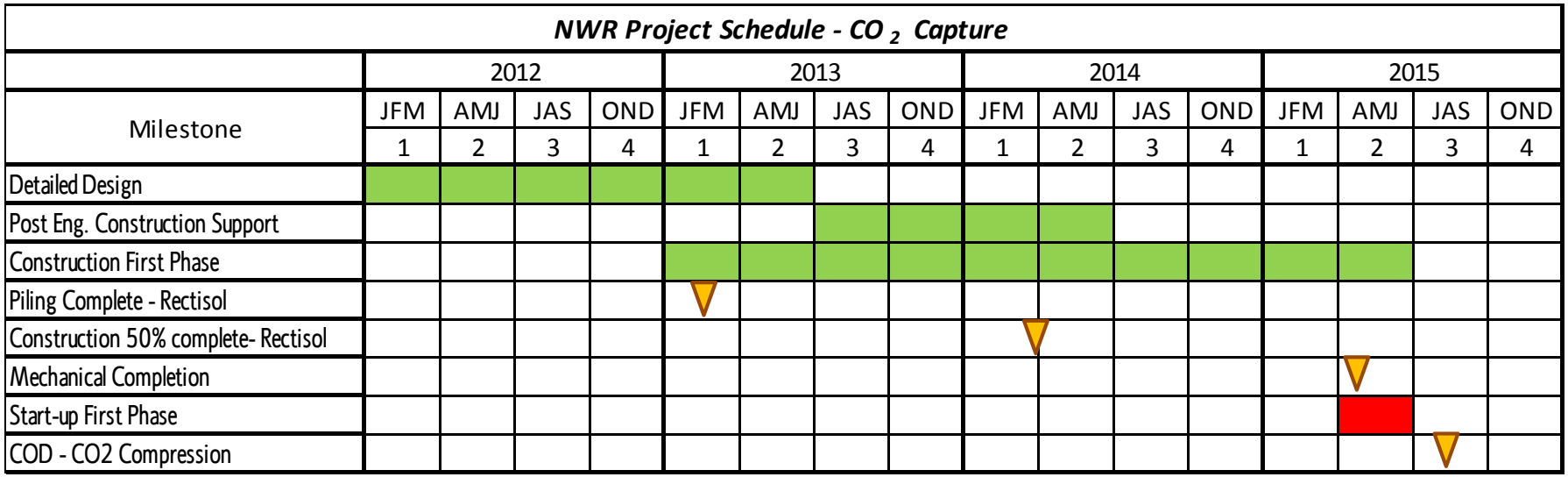


Figure 10 - NWR Project Timeline

Section 12: General Project Assessment

Successes and learnings arising from the project

Except for completed tie-ins at the Agrium plant site, the project is still in its design phase. The ACTL project is expected to encourage the development of an eco-industrial petrochemical cluster of additional value-added upgrading, refining, and petrochemicals projects that take advantage of sustainable and cost-effective solutions for CO_2 emissions. Once operational, the ACTL is strategically positioned to launch an integrated CCS sector and establish Alberta as a globally recognized leader for CCS and EOR technology. To date, the project has been successful in passing through key commercial, public consultation, regulatory, financial and design hurdles. Enhance and NWR will build on these successes as the project moves into its construction and operation phases.

Landowner acceptance

There are approximately 400 landowners along the ACTL who have been externally supportive of the project. This is a significant achievement and it highlights public support for the ACTL. Enhance's strong commitment to community engagement is evident in the fact that landowners readily accept the pipeline being built underneath their land. This level of acceptance occurs once all community questions and concerns have been adequately addressed and risks have been shown to be minimal.

Procurement of major equipment

Significant pieces of equipment have been purchased for both the Agrium facilities and the pipeline. The inlet condenser, inlet separator, six stage compressor, dehydration package, and refrigeration package (shown in Figure 11) have been purchased and are set to be delivered by the end of 2012.

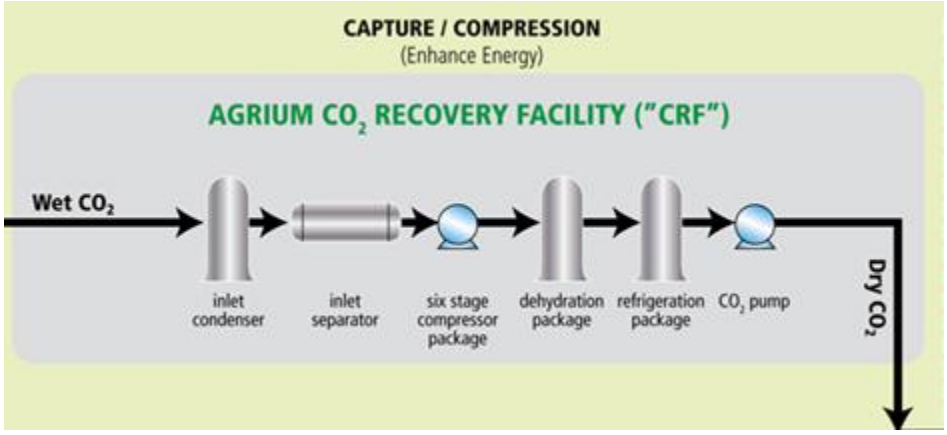


Figure 11 - Agrium CRF Equipment Diagram

Pipeline valves and actuators are currently being manufactured, and are expected to be delivered by the end of 2012. These equipment purchases show Enhance's progress on the project's development and commitment to its completion.

Regulatory approvals in place for pipeline
Enhance received its CEAA approval on September 7, 2010 and its ERCB permit to construct on April 26, 2011. A major accomplishment was receiving the ERCB permit. The Board granted the ACTL a permit as the project met all of the requirements of Directive 56, and there were no relevant outstanding issues or concerns. This is very significant for a large-scale project. It stresses Enhance's compliance to regulations pertinent to CO_2 transportation and storage.

Achievement of the project's first milestone
Enhance met its first project milestone, "Issue of Construction Drawings for the Agrium Capture Facilities", in early 2012. Meeting this milestone was a large undertaking, resulting in over 850 detailed issued for construction drawings and required more than 30,000 engineering man-hours. Approximately 26,000 of those man-hours were expended in Alberta. Completing this aspect of the project helped finalize the front end engineering stage of the project and acts as an important stepping stone as the ACTL proceeds with the project.

Knowledge sharing
One of Enhance's commitments has been to provide updates and deliver presentations to the community, industry and government in order to promote awareness about the ACTL project and highlight its benefits to a wide audience. As part of this commitment Enhance has spent considerable time preparing knowledge sharing reports for the provincial and federal governments and the general public.

Government funding
The ACTL project has benefited from both the Province of Alberta and Government of Canada funding. While Province of Alberta funds are paid once specific milestones are met, the Government of Canada funds are released on a quarterly basis as the project progresses. The opportunity to access Federal funds early in the project has been critical to moving the project forward during an economic downturn in capital markets. Having access to the capital early in the project has supported the purchase of equipment and helped move the project from its design phase towards construction.

Direct economic benefits to Alberta
The ACTL has already had a direct economic impact in Alberta, through the creation of jobs and procurement of equipment, even though the project is still in its design stage. These benefits are measured in terms of man-hours expended and equipment manufactured in the Province. Approximately 80,000 man-hours have been expended to date in Alberta on the project. 26,000 of those hours are engineering work done in 2011 to complete the first milestone "Issuance of Construction Drawings for the Agrium Capture Facilities." An additional 14,000 man-hours were

required to complete the Agrium CRF tie-ins in June 2011, and approximately 38,000 man-hours expended to date on the pipeline. Being a small Alberta based company; Enhance has always been committed to supporting more Alberta businesses. Direct efforts have been made to keep the majority of work in the Province. As shown in the two tables below, the majority of equipment for the pipeline and the large of the equipment for the Agrium CRF were procured for the project within the Province.

ACTL Pipeline Procurement

Equipment/Service	Vendor	Location
Engineering	SAW Engineering	Alberta
Environmental Assessment	Worley	Alberta
Environmental Planning	BOSS Environmental	Alberta
Regulatory	CH2M Hill	Alberta
Valves	KTI Limited	Alberta
Survey	Focus Surveys	Alberta
Geotechnical Assessment	Surface Search	Alberta
Land Acquisition	LandSolutions	Alberta

Table 8 - ACTL Pipeline Procurement List

Agrium CRF Procurement

Equipment/Service	Vendor	Location
Inlet Separator	Bilton Welding	Alberta
Engineering	Caber Engineering	Alberta

Inlet Piping	Comco	Alberta
Pipe, Valves, Fittings	Comco & Pinnacle	Alberta
Dehydration Skid	Ensign/Opsco	Alberta
Air Cooled Exchangers	Exchanger Industries	Alberta
Glycol Pump	Smith Cameron Pump	Alberta
Refrigeration Skid	Startec	Alberta
CO_2 Transfer Pump	National Process Equipment	Alberta
Environmental Planning	BOSS Environmental	Alberta
Regulatory	CH2M Hill	Alberta
Inlet Condenser	Alfa Laval	Ontario
CO_2 Booster Pump	Clyde Union Canada	Ontario
Compressor	Siemens	Germany

Table 9 - Agrium CRF Procurement List

Economic benefit to Canada

Enhance bought two pieces of equipment not manufactured in Alberta from Ontario. Unable to find manufacturers for the inlet condenser and the CO_2 Booster Pump in Alberta, Enhance preferred to have a Canadian supplier for these pieces so as to extend as much benefit as possible to Canadians.

Opportunity to build expertise

One piece of equipment that Enhance has had to order for the project from outside of Canada is the six-stage compressor for the Agrium CRF, which is being designed in Germany by Siemens. A Canadian manufactured compressor would have been preferred, however the technology and manufacturing capability has been built up in Germany over 50 years, and is hard to replicate here in a short time frame.

Indirect economic benefits of the project for Alberta and Canada

Enhance commissioned the Canadian Energy Research Institute to conduct a study on the economic impact of the ACTL project. The study concluded that the estimated economic value of the overall integrated project, at design capacity, could increase Canada's total economic output by $231 billion (approximately 80% of the impact in Alberta) and provide an additional 848,800 person-years of employment (approximately 70% of the impact in Alberta).

Section 13: Next Steps

The North West Sturgeon Refinery Project is currently in the pre-construction phase. NWR is progressing towards completion of EDS engineering and obtaining final project sanctioning from the Project's partners. The final timing of this event will ultimately affect the achievement of commercial operation for the overall project. An updated project cost estimate and schedule based on the EDS work is under development.

Changes in the project timeline

NWR commercial operation is currently forecast to begin in the third calendar quarter of 2015. ACTL will initially start-up with Agrium volumes, but it will be more efficient to run the pipeline with both Agrium and NWR volumes, and so the final NWR sanctioning date must be taken into consideration in scheduling overall start-up.

Changes in the project plan

Since the project's inception, the only changes to the project plan have been minor timeline changes. The most up to date schedules are shown in figures 9 and 10 above.