

## **Disclaimer**

This Report, including the data and information contained in this Report, is provided to you on an “as is” and “as available” basis at the sole discretion of the Government of Alberta and subject to the terms and conditions of use below (the “Terms and Conditions”). The Government of Alberta has not verified this Report for accuracy and does not warrant the accuracy of, or make any other warranties or representations regarding, this Report. Furthermore, updates to this Report may not be made available. Your use of any of this Report is at your sole and absolute risk.

This Report is provided to the Government of Alberta, and the Government of Alberta has obtained a license or other authorization for use of the Reports, from:

Shell Canada Energy, Chevron Canada Limited. and Marathon Oil Canada Corporation, for the Quest Project

(collectively the “Project”)

Each member of the Project expressly disclaims any representation or warranty, express or implied, as to the accuracy or completeness of the material and information contained herein, and none of them shall have any liability, regardless of any negligence or fault, for any statements contained in, or for any omissions from, this Report. Under no circumstances shall the Government of Alberta or the Project be liable for any damages, claims, causes of action, losses, legal fees or expenses, or any other cost whatsoever arising out of the use of this Report or any part thereof or the use of any other data or information on this website.

## **Terms and Conditions of Use**

Except as indicated in these Terms and Conditions, this Report and any part thereof shall not be copied, reproduced, distributed, republished, downloaded, displayed, posted or transmitted in any form or by any means, without the prior written consent of the Government of Alberta and the Project.

The Government of Alberta’s intent in posting this Report is to make them available to the public for personal and non-commercial (educational) use. You may not use this Report for any other purpose. You may reproduce data and information in this Report subject to the following conditions:

- any disclaimers that appear in this Report shall be retained in their original form and applied to the data and information reproduced from this Report
- the data and information shall not be modified from its original form
- the Project shall be identified as the original source of the data and information, while this website shall be identified as the reference source, and
- the reproduction shall not be represented as an official version of the materials reproduced, nor as having been made in affiliation with or with the endorsement of the Government of Alberta or the Project

By accessing and using this Report, you agree to indemnify and hold the Government of Alberta and the Project, and their respective employees and agents, harmless from and against any and all claims, demands, actions and costs (including legal costs on a solicitor-client basis) arising out of any breach by you of these Terms and Conditions or otherwise arising out of your use or reproduction of the data and information in this Report.

Your access to and use of this Report is subject exclusively to these Terms and Conditions and any terms and conditions contained within the Report itself, all of which you shall comply with. You will not use this Report for any purpose that is unlawful or prohibited by these Terms and Conditions. You agree that any other use of this Report means you agree to be bound by these Terms and Conditions. These Terms and Conditions are subject to modification, and you agree to review them periodically for changes. If you do not accept these Terms and Conditions you agree to immediately stop accessing this Report and destroy all copies in your possession or control.

These Terms and Conditions may change at any time, and your continued use and reproduction of this Report following any changes shall be deemed to be your acceptance of such change.

If any of these Terms and Conditions should be determined to be invalid, illegal or unenforceable for any reason by any court of competent jurisdiction then the applicable provision shall be severed and the remaining provisions of these Terms and Conditions shall survive and remain in full force and effect and continue to be binding and enforceable.

These Terms and Conditions shall: (i) be governed by and construed in accordance with the laws of the province of Alberta and you hereby submit to the exclusive jurisdiction of the Alberta courts, and (ii) ensure to the benefit of, and be binding upon, the Government of Alberta and your respective successors and assigns.



# Quest CCS Project Integrated Schedule

TASK filter: All Activities

Page 1 of 18

(Level 2 Schedule)

Activity ID	Activity Name	Original Duration	Start	Finish	2010				2011				2012				2013				2014				2015				2016		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1		
<b>Shell Quest CCS Project Execution Phase Schedule 7 Sep</b>					2154.0d	18-Dec-09 A	10-Nov-15																								
<b>Key Project Milestones</b>					1469.0d	01-Nov-11	09-Nov-15																								
<b>Execute Phase</b>					1469.0d	01-Nov-11	09-Nov-15																								
<b>Venture Milestones</b>					1469.0d	01-Nov-11	09-Nov-15																								
<b>Risk Management</b>					14.0d	30-Apr-12	14-May-12																								
ME01	ME01-Update of Risk Register Completed	0.0d		30-Apr-12	◆ ME01-Update of Risk Register Completed																										
ME02	ME02-Update of Risk Management Plan Completed	0.0d		14-May-12	◆ ME02-Update of Risk Management Plan Completed																										
<b>Project Management &amp; Engineering</b>					449.0d	02-Apr-12	25-Jun-13																								
ME06	ME06-Update Stakeholder Engagement Plan Issued	0.0d		02-Apr-12	◆ ME06-Update Stakeholder Engagement Plan Issued																										
ME08	ME08-Project Interface Register & Management Plan Issued	0.0d		02-Apr-12	◆ ME08-Project Interface Register & Management Plan Issued																										
ME05	ME05-Resourcing Plan (operation phase) Finalized	0.0d		12-Apr-12	◆ ME05-Resourcing Plan (operation phase) Finalized																										
ME07	ME07-Detailed Design Close-Out Report Issued	0.0d		25-Jun-13	◆ ME07-Detailed Design Close-Out Report Issued																										
<b>HSE &amp; SD</b>					559.0d	15-Mar-12	25-Sep-13																								
ME10	ME10-HSE Section for Flawless Start-Up Review Report Completed	0.0d		15-Mar-12	◆ ME10-HSE Section for Flawless Start-Up Review Report Completed																										
ME11	ME11-HSE Regulatory Permits and Consents Documents Completed	0.0d		01-Jun-12	◆ ME11-HSE Regulatory Permits and Consents Documents Completed																										
ME12	ME12-Operations HSE Case completed	0.0d		25-Sep-13	◆ ME12-Operations HSE Case completed																										
<b>Quality Management</b>					213.0d	01-Nov-11	01-Jun-12																								
ME13	ME13-Contractor QMS and Quality Plans Approval Completed	0.0d		01-Nov-11	◆ ME13-Contractor QMS and Quality Plans Approval Completed																										
ME15	ME15-Updated Project Controls & Assurance Plan Issued (PCAP)	0.0d		01-Nov-11	◆ ME15-Updated Project Controls & Assurance Plan Issued (PCAP)																										
ME14	ME14-Permits & Consents Plan Completed	0.0d		01-Jun-12	◆ ME14-Permits & Consents Plan Completed																										
<b>Information Management</b>					888.0d	04-Jun-13	09-Nov-15																								
ME17	ME17-IM Procedures and Lifecycle Information Plan Completed	0.0d		04-Jun-13	◆ ME17-IM Procedures and Lifecycle Information Plan Completed																										
ME16	ME16-Handover Final Documentation and Data to Operator	0.0d		01-Dec-14	◆ ME16-Handover Final Documentation and Data to Operator																										
ME18	ME18-Finalize/ Handover Final Documentation and Data to Customer	0.0d		09-Nov-15	◆ ME18-Finalize/ Handover Final Documentation and Data to Customer																										
<b>Project Services</b>					794.0d	30-Jul-13	02-Oct-15																								
ME19	ME19-Final Cost & Schedule Report Completed	0.0d		30-Jul-13	◆ ME19-Final Cost & Schedule Report Completed																										
ME22	ME22-Level 4 Schedule for Commissioning and Start-up Issued (Ofi	0.0d		25-Mar-14	◆ ME22-Level 4 Schedule for Commissioning and Start-up Issued (Ofi																										
ME20	ME20-Close-Out Budget (Finalise Variations/ Claims) Completed	0.0d		02-Oct-15	◆ ME20-Close-Out Budget (Finalise Variations/ Claims) Completed																										
ME21	ME21-Close-out Benchmark Report Completed	0.0d		02-Oct-15	◆ ME21-Close-out Benchmark Report Completed																										
<b>Operations Readiness (OR)</b>					755.0d	05-Sep-12	30-Sep-14																								
ME29	ME29-Operations Organization Fully Resourced Per Plan	0.0d		05-Sep-12	◆ ME29-Operations Organization Fully Resourced Per Plan																										
ME30	ME30-Operations Staff Training Program Completed	0.0d		19-Sep-12	◆ ME30-Operations Staff Training Program Completed																										
ME25	ME25-Operations Management System (OMS) Completed	0.0d		31-Oct-12	◆ ME25-Operations Management System (OMS) Completed																										
ME23	ME23-OR Plan Issued	0.0d		07-Feb-13	◆ ME23-OR Plan Issued																										
ME28	ME28-Operations Procedures Completed	0.0d		19-Dec-13	◆ ME28-Operations Procedures Completed																										
ME32	ME32-Commissioning, Completions and Start-Up Management Syst	0.0d		25-Mar-14	◆ ME32-Commissioning, Completions and Start-Up Management Syst																										
ME33	ME33-Integrated Commissioning and Start-Up Logic ( PEFS Level ) :	0.0d		25-Mar-14	◆ ME33-Integrated Commissioning and Start-Up Logic ( PEFS Level ) :																										
ME36	ME36-Pre-Start-Up Safety and Operation Readiness Audit Report Si	0.0d		29-May-14	◆ ME36-Pre-Start-Up Safety and Operation Readiness Audit Report Si																										
ME35	ME35-Project to Asset Transfer Plan Issued and Resourced	0.0d		30-Sep-14	◆ ME35-Project to Asset Transfer Plan Issued and Resourced																										
<b>ESHIA</b>					209.0d	07-Dec-12	04-Jul-13																								
ME48	ME48-Regulation & Environmental Studies Approval & Permitting	0.0d		07-Dec-12	◆ ME48-Regulation & Environmental Studies Approval & Permitting																										
ME49	ME49-Completed Detailed HSE Assessment (Construction)	0.0d		04-Jul-13	◆ ME49-Completed Detailed HSE Assessment (Construction)																										
<b>Commissioning &amp; Start up</b>					426.6d	21-Jul-14	21-Sep-15																								
ME92	ME92-Pipelines Hydrotests Completed	0.0d		21-Jul-14	◆ ME92-Pipelines Hydrotests Completed																										

█ Actual Work   
 █ Critical Remaining Work   
 ▼ Summary  
█ Remaining Work   
 ◆ Milestone

Prepared by: Prateek Arora

Date	Revision	Checked	Approved
09-Sep-11	Rev 0-Issued for ESAR 4/VAR 4	A. Desai	N. Hattab



# Quest CCS Project Integrated Schedule

TASK filter: All Activities

Page 2 of 18

(Level 2 Schedule)

Activity ID	Activity Name	Original Duration	Start	Finish	(Level 2 Schedule)																											
					2010				2011				2012				2013				2014				2015				2016			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1			
ME91	ME91-Piping Hydrotests Completed	0.0d		02-Sep-14	◆ ME91-Piping Hydrotests Completed																											
ME94	ME94-Loop tests complete	0.0d		10-Oct-14	◆ ME94-Loop tests complete																											
ME87	ME87-Statement of Fitness Signed off	0.0d		14-Oct-14	◆ ME87-Statement of Fitness Signed off																											
ME93	ME93-Review Facilities for Final Handover Completed	0.0d		16-Feb-15	◆ ME93-Review Facilities for Final Handover Completed																											
ME89	ME89-Start up complete	0.0d		21-Sep-15	◆ ME89-Start up complete																											
<b>Define Phase</b>		860.0d	18-Dec-09 A	01-Mar-12	[Summary bar]																											
<b>Key Milestones</b>		153.0d	30-Sep-11	01-Mar-12	[Summary bar]																											
KPMD1000	ESAR4/VAR4 Complete	0.0d		30-Sep-11	◆ ESAR4/VAR4 Complete																											
KPMD1010	DG4	0.0d		01-Nov-11	◆ DG4																											
KPMD1020	FID	0.0d		01-Mar-12	◆ FID																											
<b>Venture</b>		860.0d	18-Dec-09 A	01-Mar-12	[Summary bar]																											
<b>Regulatory</b>		860.0d	18-Dec-09 A	29-Feb-12	[Summary bar]																											
REGDE1010	D56 finalization for 7 (#2-#8) injection wells	21.0d	01-Aug-11	29-Aug-11	[Bar]																											
REGDE1020	D56 submission for 7 (#2-#8) injection wells	0.0d		29-Aug-11	◆ D56 submission for 7 (#2-#8) injection wells																											
REGDE1000	Landowner consultation for 7 (#2-#8) injection wells	23.0d	01-Aug-11	31-Aug-11	[Bar]																											
REGDE1040	D56 approval for 7 (#2-#8) injection wells	0.0d		30-Sep-11	◆ D56 approval for 7 (#2-#8) injection wells																											
REGDE1030	D56 application review for 7 (#2-#8) injection wells	24.0d	30-Aug-11	30-Sep-11	[Bar]																											
<b>Subsurface / Reservoir / Wells Approvals</b>		622.0d	18-Dec-09 A	18-Nov-11	[Summary bar]																											
<b>D65</b>		572.0d	18-Dec-09 A	15-Jun-11 A	[Summary bar]																											
REG0900	CCS Regulation	0.0d		27-Apr-11 A	◆ CCS Regulation																											
REG0910	Pore Space Tenure re-application- Submission	0.0d		28-Apr-11 A	◆ Pore Space Tenure re-application- Submission																											
REG0905	Submit Closure Plan	0.0d		28-Apr-11 A	◆ Submit Closure Plan																											
REG0930	"Pore Space Request" discussions/review with ABEnergy	400.0d	18-Dec-09 A	17-May-11 A	[Bar]																											
REG0920	Pore Space Tenure Received - Date given to DOE (2nd Option)	0.0d		27-May-11 A	◆ Pore Space Tenure Received - Date given to DOE (2nd Option)																											
REG0950	Submit tenure to ERCB	0.0d		27-May-11 A	◆ Submit tenure to ERCB																											
REG0915	DOE Review the Application (2nd Option)	30.0d	29-Apr-11 A	30-May-11 A	[Bar]																											
REG0925	Administration Period (2nd option) ERCB Review D65	10.0d	01-Jun-11 A	15-Jun-11 A	[Bar]																											
<b>D56</b>		84.0d	30-Nov-10 A	18-Nov-11	[Summary bar]																											
REG0008	PLA submit	0.0d		12-Apr-11 A	◆ PLA submit																											
REG0009	OSCA-Submit application	10.0d	02-May-11 A	23-May-11 A	[Bar]																											
REG0011	PLA Approvals	0.0d		26-May-11 A	◆ PLA Approvals																											
REG0013	Re-submit D56	0.0d		27-May-11 A	◆ Re-submit D56																											
REG0027	C&R Plan Review	10.0d	30-Nov-10 A	18-Nov-11	[Bar]																											
<b>Public Notices</b>		26.0d	05-Aug-11	31-Aug-11	[Summary bar]																											
REG0021	Technically "Complete": ( ERCB )	0.0d		05-Aug-11	◆ Technically "Complete": ( ERCB )																											
REG0025	Notice for Objections- 14 days (ERCB)	0.0d		05-Aug-11	◆ Notice for Objections- 14 days (ERCB)																											
REG0029	Notice of Hearing (ERCB) (31 Aug 11)	0.0d		31-Aug-11	◆ Notice of Hearing (ERCB) (31 Aug 11)																											
<b>Bundled Provincial Application</b>		335.0d	01-Dec-10 A	29-Feb-12	[Summary bar]																											
<b>AENV</b>		335.0d	01-Dec-10 A	29-Feb-12	[Summary bar]																											
REG0017	Draft IR Round 1 to Shell (Start April 8th)	31.0d	08-Apr-11 A	20-May-11 A	[Bar]																											
REG0037	Final IR Round 1 to Shell	20.0d	23-May-11 A	14-Jul-11 A	[Bar]																											
REG0019	Shell Submits IR Round # 1- Final IR's	10.0d	15-Jul-11 A	28-Jul-11 A	[Bar]																											
REG0023	Notice of Application- ERCB + AENV	0.0d		05-Aug-11	◆ Notice of Application- ERCB + AENV																											
REG0132	Substantive Hearing Evidence	0.0d		01-Sep-11	◆ Substantive Hearing Evidence																											

█ Actual Work    █ Critical Remaining Work    ▶ Summary  
█ Remaining Work    ◆ Milestone

Prepared by: Prateek Arora

Date	Revision	Checked	Approved
09-Sep-11	Rev 0-Issued for ESAR 4/VAR 4	A. Desai	N. Hattab





# Quest CCS Project Integrated Schedule

TASK filter: All Activities

Page 4 of 18

(Level 2 Schedule)

Activity ID	Activity Name	Original Duration	Start	Finish	(Level 2 Schedule)																											
					2010				2011				2012				2013				2014				2015				2016			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1			
<b>Venture</b>																																
<b>Opportunity Framing</b>																																
<b>Lessons Learned (Retrieval)</b>																																
<b>Project Management</b>																																
<b>Quality Management</b>																																
<b>Project Services</b>																																
<b>Cost Estimation</b>																																
<b>Planning</b>																																
<b>Information Management</b>																																
<b>Risk Management</b>																																
<b>Contracting</b>																																
<b>Lessons Learned Feedback</b>																																
<b>HSSE</b>																																
<b>Decisions</b>																																
DECEE1000	Land Owner Water Well Strategy	0.0d		30-Nov-11*	<ul style="list-style-type: none"> <li>◆ Land Owner Water Well Strategy</li> </ul>																											
DECEE1010	Soil & Vegetation sampling Design (Q3)	0.0d		30-Nov-11*	<ul style="list-style-type: none"> <li>◆ Soil &amp; Vegetation sampling Design (Q3)</li> </ul>																											
DECEE1020	Well Proposals Approval	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ Well Proposals Approval</li> </ul>																											
DECEE1030	Water Injection Test Design	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ Water Injection Test Design</li> </ul>																											
DECEE1040	Ground Water Well Locations (End FEB)	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ Ground Water Well Locations (End FEB)</li> </ul>																											
DECEE1050	Negotiation of ERCB Approval Terms & Conditions	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ Negotiation of ERCB Approval Terms &amp; Conditions</li> </ul>																											
DECEE1060	Operational Requirements of the FA's	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ Operational Requirements of the FA's</li> </ul>																											
DECEE1070	Move to Mode 2 in the Mod. Yards	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ Move to Mode 2 in the Mod. Yards</li> </ul>																											
DECEE1080	How Env.Reg support will be provided	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ How Env.Reg support will be provided</li> </ul>																											
DECEE1090	Tracer Injection Design	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ Tracer Injection Design</li> </ul>																											
DECEE1100	Onsite P/L Routing	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ Onsite P/L Routing</li> </ul>																											
DECEE1110	GIP sign Off	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ GIP sign Off</li> </ul>																											
DECEE1120	Shared Services Agreement	0.0d		29-Feb-12*	<ul style="list-style-type: none"> <li>◆ Shared Services Agreement</li> </ul>																											
DECEE1130	Funding Agreement Budget	0.0d		31-May-12*	<ul style="list-style-type: none"> <li>◆ Funding Agreement Budget</li> </ul>																											
DECEE1140	Financial Authorities for Execution	0.0d		31-May-12*	<ul style="list-style-type: none"> <li>◆ Financial Authorities for Execution</li> </ul>																											
DECEE1150	Steel Fabrication Award (Local vs LCCS)	0.0d		31-May-12*	<ul style="list-style-type: none"> <li>◆ Steel Fabrication Award (Local vs LCCS)</li> </ul>																											
DECEE1160	Site Construction Mobilisation (readiness)	0.0d		31-May-12*	<ul style="list-style-type: none"> <li>◆ Site Construction Mobilisation (readiness)</li> </ul>																											
DECEE1170	Timing Of well Handover to Scotford	0.0d		31-May-12*	<ul style="list-style-type: none"> <li>◆ Timing Of well Handover to Scotford</li> </ul>																											
DECEE1180	Fate of the Redwater Well	0.0d		31-Aug-12*	<ul style="list-style-type: none"> <li>◆ Fate of the Redwater Well</li> </ul>																											
DECEE1190	Control Estimate Reforecast	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ Control Estimate Reforecast</li> </ul>																											
DECEE1200	Module Construction Contract Award	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ Module Construction Contract Award</li> </ul>																											
DECEE1210	Use Of Foreign Labour	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ Use Of Foreign Labour</li> </ul>																											
DECEE1220	Submission on MMV well Licences	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ Submission on MMV well Licences</li> </ul>																											
DECEE1240	D56 Application - P/L Laterals	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ D56 Application - P/L Laterals</li> </ul>																											
DECEE1250	Second Installment of P/L order	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ Second Installment of P/L order</li> </ul>																											
DECEE1260	Final well count	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ Final well count</li> </ul>																											
DECEE1270	MMV well locations	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ MMV well locations</li> </ul>																											
DECEE1280	MMV well Designs	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ MMV well Designs</li> </ul>																											
DECEE1290	Modilise to MOD yard	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ Modilise to MOD yard</li> </ul>																											
DECEE1230	D51 Information Submission	0.0d		30-Nov-12*	<ul style="list-style-type: none"> <li>◆ D51 Information Submission</li> </ul>																											

█ Actual Work   
 █ Critical Remaining Work   
 Summary  
█ Remaining Work   
 ◆ Milestone

Prepared by: Prateek Arora

Date	Revision	Checked	Approved
09-Sep-11	Rev 0-Issued for ESAR 4/VAR 4	A. Desai	N. Hattab





# Quest CCS Project Integrated Schedule

TASK filter: All Activities

Page 6 of 18

(Level 2 Schedule)

Activity ID	Activity Name	Original Duration	Start	Finish	(Level 2 Schedule)																											
					2010				2011				2012				2013				2014				2015				2016			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1			
<b>Project to Asset Transfer</b>																																
<b>Regulatory</b>																																
D56 (Approval for MMV wells)																																
D65 (Class II-water disposal)-this is for water injection wells																																
D56 Ammendment for Lateral Pipelines																																
<b>Capture</b>																																
<b>KEY PROJECT MILESTONES</b>																																
<b>Quest Milestones</b>																																
<b>Execute Phase</b>																																
CAPEM ENG000	KPM - Start Early Engineering for Execution Phase	0.0d	15-Aug-11*		◆ KPM - Start Early Engineering for Execution Phase																											
CAPEM ENG020	KPM - Complete First 30% Model Review	0.0d	12-Dec-11		◆ KPM - Complete First 30% Model Review																											
CAPEM PREFID	KPM - Release Pre-FID Funding	0.0d	03-Jan-12*		◆ KPM - Release Pre-FID Funding																											
CAPEM FID	KPM - Final Investment Decision (FID) Release	0.0d	01-Mar-12		◆ KPM - Final Investment Decision (FID) Release																											
CAPEM ENG040	KPM - Complete First 60% Model Review	0.0d	22-Mar-12		◆ KPM - Complete First 60% Model Review																											
CAPEM ENG030	KPM - Complete Last 30% Model Review	0.0d	30-Apr-12		◆ KPM - Complete Last 30% Model Review																											
CAPEM ENG060	KPM - Complete First 90% Model Review	0.0d	31-May-12		◆ KPM - Complete First 90% Model Review																											
CAPEM SC000	KPM - Issue RFP for Module Pipe Fab & Module Assembly Contract	0.0d	06-Jul-12		◆ KPM - Issue RFP for Module Pipe Fab & Module Assembly Contract																											
CAPEM ENG050	KPM - Complete Last 60% Model Review	0.0d	29-Aug-12		◆ KPM - Complete Last 60% Model Review																											
CAPEM CON010	KPM - Start Site Prep & Underground Installation	0.0d	07-Sep-12		◆ KPM - Start Site Prep & Underground Installation																											
CAPEM 92010	KPM - Last Material Delivered for HMU 2 Turnaround in 2013	0.0d	10-Sep-12		◆ KPM - Last Material Delivered for HMU 2 Turnaround in 2013																											
CAPEM ENG100	KPM - First Module Steel AFC in POL	0.0d	18-Sep-12		◆ KPM - First Module Steel AFC in POL																											
CAPEM PROC0	KPM - Start Steel Fabrication	0.0d	19-Sep-12		◆ KPM - Start Steel Fabrication																											
CAPEM CON030	KPM - Start Piling Installation	0.0d	22-Oct-12		◆ KPM - Start Piling Installation																											
CAPEM ENG070	KPM - Complete Last 90% Model Review	0.0d	14-Nov-12		◆ KPM - Complete Last 90% Model Review																											
CAPEM ENG090	KPM - Last Major Foundation AFC in POL	0.0d	17-Dec-12		◆ KPM - Last Major Foundation AFC in POL																											
CAPEM SC010	KPM - Award Module Pipe Fab & Module Assembly Contract	0.0d	20-Dec-12		◆ KPM - Award Module Pipe Fab & Module Assembly Contract																											
CAPEM PROC0	KPM - Deliver First Module Steel to Mod Yard	0.0d	17-Jan-13		◆ KPM - Deliver First Module Steel to Mod Yard																											
CAPEM CON020	KPM - Complete Underground Installation	0.0d	28-Jan-13		◆ KPM - Complete Underground Installation																											
CAPEM ENG130	KPM - Issue Last Module Iso AFC in POL	0.0d	29-Jan-13		◆ KPM - Issue Last Module Iso AFC in POL																											
CAPEM CON040	KPM - Complete Piling Installation	0.0d	11-Feb-13		◆ KPM - Complete Piling Installation																											
CAPEM PROC0	KPM - Deliver HMU 1 & 2 Amine Absorbers to Site	0.0d	22-Feb-13		◆ KPM - Deliver HMU 1 & 2 Amine Absorbers to Site																											
CAPEM SC020	KPM - Start Pipe Fabrication	0.0d	26-Feb-13		◆ KPM - Start Pipe Fabrication																											
CAPEM ENG080	KPM - Last Piping AFC in POL	0.0d	01-Mar-13		◆ KPM - Last Piping AFC in POL																											
CAPEM ENG110	KPM - Last Module Steel AFC in POL	0.0d	01-Mar-13		◆ KPM - Last Module Steel AFC in POL																											
CAPEM 92020	KPM - Assumed Start of HMU 2 Turnaround in 2013	0.0d	11-Mar-13*		◆ KPM - Assumed Start of HMU 2 Turnaround in 2013																											
CAPEM ENG010	KPM - Loading of Design Documents & Data	0.0d	01-Apr-13		◆ KPM - Loading of Design Documents & Data																											
CAPEM CON050	KPM - Start Foundation Installation	0.0d	01-May-13		◆ KPM - Start Foundation Installation																											
CAPEM SC030	KPM - Start Module Assembly	0.0d	01-May-13		◆ KPM - Start Module Assembly																											
CAPEM ENG140	KPM - Detailed Engineering Complete	0.0d	04-Jun-13		◆ KPM - Detailed Engineering Complete																											
CAPEM PROC0	KPM - Deliver CO2 Compressor to Site	0.0d	18-Jul-13		◆ KPM - Deliver CO2 Compressor to Site																											
CAPEM PROC0	KPM - Deliver Amine Stripper to Site	0.0d	18-Jul-13		◆ KPM - Deliver Amine Stripper to Site																											
CAPEM PROC0	KPM - Deliver HMU 3 Amine Absorber to Site	0.0d	18-Jul-13		◆ KPM - Deliver HMU 3 Amine Absorber to Site																											
CAPEM CON070	KPM - Rough Set CO2 Compressor	0.0d	01-Aug-13		◆ KPM - Rough Set CO2 Compressor																											
CAPEM PROC0	KPM - Deliver Last Module Steel to Mod Yard	0.0d	16-Aug-13		◆ KPM - Deliver Last Module Steel to Mod Yard																											

█ Actual Work   
 █ Critical Remaining Work   
 Summary  
█ Remaining Work   
 ◆ Milestone

Prepared by: Prateek Arora

Date	Revision	Checked	Approved
09-Sep-11	Rev 0-Issued for ESAR 4/VAR 4	A. Desai	N. Hattab









# Quest CCS Project Integrated Schedule

TASK filter: All Activities

Page 9 of 18

(Level 2 Schedule)

Activity ID	Activity Name	Original Duration	Start	Finish	2010				2011				2012				2013				2014				2015				2016
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
<b>Electrical</b>																													
<b>Control Systems</b>																													
<b>PROCUREMENT</b>																													
<b>CONTRACTS</b>																													

█ Actual Work   
 █ Critical Remaining Work   
 Summary  
█ Remaining Work   
 ◆ Milestone

Prepared by: Prateek Arora

Date	Revision	Checked	Approved
09-Sep-11	Rev 0-Issued for ESAR 4/VAR 4	A. Desai	N. Hattab



# Quest CCS Project Integrated Schedule

TASK filter: All Activities

Page 10 of 18

(Level 2 Schedule)

Activity ID	Activity Name	Original Duration	Start	Finish	(Level 2 Schedule)																														
					2010				2011				2012				2013				2014				2015				2016						
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1						
<b>U/G Piping &amp; Cable Contract Preparation</b>					193.0d	02-Mar-12	10-Sep-12																												
<b>Piling &amp; Foundation Contract Preparation</b>					378.0d	18-Apr-12	30-Apr-13																												
<b>Module Fabrication and Assembly</b>					737.0d	01-May-12	07-May-14																												
<b>CONSTRUCTION</b>					981.0d	25-Jul-12	02-Apr-15																												
CAPEC TA060	Execute tie-ins during 2013 T/A	30.0d	11-Mar-13	04-Apr-13																															
CAPEC TA070	Execute tie-ins during 2014 T/A	30.0d	10-Mar-14	03-Apr-14																															
CAPEC LOF030	Painting & Insulation Installation - Level of Effort Activity	113.0d	02-Apr-14	12-Sep-14																															
CAPEC LOF050	Control Room Work - Level of Effort Activity	114.0d	01-Apr-14	12-Sep-14																															
CAPEC LOF020	Scaffolding - Level of Effort Activity	339.0d	02-Jul-13	18-Nov-14																															
CAPEC LOF040	Precommissioning	80.0d	24-Jul-14	18-Nov-14																															
CAPEC TA080	Execute tie-ins during 2015 T/A	30.0d	09-Mar-15	02-Apr-15																															
<b>HMU 1 &amp; 2 (B1)</b>					777.0d	03-Oct-12	18-Nov-14																												
<b>HMU 3 (B2)</b>					742.0d	25-Jul-12	05-Aug-14																												
<b>CO2 CAPTURE FACILITIES (C)</b>					847.0d	25-Jul-12	18-Nov-14																												
CAPEC 01010	Start Temporary Facility Installation	30.0d	12-Feb-13	26-Mar-13																															
<b>Civil &amp; Structural</b>					477.0d	25-Jul-12	13-Nov-13																												
<b>U/G Piping &amp; Cable Installation</b>					181.0d	01-Aug-12	28-Jan-13																												
<b>Piling &amp; Foundation Installation</b>					477.0d	25-Jul-12	13-Nov-13																												
<b>Module/Equipment Setting</b>					549.0d	16-Oct-12	17-Apr-14																												
<b>Structural</b>					154.0d	13-Jun-13	13-Nov-13																												
<b>Mechanical and Piping</b>					369.0d	26-Jul-13	29-Jul-14																												
<b>E&amp;I</b>					383.0d	26-Aug-13	12-Sep-14																												
<b>Mechanical Completion</b>					279.0d	12-Feb-14	18-Nov-14																												
CAPEC Z0930	4546/4547- Unit Mechanical Completion	0.0d		12-Feb-14																															
CAPEC Z0920	2541 - Unit Mechanical Completion	0.0d		28-Jul-14																															
CAPEC Z0910	4330 - HMU 3 Mechanical Completion	0.0d		05-Aug-14																															
CAPEC Z0950	CO2 Facilities Mechanical Completion	0.0d		12-Sep-14*																															
CAPEC Z0900	4120 - HMU 1 & 2 Mechanical Completion	0.0d		18-Nov-14*																															
<b>Pipeline</b>					1280.3d	29-Jul-11	30-Jan-15																												
TPLE0290	Detailed Engineering - Piping Engineering (Hammock)	276.0d	26-Sep-11	12-Oct-12																															
TPLE0300	Detailed Engineering - Piping Layout Engineering (Hammock)	252.0d	31-Oct-11	12-Oct-12																															
TPLE0260	Detailed Engineering - Process Engineering (Hammock)	95.0d	15-Jun-12	24-Oct-12																															
TPLE0270	Detailed Engineering - I&C Engineering (Hammock)	85.1d	09-Jul-12	31-Oct-12																															
TPLE0310	Detailed Engineering - Civil Engineering (Hammock)	27.1d	04-Oct-12	08-Nov-12																															
TPLE0280	Detailed Engineering - Electrical Engineering (Hammock)	84.1d	02-Aug-12	23-Nov-12																															
TPLE0320	Detailed Engineering - Procurement Engineering (Hammock)	440.9d	26-Sep-11	29-May-13																															
TPLE0250	Detailed Engineering - Project Management (Hammock)	758.3d	26-Sep-11	07-Aug-14																															
<b>General</b>					1222.3d	26-Sep-11	30-Jan-15																												
<b>Major Milestones</b>					1222.3d	26-Sep-11	30-Jan-15																												
PLE0030	Quest CCS Project - Execute Phase Kickoff Meeting	0.0d	26-Sep-11																																
PLJD7140	Pipeline Work Package	0.0d		20-Sep-12																															
PLKD1080	Wellsite - Site Prep / Grading / Foundation / UG Work Package - By	0.0d		19-Oct-12																															
PLJD7100	Site Prep / Grading / Foundation / UG Work Package - By others	0.0d		19-Oct-12																															
PLJG5490	Construction Kick Off Meeting	0.0d	01-Mar-13																																

█ Actual Work   
 █ Critical Remaining Work   
 Summary  
█ Remaining Work   
 ◆ Milestone

Prepared by: Prateek Arora

Date	Revision	Checked	Approved
09-Sep-11	Rev 0-Issued for ESAR 4/VAR 4	A. Desai	N. Hattab

















# Quest CCS Project Integrated Schedule

TASK filter: All Activities

Page 17 of 18

(Level 2 Schedule)

Activity ID	Activity Name	Original Duration	Start	Finish	2010				2011				2012				2013				2014				2015				2016
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
<b>Unit 701 Branch Pipeline Construction</b>																													
<b>Unit 701 Project Management/Planning</b>																													
<b>Unit 701 Construction - Flint</b>																													
TPLC3320	Schedule Start	0.0d	03-Sep-13*																										
TPLC3330	Schedule Finish	0.0d		04-Jul-14																									
<b>Unit 701 Phase I Activities</b>																													
<b>Unit 701 Indirect Activities</b>																													
<b>Unit 701 Direct Activities</b>																													
<b>Unit 701 Offsite Activities</b>																													
<b>Unit 701 Onsite Activities</b>																													
<b>Royal Dutch Shell</b>																													
<b>Unit 701 Milestones</b>																													
TPLC3430	Mobilize	0.0d	03-Sep-13																										
TPLC3450	Begin Grade Activities	0.0d	13-Sep-13																										
TPLC3460	Begin Piping Activities	0.0d	26-Oct-13																										
TPLC3470	Demobilize	0.0d	14-Feb-14																										
TPLC3490	Begin Pressure Testing	0.0d	07-Jun-14																										
TPLC3500	Cap Piping with N2	0.0d	07-Jun-14																										
TPLC3480	Begin Final Clean-up	0.0d	02-Jul-14																										
TPLC3510	Demobilize after Final Clean-up and N2 Blanket	0.0d		04-Jul-14																									
<b>Unit 701 Phase II</b>																													
<b>Unit 701 Onsite Activities</b>																													
<b>Unit 701 Mechanical Completion</b>																													
TPLE6990	Unit 701 Mechanical Completion	1.0d	07-Jun-14	09-Jun-14																									
TPLE6400	Unit 701 Pipeline Commissioning (Fill and Pressurize)	1.0d	07-Aug-14	08-Aug-14																									
<b>Post Construction</b>																													
<b>Storage</b>																													
<b>Milestones</b>																													
<b>Regulatory (Storage)</b>																													
STEE1000	Milestone-D56 approval for 7 (#2-#8) injection wells	0.0d		30-Sep-11																									
STEE1010	Regulatory approval for offsite locations	0.0d		28-Mar-12																									
STEE1530	D65 (Class II-Water Disposal) approval	0.0d		06-Jul-12																									
STEE1550	Regulatory approval to use Redwater 3-4 as BCS press monitoring	110.0d	02-Mar-12	02-Aug-12																									
STEE1540	ERCB D56 approval (for deep MMV wells)	0.0d		01-Apr-13																									
<b>Wells</b>																													
<b>Injector Wells (#2 &amp; #3)</b>																													
<b>Procurement</b>																													
<b>Drilling and Completion</b>																													
<b>Injector Wells (#4 &amp; #5)</b>																													
<b>Procurement</b>																													
<b>Drilling and Completion</b>																													
<b>Water Wells</b>																													
<b>Procurement</b>																													
<b>Drilling and Completion</b>																													

█ Actual Work   
 █ Critical Remaining Work   
 Summary   
 █ Remaining Work   
 ◆ Milestone

Prepared by: Prateek Arora

Date	Revision	Checked	Approved
09-Sep-11	Rev 0-Issued for ESAR 4/VAR 4	A. Desai	N. Hattab



# Quest CCS Project Integrated Schedule

TASK filter: All Activities

Page 18 of 18

(Level 2 Schedule)

Activity ID	Activity Name	Original Duration	Start	Finish	2010				2011				2012				2013				2014				2015				2016
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
<b>Monitor Wells</b>																													
<b>Procurement</b>																													
<b>Drilling and Completion</b>																													
<b>MMV</b>																													
<b>Asset</b>																													
<b>Commissioning and Startup</b>																													
<b>Key Milestones</b>																													
GENED0231	FGR and Nox system tested	0.0d	07-Nov-13	07-Nov-13	◆ FGR and Nox system tested																								
GENED0141	Commissioning procedure ready	0.0d	25-Mar-14	25-Mar-14	◆ Commissioning procedure ready																								
GENED0111	HMU 3 and capture common tie ins complete	0.0d	03-Apr-14	03-Apr-14	◆ HMU 3 and capture common tie ins complete																								
GENED0241	Hazop all actions items closed	0.0d	01-May-14	01-May-14	◆ Hazop all actions items closed																								
GENED0201	Mandatory and Vendor Training complete by ops and Maintenance	0.0d	23-Jun-14	23-Jun-14	◆ Mandatory and Vendor Training complete by ops																								
GENED0021	Pipelines Handover	0.0d	05-Aug-14	05-Aug-14	◆ Pipelines Handover																								
GENED0001	Systems Handover (Except HMU 1&2)	0.0d	30-Sep-14*	30-Sep-14*	◆ Systems Handover (Except HMU 1&2)																								
GENED0151	Amine system chemical cleaning complete	0.0d	14-Nov-14	14-Nov-14	◆ Amine system chemical cleaning complete																								
GENED0011	Systems Handover (HMU 1&2)	0.0d	18-Nov-14	18-Nov-14	◆ Systems Handover (HMU 1&2)																								
GENED0161	CO2 Compressor surge test complete	0.0d	29-Dec-14	29-Dec-14	◆ CO2 Compressor surge test complete																								
GENED0171	ESP and alarm management complete	0.0d	13-Jan-15	13-Jan-15	◆ ESP and alarm management complete																								
GENED0121	HMU 1 & 2 Tie ins done	0.0d	02-Apr-15	02-Apr-15	◆ HMU 1 & 2 Tie ins done																								
GENED0091	Sustained operations	0.0d	29-Jul-15	29-Jul-15	◆ Sustained operations																								
GENED0101	Startup complete	0.0d	19-Sep-15	19-Sep-15	◆ Startup complete																								
<b>HMU-3</b>																													
<b>Mechanical Completion</b>																													
<b>Pre-Commissioning Steps</b>																													
<b>Commissioning</b>																													
<b>CO2 Capture</b>																													
<b>Mechanical Completion</b>																													
<b>Pre-Commissioning Steps</b>																													
<b>Commissioning</b>																													
<b>HMU-3 &amp; Capture Start-Up</b>																													
<b>Commercial Operations Testing</b>																													
<b>Shutdown and Startup for Turnaround</b>																													
<b>HMU-1&amp;2</b>																													
<b>Mechanical Completion</b>																													
<b>Pre-Commissioning Steps</b>																													
<b>HMU 2</b>																													
<b>Commissioning</b>																													
<b>Startup</b>																													
<b>HMU 1</b>																													
<b>Commissioning</b>																													
<b>Startup</b>																													
<b>Pipeline Commissioning and Start-Up</b>																													
<b>Wells Commissioning and Start-up</b>																													

█ Actual Work   
 █ Critical Remaining Work   
 ▼ Summary  
█ Remaining Work   
 ◆ Milestone

Prepared by: Prateek Arora

Date	Revision	Checked	Approved
09-Sep-11	Rev 0-Issued for ESAR 4/VAR 4	A. Desai	N. Hattab