

# Pointe-du-Lac Facility

Procedures and Cost  
Summary for Recommended  
Well Interventions  
March 2, 2022

**Privileged and Confidential**

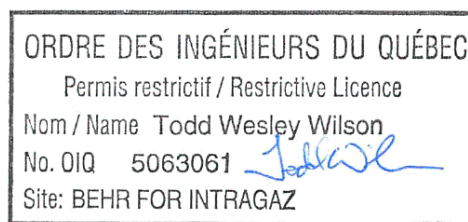


## Presented to:

Intragaz  
4640, Rue Charles Malhiot  
Trois-Rivières (Québec) G9B 0V4

## Submitted by:

Todd Wilson, P. Eng., M.B.A.  
Behr Integrated Solutions Inc.  
750, 600 – 6 Avenue SW  
Calgary AB T2P 0S5  
[www.behrintegrated.com](http://www.behrintegrated.com)



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**ACRONYMS**

Acronym	Description
BOP	Blowout Preventor
CSA	Canadian Standards Association
EUE	External Upset End
MOP	Maximum Operating Pressure
OD	Outside diameter
OH	Open Hole
PDL	Pointe-du-Lac

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## EXECUTIVE SUMMARY

Behr Integrated Solutions Inc. (Behr) was engaged to conduct a review of the wells in the Pointe-du-Lac (PDL) field and provide forward looking recommendations for well interventions. The PDL gas storage reservoir is used for injection and withdrawal operations from the Lotbinière Sand. There are also some observation wells in in the St. Pierre sand, which is approximately 30 m above the Lotbinière sand.

A summary report entitled “Pointe-du-Lac Facility – Review of Wells and Recommendations for Well Interventions”, dated March 2, 2022, outlines the recommended well operations considerations and objectives.

This report includes cost estimates and related procedures to complete these recommendations. The cost estimate is broken into two well-type categories as follows:

- Wells with operations not requiring a service rig
- Wells with operations that will require a service rig

It is recommended that the non-service rig operations be conducted in one continuous schedule to avoid multiple mobilization of related services. Similarly, the service rig operations should be conducted as one continuous operation to limit the mobilization of services to a single mobilization. Accordingly, the cost estimate is based on these mobilization recommendations. Ideally, the work should be scheduled when the appropriate servicing equipment is in the area.

The cost estimate for the proposed non-service rig operations is \$257,600. The cost estimate for the service rig operations is \$877,200 and the total cost estimate for all operations is \$1,134,800.

## INTRODUCTION

Behr Integrated Solutions Inc. (Behr) has been engaged by Intragaz Inc. (Intragaz) to review the status of the wells in the PDL field and provide forward looking recommendations for well interventions. The review that was conducted incorporates the following considerations:

- Regulatory requirements
- Standards and best practices
- The status of the wells
- Monitoring results.

From this information, an outline of the steps required for well interventions has been prepared. Additionally, priorities for the order of the work have been set. Finally, cost estimates for the proposed work, in 2021 dollars are provided.

The specific steps of the workover may be amended when the scheduled time of work approaches. The availability, type and proximity of services may influence procedural decisions. Additionally, new technologies may become available which could result in procedural changes. Regardless, the objective of the workovers will remain the same.

## WELL SUMMARY

There are 39 active wells in the PDL field. Wellbore evaluation operations are limited to a select group of wells. The results of these operations will provide valuable information regarding the overall status of the wellbores in the PDL field. Because the wellbores are extensively oversized for operational pressures, wellbore integrity is not expected to be an issue.

The following table provides an overview of recommended operations:

Well (s)	Status	Summary of Work	
[REDACTED]	[REDACTED]	[REDACTED]	Non-Service Rig Operations
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	Service Rig Operations
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	

The cost estimate for these operations is described in the following section.

## COST ESTIMATE

Conduct operations to verify casing integrity on PDL wells. Also include option to re-activate [REDACTED], inspect casing on B-294 (the water injection well, confirm isolation of production casing annulus on [REDACTED] and abandon [REDACTED].

			Non-Service Rig Operations			Service Rig Operation			
Code	INTANGIBLE COMPLETION COST		Non-SR Mob/ Demob	Site Costs	Total Non-SR Ops	Service Rig Mob/ Demob	Site Costs	Total Service Rig Ops	Grand Total
930 058	Rig Move in/out (includes Camp move)		-	-	-	-	-	-	-
930 063	Service rig - Daywork		-	-	-	-	-	-	-
930 064	Mud and Chemicals		-	-	-	-	-	-	-
930 068	Crew travel, Subsistence and camp		-	-	-	-	-	-	-
930 069	Water & Water hauling		-	-	-	-	-	-	-
930 070	Boiler		-	-	-	-	-	-	-
930 071	Communications		-	-	-	-	-	-	-
930 072	Equipment Rentals - BOP Equipment		-	-	-	-	-	-	-
930 072	Equipment Rentals Drill Pipe and Collars		-	-	-	-	-	-	-
930 072	Equipment Rentals - Power Swivel		-	-	-	-	-	-	-
930 072	Equipment Rentals - Power Plant		-	-	-	-	-	-	-
930 072	Equipment Rentals - Other		-	-	-	-	-	-	-
930 074	Fuel and Lubricants		-	-	-	-	-	-	-
930 081	Wellsite supervision		-	-	-	-	-	-	-
930 083	Engineering services		-	-	-	-	-	-	-
930 090	Trucking and Hauling		-	-	-	-	-	-	-
930 091	Tank Truck and Fluid Hauling		-	-	-	-	-	-	-
930 094	Fluid Disposal (Vacuum Truck)		-	-	-	-	-	-	-
930 098	Picker Services		-	-	-	-	-	-	-
930 100	Casedhole Logging & Perforating		-	-	-	-	-	-	-
930 102	Safety services		-	-	-	-	-	-	-
930 104	Environmental services		-	-	-	-	-	-	-
930 109	Wireline Services & Recorders		-	-	-	-	-	-	-
930 110	Pickup/Laydown/Torque Services		-	-	-	-	-	-	-
930 111	Thread Supervision Services		-	-	-	-	-	-	-
930 112	Coil Tubing / N2 Services		-	-	-	-	-	-	-
930 115	Snubbing Equipment		-	-	-	-	-	-	-
930 126	Packer Equipment Supervision		-	-	-	-	-	-	-
930 139	Cement & Services - Primary or Remedial		-	-	-	-	-	-	-
	Subtotal:		-	-	-	-	-	-	-
	<b>Code TANGIBLE COMPLETION</b>								
940 054	Wellhead, Assembly and Installation		-	-	-	-	-	-	-
940 105	Production Tubing		-	-	-	-	-	-	-
940 105	Production Casing		-	-	-	-	-	-	-
930 108	Downhole equipment (Except BH pumps)		-	-	-	-	-	-	-
	Subtotal:		-	-	-	-	-	-	-
	<b>Code GENERAL</b>								
930 130	Miscellaneous		-	-	-	-	-	-	-
930 199	Contingency (25%)		-	-	-	-	-	-	-
930 500	Non-Op ICC		-	-	-	-	-	-	-
930 129	Overhead 3/2/1 or _____		-	-	-	-	-	-	-
	Subtotal:		-	-	-	-	-	-	-
	<b>TOTAL</b>		18,050	239,550	257,600	363,050	514,150	877,200	1,134,800

Annex 1 provides a detailed outline of the procedures which are summarized in the cost estimate. Details of the individual well costs are shown in Annex 2. A 25% contingency has been applied. Factors such as the remoteness of most services, uncertainty in the availability of equipment or services and competitiveness of the industry at the time of operations all contribute to the need of a high contingency. In addition, unforeseen circumstances that arise during a workover are more complex and costly to resolve, as mobilization of equipment will often involve distant service requirements (as far away as Alberta) with costly mobilizations and delays.

The estimate is divided into costs for non-service rig operations and for operations that require a service rig. It is recommended that the non-service rig operations be conducted in one continuous schedule to avoid multiple mobilizations of related services. Similarly, the service rig operations should be conducted as a single continuous operation to limit the mobilization of services to one



mobilization. However, the service and non-service rig operations can be conducted at different times without affecting the overall budget.

In summary, the cost estimate for the proposed non-service rig operations is \$257,600. The cost estimate for the service rig related operations is \$877,200 and the total cost estimate for all operations is \$1,134,800.

## CONCLUSIONS

A sampling of wells is recommended for casing inspection logging to provide assurance that the wellbore integrity in PDL continues to be sufficient for the operating conditions. We refer you to the summary report entitled “Pointe-du-Lac Facility – Review of Wells and Recommendations for Well Interventions”, dated March 2, 2022, which outlines supporting information regarding the selection of the wellbore evaluation candidates.

The cost estimate for the proposed non-service rig operations is \$257,600. The cost estimate for the service rig related operations is \$877,200 and the total cost estimate for all operations is \$1,134,800.

## **ANNEX SUMMARY**

Annex 1 includes the following detailed information to accomplish the required workover objectives:

- Background and ongoing maintenance considerations
- Forward-looking recommendations
- Suggested workover overview
- Expected workover timeline.

The annex includes subsections for each well.

Annex 2 includes a detailed cost estimate.

Annex 3 includes detailed well information.

## ANNEX 1

### Annex 1 – [REDACTED]

Well Name: [REDACTED]

Permit #: Not available

### Background and Ongoing Maintenance Considerations

- 1) This well was originally drilled in 1961.
- 2) The burst rating for the 114.3 mm OD intermediate casing string is 21,990 kPa.
- 3) The pressure rating of the wellhead is about 5,100 kPa.
- 4) The well was originally completed in the Lotbinière. However, the lower portion of the wellbore was abandoned. A bridge plug was set at 53.3 m KB and capped with cement to an estimated top at 49.4 m KB.
- 5) The casing is filled with inhibited water.
- 6) The wellhead includes two 101.4 mm ball valves.
- 7) There is no tubing in the well.

### Recommendations

- 1) Conduct a pressure test to 1400 kPa.
- 2) Conduct workover to achieve the following objectives:
  - a. Run a wire brush to clean the casing wall
  - b. Conduct casing inspection logs down to the cement top at 49.4 m KB.
  - c. Continue to conduct annual pressure tests to 1400 kPa.

[REDACTED]

### Workover Overview (Rigless Operations)

[REDACTED]

[Redacted]

### Workover Overview (Service Rig Operations)

[Redacted]

### Workover Timeline

These operations can be conducted within [Redacted]

**Annex 1 – [REDACTED]**

Well Name: [REDACTED]

Permit #: [REDACTED]

**Background and Ongoing Maintenance Considerations**

- 1) [REDACTED] was originally drilled in 1961.
- 2) The well is equipped with 114.3 mm 14.14 kg/m J55 production casing with a burst rating of 30.2 MPa. The bottom of the casing is at 118.3 m KB.
- 3) The wellhead has 150 ANSI equipment with a 101.4 mm ball valve at surface with a pressure rating of 1965 kPa.
- 4) The open hole section, which extends down to 133 m KB, across the Lotbinière formation. The bottom of the wellbore appears to be filled with debris down to about 128.68 m KB.
- 5) The tubing appears to have parted midway up the screen, leaving the top of the remaining screen at about 120.88 m KB, just below the base of the casing shoe.
- 6) The Lotbinière is wet and therefore, the wellbore is filled with water and there is no pressure at surface

**Recommendations**

- 1) Conduct workover to achieve the following objectives:
  - a. Run a gauge ring and wire brush to clean the casing wall
  - b. Conduct casing inspection logs down to the cement top at 49.4 m KB.

**Workover Overview**

[REDACTED]

**Workover Timeline**

These operations can be conducted in [REDACTED]

**Annex 1 –** [REDACTED]

Well Name: [REDACTED]

Permit #'s: Not available

**Background and Ongoing Maintenance Considerations**

- 1) [REDACTED] was drilled in 1964 and last worked over in 1990.
- 2) The well is equipped with 177.8 mm 25.3 kg/m H40 casing with a burst rating of 21.9 MPa is landed at 120.18 m.
- 3) An open-hole section was drilled to 482.58 m and subsequently cemented back inside the 177.8 mm casing to a cement top of 96.78 m. A bridge plug was also set in the casing at 82.38 m.
- 4) The well was perforated immediately above the Lotbinière from 77.8 m to 78.8 m. (The Lotbinière is from 79.18 m to 82.39 m) and a cement retainer was set at 77.78 m. The perforations were cement squeezed and a 16 m cement cap was left above the retainer (cement top at 61.78 m). The Gentilly till was perforated from 40.78 to 41.78 m for observation.
- 5) The wellhead rating is unknown as there is a steel plate welded on top with a 76.2 mm rise and with a ball valve.
- 6) There is no tubing in the well.

**Recommendations**

- 1) Conduct workover to cut off the steel plate cap and replace with a bell nipple and run a casing inspection log.
- 2) Install a changeover from the bell nipple to the master valve and reinstall the master valve.

[REDACTED]

**Workover Overview**

[REDACTED]

**Workover Timeline**

These operations should be completed in [REDACTED] although the hand digging and welding operations should be conducted before the logging unit arrives.

**Annex 1 – [REDACTED]**

Well Name: [REDACTED]

Permit #'s: [REDACTED]

**Background and Ongoing Maintenance Considerations**

- 1) [REDACTED] was drilled in 1996. There have been no subsequent workover operations.
- 2) The well is equipped with 193.7 mm 39.3 kg/m H40 casing with a burst rating of 28.5 MPa is landed at 88.86 m.
- 3) An open-hole section was drilled to 107.72 m
- 4) The tubing string is 127 mm 22.32 kg/m L80 tubing with a burst rating of 49.9 MPa.
- 5) An inflatable packer was run on the tubing and set in the open-hole section at 92.2 m, below the casing shoe but above the top of the Lotbinière porosity.
- 6) A 114.3 mm screen is positioned across the Lotbinière.
- 7) The wellhead consists of a 228.6 mm 14 MPa API casing bowl that transitions to ANSI - 150 equipment. The master valve is a 152.4 mm ANSI-150 ball valve.

**Recommendations**

- 1) Conduct a high-resolution flux leakage casing inspection log on the tubing string. [REDACTED]

**Workover Overview**

[REDACTED]

**Workover Timeline**

These operations should be completed in [REDACTED] although the hand digging and welding operations should be conducted before the logging unit arrives.



**Annex 1 – [REDACTED]**

Well Name: [REDACTED]

Permit #'s: [REDACTED]

**Background and Ongoing Maintenance Considerations**

- 1) [REDACTED] was drilled in 1961 and last worked over in 1996.
- 2) The well is equipped with 114.3 mm 14.14 kg/m K55 casing with a burst rating of 30.2 MPa.
- 3) The 73 mm tubing string is landed at 110.11 m KB.
- 4) The open-hole section is across the Lotbinière formation, below the gas/water contact. Therefore, the wellbore is filled with water without pressure at surface.

**Recommendations**

- 1) Conduct workover to achieve the following objectives:
  - a. Pull the tubing and run a scraper to clean the casing wall
  - b. Conduct a casing inspection log down to about 90 m.
  - c. Run a WR plug and set at 90 m. Pressure test the casing to 1,400 kPa
  - d. Pull the WR plug on tubing
  - e. Rerun the tubing and screen in the same order it was pulled.

**Workover Overview**

[REDACTED]



### Workover Timeline

These operations should be completed within [redacted]

**Annex 1 – [REDACTED]**

Well Name: [REDACTED]

Permit #'s: [REDACTED]

**Background and Ongoing Maintenance Considerations**

- 1) [REDACTED] was drilled in 1990 and last worked over in 1991.
- 2) The well is equipped with 177.8 mm 25.3 kg/m K55 casing with a burst rating of 21.9 MPa is landed at 75.02 m.
- 3) The wellhead equipment is rated to 1965 kPa.
- 4) The 139.7 mm tubing string is landed at 90.9 m KB.
- 5) The open-hole section is across the Lotbinière formation, below the gas/water contact. Therefore, the wellbore is filled with water without pressure at surface.

**Recommendations**

- 1) Conduct workover to achieve the following objectives:
  - a. Pull the tubing and run a scraper to clean the casing wall
  - b. Conduct a casing inspection log down to about 70 m.
  - c. Run a WR plug and set at 70 m. Pressure test the casing to 1,400 kPa
  - d. Pull the WR plug on tubing
  - e. Rerun the tubing and screen in the same order it was pulled.

**Workover Overview**

[REDACTED]



### Workover Timeline

These operations should be completed within [redacted]

**Annex 1 – [REDACTED]**

Well Name: [REDACTED]

Permit #'s: [REDACTED]

**Background and Ongoing Maintenance Considerations**

- 1) [REDACTED] was drilled in 1990.
- 2) The well is equipped with 114.3 mm 14.14 kg/m H40 casing with a burst rating of 21.9 MPa is landed at 65.19 m.
- 3) The 73 mm tubing string is landed at 80.3 m KB.
- 4) The open-hole section is across the Lotbinière formation, above the gas/water contact. Therefore, the wellbore is gas filled and will have near reservoir pressure at surface.

**Recommendations**


- 1) Conduct workover to achieve the following objectives:
  - a. Pull the tubing and run a scraper to clean the casing wall
  - b. Conduct a casing inspection log down to about 60 m.
  - c. Run in and circulate out debris across the Lotbinière.
  - d. Run a cement retainer at 60 m. Pressure test the casing to 1,400 kPa
  - e. Conduct a cement squeeze to abandon the zone.
- 2) Possibly cut and cap wellhead and restore location.

**Workover Overview**

[REDACTED]



### Workover Timeline

These operations should be completed within 



### ANNEX 3 – WELL DETAILS

Well	Status	Year Drilled	Comp. Type	Production Casing					Prod. Tbg		Screen		Tbg. Packer		Zone		Internal Total Depth m		
				OD mm	Wt. kg/m	Grade	Burst Mpa	SF	Setting Depth m	OD mm	Setting Depth m	OD mm	Interval from m - to m	Equipped with Packer (Y/N)	Depth	Completi on Zone		Interval	
	Observation	1964	6	177.8	25.3	H40	15.93	21.24	120.18	none					De Gentilly	40.78-41.78	61.78		
	Observation	1955	4	177.8	29.8	K55	25.79	34.39	55	114.3	75.77	114.3	64.19-68.37	Y	58.86	Lotbinere	61.5-75.5	83.42	
	Temp Aband.		5	114.3	14.1	H40	21.99	29.32	60.76	none					Lotbinere	63.0-70.6	49.4		
	Observation	1961	2	114.3	14.1	H40	21.99	29.32	65.19	73	80.33	66.7	69.0-75.26	N		Lotbinere	69.0-75.7	82	
	Observation	1961	2	114.3	?	?	?	?	?	73	27.14	60	18.52-21.77	N		St Pierre	?	29.99	
	Suspended	1961	2	177.8	25.3	K55	21.90	29.20	94.3	73	110.11	60.3	94.22-100.22	N		Lotbinere	99.9-102.4	~84	
	Observation	1961	2	177.8	25.3	K55	21.99	29.32	100.9	73	110.93	63.5	100.42-100.66	N		Lotbinere	100.8-106.0	112.3	
	Observation	1957	2	177.8	25.3	K55	21.90	29.20	63.78	139.7	79.77	117.5	66.3-72.58	N		Lotbinere	66.2-75.6	~53	
	Observation	1961	3	177.8	29.8	J55	25.79	34.39	118.13	none		95.3	120.88-122.1	N		Lotbinere	121.2-132.2	120.68	
	Observation	1985	2	177.8	34.23	J55	30.06	40.08	67.4	88.9	85.3	92	73.48-75.71	N		Lotbinere	68.0-82.6	85.3	
	Observation	1986	2	177.8	29.8	J55	25.79	34.39	69.8	139.7	84.11	142.9	72.82-79.08	N		Lotbinere	72.7-78.8	85.92	
	Gas Inj./with.	1986	2	177.8	29.76	K55	25.79	34.39	67.9	139.7	79.84	168.3	70.56-76.87	N		Lotbinere	70.0-75.7	80.8	
	Observation	1986	2	177.8	29.76	K55	25.79	34.39	67.5	139.7	95.45	143	70.34-76.6	N		Lotbinere	70.1-77.3	100	
	Gas Inj./with.	1990	1	177.8	25.3	K55	21.90	29.20	68.28	139.7	85.28	117.5	71.78-77.66	Y	65.97	Lotbinere	71.3-77.3	85.8	
	Observation	1990	1	177.8	25.3	K55	21.90	29.20	71.37	139.7	88.43	117.5	73.93-79.73	Y	66.64	Lotbinere	73.8-79.8	88.8	
	Gas Inj./with.	1990	1	177.8	25.3	K55	21.90	29.20	67.9	139.7	79.84	143	66.95-73.17	Y	59.23	Lotbinere	66.8-73.5	82.8	
	Observation	1990	2	177.8	25.3	K55	21.90	29.20	65.66	139.7	86.19	117.5	68.39-77.05	N		Lotbinere	68.7-78.2	~55	
	Gas Inj./with.	1990	1	177.8	25.3	K55	21.90	29.20	63.9	139.7	81.94	117.5	65.44-74.64	Y	56.55	Lotbinere	65.6-72.3	82.9	
	Observation	1990	2	177.8	25.3	K55	21.90	29.20	69.2	139.7	84	117.5	71.5-77.46	N		Lotbinere	71.0-75.7	~59	
	Gas Inj./with.	1990	2	177.8	25.3	K55	21.90	29.20	66.83	139.7	81.7	117.5	66.73-72.72	N		Lotbinere	66.7-72.7	81.7	
	Gas Inj./with.	1990	1	177.8	25.3	K55	21.90	29.20	62.62	139.7	79.72	117.5	65.32-74.8	Y	56.43	Lotbinere	65.1-72.8	80.82	
	Gas Inj./with.	1990	1	177.8	25.3	K55	21.90	29.20	65.87	139.7	77.79	117.5	66.67-73.00	Y	59.14	Lotbinere	66.8-73.4	80.7	
	Gas Inj./with.	1990	1	177.8	25.3	K55	21.90	29.20	64.93	139.7	79.5	117.5	66.4-72.7	Y	57.73	Lotbinere	66.0-73.1	80.76	
	Gas Inj./with.	1990	2	177.8	25.3	K55	21.90	29.20	59.7	114.3	78.98	114.3	62.8-72.7	N		Lotbinere	62.8-71.4	80.75	
	Gas Inj./with.	1990	1	177.8	25.3	K55	21.90	29.20	63.75	139.7	79.36	117.5	67.01-73.27	Y	54.92	Lotbinere	67.0-73.0	80.57	
	Observation	1990	2	177.8	25.3	K55	21.90	29.20	22.95	139.7	40.29	117.5	23.79-33.54	N		St Pierre	25.7-36.0	44.54	
	Observation	1990	2	177.8	25.3	K55	21.90	29.20	28.79	139.7	48.34	117.5	31.34-40.75	N		St Pierre	38.7-45.9	55.51	
	Gas Inj./with.	1990	1	177.8	25.3	K55	21.90	29.20	64.38	139.7	79.36	117.5	68.63-74.83	Y	56.51	Lotbinere	68.6-74.8	82.59	
	Observation	1990	1	177.8	25.3	K55	21.90	29.20	64.52	139.7	79.63	117.5	67.98-74.23	Y	55.89	Lotbinere	68.0-73.2	80.72	
	Gas Inj./with.	1990	4	177.8	25.3	K55	21.90	29.20	63.1	114.3	79.55	114.3	65.9-76.2	Y	63.45	Lotbinere	64.5-72.6	79.7	
	Water Injection	1992	2	177.8	25.3	K55	21.90	29.20	75.02	139.7	90.9	117.4	77.43-83.80	N		Lotbinere	75.6-85.2	92.6	
	Observation	1992	4	177.8	25.3	K55	21.90	29.20	63.1	139.7	45.19	127	32.08-39.07	y	29	St Pierre	34.47-47.16		
	Observation	1992	2	177.8	25.3	H40	15.93	21.24	67.45	139.7	85.76	114.3	69.67-76.53	N		Lotbinere	69.75-76.75	85.7	
	Observation	1992	2	177.8	25.3	H40	15.93	21.24	87.75	139.7	112.71	114.3	69.67-76.53	N		Lotbinere	99.7-104.8	115.03	
	Observation	1992	2	177.8	25.3	H40	15.93	21.24	100.52	139.7	112.23	114.3	108.64-112.23	N		Lotbinere	108.3-111.8	121.8	
	Observation	1994	2	177.8	25.3	K55	21.90	29.20	97.2	139.7	111.25	117.5	104.4-107.5	N		Lotbinere	110.2-111.9	122.9	
	Observation	1996	4	193.7	25.3	K55	28.54	38.05	88.86	127	102.19	114.3	94.8-98.23	Y	92.2	Lotbinere	94.72-97.72	107.72	
	Gas Inj./with.	1996	4	193.7	25.3	K55	28.54	38.05	68.43	127	88.62	114.3	72.1-81.5	Y	69.09	Lotbinere	70.45-79.45	88.95	
	Observation	2009	2	177.8	25.3	K55	21.90	29.20	97	114.3	113.63	103.9	105.54-111.83	N		Lotbinere	106.2-111.0	118.8	