

VERSION 1.0: October 2022

About the Commission

The BC Oil and Gas Commission (Commission) is the single-window regulatory agency with responsibilities for regulating oil and gas activities in British Columbia, including exploration, development, pipeline transportation and reclamation.

The Commission's core roles include reviewing and assessing applications for industry activity, consulting with First Nations, ensuring industry complies with provincial legislation and cooperating with partner agencies. The public interest is protected by ensuring public safety, protecting the environment, conserving petroleum resources and ensuring equitable participation in production.



VISION

Safe and responsible energy resource development for British Columbia.

MISSION

We provide British Columbia with regulatory excellence in responsible energy resource development by protecting public safety, safeguarding the environment and respecting those individuals and communities who are affected.

VALUES

Transparency

Is our commitment to be open and provide clear information on decisions, operations and actions.

Innovation

Is our commitment to learn, adapt, act and grow.

Integrity

Is our commitment to the principles or fairness, trust and accountability.

Respect

Is our commitment to listen, accept and value diverse perspectives.

Responsiveness

Is our commitment to listening and timely and meaningful action.



Page: 2

Additional Guidance

As with all Commission documents, this document does not take the place of applicable legislation. Readers are encouraged to become familiar with the acts and regulations and seek direction from Commission staff for clarification.

The Commission publishes both application and operations manuals and guides. The application manual provides guidance to applicants in preparing and applying for permits and the regulatory requirements in the planning and application stages. The operation manual details the reporting, compliance and regulatory obligations of the permit holder. Commission manuals focus on requirements and processes associated with the Commission's legislative authorities. Some activities may require additional requirements and approvals from other regulators or create obligations under other statutes. It is the applicant and permit holder's responsibility to know and uphold all legal obligations and responsibilities. For example, Federal Fisheries Act, Transportation Act, Highway Act, Workers Compensation Act and Wildlife Act.

Throughout the document there are references to guides, forms, tables and definitions to assist in creating and submitting all required information. Additional resources include:

- Glossary and acronym listing on the Commission website.
- <u>Documentation and guidelines</u> on the Commission website.
- Frequently asked questions on the Commission website.
- Advisories, bulletins, reports and directives on the Commission website.
- Regulations and Acts listed on the Commission website.

In addition, this document references some application types and forms to be submitted outside of the Application Management System but made available on the Commission's website. Application types and forms include:

- Heritage Conservation Act, Section 12
- Road use permits
- Water licences
- Master licence to cut
- Certificate of restoration
- Waste discharge permit
- Experimental scheme application
- Permit extension application

Page: 3

Manual Revisions

The Commission is committed to the continuous improvement of its documentation. Revisions to the documentation are highlighted in this section and are posted to the <u>Energy Professionals</u> section of the Commission's website. Stakeholders are invited to provide input or feedback on Commission documentation to <u>OGC.Systems@bcogc.ca</u> or submit feedback using the <u>feedback form</u>.

Version	Posted	Effective	Chapter	Summary of Revision(s)
Number	Date	Date	Section	
1.0	November 18, 2022	November 18, 2022	Various	This is a new document. Users are encouraged to review in full.

Page: 4

Table of Contents

About the Commission	2
Additional Guidance	3
Manual Revisions	4
Chapter 1: Introduction	6
1.1 Purpose	6
1.2 Compliance	6
1.3 Notification and Reporting	6
Chapter 2: Notice of Abandonment	7
2.1 Notice of Abandonment – Abandonment Summary Tab	8
2.2 Notice of Abandonment – Abandonment Detail Tab	9
2.3 Notice of Abandonment – Documents Tab	10
2.4 Notice of Abandonment – Submit Tab	11
2.5 Notice of Abandonment – Updating Operation Start / End Date	12
2.6 Notice of Abandonment – Update Request	12
2.7 Notice of Abandonment – Cancellation	14
Chapter 3: Abandonment Report	15
3.1 Abandonment Report – Lists Abandonment Reports for Well	16
3.2 Abandonment Report – Abandonment Plugs Tab	16
3.3 Abandonment Report – Surface Abandonment	23
3.4 Abandonment Report – Documents Tab	24
3.5 Abandonment Report – Submit Tab	25
3.6 Abandonment Report – Update Request	26
Appendix A: Wellbore Schematic Examples	27

Chapter 1: Introduction

1.1 Purpose

This document provides guidance to permit holders regarding Notice of Abandonment and Abandonment Reports, including zonal abandonment and cut and cap for surface decommissioning. Permit holders are expected to meet or exceed these guidelines in order to comply with the requirements outlined below.

Under sections 24 and 26 of the Oil and Gas Activities Act <u>Drilling and Production Regulation</u> requires a plugging program, Notice of Abandonment (NOA), to be submitted at least 7 days before commencement of any abandonment operations.

As per sections 36(1) of the Oil and Gas Activities Act <u>Drilling and Production Regulation</u> requires a permit holder to submit to the Commission, within 30 days of the end of each abandonment operation, with an attached downhole schematic diagram, in color.

1.2 Compliance

All submissions made to the Commission in support of an application or a regulatory requirement that include work relating to the practice of professional engineering or professional geoscience are expected to accord with the Professional Governance Act, [SBC 2018], c. 47 and the Bylaws of Engineers and Geoscientists British Columbia (EGBC). This includes any requirements relating to authentication of documents

1.3 Notification and Reporting

Under section 26 (1) (a) of the DPR, a permit holder must submit a Notice of Abandonment (NOA) and a plugging program to the Commission at least 7 calendar days before commencement of operations. This notification is to be submitted electronically through eSubmission and include a wellbore diagram, in color, and a complete program of activities to be undertaken. Permit holders may submit NOAs before the regulatory minimum 7 days to allow for modifications to be made, if necessary.

Under section 26 (1) (c) of the DPR, a permit holder must submit an Abandonment Report to the Commission within 30 days of the completion of activities. This Abandonment Report is to be submitted electronically through eSubmission and must include a completed copy of the Completion/Workover Report Form, a complete record of the daily reports including all significant operations undertaken, a downhole schematic illustrating the configuration of the well at the end of the operation, in color, and any other information respecting the work conducted. If the Abandonment Report includes surface decommissioning, a photograph of the cut & capped casing stub including identifying information welded thereon must be included in the Completion/Workover Report. The Report is submitted electronically through eSubmission.

If a well is decommissioned prior to the release of the drilling rig, no advance notification is required, though permit holders are encouraged to consult with the Commission's Drilling and Production staff prior to completing downhole abandonment operations. If surface decommissioning, including the final cut and cap, is not completed and reported on the Summary Report of Drilling Operations (SRDO), the well is not considered to be decommissioned. In those cases, surface decommissioning activities must be reported separately as though the well were cased.

Page: 6

Chapter 2: Notice of Abandonment

To initiate a Notice of Abandonment for a well, the permit holder must select the Notice of Abandonment option from the Well Decommissioning section of the Navigation Menu. If there is no well in the Active Activity Bar, the Find Well application will prompt the user to find a well. Enter a WA Num and click on Query Well.

BCOIL& Gas COMMESSION	eSubmission Notice of Abandonment	Flat The
Menu	Please find a well	
Home	Find Well	×
• Well	WA Num: Well Name:	
● Drilling		
 Data Submission 		
 Notices 	DLS: LSD v Section v TWP v Range v	
 Suspend Well 		
 Well Integrity 		
Well Decommissioning	Iter Extend Criteria	
Notice of Abandonme	nt O User Entereu Cinena	
 Abandonment Report 	Well Drilling Options	
 Waste Disposal 	Well Completion Maintenance & Abandonment Options	
Geophysical Program		
 Permit Administration 	Well Suspension Options	
 Water Use 	Well Integrity Options	
• Emergency Response Plans		
 Pipeline 	P Query Well ← Reset Generate to CSV Ø Close	
 Liability Management 		
 Methane Reporting 	WA Num 😳 Well Name 🗘	
	0-0 out of 0 14 <4 P> P1	

Select the well from the results as highlighted below.

ind Well	
WA Nu	m: 22522 Well Name:
NT	S: Qtr Unit • Block • Map • •
DL	.S: LSD * Section * TWP * Range *
- Usor Ente	and Criteria
• User Ente	
O Us	er Entered Criteria
Well Drilling	ng Options
Well Com	pletion, Maintenance & Abandonment Options
Well Susp	vension Options
 Well Integ 	rity Options
P Query Well	* Reset Generate to CSV @ Close WA Num 22522 is currently selected. To select another well, please click on the list below.
WA Num 🗘	Well Name 🗘
22522	ORPHAN SANLING SIERRA C- 094-C/094-I-14
	1-1 out of 1 14 <4 1 1> 14

Page: 7

Previously created Notice of Abandonments for the well will appear in the table. A notice can be viewed by clicking on the row pertaining to the notice.

To initiate a new Notice of Abandonment for the selected well, click the "New Notice of Abandonment" button to begin.

Menu	WA Num: 22522 Well Na	me: ORPHAN SANLING SIE	RRA C- 094-C/0	94-I-14 Status: 9	SUSP/GAS/PROD	₽ Find Well				
Home										
• Well		Abandonment Operation # 👻	Revision # 0	Operation Start Date 🗘	Operation End Date 🗢	Submitted By \$	Submitted Date 🗢	Submitted By Email \$	Status 🗘	Outstanding Request 🗘
Drilling					No n	ecords found.				
 Data Submission 					0-0 out of 0	<4 12	25 🗸			
Notices	New Notice of Abandonment									
Suspend Well										
Well Integrity										
 Well Decommissioning 										
Notice of Abandonment										
Abandonment Report										

Wells that have a Well Status of Well Authority Granted (WAG), Cancelled (CANC), Drilling (DRILL), Drilling Suspended (DSUS), Certificate of Restoration (COR) or Abandoned (ABAN) where the Well is Surface Abandoned, the New Notice of Abandonment button will not be displayed.

Upon clicking on the New Notice of Abandonment, the system will prompt for the planned Operation Start Date and the Operation End Date to be entered. Upon clicking on save, the system will take you into the Notice of Abandonment.

Create Notice of Abandonment		
Operation Start Date: *	уууу-MM-dd	Ĩ
Operation End Date: *	уууу-MM-dd	Ĩ
Save	Cancel	

2.1 Notice of Abandonment – Abandonment Summary Tab

The Notice of Abandonment uses a tabbed page format to facilitate viewing and entering data. The contact information should reflect the person responsible for the oversight of the notice. The fields with an asterisk * are required to be entered.

WA Num: 22522 Well Name: ORPHA	N SANLING SIERRA	C- 094-C/0	94-I-14 Status: SUSP	/GAS/PROD	P Find Well				
Abandonment Operation #: 00	0277		Notice of	f Abandonment Status:	Initiated	Submitted By:			
Operation Start Date: 20	122-11-01		Abandonn	ment Report Due Date:	2022-12-05	Submitted Date:			
Operation End Date: 20	122-11-05				Submitted By Email:				
Abandonment Summary Abandonment Detail	Documents Sub	nit Upda	te Request Cancel Request						
Operation Start Date: *	2022-11-01	13		Operation End Date: *	2022-11-05				
Site Supervisor 1: *				Phone: *	(999) 999-9999				
Site Supervisor 2:				Phone:	(999) 999-9999				
Office Contact: *				Phone: *	(999) 999-9999	Email: *			
			Base of Usable	Groundwater (mKB): *					
			How was the Base of Usable Gro	oundwater identified?*	Please select *				
	Which a	f the followin	a best describes the status of Grou	undwater Protection? *	Plaza colort				
					Fielder Serect				
		is there any	history of Surface Casing Vent Fic	ow or Gas Migration? -					
		is t	there active Surface Casing Vent H	-low or Gas Migration?					
			Is there any history of Car	sing Integrity issues? *					
Well Use History:	Wall Status A	Delete							
	Drilling	-							
	Cased								
	Production								
	Add Well Use History								
				Save	Cancel				
L									

Page: 8

A unique Abandonment Operation # will automatically be assigned to each Notice of Abandonment.

WA Num: 22522	Well Name: ORPH	IAN SANLING SIERRA C- 094-C/094-I-14	Status: SUSP/GAS/PROD	₽ Find Well
	Abandonment Operation #:	000252	Notice of Abandonment Statu	is: Initiated
	Operation Start Date:	2022-10-01	Abandonment Report Due Dat	te: 2022-11-30
	Operation End Date:	2022-10-31		

Base of Usable Groundwater (mKB): reference the Industry Bulletin 2016-09, <u>Technical Guidance for Determining the "Base of Usable Groundwater</u>," when determining the depth.

How was the Base of Usable Groundwater identified?: Select from the list of options.

Status of Ground Water Protection: Select from the list of options

Is there any history of Surface Casing Vent Flow or Gas Migration?: The field will be auto populated with a value of Yes if the well being abandoned has a Well Integrity submission with a Severity of Serious, Non Serious, or Unknown.

Is there any history of Surface Casing Vent Flow or Gas Migration?: Examples may include casing corrosion, deforming and breaking, no cement, cement patch or other remedial work due to casing integrity issues, non-routine zonal plugs due to casing integrity issues, Fish in hole leading to potential wellbore integrity issues.

Is there active Surface Casing Vent Flow or Gas Migration?: Answer relating to the current stat of the well.

Is there any history of Casing Integrity issues?: Known casing integrity issue.

Have all known Casing Integrity issues been successfully repaired?: The work completed meets the requirements of the Drilling and Production Regulations, Section 26, Plugging requirements for wells.

Well Use History: The field will be auto populated with well statuses with what is currently reported in BC Oil and Gas Commission internal system. If the well has been previously rig released the permit holder will be required to Add a Well Use History of "Cased" if not listed. There will be the option to add a Well Status if there is a missed Well Use History not listed or reported in the system.

2.2 Notice of Abandonment – Abandonment Detail Tab

The fields with an asterisk * are required to be entered.

Will the well be cut and capped?: Will the well be cut and capped for this specific Notice of Abandonment?

Will any remedial cementing take place?: Required to answer Y or N. Reference the Well Decommissioning Guidelines. **Additional Details:** Ensure that Additional Details include a description of the job summary. This is usually the summary that is in the program. The following shows examples of Additional Details::

- Abandon zone with bridge plug and cap with cement. Run a RBL to determine cement top. If required, remedial cement job for BGWP. Cut and cap well.
- Previously set Cadomin zone abandonment plug will be pressure tested and additional plug run. Proceed with Dunlevy and Bluesky abandonments. Logs will be run to determine SCVF source for remedial cementing.
- Displace/Circulate casing to fresh water. Abandon Montney perforations with a bridge plug and dump bailed cement. Conduct logging to determine SCVF source. Complete remedial cementing to repair SCVF.
- Displace casing to fresh water. Pressure test cement plug and dump bail additional cement. Abandon Dunlevy perforations

Page: 9

with a bridge plug and dump bailed cement. Complete remedial cementing to protect groundwater. Complete surface abandonment.

Completion Events available for Abandonment: The table will display a list of previously reported completion events for the well, if any exist, requiring the user to identify if an operation will be performed for this notice. Where the well is cased and not completed then this section will not appear, and the additional details must summarize the work being conducted.

Num: 22522 Well Name: (ORPHAN SANLING SIERR	A C- 094-C/094-I	-14 Status	SUSP/GAS/PROD	P Find We				
Abandonment Operat	ion #: 000252			Notice of Abandonment S	atus: Initiated			Sut	mitted By:
Operation Start	Date: 2022-10-01			Abandonment Report Due	Date: 2022-11-30			Subm	itted Date:
Operation End	Date: 2022-10-31							Submitted	By Email:
Abandonment Summary Abandonm	ent Detail Documents Su								
١	Vill the well be cut and capped? *	💌							
Will any	remedial cementing take place? *	🔻							
	Additional Details:								
									1
Completion Events available for Aba	indonment:								1
DE CE Formation ≎	Current CE Status 🜣	Top Depth(mKb) ≎	Base Depth(mKb) \$	Will there be an Operation on this CE?	Will this CE be Abandoned?	Level A?	High Pressure Interval?	Are all Operations Routine as described in the BC Well Decommissioning Guidelines?	Proposed Barriers
00 00 SIERRA/BLUESKY/	B Suspended/Gas/Production	598	600	• •					• •
				Save		Cancel			

Will there be an Operation on this CE?: Select yes or no for each CE. CEs indicated with a Yes will be required to answer the following additional questions.

Will this CE be Abandoned?: Select Yes or No.

Level A?: Select Yes or No. Reference the Well Decommissioning Guidelines for further information.

High Pressure Interval?: Select Yes or No. Reference the Well Decommissioning Guidelines for further information.

Are all Operations Routine as described in the BC Well Decommissioning Guidelines?: Select Yes or No. Reference the <u>Well</u> <u>Decommissioning Guidelines</u> for further information. Where the option NO is selected, further describe the operations in the Additional Details field.

Proposed Barriers: Select one option from the list. Where the type OTHER is selected, further describe the proposed barrier in the Additional Details field.

2.3 Notice of Abandonment – Documents Tab

The Documents tab allows permit holders to upload supporting documentation to a Notice of Abandonment. The Abandonment Program and a current Wellbore Schematic are both mandatory submissions. Miscellaneous documentation may include: a Qualified Professionals detailed Base of Usable Groundwater report, logs and any other reports that may be relevant relating to the scope of the job.

Page: 10

Menu	
Woha	WA Num: 22522 Well Name: ORPHAN SANLING SIERRA C- 094-C/094-I-14 Status: SUSP/GAS/PROD P Find Well
Home	Abandonment Operation #: 000252 Notice of Abandonment Status: Initiated
Well	Operation Start Date: 2022-10-01 Abandonment Report Due Date: 2022-11-30
 Drilling 	Operation End Date: 2022-10-31
Data Submission	
Notices	Abandonment Summary Abandonment Detail Documents Submit Update Request Cancel Request
Suspend Well	Document Type C Eile Name C Eile Format C Unloaded By C Unloaded Date C Download Delete
Well Integrity	No records found
 Well Decommissioning 	0-0 out of 0 to the second seco
Notice of Abandonment	
Abandonment Report	Select Document Type * Please select
	+ Chanse + Ilin Plass select
 Geophysical Program 	Abadoment Program
Permit Administration	Miscellaneous
Water Use	Wellbore Schematic
Emergency Response Plans	
• Pipeline	
Liability Management	
Methane Reporting	

To upload a document, select the Document Type. Click on the Choose button to locate the document to be uploaded and click Open. The selected file name will be displayed, click on Upload to upload the document. Files must be of type .doc, .docx and .pdf only.

2.4 Notice of Abandonment – Submit Tab

The Submit Tab requires that the permit holder accept the statement of responsibility acknowledging that all information provided is accurate. Agreeing to accept responsibility for the application allows the permit holder to submit the Notice of Abandonment to the BC Oil and Gas Commission.

The option to Discard the submission is available only when the Notice is in a status of Initiated. Notices that have been submitted will require a Cancel Request to be initiated.

Menu	* WA Num: 22522 Weil Name: ORPHAN SANLING SIERRA C- 094-0/094-1-14 Status: SUSP/GAS/PROD P Find Weil
Home	Abandonment Operation # 000252 Notice of Abandonment Status Initiated Submitted By
• Well	Operation Start Date: 2022-10-01 Abandomment Report Due Date: 2022-11-30 Submitted Date:
• Drilling	Operation End Date: 2022-10-31 Submitted By Email:
 Data Submission 	
O Notices	Abandonment Summary Abandonment Detail Documents Submit Update Request Cancel Request
 Suspend Well 	The permit holder that submits well reports and well data is solely responsible for submitting complete and accurate information. The Commission does not take any responsibility for inaccurate, incomplete or incorrect information included in, or submitted with, well reports and well data. The BC OI
 Well Integrity 	and Gas Commission may make all or any portion of the information included in the well reports and well data publicly available on expiry of statutory confidentiality status of the WA Number that appears on the well reports and well data.
Well Decommissioning	IAccept Responsibility O Declined
Notice of Abandonment	
 Abandonment Report 	Submit to OGC Discard

When the permit holder clicks the Submit to OGC button several completeness and data integrity checks will be conducted. If any error conditions are identified, the permit holder will be notified with error descriptions on the submit tab. If the Notice of Abandonment meets all data integrity and completeness requirements, the permit holder will be notified that the Notice of Abandonment has been successfully submitted and the status will change from Initiated to Under Review.



Page: 11

BC Oil and Gas Commission Uncontrolled copy once downloaded

2.5 Notice of Abandonment – Updating Operation Start / End Date

Permit holders can update the Abandonment Start Date and the Abandonment End Date after the Notice of Abandonment has been submitted. Find the Notice of Abandonment and click on the Change Operation Start/End Date button near the top of the screen.

м	enu	4	WA Num: 22522 Well Name: ORPHA	AN SANLING SIERRA C- 0	94-C/094-I-14	Status: SUSP/	GAS/PROD	Find Well
	Home		Abandonment Operation #: 0	000252-0		Notice	of Abandonment Status:	Complete
e	Well		Operation Start Date: 2	2022-10-01		Abandor	nment Report Due Date:	2022-11-30
G	Drilling		Operation End Date: 2	2022-10-31				
Θ	Data Submission		1	Change Operation Start / End I	Date			
G	Notices							
0	Suspend Well		Abandonment Summary Abandonment Detail	il Documents Submit	Update Request	Cancel Request		
G	Well Integrity		Operation Start Date: *	2022-10-01			Operation End Date: *	2022-10-31
9	Well Decommissioning		oporation otari bato.				oporation End Bato.	
	Notice of Abandonment		Site Supervisor 1: *	Tester 1			Phone: *	(111) 111-1111
	Abandonment Report		Site Supervisor 2:				Phone:	(999) 999-9999

Enter the New Operation Start Date, Operation End Date and provide a reason for the Date change. Click Save to submit the date changes to the BC Oil & Gas Commission.

Current Operation Start Date:	2022-10-01	Cu	irrent Operation End Date:	2022-10-31	
Enter New Operation Start Date:	2022-10-31	Enter	New Operation End Date:	2022-11-30	ũ
Updated By:	Dave Fukumoto	Email:	OGCKermit.Notices@bcc	ogc.ca	
e service rig is on hold.					

2.6 Notice of Abandonment – Update Request

After a Notice of Abandonment has been submitted to the Commission, it is no longer available for update in eSubmission. If an external permit holder identifies an error in a Notice of Abandonment after it has been submitted to the Commission, they can enter an Update Request. To enter an Update Request the permit holder will navigate to the Request Update tab. The permit holder may submit an update request when the Notice of Abandonment status is in Under Review.

Page: 12

Menu	WA Num: 22522 Well Name: ORPHAN SANLING SIERRA C- 094-C/094-I-14 Status: SUSP/GAS/PROD P Find Well
Home	Abandonment Operation #: 000252-0 Notice of Abandonment Status: Complete
Well	Operation Start Date: 2022-10-01 Abandonment Report Due Date: 2022-11-30
• Drilling	Operation End Date: 2022-10-31
 Data Submission 	Change Operation Start / End Date
Notices	
 Suspend Well 	Abandonment Summary Abandonment Detail Documents Submit Update Request Cancel Request
Well Integrity	Request Date Request By Final Address Outcome Outcome Date Outcome Ry
 Well Decommissioning 	No records found.
Notice of Abandonment	
Abandonment Report	New Underto Doguest
Waste Disposal	New Optime Request

To enter an Update Request the permit holder will click the New Update Request button which will open the Update Request popup.

The permit holder must enter a reason for the Update Request and then click Save. The permit holder will then be notified that the Update Request has been successfully generated.

As illustrated below, this update request notified the permit holder that the request was successful.

WA Num: 22522	NA Num: 22522 Well Name: ORPHAN SANLING SIERRA C- 094-C/094-I-14 Status: SUSP/GAS/PROD P Find Well												
Update Reques	Update Request in Progress.												
Ab	andonment Operation #:	000277-0		Notice of Abandonment Statu	: Review Required	Submitted By:	eSubmission User						
	Operation Start Date:	2022-11-01		Abandonment Report Due Dat	2022-12-05	Submitted Date:	2022-10-25						
	Operation End Date:	2022-11-05				Submitted By Email:	OGCKermit.Notices@bcogc.ca						
		Change Operation Start / En	d Date										
Notice of Abane You will be noti	donment Update Reque fied when the Update R	st sent to ogc@kineticsystems equest has been reviewed by t	.ca,abnu@kineticsystems.ca he OGC and the Abandonme	infosystems.notices@bcogc.ca, t Report is available for update.	OGCDrilling.Production@bcogc.ca	a							
Abandonment Summ	Abandonment D	etail Documents Submit	Update Request Car	cel Request									
Request Date *	Request By 0	Email Address 🗘	Outcome COutcome D	ate 🌣 Outcome By 🌣									
2022-10-25	eSubmission User	OGCKermit.Notices@bcogc.ca		OGCUSER									
New Update Requ	est												

Saving an Update Request results in an email notification being sent to <u>OGCDrilling.Production@bcogc.ca</u> notifying the appropriate Commission staff that an Update Request requires their attention.

Commission staff will confirm the update request setting the Notice to a status of In Revision. An email will be sent to the eSubmission submitter notifying them that the Notice is available for edit.

WA Num: 22522 Well Name:	ORPHAN SANLING SIERRA C-	094-C/094-I-14	4 Status: SU	JSP/GAS/PROD	₽ Find Well					
Abandonment Opera	ion #: 000277-0		Not	ice of Abandonment Status:	In Revision	Submitted By:	eSubmission User			
Operation Star	Date: 2022-11-01		Abar	ndonment Report Due Date:	2022-12-05	Submitted Date:	2022-10-25			
Operation End	Date: 2022-11-05					Submitted By Email:	OGCKermit.Notices@bcogc.ca			
	Change Operation Start / En	d Date								
Abandonment Summary Abandon	nent Detail Documents Submit	Update Reque	est Cancel Requ	Jest						
Request Date * Request By	Email Address 🗘	Outcome 🌣 🛛 0	Outcome Date 🗘	Outcome By 🗘						
2022-10-25 eSubmission U	er OGCKermit.Notices@bcogc.ca	Confirmed 2	2022-10-25	OGCUSER						
2022-10-25 eSubmission User OGCKermit. Notices@booge.ca Confirmed 2022-10-25 OGCUSER										

Page: 13

2.7 Notice of Abandonment – Cancellation

After a Notice of Abandonment has been submitted to the Commission, it is no longer available to be updated or discarded in eSubmission. If a permit holder would like to Cancel a Notice of Abandonment after it has been submitted to the Commission they must request that the notice be cancelled. To cancel a Notice of Abandonment, on the Cancel Request tab click on New Cancel Request as shown below.

Menu 4	WA Num: 22522 Well Name: ORPHAN SANLING SIERRA C- 094-C/094-I-14	Status: SUSP/GAS/PROD P Find Well
Home	Abandonment Operation #: 000252-0	Notice of Abandonment Status: Complete
↔ Well	Operation Start Date: 2022-10-01	Abandonment Report Due Date: 2022-11-30
✤ Drilling	Operation End Date: 2022-10-31	
◆ Data Submission	Change Operation Start / End Date	
◆ Notices		
 Suspend Well 	Abandonment Summary Abandonment Detail Documents Submit Update Request	Cancel Request
Well Integrity	Request Date ▼ Request By ☆ Email Address ☆ Outcome ☆ Outcome Date ≎	Outcome By 🗘
Well Decommissioning	No records found.	
Notice of Abandonment		
 Abandonment Report 	New Cancel Request	

The user will be required to enter a reason for the cancellation and then click Cancel Notice of Abandonment.

Notice of Abandonment Cancel Request		36
Abandonment Operation # 000277		
Operation Start Date: 2022-11-01	Operation End Date: 2022-11-05	
Cancellation Requested by: eSubmission User	Cancellation Requested by Email: OGCKermit.Notices@bcogc.ca	
Reason for Cancellation:		
Work will no longer be proceeding.		
Cancel Notice of Abandonment		
WA Num: 22522 Well Name: ORPHAN SANLING SIERRA	C- 094-C/094-I-14 Status: SUSP/GAS/PROD P Find Well	
Cancellation Request in Progress.		
Abandonment Operation #: 000277-0	Notice of Abandonment Status: In Revision	Submitted By: eSubmission User
Operation Start Date: 2022-11-01	Abandonment Report Due Date: 2022-12-05	Submitted Date: 2022-10-25
Operation End Date: 2022-11-05		Submitted By Email: OGCKermit.Notices@bcogc.ca
Change Operation Start /	End Date	
Abandonment Summary Abandonment Detail Documents Sul	mit Update Request Canoel Request	
Cancellation has been successfully saved. Cancellation email has been sort to		
Candenation email has been sent to		
Request Date * Request By	Outcome 🌣 Outcome Date 🌣 Outcome By 🗘	
2022-10-25 eSubmission User OGCKermit.Notices@boogc.c	8	
New Cancel Request		

Commission staff will confirm the cancellation request setting the Notice to a status of Cancelled. An email will be sent to the eSubmission submitter notifying them that the Notice is now cancelled.

Page: 14

Chapter 3: Abandonment Report

An Abandonment Report submission is required for each Notice of Abandonment that has been submitted. To initiate an Abandonment Report for a well, the permit holder must select the Abandonment Report option from the Well Decommissioning section from the Navigation Menu. The Find Well application will prompt the permit holder to select a well, type in your WA Num and Query Well.

BCOIL & Gas COMMISSION	Submission Abandonment Report	Flat
Menu	Please find a well	
Home	Find Well	×
🕑 Well		
Drilling	WA Num: Well Name:	
Data Submission	NTS: Qtr Unit v Unit v Block v Map v	
Notices	DLS: LSD 💌 Section 💌 TWP 💌 Range 💌	
 Suspend Well 		
Well Integrity	✓ User Entered Criteria	
Well Decommissioning		
Notice of Abandonment	User Entered Criteria	
Abandonment Report	· Will Differ Out of	
Waste Disposal	Weil Drilling Options	
 Geophysical Program 	Well Completion, Maintenance & Abandonment Options	
 Permit Administration 	Well Suspension Options	
 Water Use 	Well Integrity Options	
Emergency Response Plans		
 Pipeline 	P Query Well * Reset Generate to CSV Ø Close	
Liability Management		
 Methane Reporting 	WA Num 🌣 Well Name 🗘	
	No records found.	
	0-0 out of 0 in << >> >> >> >> >> >> >> >> >> >> >> >> >	

When the permit holder has searched for a well, it will show up on the Active Activity Bar, as shown below.

Menu	Find Well	Well Name: ORPHAN SANLING SIERRA C- 094-C/094-I-14 Status: SUSP/GAS/PROD P Find Well									
Home	WA Num	um: 22522 Well Name:									
• Well	NTS	NTS: Otr Unit Con I + Act Block Cattor Shit C Map Act BU Protor Fy Rate C + Submitted By C S Su mi									
➡ Drilling		00252									
Data Submission	DLS	LS: LSD v Section v TWP v Range v 1-1 out of 1 live live live live live live live live									
Notices											
 Suspend Well 		ered Criteria									
Well Integrity	O User	ser Entered Criteria									
Well Decommissioning											
Notice of Abandonment	Well Drilling	ing Options									
Abandonment Report	Well Complexity	npletion, Maintenance & Abandonment Options									
Waste Disposal	Well Suspe	pension Options									
Geophysical Program	Nell Integri	arity Ontions									
Permit Administration	· ····	ing options									
Water Use											
Emergency Response Plans	Query Well	Reset Generate to CSV Ø Close WA Num 22522 is currently selected. To select another well, please click on the list below.									
Pipeline	WA Num 🗘 Well Name 🗘										
Liability Management	22522 ORPHAN SANLING SIERRA C- 094-C/094-I-14										
Methane Reporting		1-1 out of 1 II III III III									

Page: 15

3.1 Abandonment Report – Lists Abandonment Reports for Well

After selecting a well, permit holders will navigate to the List Abandonment Report screen.

If only the Notice of Abandonment exists, no abandonment report submitted against the notice, a link will be provided for the permit holder to create an Abandonment Report as highlighted below. If an Abandonment Report does exist, then the link will allow the permit holder to navigate to a selected Report (ex. Status = initiated).



3.2 Abandonment Report – Abandonment Plugs Tab

The Abandonment Report screen has a section of summary information along the top. The Abandonment Report displays a row of tabs each displaying or requiring entry of well abandonment information.

Menu	WA Num: 22522 Well Name: ORPHAN SANLING SIERRA C- 094-C/094-I-14	Status: SUSP/GAS/PROD P Find Well	
Home	Abandonment Operation # 000252	Abandonment Report Status: Initiated	Submitted By:
• Well	Actual Operation Start Date:	Abandonment Report Due Date: 2022-11-30	Submitted Date:
O Drilling	Actual Operation End Date:		Submitted By Email:
 Data Submission 	View Notice of Abandonment		
 Notices 			
 Suspend Well 	Abandonment Plugs Documents Submit Update Request		
 Well Integrity 			
 Well Decommissioning 	Actual Operation Start Date: * yyyy-MM-dd	0	Actual Operation End Date: * yyyy-MM-dd 0
 Notice of Abardonment. 	Is this a Cased, Uncompleted Well? * No +		
Abandonment Report			
Waste Disposal		Save Cancel	
 Geophysical Program 	Man Developed Information for Data Entry		
 Permit Administration 	To enter a new plug: Select the Button – Plug Entry		
 Water Use 	To review or confirm a previously reported operation: Select the Button = Plug Entry		
 Emergency Response Plans 	Plug Entry		
O Pipeline	Abandonment Pluns: All Previously Reported Pluns that = YES must be reviewed and confirmed		
 Liability Management 	To review or confirm a plug: Select the Plug #		
 Methane Reporting 	DE CE Current CE Status Previously Reported Completion Operation	Completion Type Plug # Plug Type Plug Placement Date	Plug Top Depth Plug Base Depth Plug Removal Date IRIS Plug # Plug Confirmed Delete
	No records found.		

The fields with an asterixis * are required to be entered. There is a requirement to confirm all previous reported abandonment plugs that would have been listed in the table below, if the Commission database has any plugs previous reported. The example below shows no previous reported abandonment plugs.

Abandonment Plugs Documents Submit Update Request								
Actual Operation Start Date:	* yyyy-MM-dd			Actual Operation E	End Date: * yyyy-MM-dd			
Is this a Cased, Uncompleted Well?	* No *							
		Save	Cancel					
View Downhole Information for Plug Entry: To enter a new plug: Select the Button – Plug Entry To review or confirm a previously reported operation: Select the Bu Plug Entry	itton – Plug Entry							
Abandonment Plugs: All Previously Reported Plugs that = YES must b To review or confirm a plug: Select the Plug #	e reviewed and confirmed.							
DE CE Current CE Status Previously Reported ◇ ◇ ◇ Plug ◇	Completion Operation Completion Type	Plug # Plug Type	Plug Placement Date	Plug Top Depth Plug Ba	ase Depth Plug Removal Date	IRIS Plug # Plug	g Confirmed \$	Delete
No records found.								
		0-0 out of 0 🛛 1-4 🔍 <4	⇒ ⇒i 25 ∨					

The following is an example of previous reported plugs listed under the following Abandonment Operation section that will need to be

Page: 16

reviewed and confirmed. The permit holder will have to click in every previous reported plug entry until the Operation Confirmed is equal to "Yes".

To rev	iew or o	confirm a plug: S	elect the Operation then select the	highlighted BUTTON = En	ter Abandonmen	t Plug for Select	ed Operation							
DE ≎	CE ≎	Previously Reported Operation ≎	Completion Event Status \$	Pool \$	Completion Operation \$	Completion Type ≎	Completion Date ≎	Top Depth ≎	Base Depth ≎	Wellbore Equipment \$	Exist in Wellbore ≎	Equipment Removal Date ≎	Plug # ≎	Operation Confirmed ≎
00	00	Yes	Suspended/Gas/Production	BEAR FLAT/HALFWAY/B	Bridge Plug Set	SINGLE	2013-02-25	1642	1642					No
00	00	Yes	Suspended/Gas/Production	BEAR FLAT/HALFWAY/B	Bridge Plug Set	SINGLE	2005-02-12	1638.5	1640					No
00	00	Yes	Suspended/Gas/Production	BEAR FLAT/HALFWAY/B	Other	SINGLE	2013-02-24	1638.5	1640					No
00	02	Yes	Suspended/Undefined/Undefined	OTHER AREAS/BOUNDARY LAKE/13-33-084-20- W6M	Other	SINGLE	2013-03-01	1460.2	1460.2					No

Abandonment Operations: All Previously Reported Operations that = YES must be reviewed and confirmed.

Enter Abandonment Plug for Selected Operation

The following is an example of a re-entry well where a Surface Abandonment operation is reported against Drilling Event 00. The Permit holder when confirming the Surface Abandonment plug must answer "No" to the question "Does this plug exist in the Wellbore" with a "Plug Removal Date" as the re-entry date for Drilling Event 02. Enter the final Surface Abandonment operation under the shallowest completion event or if cased/not completed under Drilling Event 00. If you have any concerns, please contact the <u>OGCDrilling.Production@bcogc.ca</u> email address for assistance.

Abandon	ment Plug	s Documents	Submit Update Reque	st										
0	The Plug i	information has be	en saved successfully.											
			Actual Operation Start Da	Ne: * yyyy-MM-dd	80				Actual Opera	tion End Date: *	yyy-MM-dd			
		Is th	nis a Cased, Uncompleted We	#?* No *										
						Save		Cancel						
View Do To enter	wnhole inf r a new pl	formation for Plug Er lug: Select the Buth	ntry: on = Plug Entry											
To revie	w or conf	firm a previously re	ported operation: Select the	Button - Plug Entry										
Plug E	Intry													
Abandor To revie	ment Plu	gs: All Previously R firm a plug: Select t	eported Plugs that = YES mu the Plug #	st be reviewed and conf	inned.									
DE ¢	CE 0	Current CE Status ©	Previously Reported Plug ©	Completion Operation 0	Completion Type	Plug # 0	Plug Type 0	Plug Placement Date 0	Plug Top Depth ©	Plug Base Depth ©	Plug Removal Date ©	IRIS Plug # 0	Plug Confirmed	Delete
00			Yes			PLUG 1	CEMENT	1993-09-24	2330	2450		01	Yes	
00			Yes			PLUG 2	CEMENT	1993-09-24	1250	1355		03	Yes	
00			Yes			PLUG 3	CEMENT	1993-09-24	420	540		04	Yes	
00			Yes			PLUG 4	CEMENT	1993-09-24	345	395		05	Yes	
00			Yes			PLUG 5	CEMENT	1993-09-24	185	2085		02	No	
00			Yes			PLUG 6	SURFACE ABANDONMENT	1993-09-25				05	No	
						1-6 out of 6	14 44 1 10	⊨ 25 ¥						

The following is an example of confirming a previous reported plug and the updated required fields:

	WA Num:19106 V	VA Name: ORPHAN PREDATOR B	EAR FLAT 12-33-084-20 Abando	onment Operation: 000262	
Downhole Information					
Drilling Even	t 00	Top Cut Depth:	PB Depth:		Total Depth: 1709
Completion Even	t 00	Status: Suspended/Gas/Proc	luction Top Depth (mKB):	1648	Base Depth (mKB): 1654
		Area: BEAR FLAT	Formation:	HALFWAY	Pool: B
Abandonment Operation:	PREVIOUSLY REPORTED OPERATION	Operation: * Bridge Plug Set		Operation Date: * 2013-02-25	
Completion Type: 1	' Single	Top Depth(mKB): *	1642	Base Depth(mK	B): * 1642
		Is this Wellbore Equipment? *	Yes 💌		
	Do	es this equipment remain in the Wellbore? *	Yes 👻		
	Did th	is Plug complete the Zonal Abandonment? *	No 👻		
Plug Detail: NEW PLUG					
Plug #: 1	Plug Type: *	BRIDGE - NON-RETRIEVABLE	▼ F	Plug Placement Date: * 2013-02-25	
	Mechanical Plug Set Depth (mKB): *	1642	Is there Cement assoc	iated with this Plug? * Yes 💌	
	Cement Confirmed:	Confirmation Method Delete	c	Cement Volume (m3): *	0.1
		Tagged 💌 🗑			
		Add Cement Confirmation Method			
	Top Depth (mKB): *	1635		Base Depth (mKB): *	1642
Summary Information: *	Set perm BP @ 1642 mKB (capped with 8m c	:mt)			
		Save	Cancel		

After reviewing and confirming one of the previous plugs the Abandonment Operations section will be updated to show "Yes". The remaining plugs will need to be confirmed.

Abandonment Operations: All Previously Reported Operations that = YES must be reviewed and confirmed. To review or confirm a plug: Select the Operation then select the highlighted BUTTON = Enter Abandonment Plug for Selected Operation

DE \$	CE ≎	Previously Reported Operation ≎	Completion Event Status \$	Pool \$	Completion Operation \$	Completion Type \$	Completion Date \$	Top Depth ≎	Base Depth ≎	Wellbore Equipment	Exist in Wellbore	Equipment Removal Date ≎	Plug #≎	Operation Confirmed \$
00	00	Yes	Suspended/Gas/Production	BEAR FLAT/HALFWAY/B	Bridge Plug Set	SINGLE	2013-02-25	1642	1642	Yes	Yes		1	Yes
00	00	Yes	Suspended/Gas/Production	BEAR FLAT/HALFWAY/B	Bridge Plug Set	SINGLE	2005-02-12	1638.5	1640					No
00	00	Yes	Suspended/Gas/Production	BEAR FLAT/HALFWAY/B	Other	SINGLE	2013-02-24	1638.5	1640					No
00	02	Yes	Suspended/Undefined/Undefined	OTHER AREAS/BOUNDARY LAKE/13-33-084-20- W6M	Other	SINGLE	2013-03-01	1460.2	1460.2					No

Enter Abandonment Plug for Selected Operation

Page: 18

×

To enter a new plug the Permit holder will have to select the "Plug Entry" button as shown below:

M	lenu	4	WA Num: 22522	Well Name: OF	RPHAN SANLING SIERF	RA C- 094-C/094-I-14	Status: SUSP/	GAS/PROD		Find Wel	
	Home			Abandonment Operation	n #: 000252		Aban	donment Repo	ort Status	Initiated	
e	Well			Actual Operation Start Da	ate:		Abandor	ment Report [Due Date:	2022-11-30	
G	Drilling			Actual Operation End Da	ate:						
e	Data Submission		View Notice of A	bandonment							
G	Notices										
e	Suspend Well		Abandonment Pl	ugs Documents S	Submit Update Request						
C	Well Integrity										
e	Well Decommissioning				Actual Operation Start Date: *	yyyy-MM-dd					
	 Notice of Abandonment 			Is this	a Cased, Uncompleted Well? *	No 👻					
	Abandonment Report										
e	Waste Disposal							Save			Cancel
C	Geophysical Program										
G	Permit Administration		To enter a new	plug: Select the Button =	= Plug Entry						
e	Water Use		To review or co	onfirm a previously repor	ted operation: Select the But	tton = Plug Entry					
G	Emergency Response Plans		Plug Entry								
G	Pipeline		Abandonment F	lune: All Previously Repo	rted Plugs that - VES must be	reviewed and confirmed					
C	Liability Management		To review or co	onfirm a plug: Select the	Plug #	reviewed and commed.					
e	Methane Reporting		DE CE ≎ ≎	Current CE Status ≎	Previously Reported Plug ≎	Completion Operation ≎	Completion Type	Plug #	Plug T \$	ype Plug P	lacement D \$
			No records fou	ind.							
								0-0 out of 0	14	4 100	25 🗸

Once the Permit holder selects the "Plug Entry" button, the following screen displays the existing Drilling Event statuses and Completion Event statuses that are available for operation plugs. Select the correct completion event for each operational plug entry. If there are no previously reported completion events, then any new operation plugs would be reported to the Drilling Event screen.

If there is a Surface Abandonment Operation completed, it should be reported to the highest (shallowest) Completion Event. In the example below shows the SIERRA/BLUESKY/B DE 00 CE 00 Completion event so the Surface Abandonment operation would be reported there. If there is no Completion Event on this well the Surface Abandonment Operations should be reported to the Drilling Event section, the uppermost table below.

Abando	nment Op	erations												3
			W	A Num:22522	WA Name: OI	RPHAN SANLII	NG SIERRA	C- 094-C/	094-I-14	Abandonment C	Operation: 0002	.52		
Drilling	Events: N	lew plugs can be crea	ted from Drilling E	Events.										
To ente	er a new p	olug: Select a DE the	n select the high	lighted BUTTON	= Enter Abandonme	nt Plug for Selecte	d Drilling Ever	nt						
DE	Drillir	ng Event Status	Top Cut Depth	Total Depth	Plug Back Depth									
00	Suspend	led/Gas/Production		649										
- False		ment Divertion Only sta	d Deilling French											
Entel	rAbandon	ment Plug for Selecte	a Drilling Event											
Comple	etion Even	ts: New plugs can be	created from Corr	npletion Events.										
To ente	er a new p	olug: Select a CE the	n select the high	lighted BUTTON	= Enter Abandonme	nt Plug for Selecte	d Completion	Event						
DE 🗘	CE <	Completion Ev	ent Status	Pool	Completion Da	te 🗘 Top Depth	a 🌣 🛛 Base D	epth ≎						
00	00	Suspended/Gas	Production SI	ERRA/BLUESKY/	B 2007-03-02	598	600							
Enter	r Abandon	ment Plug for Selecte	d Completion Eve	ent										
Abando	onment Op	perations:												
To revi	iew or cor	nfirm a plug: Select i	the Operation the	en select the high	lighted BUTTON = E	nter Abandonmen	t Plug for Sele	cted Operati	on					
DE	CF	Previously	Completio	n Pool	Completion	Completion	Completion	Тор	Base	Wellbore	Exist in	Equipment	Plua	Operation
\$	\$	Reported Operation \$	Event Status	\$ \$	Operation \$	Type ≎	Date \$	Depth \$	Depth \$	Equipment \$	Wellbore \$	Removal Date	# \$	Confirmed \$
No re	cords four	nd.												

Enter Abandonment Plug for Selected Operation

The following "Drilling Events: New plugs can be created from Drilling Events" section is used for any missed reported drilling event plugs not displayed in the "Abandonment Operations" table and for Surface Abandonment operations where the well is cased and not completed.

Page: 19

Abandonment Operations

WA Num:22522 WA Name: ORPHAN SANLING SIERRA C- 094-C/094-I-14 Abandonment Operation: 000252

Drilling	Events: New plugs can be crea	ated from Drilling Ev	vents.		
To ent	er a new plug: Select a DE the	en select the highl	ighted BUTTON	= Enter Abandonme	ent Plug for Selected Drilling Event
DE	Drilling Event Status	Top Cut Depth	Total Depth	Plug Back Depth	
00	Suspended/Gas/Production		649		

Enter Abandonment Plug for Selected Drilling Event

The following "Completion Events: New plugs can be created from Completion Events" section is to report any Abandonment Plugs that have not been previously reported. Please select the correct completion event the plug was set in.

Completion Events: New plugs can be created from Completion Events.

To enter a	a new plug	g: Select a CE then select the	highlighted BUTTON = E	Enter Abandonment Plug	g for Selected Co	mpletion Event
DE 🗘	CE 🗘	Completion Event Status	Pool	Completion Date \$	Top Depth 💠	Base Depth 💠
00	00	Suspended/Gas/Production	SIERRA/BLUESKY/B	2007-03-02	598	600

Enter Abandonment Plug for Selected Completion Event

The following is an example of entering a zonal abandonment against a completion event. The newly updated abandonment plug will be displayed under the Abandonment Plugs tab and can be selected to view the details of that plug. As per the following example the Completion Type has an option single or Abandoned Zone. Please ensure the correct type is selected.

bandonment Plug				
	WA Num:22522	WA Name: ORPHAN SANLING SIERRA C- (094-C/094-I-14 Abandonment Operation: 000252	
Downhole Information				
Drilling Event	00	Top Cut Depth:	PB Depth:	Total Depth: 649
Completion Event	00	Status: Suspended/Gas/Production	Top Depth (mKB): 598	Base Depth (mKB): 600
		Area: SIERRA	Formation: BLUESKY	Pool: B
Abandonment Operation:	NEW OPERATION	Operation: * Bridge - Non-Retrievable	Operation Date: * 2022	-10-05 tt
Completion Type: *	Abandoned Zone 👻	Top Depth(mKB): *	590 Base I	Depth(mKB): * 590
Plug Detail: NEW PLUG				
Plug #: 1	Plug Type: *	BRIDGE - NON-RETRIEVABLE	Plug Placement Date: * 2022	-10-05
	Mechanical Plug Set Depth (mKB): *	590	Is there Cement associated with this Plug? * Yes	-
	Cement Confirmed:	Confirmation Method Delete	Cement Volume (m3): *	0.1
		Tagged 👻 🗑		
		Add Cement Confirmation Method		
	Top Depth (mKB): *	582	Base Depth (mKB): *	590
Summary Information: *	Zonal abandonment			
		Save	Cancel	

The following "Abandonment Operations" section shows all reported abandonment plugs that can be reviewed or confirmed.

T	o revi	ew or c	onfirm a plug: Sel	lect the Operation then select	the highlighted BUTTON	I = Enter Abandor	nment Plug for Sel	lected Operation							
	DE ≎	CE ≎	Previously Reported Operation ≎	Completion Event Status	Pool ≎	Completion Operation \$	Completion Type ≎	Completion Date ≎	Top Depth ≎	Base Depth ≎	Wellbore Equipment	Exist in Wellbore ≎	Equipment Removal Date ≎	Plug #≎	Operation Confirmed ≎
	00	00	No	Suspended/Gas/Production	SIERRA/BLUESKY/B	Bridge - Non- Retrievable	ABANDONED ZONE	2022-10-05	590	590				1	Yes

Enter Abandonment Plug for Selected Operation

Abandonment Operations:

Page: 20

When reviewing and confirming Abandonment Operation plugs the question: "Did this Plug complete the Zonal Abandonment" meets the requirements of the Well Decommissioning Guidelines.

Does this Plug complete the Zonal Abandonment?

When an operation zonally abandons 2 formations the plug goes into the shallowest formation. Put the ABNZ status in each CE.

After you have filled out all the information for a new Plug Entry that will be a Completion Type of Abandoned Zone, ensure you provide detailed information for each plug in the Summary Information box.

Examples shown below are for Zonal Abandonment plugs.

Bride Plug Non-Retrievable	Unset packer and pull out of the hole with production string. Set BP at 769mKB, dump 8m cement on top of BP, top of cement at 761mKB. This is a Zonal Abandonment.
Bride Plug Non-Retrievable	Set BP at 1135mKB, dump 8m cement on top of BP, top of cement at 1127mKB. ABNZ for CE00 and CE02
Bride Plug Non-Retrievable	Remedial perf 239 - 240mKB. No bleed off. Decided to set BP. Set BP at 229mKB, dump 8m cement on top of BP, top of cement at 221mKB.
Bride Plug Non-Retrievable	Mar 1 - Remedial perf 684-687mKB, 680-681mKB and 679-680mKNB, no feed rates. Mar 2 - set BP at 675mKB, place 8m cement on top of BP
Bride Plug Non-Retrievable	Perf 358 - 359mKB. Pump 2.4m3, pressure up to max 3600kPa and do not establish flow or bubbles. Decision to set BP and cement above 2 lower sets of perfs shot today. Set BP at 349mKB, dump 8m cement on top of BP, top of cement at 341mKB.
Bride Plug Non-Retrievable	Set BP at 1130mKB. Pump cement plug, estimated top of cement at 1006mKB.
Bride Plug Non-Retrievable	Release from on/off connector leaving tubing fish downhole, top of fish at 1008mKB. Set BP at 1004mKB, dump 8.2m cement on top of BP, top of cement at 995.8mKB
Cement Squeeze	POOH tubing. Perform cement job, pump cement plug from 850-50mKB. Tag top of cement at 213mKB
Other	Dump 8.5m cement on top of BP, top of cement at 1038.5mKB.
Other	Pull tubing, capillary line parted, tubing stuck 8.5 - 789.6mKB. Injection line 202-795mKB. Instrument line 795-1205.5mKB, bird's nest (400 m of line) 1205.5-1255.5m. Squeezed cement, placed 6.8m3 cement below tubing on BP that was previously set. Cement plug 789.7-1255.5mKB.
Other	Place 8.5m cement cap on top of previously set non-functioning cement retainer at 1006mKB to abandon zone Bluesky. Top of cement at 997.5mKB

After you have filled out all the information for a new Plug Entry that will be a Completion Operation of Cement Squeeze, ensure you provide detailed information for each plug in the Summary Information box.

Remedial:

After you have filled out all the information for a new Plug Entry that will be a Completion Operation of Remedial, ensure you provide detailed information for each plug in the Summary Information box.

This is the information you should provide in the Summary Information box:

What are the perforated intervals? Feed rate – how fast the water will feed into the perforations What depth was the retainer set? What are the pressure test results? How much cement? Cement returned Cement on top of retainer – this will be the top interval Did you run a bond log?

Remedial	Perf 455-457m. Set retainer at 450m, p-test from surface, pass. Sting into retainer, establish circulation to surface through perfs. circulate 1.5m3 cement through retainer, returns to surface. Pull out of retainer, circulate cement onto retainer. Pull to 400m, backwash clean. WOC, tag cement at 405m
Remedial	Remedial perf 566-568mKB, set cement retainer at 550mKB, squeeze 1m3 cement thru retainer into perfs, leaving cement on top of retainer. TOC at 497mKB.
Remedial	Remedial perf 1220-1234.9mKB, squeeze acid into perf interval, set cement retainer at 1229.5mKB, squeeze cement, tag top of cement at 1193.2mKB on Mar 29.
Remedial	Set cement retainer at 363mKB, attempt to break circulation on 365-366mKB, closed cement retainer valve. Spot 8m cement on top of retainer at 363mKB, TOC at 355mKB
Remedial	Balanced cement plugs from 1300 – 1510mKB and 1510 – 1722mKB, tagged cement top at 1285mKB.
Remedial	Positive SCVF. Section mill casing 723-728mKB. Dec 2 - spot 3m3 continuous cement plug, squeeze cement, estimated cement top 503.55mKB. Dec 4 - tag top of cement at 516.86mKB. Continue to monitor scvf
Remedial	Come off seal latch assembly, POOH with tubing, leave on-off tools and packers tubing fish downhole, top of fish at 1708.7mKB. Set cement retainer at 1708mKB. Sept 10 - sting into retainer, sqeeze cement into Halfway perfs, leave cement on top of retainer. Est cement top at 1660mKB. Monitor SCVF.
Remedial	Remedial perf 1108-1112mKB, acidize remedial perfs, bradenhead cement squeeze remedial perfs, tag top of cement at 925mKB. Cement plug 925-1127mKB.

Other:

Example of wording	POOH with tubing, leaving permanent packer and BHA fish downhole, top of fish at 2163mKB. Fish is 17M
Example of wording	Retate tubing string off the packer, leave packer assembly downhole from 2004 4 – 3002 4mkB, POOH
for a fish	with tubing.
Example of wording for a fish	Attempt to come off on/off, no luck. Feb 22 - approval for commingled suspension due to stuck packer. Jet cut tubing at 1045mKB, leave packer assembly fish downhole. Fish 1045 - 1075mKB.
Example of wording for a fish	Sub gun left down hole. Find wording example
Example of wording	TCP perforating BHA left down hole. Find wording example
for a fish	
Example of wording	Jet cut off tubing at 1584mKB leaving stuck packer in hole. Tagged plunger at 97mKB and pushed it down
for a fish	to 1584.5mKB. Perforated tubing at 1578mKB.

3.3 Abandonment Report – Surface Abandonment

When entering a Surface Abandonment, new operation, for a completed well, please use the shallowest completion event. For cased, uncompleted wells, enter the new Surface Abandonment under the Drilling Event.

Under the Drilling Event "Enter Abandonment Plug for Selected Drilling Event" option for entering missing plugs not reported in the system.

Summary Information:

Here are some additional questions as a guide to providing detailed information:

How far down was the excavation? Did you cut the conductor casing? How far down were the surface and production casing cut off? Did you use jet cutting and what is the name of the jet cutting company? Did you install a vented cap? What type? Did you put the well surface location or the WA# on the cover plate? Was a spring loaded centralizing cap used? Did you backfill the area? Wedding cake??

Comments for Surface abandonment.

Cut window in surface casing, remove wellhead, excavate down 3m below ground level and cut surface and production casings 2m below ground level, installed bow spring cap, surface location on cover plate, backfill area. Photos included with report.

Excavate down 2.5m, cut surface and production casings 2.4m below ground level, install vented cap on casings with well authorization number on cap, backfill area, photos included with report.

Nu Wave jet cut. Hydro-vac around well head, jet cut off surface and production casings 2 meters below ground level, install spring loaded centralizing cap with well authorization number on top and backfill excavation. Photos attached.

Nu Wave jet cut. Remove wellhead, set jet cutting tool in wellbore, cut surface and production casings (no conductor barrel), install spring loaded centralizing cap with location on cap, photos included with report, backfill area.

Page: 23

3.4 Abandonment Report – Documents Tab

The Documents tab allows permit holders to upload supporting documentation to an Abandonment Report.

The Abandonment Report file must include the following in this order:

- Completion/Workover Report Form coversheet
- Chronological summary of work completed
- Daily reports detailing all significant operations
- Downhole schematic diagram in full colour
- Photos of the abandonment.

One PDF document containing:

	Image: second	Daily Reports	(if applicable) Supporting Data
Terenal international services of	 and the little states and the		(if reference

For surface abandonment operations, cut and cap, photos are to be included in the Abandonment Report.

A photos of the casing stub that clearly shows the correct well ID information as per Section 6.7 of the <u>Well Decommissioning</u> <u>Guidelines</u>.

Menu	WA Num: 00086 Well Name: ORPHAN PREDATOR W BUICK B- 023-E/094-A-14	Status: SUSP/GAS/PROD P Find Well
Home	Abandonment Operation #: 000175	Abandonment Report Status: Initiated
• Well	Actual Operation Start Date:	Abandonment Report Due Date: 2022-10-15
Drilling	Actual Operation End Date:	
 Data Submission 	View Notice of Abandonment	
Notices		
 Suspend Well 	Abandonment Plugs Documents Submit Update Request	
Well Integrity	Document Type ≎ File Name ≎ File Format ≎ Uploaded By ≎ Uploaded Date ≎	Download Delete
 Well Decommissioning 	No records found.	
Notice of Abandonment		0-0 out of 0 14 <4 P> P1 25 V
Abandonment Report		
 Waste Disposal 	Select Document Type * Abandonment Report	
 Geophysical Program 	+ Choose + Linlard @ Cancel	
Permit Administration		

Page: 24

3.5 Abandonment Report – Submit Tab

The Submit Tab requires that the permit holder accept the statement of responsibility acknowledging that all information provided is accurate. Agreeing to accept responsibility for the application allows the permit holder to submit the Abandonment Report to the Commission.

When the permit holder clicks the Submit to OGC button, a number of completeness and data integrity checks will be conducted by the Oil and Gas Commission. If any error conditions are identified, the permit holder will be notified with error descriptions on the submit tab.

If the Abandonment Report meets all data integrity and completeness requirements, the permit holder will be notified that the Abandonment Report has been successfully submitted and the status will change from Initiated to Under Review.

After the Abandonment Report is submitted to the Commission, it is no longer available for edit in eSubmission.

WA Num: 00086	Well Name: ORPHAN PREDATOR W BUICK B- 023-E/094-A-14	Status: SUSP/GAS/PROD		
	Abandonment Operation #: 000175	Abandonment Report Status:	Initiated	Submitted By:
	Actual Operation Start Date:	Abandonment Report Due Date:	2022-10-15	Submitted Date:
	Actual Operation End Date:			Submitted By Email:
View Notice of At	bandonment			
Abandonment Plu	ugs Documents Submit Update Request			
The permit holde and Gas Commi	er that submits well reports and well data is solely responsible for submitting complete and a ssion may make all or any portion of the information included in the well reports and well dat	ccurate information. The Commission doe la publicly available on expiry of statutory	s not take any responsibilit confidentiality status of the	y for inaccurate, incomplete or incorrect information included in, or submitted with, well reports and well data. The BC Oil WA Number that appears on the well reports and well data.
		O I Accept Responsibilit	y O Declined	
		Submit to OGC	Discar	d

Page: 25

3.6 Abandonment Report – Update Request

After an Abandonment Report has been submitted to the Commission and the permit holder identifies an error in an, they can enter an Update Request.

To enter an Update Request the permit holder will navigate to the Update Request tab and the New Request button which will open an Update Request popup.

The permit holder must enter a reason for the Update Request and then click Save. The permit holder will then be notified that the Update Request has been successfully generated.

As illustrated below, this update request notified the permit holder that the request was successful.

Saving an Update Request results in an email notification being sent to <u>OGCDrilling.Production@bcogc.ca</u>, notifying the appropriate Commission staff that an Update Request requires their attention.

The email will include the Abandonment #, the WA# of the well being abandoned, the date of the update request, the full name of the permit holder making the update request, the email address of the permit holder making the update request and the reason for the update request.

Menu	WA Num: 00086 Well Name: ORPHAN PREDATOR W BUICK B- 023-E/094-A-14	4 Status: SUSP/GAS/PROD P Find Well
Home	Abandonment Operation #: 000175	Abandonment Report Status: Initiated
↔ Well	Actual Operation Start Date:	Abandonment Report Due Date: 2022-10-15
✤ Drilling	Actual Operation End Date:	
	View Notice of Abandonment	
Notices		
 Suspend Well 	Abandonment Plugs Documents Submit Update Request	
Well Integrity	Request Date T Request By A Email Address A Outcome A Outcome Date A	Outcome By
 Well Decommissioning 	No records found.	
Notice of Abandonment		
Abandonment Report	New Lindste Dequest	
Waste Disposal	New Opdate Request	

Appendix A: Wellbore Schematic Examples

	ORIGINAL HOLE, 3/30/2022 1:51:18 P	M	Casing Strings								1 0		
D			Csg Des		OD (mm)	Wt/Len	(kg/m)	Grade		Top Thread	Set (r	t Depth nKB)	
mK	Vertical schematic (actual)		SURFACE		219.1	3	5.716	J-55				200.00	
B)			PRODUCTION		114.3	1	4.138	J-55			1	100.00	
			Perforations			-		-	_		-		
45	HIRA MIALINA ALAMA MATINA INA ALAMAMI AND MINI AND AND ALAMA AND ALAMA AND ALAMA AND A	A LA ATA ATA ATA A LA ATA ATA ATA ATA AT	Date	1	Top (mKB)			Btm (mKB)		Lin	ked Zone		
			3/05/2022		4	71.00		4	72.00	BFSC/BG	N, ORIO	GINAL	
15.0			a da te desta de catero							HOLE			
	SUR	FACE; 4.50-	12/20/1992		1,0	77.45		1,0	81.45	BLUESKY	С,	< (
-	200.0	00								ORIGINAL	HOLE	1	
			Tubing Strings										
	465 J	ent; 430.80-	Tubing Description	Run Dat	8		String L	.ength (m)		Set Depth (mKB)			
-	Cem	ent Retainer;						resource and	1 00			-	
	465.8	30-466.30;	Item Des	Jts	Ma	ke		Model	(mm)	Wt (kg/m)	Grade	Len (m	
63	103.5)							-				
	472.0	ent; 466.30-	Rod Strings		-								
71.0	Perfo	orated; 471.00-	Rod Description	Run Dat	e		String 1	ength (m)	_	Set Depth	(mKB)		
7.0	472.0	00; 3/06/2022											
	Fres	Water; 15.00-	No. Dec					Married V	OD	1000 00-0-0	Condo		
71.8	1,00	1.50, 105.5	item Des	JIS	IVIA	Ke .		Model	(mm)	WL (Kgrin)	Grade	Cen (m	
			1			77						5	
	-NOTIKEWIN (
61.3	Cem	ent; 1,061.30-											
	Bride	Plug -											
200.0	Perm	anent:											
	1,069	9.80-1,070.15;											
076.2	103.9	9	1										
AT7.4													
	4 1												
477.5	-BLUESKY (final)	FORATE -	4										
		7.45-1,081.45;											
81.4	3/05/	2022											
	7 5												
11.5 ·													
098.3													
	PRO	DUCTION:											
000	4.50-	1,100.00	1										
04.0	-NORDEGG (fi												
36.5	-BALDONNEL		4										
157.0	- CHARLIE LAK		-{										
	- A MARKER/B		41										
196.0			11										
296.0													

Vertical - Original Hole, 3/9/2022 1:31:07 PM					SCVF & GM Tests (Last 2 Records)								
MD	TVD						Test Date	0.01.07	Tes	t Type		Fai	led?
(mKB)	(mKB)	Vertical schematic (actual)			3/7/2022	SCVF				No			
		,		,			3/7/2022	Gas Mig	ration		1	No	
- 4.8 -	· ·		Perforation; 255.00-				Openhole Information	n					
- 6.8 -	· ·		256.00 mKB;	898 au		50.033	Section Des	Size (m	m)	Top (mK	(B)	Botto	m (mKB)
- 7.8 -	- ·		PGW/P:Pomodial	- 22		200	Surface		311.2		4.80		254.40
- 8.0 -			Original Hole	-88		888	Intermediate 1		222.2		254.40		1,379.60
- 58.0 -	- ·		Current Status:	- 88 8		- 2 22	Main 1		155.6	1	1,379.60		1,445.00
- 245.0 -			Abandoned	- <u>8</u> 8 8		- 28 S.S.	Casing Strings						
- 254.4 -			Shot Dens: 21.0	1987 6		3 W.				WULen			Set Depth
- 255.0 -			Calculated Shot Total:	<u>8</u>		2	Csg Des		OD (mm)	(kg/m)	Grade	Top (mKB)	(MD) (mKB)
256.0			22	→ (8		题	Sunace		244.5	40.000	H-40	0.00	254.40
439.0			Phasing: 60				Intermediate		177.8	29.763	K-55	6.80	1,379.80
440.0			Perforation; 439.00-	- 8		\$	Liner		114.3	17.263	K-55	1,261.8	1,401.10
470.0			440.00 mKB;	影								9	
E20.0			BGWP:Remedial	100 B		8	Cement Stages				we les		
715.0			Original Hole	ŝ		8	Surface Cement	10/1	7/1992	e Top Depth (n	5.80	254.40	0.10
817.0			Current Status			8	Comment						
	I 1		Abandoned			巖	17.6 tonne 0:1:0 'G' +	2.0% CaCl	2. Top up	with 1.5m3	8 0:1:0 'G	5' + 2.0% C	aCl2
- 1,050.1 -	ľ 1		Shot Dens: 21.0				Description	Cement	ng Start Dat	e Top Depth (n	nKB) Btm ((mKB) V	ol Cement Re
- 1,123.0 -	1		Calculated Shot Total:			8	Production Cement	10/2	20/1992	528	8.00	1,379.75	0.00
- 1,131.0 -	1		22			- <u>-</u>	15.9 tonnes 1:1:2 + 0.1	75% CFR-3	3 + 0.3%	Halad-4 tail	ed with 7	7.7 tonne 0:	1:0 +
- 1,131.2 -	· ·		Phasing: 60	8		2	0.75% CFR-3 + 0.3%	Halad 22A,	no info o	on cement re	eturns.		
- 1,131.3 -			D. C			8	Using a yield of 0.96m	3/t for the I	ead slum	y and 0.76m	n3/t for th	ne tail slurry	, the
- 1,131.6 -	- ·		Perforated; 1,226.00-				TOC was calculated to	be at 113.	9mKB. (J	JC). Based o	on the RE	BL perform	ed
- 1,158.0 -	- ·	Hı	1/20/1997: Zone: Ceril	1			extending to 663mKB	(nesified flu	id in well	t at the time	of loogin	y or cement vol	·
- 1,175.0 -		н.	Sand, Original Hole	1		2	Ran RBL Nov 8, 2021.	Good cerr	ent to 52	8 mKB, Poo	or cemen	nt up to the	shoe.
- 1,226.0 -	· ·		Current Status:		•	26	Description	Cement	ng Start Dat	e Top Depth (n	nKB) Btm ((mKB) V	ol Cement Re
- 1,229.0 -			Abandoned	- 8		22	Production Cement	10/2	20/1992	6	i.80	528.00	
- 1,238.0 -			Shot Dens:				Comment Classificate of AE, Earch 470	01-1					
- 1,256.0 -		Цα	Calculated Shot Total: 1			8	Description	Cerrenti	well blen	u e Too Death (a	KB) Btm ((mKB)	N Cement Re
- 1,261.9 -		L.	Phasing:		L,		Liner Cement	10/2	5/1992	1,261	.99	1,401.10	
- 1,262.0 -			Perforated; 1,364.00-				Comment						
- 1,263.4 -			1,366.00 mKB;			. g	No info on cement job.	. Backwash	ed 300L	cement. EC	P at bott	tom of liner	with
- 1,284.0 -		Ц	11/19/1997; Zone: Artex, Original Hele		22	88	stage collar above.	Comon	an Start Dat	e Teo Deeth In			of Comont Do
1,348.8			Current Status:			喜酱	Cement Plug	10/28/2021 1.123.00			1.00	1.131.00	
1.349.4			Abandoned			ŝ.	Comment		10/20/2021				
1 351 5			Shot Dens:			88							
1,001.0		C	alculated Shot Total: 1		2.2	88	Perforations						
1 354 8			Phasing:			8	Zone		Top (m	KB) Btm	(mKB)	Curren	t Status
1,004.0			Open Hole; 1,408.00-			86	BGWP:Remedial, Ong	inal Hole	Hole 255.00 256		256.00	Abandoned	
1,355.5	1 1	Π.	1,413.00 mKB;			88	DOWD Down dial Orde						.
1,355.6	1 1		//18/1995; Zone: Doig,			88	BGWP:Remedial, Ong	inal Hole	43	9.00	440.00	Abandoned	·
1,364.0	1		Current Status	- 16	15	梁 解	Conflicted Original	-1-	4.00			Abandar	.
- 1,366.0 -	1		Abandoned			8 8	Cecil Sand, Original H	ole	1,22	1,	229.00	Abandoned	
- 1,371.0 -	1	Н	Shot Dens:			88	Artex, Original Hole		1,36	4.00 1,	366.00	Abandoned	
- 1,378.0 -	· ·	Ηc	Calculated Shot Total: 1		200		Doig, Original Hole		1,40	1.10 1,	445.00	Abandoned	
- 1,379.6 -	-	H `	Phasing:		1	88	Doig, Original Hole		1,40	8.00 1,	0 1,413.00 A		
- 1,379.8 -			Open Hole; 1,401.10-		2	19 AN	Tubing Strings						
- 1,384.0 -			1,445.00 mKB;		§	ŝ	Packer c/w 47.5mm F	SG in on-	off set at	t 1,355.62m	KB on <	dttmrun>	
- 1,386.0 -	-	1	12/1/1992; Zone: Doig,			3	Tubing Description			String Max	CN Wt (kg/m)	String Grade
- 1,389.0 -	- ·	H	Original Hole			3	Packer c/w 47.5mm FS	sG in on-of	т		60.3		
- 1,401.1 -			Current Status:	1	15	8	Comment						
- 1,408.0 -			Abandoned Shet Door	-	-	-	Tubing Components						
- 1,413.0 -			alculated Shot Total: 1		-	-	Item # Jts Ite	m Des	OD (m	m) ID (mm)	Len (m)	Top (mKB) Btm (mKB)
- 1,445.0 -		ЦĽ	Phasing	-			1-1 1 Guib XL On-	Off 47.5mm	F 95	6.0 47.5	0.6	0 1,348.8	3 1,349.43
			- nabing.										

Page: 28

Vertical - Original Hole. 3/9/2022 1:31:10 PM				Tubing Components											
MD				Item #	Jts	Item	Des	OD (mm)	ID (mm)	Len (m) Top (mKB)	Btm (mKB)			
(mKB)	(mKB)	Vertical schematic (actual)			1-2	1	Guiberson Un	i VI Pack	er 100.0	50.7	2.	09 1,349.43	1,351.52		
		_	D. (1-3	1	Tubing Pup .	Joint	60.3	50.7	3.	07 1,351.52	1,354.59
4.8			Perforation; 255.00-				1-4	1	R Nipple 46 x 44	4.7mm No-0	30 60.3	44.7	0.	24 1,354.59	1,354.83
6.8			11/28/2021: Zone:	888 BC		激战	1-5	1	Tubing Pup .	Joint	60.3	50.7	0.	64 1,354.83	1,355.47
- 7.8 -			BGWP:Remedial.	鐵路		200	1-6	1	Wireline Gui	de	60.3	50.7	0.	15 1,355.47	1,355.62
- 8.0 -			Original Hole			8 8 C	Othe	r In H	ole						
- 58.0 -			Current Status:	酸素					Des		Run Date	Pu	Date	Top (mKB)	Btm (mKB)
245.0			Abandoned			3.83	9.5 m	ım We	elded Steel Pl	ate to	3/7/2022			6.75	6.80
- 254.4 -			Shot Dens: 21.0	988° 88		50 MA	Centi	alizer							
255.0			Calculated Shot Total:	- 35		86 85	Vente	ed cap	bowspring		3/7/2022			6.80	7.80
- 256.0 -			Phasing: 60	12		88 85	asse	mbiy							
- 439.0 -			Perforation: 439.00-	NG 		66 86	Fresh	n wate	r		8/17/2021	8/17/	2021	8.00	1,229.00
- 440.0 -			440.00 mKB;	- 10		20	Fresh	n wate	r		10/28/2021			8.00	1,123.00
- 470.0 -			11/28/2021; Zone:	8		- 2	Fresh	n wate	r		10/7/2021	10/27	//2021	10.00	1,238.00
- 528.0 -			BGWP:Remedial,			ä	Cem	ent Pl	ug		2/1/2022			58.00	470.00
- 715.0 -			Original Hole	100			Bridg	e Pluș	9		10/27/2021			1,131.00	1,131.20
- 817.0 -			Current Status:				Bridg	e Pluș	g - Permanent	t (Hung	10/26/2021			1,131.30	1,131.60
- 1,050.1 -			Abandoned Shet Dense 24.0			ä	up P	DOH)		-					
- 1,123.0 -			Calculated Shot Total:	100	000000		Bake	r RZG	Plug in R Nip	ople -	12/5/2016	8/15/	2021	1,219.61	1,220.00
- 1,131.0 -			22		*******	S (2)	teste	d 7 M	Pa						
- 1,131.2 -			Phasing: 60			- 8i	Cem	ent Pl	ug		10/7/2021			1,238.00	1,261.89
- 1,131.3 -						<u>8</u>	Cem	ent Pl	ug		10/7/2021			1,261.89	1,348.83
- 1,131.6 -		Γ	Perforated; 1,226.00-		\times	8	Bake	r FSG	Plug in on/of	f	9/4/1995	8/15/	2021	1,349.80	1,349.99
1,158.0		1,229.00 mKB;			Sand Plug 2m			8/4/1995	/4/1995		1,384.00	1,386.00			
1,175.0		1	11/20/1997; Zone: Cecil				Retrie	evable	TW Bridge P	Nuq	8/4/1995			1,386.00	1,389.00
1 226.0			Sand, Original Hole			题	Form	ation	Tops			_			.,
1,229.0			Current Status:	• 8		3	Formation Name Top (mi			nKB) Com					
1 228.0			Shot Dens:				Shaft	esbur	у	24	5.00				
1 256.0			Calculated Shot Total: 1			- 18	Base	Fish	Scales	43	9.00				
1 361 9			Phasing:			8	Peac	e Rive	er Group	71	5.00				
4,000,00			Perforated; 1,364.00-	32	n . (- 麗	Spirit	River		81	7.00				
1 263.4			1,366.00 mKB;	100		8	Baldo	onnel		1.15	8.00				
1,203.4	1		11/19/1997; Zone:		8	8	Charl	le I al	(e	1 17	5.00				
1,284.0	1		Artex, Original Hole		2	88	Boun	danul	aka	1.25	6.00				
- 1,348.8 -	1		Current Status:				Cool	o Lloo	ane	1,20	4.00				
1,349.4	1 1		Shot Dens:	100		8	Lunk	- Onc	onomity	1,20					
1,351.5	1 1		Calculated Shot Total: 1				Hallw	ray		1,37	1.00				
1,354.6	1 1	Ľ	Phasing:				Doig			1,37	8.00				
- 1,354.8 -	1		Open Hole; 1,408.00-			88	1								
1,355.5	1		1,413.00 mKB;	R.		88	1								
- 1,355.6 -	1		7/18/1995; Zone: Doig,	200			1								
- 1,364.0 -			Original Hole	L. 88		a si									
- 1,366.0 -			Current Status:	10			1								
- 1,371.0 -		-	Shot Descu		10.0	8	1								
- 1,378.0 -		H	Calculated Shot Total: 1			88	1								
- 1,379.6 -		1	Phasing:	8		28	1								
- 1,379.8 -		÷E	Open Hole; 1,401.10-		a.	8 C.									
- 1,384.0 -			1,445.00 mKB;		§	8									
- 1,386.0 -			12/1/1992; Zone: Doig,			8									
- 1,389.0 -			Original Hole			8	-								
- 1,401.1 -			Current Status:	1		8									
- 1,408.0 -	- ·		Abandoned Shot Depen	-	+										
- 1,413.0 -		- 0	Calculated Shot Total: 1		-										
- 1,445.0 -		1	Phasing												
	I		- naulig.				1								I

Page: 29

ω		ELEVATIONS (meters)											
2		KB ELEV	GL ELEV	KB TO THF	KB TO SCF	KB TO GL	PBTD						
		660.3	656	4	4	4.3	1576						
6		CASING	DESCRIPTION	OD (mm)	LANDED DEPTH	WEIGHT (kg/m)	TOP OF (mKB)						
		Surface casing	100	244.5	252	48.07	Surface						
		Froduction cas	3	177.9	1004	30.05	Surrace						
		Perf Date	Zones	Top Shot	Bottom Shot	Status	Gun Data						
IN THE THE		2003-10-29	Halfway	1527.00	1529.00	Abandoned							
			Halfway	1530.00	1533.50	Abandoned							
	ງພ		Squeeze perfs	879.00	882.00	Abandoned							
			Squeeze perts	586.00	589.00	Abandoned							
			Squeeze peris	269.00	290.00	Abandoned							
	,		DOWNHOLE DES	CRIPTION F	ROM BOTTOM	UP (Tubing St	ring)						
1 m		ITEM #	DE	ESCRIPTION	tom borrow	LENGTH	TOP OF (mKB)						
							-						
							-						
							-						
							-						
							-						
Cement Top	253.0 mKB						-						
00000							-						
Squeeze Perfs	282.0 mKB						-						
	283.0 mKB						-						
Retainer	286.0 mKB						-						
E.S.L. J.G.S.							-						
squeeze perr	289.0 mKB						-						
Permanent BP	290.0 MKB						-						
CA.1	201.01110						-						
							-						
Cement Top	565.0 mKB						-						
							-						
Retainer	580.0 mKB						-						
- 1 240.427	500 0 m// D						-						
squeeze pens	586.0 mKB						-						
ti e e ei	303.0 IIIKD												
Permanent BP	594.0 mKB						-						
2.22-3.63					-								
1 1 1							-						
							-						
							-						
							-						
Cement top	862.0 mKB						-						
<u>1984 - 198</u>							-						
Permanent BP	870.0 mKB						-						
ĘA.€⇒.AĢ							-						
Saunaza porta	979 0 mKG						-						
	673.0 MKB 882.0 mKB						-						
	002.0 IIIND						-						
							-						
		WEIGHT OF T	UBING STRING (daN))	TOTAL STRING	LENGTH	0.00						
		TENSION/COI	MPRESSION (+/- daN)		STRETCH/SLAC	KOFF (+/- m)							
		LANDED STR	ING WEIGHT (daN)	-	TUBING BOTTO	M (mKB)	4.00						
		ITEM #	DESCRIPT	WELL HEAL	SERIAL #	MWD	017E						
		11 L M #	DESCRIPT	1011	OLNIAL #	mare	OILE						
cement top at	1514.0 mKB												
Sara sura													
Retainer at	1522.0 mKB				[
haitway perts	1527.0 mKB												
	1929.0 MKB												
Halfway perfs	1530.0 mKB												
	1533.5 mKB												
		REMARKS											
PBTD	1576.0 mKB												
10	1604.0 MKB												
Provide State State State State													
I													

Page: 30

BC Oil and Gas Commission Uncontrolled copy once downloaded