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July 14, 2023

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Attention: Erin Doherty

Subject: Hebron Jeanne d'Arc Formation Development Plan Amendment – Supplemental Addendum

ExxonMobil Canada Properties ("ExxonMobil") as operator of the Hebron Field, is providing a supplemental addendum to the Hebron Jeanne d'Arc Formation Development Plan Amendment (JdA DPA) submitted by on behalf of itself and the Hebron co-venturers in 2023. The addendum is in response to an email dated June 27, 2023, requesting additional information regarding the Operator's learnings on Pool 4H dynamic performance and resulting development strategies.

The scope of the submitted JdA DPA is to include for development, sands in the Jeanne d'Arc Formation sands not covered by the existing Development Plan, and to include fault blocks connected via juxtaposition to the Hebron Horst Block. This addendum does not alter the scope of the submitted JdA DPA but will serve to provide an update on learnings from dynamic production in the H Sand and strategies the Operator is pursuing to balance uncertainty and collect additional information.

This addendum provides supplemental information on dynamic learnings for the H Sand, and more clearly articulates how broader Pool 4 uncertainty is mitigated to preserve optionality, enable optimization of the development, and provide the maximum chance of economic success while reducing waste.

Please direct any inquiries to the undersigned.

Yours truly,

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HEBRON DEVELOPMENT PLAN AMENDMENT ADDENDUM 2023

Jeanne d'Arc Formation Sand Intervals

ExxonMobil Canada Properties
On behalf of the Hebron Co-Venturers
7-14-2023

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1 Introduction

This document serves as an Addendum to the Hebron Jeanne d'Arc Formation Development Plan Amendment (JdA DPA) submitted by ExxonMobil Canada Properties as operator of the Hebron project on behalf of itself and the Hebron co-venturers in 2023. The addendum is in response to an email dated June 27 2023, requesting additional information regarding the Operator's learnings on Pool 4H dynamic performance.

The scope of the submitted DPA is to include for development, sands in the Jeanne d'Arc Formation between the H and B sands not already covered by the existing Development Plan and to include fault blocks connected via juxtaposition to the Hebron Horst Block. This addendum does not alter the scope of the submitted Hebron JdA DPA (2023) but will provide an update on learnings from dynamic production in the H Sand and strategies the Operator is pursuing to balance uncertainty and collect additional information.

The operator is proposing the following actions:

- Defer dedicated H Sand wells to later in the rig schedule to allow for additional time to collect data and analyze results
- Incorporate additional comingled production/injection wells as a means of gathering static and dynamic data
- Pursue early data collection in off-Horst Prime blocks to inform potential high side

As stated in the Hebron JdA DPA (2023), these actions will use the same general approach to Hebron Project development, including existing facilities and drill well slots, recovery methods and systems. The development approach to this resource is consistent with good oil field practice by using early data collection to optimize Hebron area resources. Uncertainty is a consideration of any oilfield development and planning for timely data collection and responding to new data and interpretations is a critical component of field optimization. This addendum highlights the Operator's approach to uncertainty to maximize chance of economic success and eliminate waste by using data collection and drill well timing to inform and optimize future well decisions.

2 H Sand

H Sand is the uppermost sand of the named Jeanne d'Arc Formation sand intervals. It was included in the Hebron Development Plan based on the results of the Hebron M-04 delineation well which encountered ~51m of sand (gross) with an oil water contact of -3912m TVDss. Two production wells targeting the H Sand have been drilled in recent years:

- L-93 22 was drilled in 2021 as a deviated well that penetrated the full Jeanne d'Arc Formation and was completed in the H, G, E and B sands. The well targeted H Sand near the edge of the H Sand North Valley system to test reservoir quality and continuity. It encountered ~25m gross of fine grained sand with lower than anticipated reservoir quality. Reservoir performance was below expectations with results attributed to reservoir connectivity and quality issues associated with its location near the edge of the valley system.
- L-93 30z was drilled in 2022 as a near horizontal well cross cutting the axis of the North Valley system. Reservoir quality exceeded pre-drill predictions as the well encountered 70% net to gross, 15% porosity, and 155mD permeability based on a 1mD cutoff. The well was completed and came online in 2022.

The recent wells not only confirm the presence of hydrocarbon filled H Sand reservoir, but also further delineates its extent. Specifically, L-93 22 confirmed that reservoir quality and thickness decreases towards the edge of the valley system, and L-93 30z confirmed the presence of reservoir quality sand across the valley axis. Static data continues to support the Operator's best resource estimate of 170 MBO.

2.1 H Sand Performance Update

As indicated in Section 3.7.1.1 of the Hebron JdA DPA, the L-93 30z horizontal H sand development well came online in the second half of 2022. Early dynamic well learnings were not incorporated into the Hebron JdA DPA submission as data collection and assessment were ongoing at the time of submission.

L-93 30z was drilled across the axis of the H Sand valley system and encountered good quality sand that exceeded predrill expectations. The initial dynamic performance of L-93 30z was in line with pre-drill expectations with a productivity index of 0.4 m3/d/kPa and an initial rate of 15 kbd (2385 m3/d). One exception to pre-drill expectations was the presence of a low sustained water production rate resulting in a water cut of ~4%.

Since start-up, water production has persisted at a low rate (<5%), and reservoir pressure near L-93 30Z has declined below predrill expectations. A production log was performed and confirmed contribution over the full completion interval. The production log also indicated water production from the heel of the well.

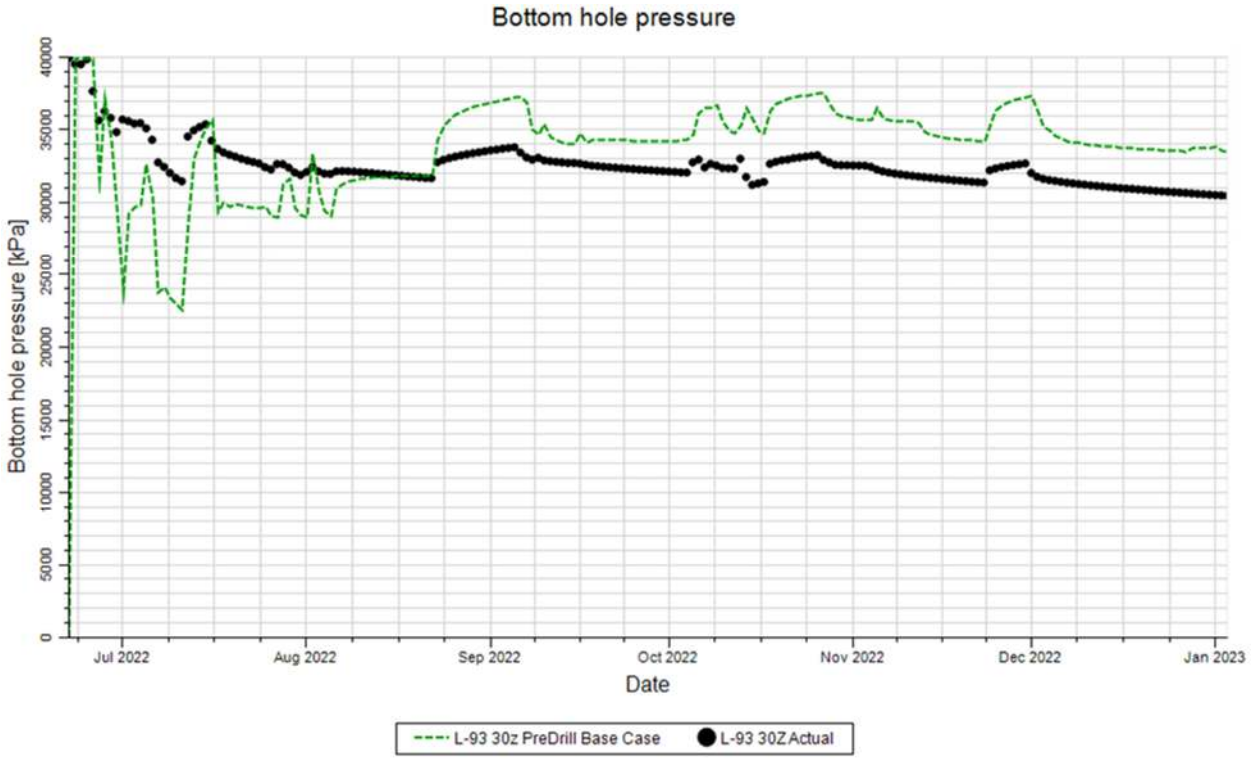

Figure 2.1 L-93 30z Performance vs. Base Model Prediction

Pressure transient analysis on L-93 30z dynamic data indicated the potential for boundaries/baffles surrounding the well with a leakage to a larger area. The interpretation is that the well is in good connectivity to a small reservoir volume with poor connectivity to the greater H sand area, with a potential pocket of perched water near the heel.

2.2 H Sand History Matching

To match L-93 30z well performance, multiple geologic scenarios were contemplated with several interpretations tested using simulation modeling. Simulated scenarios resulting in a reasonable history match included:

- Limited connected volume by addition of near well-bore baffles/boundaries (Figure 2.2)
    - History match edits made near the L-93 30z wellbore to honor production performance including water production at heel.
- Geobody objects (Figure 2.3)
    - H sand overall connectivity was lowered by distributing the sand as geobody objects in the geologic model (~1000m in width x 15m in thickness) and lowering transmissibility between objects.
- Narrow Fluvial axis (Figure 2.4)
    - Qualitative calibration of VpVs amplitudes resulting in a narrower seismic trend and smaller pore volume area limits connected volume and a new low side estimation (140 MB STOOIP).

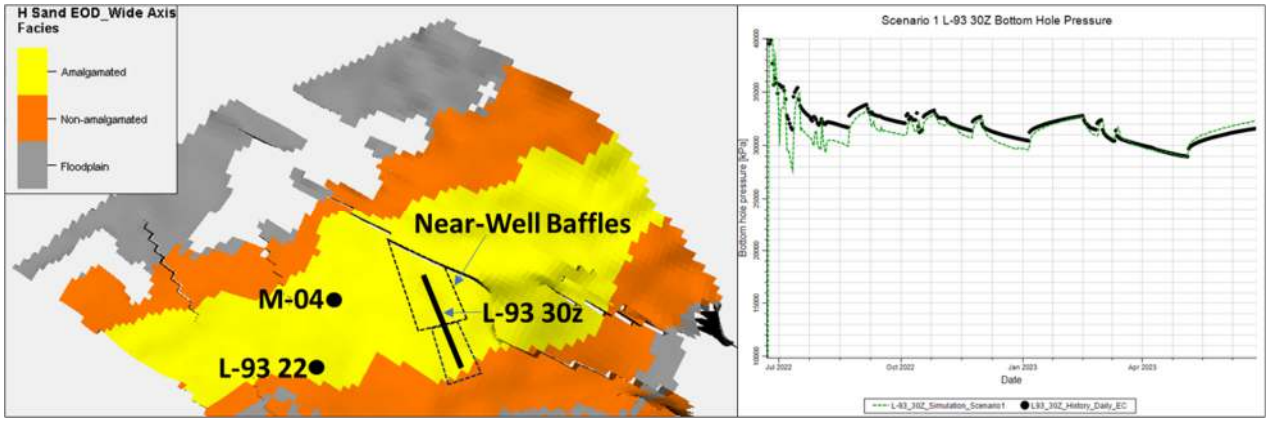

Figure 2.2 Scenario 1 Near-Well Limited Connectivity

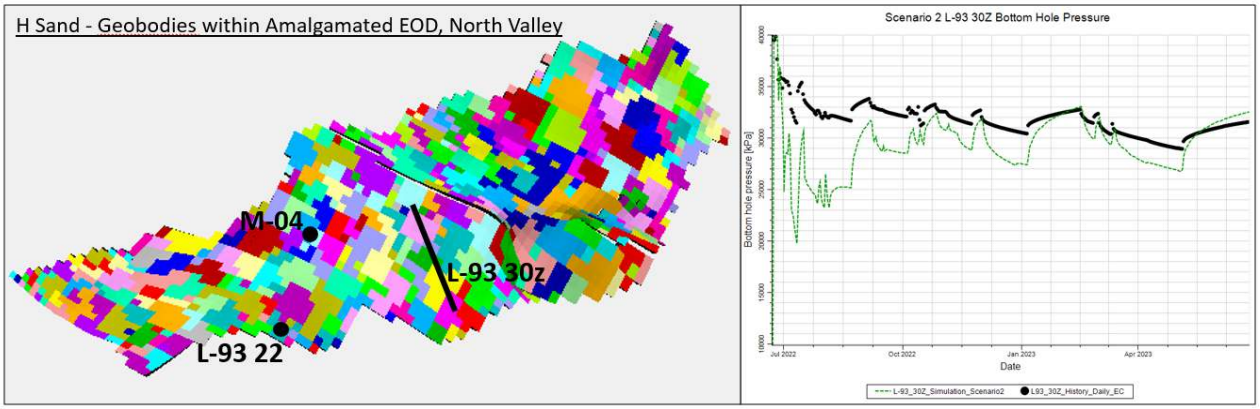

Figure 2.3 Scenario 2 Geo-body Limited Connectivity & L-93 30z History Match

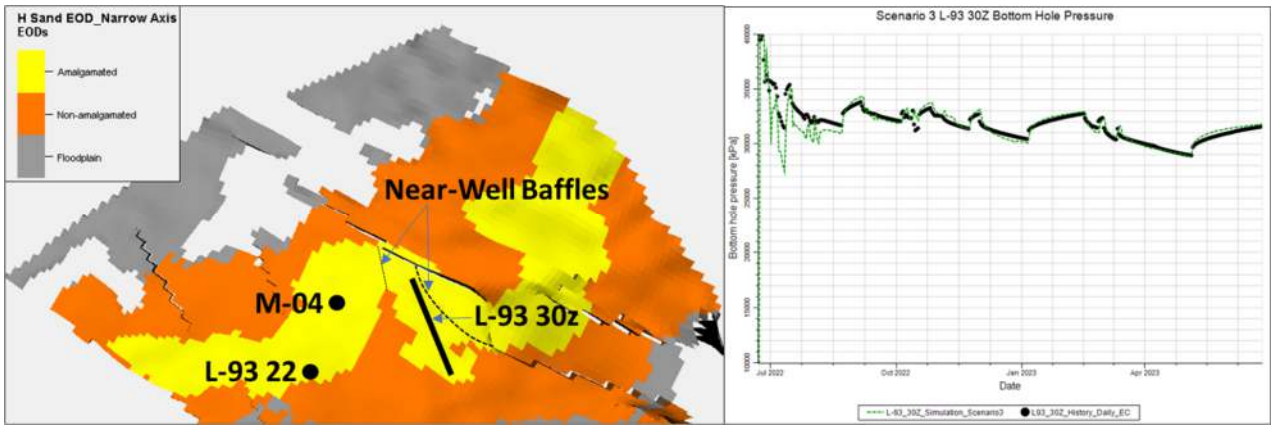

Figure 2.4 Scenario 3 Narrow Fluvial Axis & L-93 30z History Match

Due to the ability to history match multiple scenarios and its associated impact on future well placement and production expectations, additional H sand data is required to refine the range of possible geologic outcomes. As a result, dedicated H sand wells are being deferred in the rig schedule with emphasis being placed on strategic data collection to update the H sand development strategy. The H sand is located stratigraphically at the top of the JdA Formation and planned wells targeting deeper sands will encounter the H sand interval. This will provide an opportunity to collect additional static data to further delineate reservoir presence and extent. To collect dynamic data, pressures may be taken in future wells penetrating the H sand. The operator is also proposing injecting in the H sand through the first B sand injector. Should the existing seismic be reprocessed or additional seismic data be collected, it will be utilized to evaluate and optimize future H sand wells and placement.

3 Comingled Production/Injection Wells

The Hebron JdA DPA did include a comingled producer from the G, F and D sands. These sand intervals are interpreted to have limited areal extent and/or poorer reservoir quality meaning they were not good candidates for dedicated wells. Comingling production is proposed to capture the potential of these sand intervals.

The stacking of multiple reservoir intervals within the Jeanne d'Arc Formation does lend itself to encountering multiple hydrocarbon filled sand intervals in a single wellbore. By evaluating dedicated wellbores for uphole and extension potential, there is an opportunity to advance data collection and learnings in a timely manner to influence future development decisions. The primary goal would be for data gathering, but successful outcomes could support maintaining take points as part of the JdA development.

Sections 4.2.4.1 to 4.2.4.5 of the Hebron JdA DPA outlines the well count and sensitivities for each of the Jeanne d'Arc Formation sand intervals. Each section included a comment on future optimizations that might be realized from ongoing work confirming feasibility of drilling dedicated horizontal wells and opportunities to comingle intervals through a single wellbore.

Analysis has been ongoing since submission of the DPA and a number of comingled opportunities are identified that would provide efficient data collection of a secondary sand interval from wells with a different primary target. Potential examples include, but are not limited to:

- Injection in the B Sand through planned E/D injector
    - The E/D injector is planned as an early well in the rig schedule and the potential exists to gather timely B Sand data by extending and completing the well in that interval. This data could enable optimization of future B Sand wells.
- Injection in the North Valley H Sand through planned B Sand water injector
    - Establishing injection in the H Sand through a water injector with an alternative primary target could provide a data point to evaluate connectivity to the existing H Sand producers with the potential to inform future H Sand wells and placement.
- Production/injection in the B Sand through planned C Sand wells
    - The C Sand accumulation is located at the crest of the Hebron Horst with limited well penetrations. L-93 29 encountered hydrocarbons and good quality reservoir in the B Sand at this location. The potential deepening of C Sand wells and collecting dynamic data in the B sand in this area through comingled production/injection could reduce connectivity uncertainty in the B Sand, improve understanding of B Sand distribution and enable optimization of future B Sand wells.

Comingling production or injection through a single wellbore does not preclude dedicated horizontal wells. Advancing a variety of well options from dedicated to comingled wells provides increased opportunity for data collection and potential optimization of reservoir contact and recovery.

4 Off Horst Prime Blocks

As part of the completeness review, Section 4.2.4.6 Fault Blocks A' through F' was included. Fault blocks A' through F' rim the Hebron Horst on the east and south sides. They are interpreted to be likely extensions of the Jeanne d'Arc Formation Horst accumulations based on juxtaposition relationships.

At the time of the Hebron JdA DPA submission, no specific wells were assigned to these blocks. It was recognized that further analysis and data collection could result in future development to capture high side resource. For future development decisions and continued optimization of the rig schedule, the Operator recognizes the potential of early data collection and has continued the evaluation of the Prime blocks area. As a result, two wells (producers in a success case) are planned to target the C' and E' blocks. Prioritization of data collection in the C' and E' was based on high side EUR potential. The drill schedule includes placeholders for two additional injectors supporting the initial wells. This represents a successful high side outcome of two oil producers and two water injectors. The operator recognizes the value of early planning for these opportunities in ongoing efforts to manage and optimize slot usage, preserve optionality, and progress drill readiness if the high side is realized. Uncertainty in the presence and volume of hydrocarbon, in addition to reservoir presence and quality remains a key concern and the Operator characterizes success in this area as a high side outcome.

Should C' and E' blocks prove successful, the remaining Prime blocks may also be assessed for economic development.

5 Integrated Well Count and Sequence Update

Section 5.3 of the DPA states that the rig schedule is evergreen and is subject to change as additional information is gathered or technical work completed. The recent H sand learnings have highlighted a reduced confidence in future H sand well locations due to the uncertainty in the geologic connectivity

scenarios and impact on well performance. As a result, the H Sand wells are deferred to later in the rig schedule to allow for additional data collection. Furthermore, the identification of commingling potential of H Sand injection with the B sand injector allows for the reduction of the H sand total well count by 1.

Ongoing technical work on select Prime Block opportunities and desire for early data acquisition has been identified as beneficial to assess high side potential. The update included in this Addendum incorporates data collection wells from 2 of the Prime Blocks.

The well count in Table 5-1 and Table 5-2 reflects both the H Sand and Prime Blocks well count changes and results in a net addition of 1 production/injection well to the Hebron JdA DPA total, all of which would be drilled from the existing facilities and drill well slots, using existing recovery methods and systems.

Table 5-1 Table 1 Hebron Project Updated Well Count by Pool (Best Estimate)

Pool	Reservoir / Compartment	Production Wells	Injection Wells	Total
Pool 1	Hebron Ben Nevis, D-94	14	5	19
	Hebron Ben Nevis, I-13	3	2	5
	Pool 1 Total	**17**	**7**	**24**
Pool 5	Hebron Hibernia	7	2	9
Pool 4	Hebron JdA	12	5	17
Pool 2	West Ben Nevis, Ben Nevis	0	1*	1*
Total		**36**	**15**	**51**

*Pool 2 gas injector completed to allow future back-production

Table 5-2 Table 2 Hebron Jeanne d'Arc Updated Well Count by Sand

Pool	Reservoir / Compartment	Production Wells	Injection Wells	Commingle Potential	Total
Pool 4	H Sand	3	2		5
Pool 4	E/D Sand	1	1	1 WI with B Sand	2
Pool 4	C Sand	2	1	1 WI & 1 OP with B Sand	3
Pool 4	B Sand	2	1	1 WI with H Sand	3
Pool 4	Commingled	2			2
Pool 4	Prime Blocks	2			2
P4 Total		**12**	**5**		**17**

* Commingled includes L-93 22 and 1 future commingled well (potential G, F & D)

The maps shown in Figure 5.1, Figure 5.2, Figure 5.3, Figure 5.4, and Figure 5.5 represent the updated notional well placement options for each of the JdA Formation sands. Figure 5.1 is the H Sand and includes a potential location for a comingled injector with the B Sand. The G, F and D sands shown in Figure 5.2 remains unchanged. The E Sand (Figure 5.3) and C Sand (Figure 5.4) also remain unchanged.

Figure 5.5 is the B Sand and includes potential commingled penetrations by deepening C Sand wells and an E Sand injector.

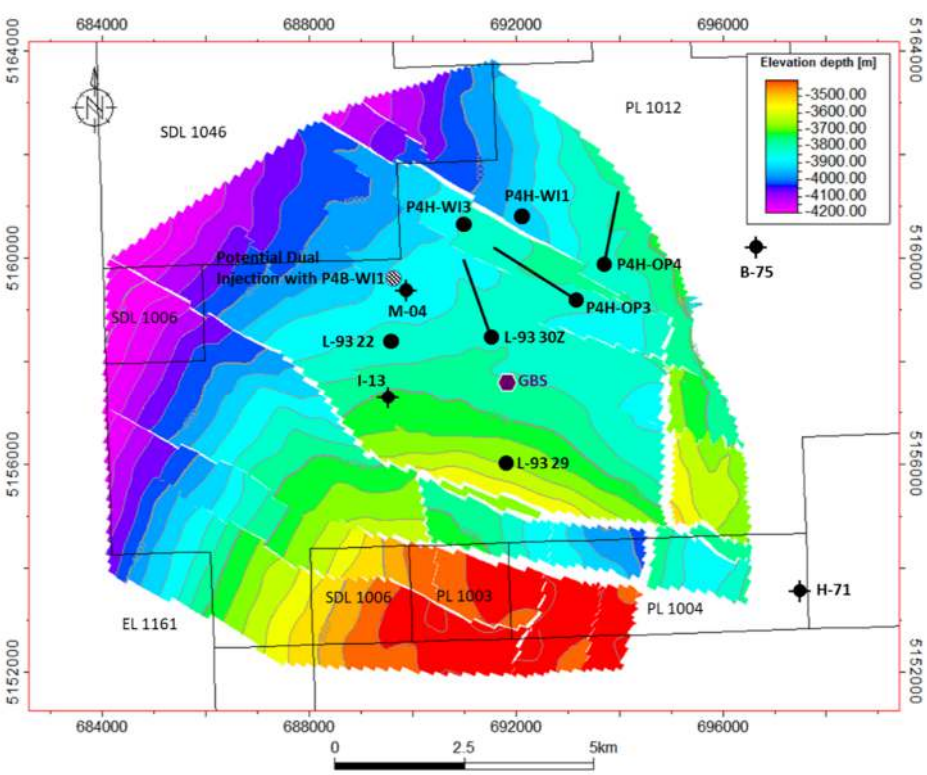

Figure 5.1 Updated Pool 4H Sand Development Area

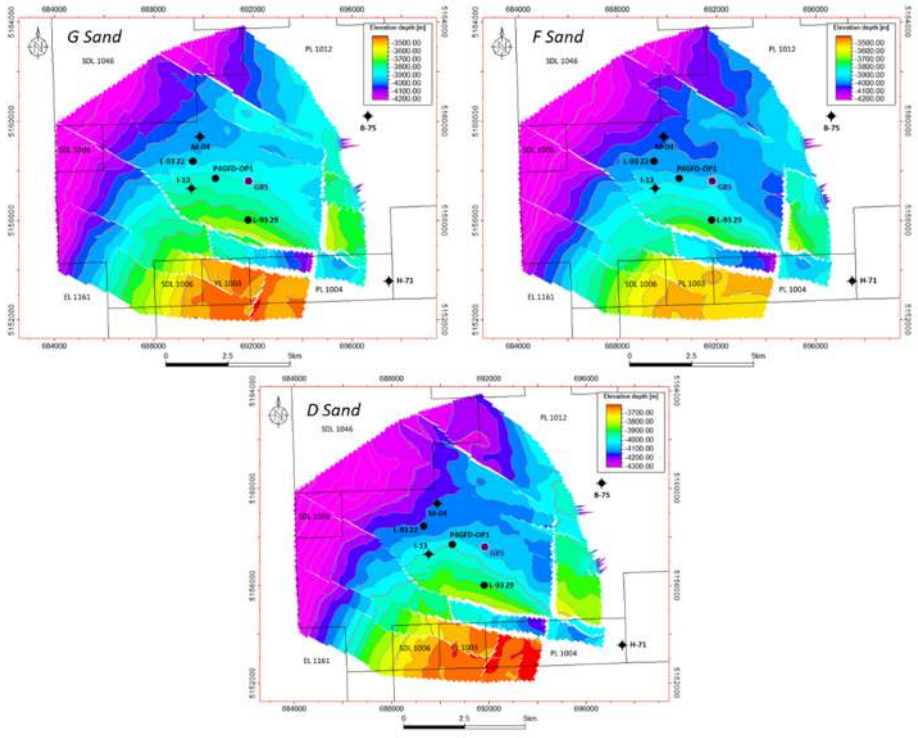

Figure 5.2 Pool 4GFD Sand Development Area

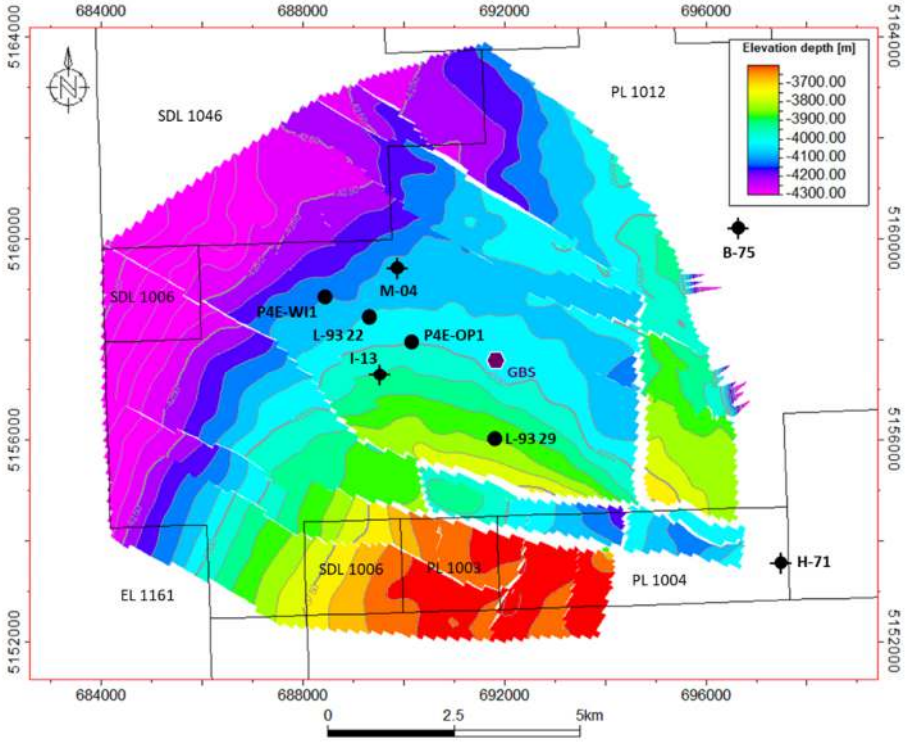

Figure 5.3 Pool 4E Sand Development Area

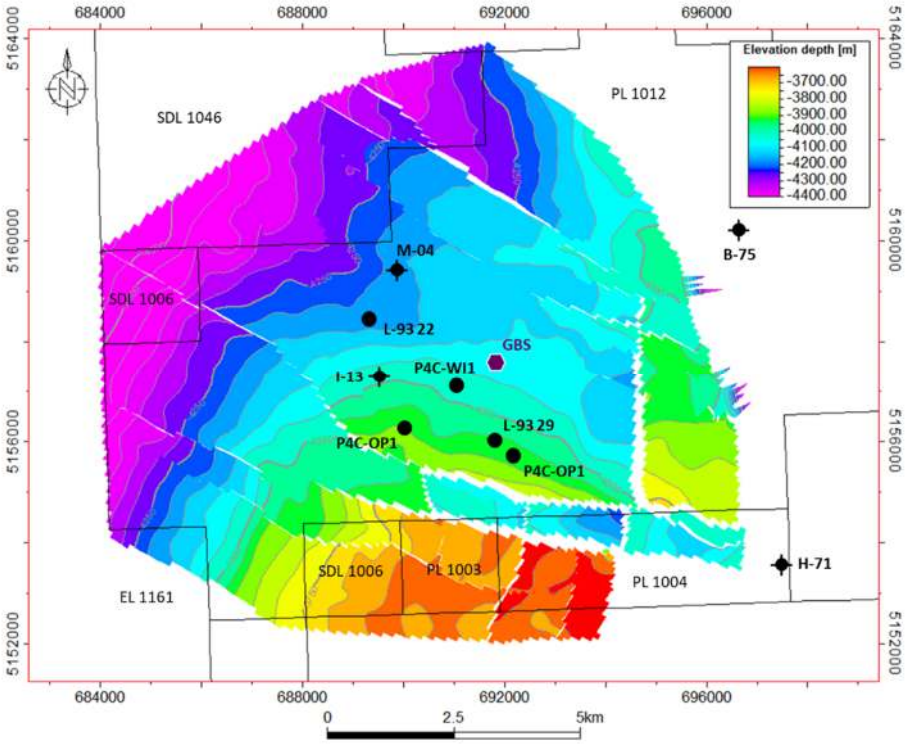

Figure 5.4 Pool 4C Sand Development Area

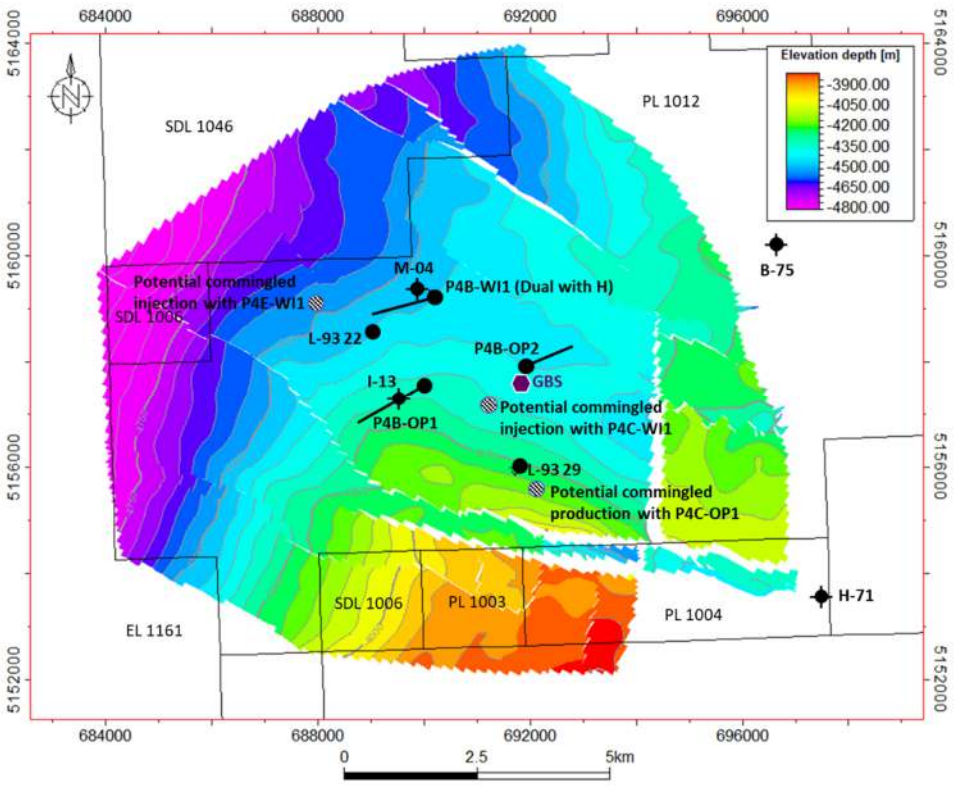

Figure 5.5 Updated Pool 4B Sand Development Area

In addition to the planned wells targeting the individual sand intervals above, several key areas of interest are also noted. Figure 5.6 shows the notional locations of an E' and C' block data collection well/producer. Figure 5.7 shows other areas within the Hebron Horst development area where future data collection and commingled production may be an option.

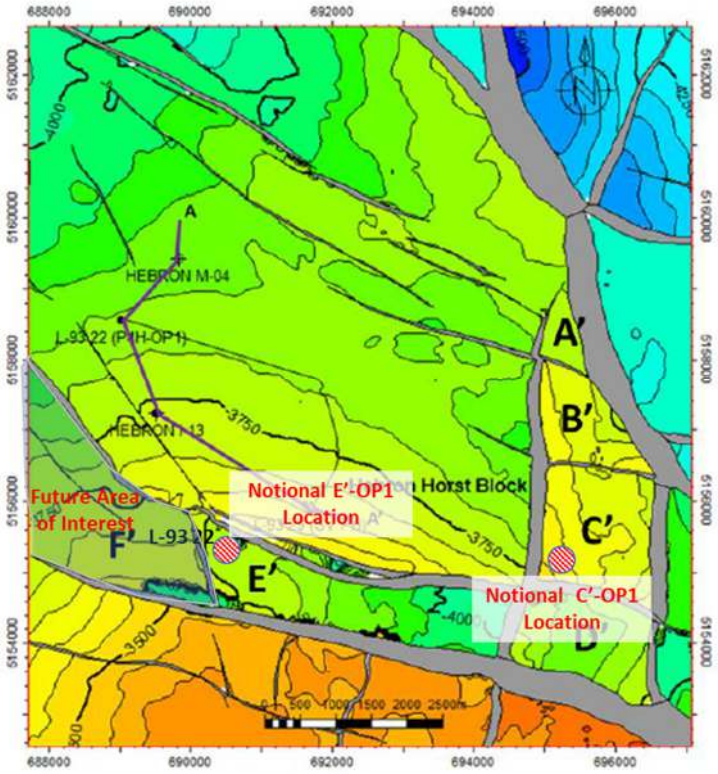

Figure 5.6 Off-Horst Prime Block Development Area

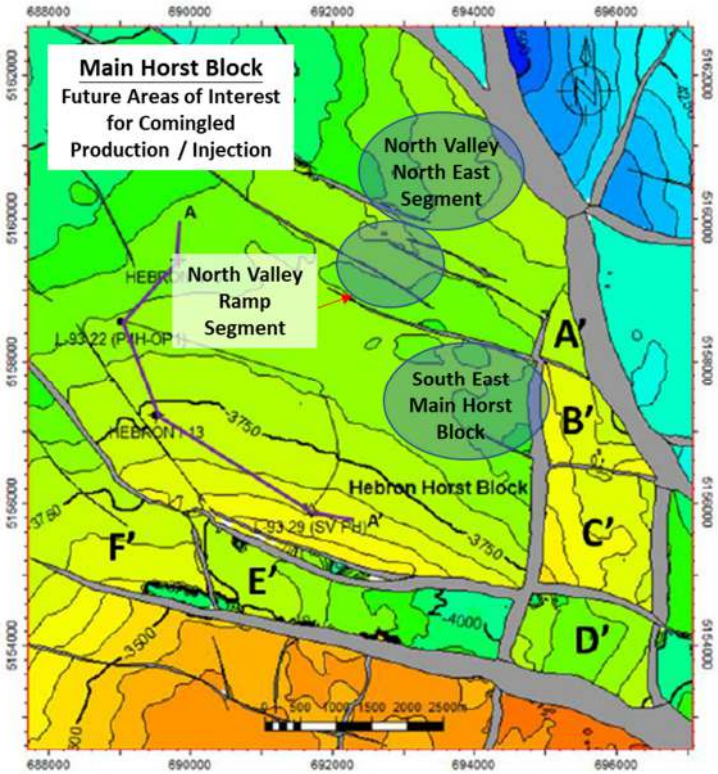

Figure 5.7 Horst Block Future Areas of Interest for Commingled Production/Injection

A rig schedule associated with this Addendum is shown in Figure 5.8. It includes placeholders for the high side outcome where the Prime block wells are successful producers requiring injection support. It

also includes a placeholder for an additional Pool 4 commingled well in the event of a high side outcome through additional data collection for both B and H sands. This is done to enable consideration of the high side in well planning, slot optimization and preserving optionality.

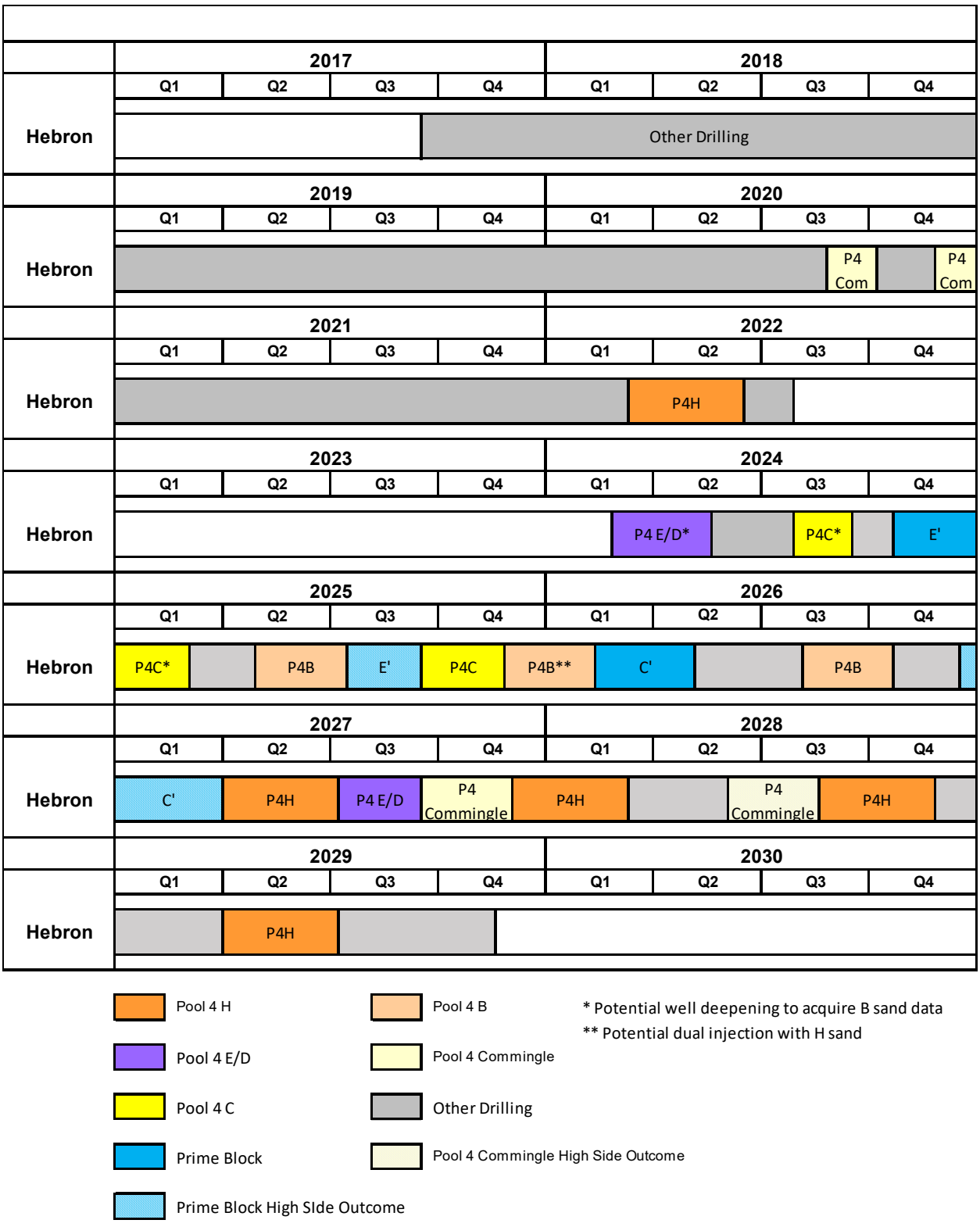

Figure 5.8 Updated Integrated Drill Schedule, with High Side Potential

6 Hydrocarbon Resource Estimates

As per the Hebron JdA DPA, original in place oil volumes are calculated for each Jeanne d'Arc sand interval within the main Hebron Horst block and adjacent fault blocks where cross fault juxtaposition is potentially indicative of a connected oil system across block bounding faults. The STOOIP for these adjacent fault blocks is captured as high side to reflect the uncertainty associated with fluid contacts and potential for shallower perched contacts.

6.1 Original Hydrocarbon in Place Estimates

An update was made to the original in place oil volumes for the low side estimate of the H Sand in the North Valley system (Table 6-1). Static data from wells drilled to date confirm reservoir presence and extent in accordance with the best estimate seismic interpretation and a calculated 170 MBO (27M m^3) in place volume. In the best estimate case, no volume reduction is assumed as the dynamic performance of L-93 30z can be matched via near wellbore baffles. This scenario relies on the placement of L-93 30z being impacted by its proximity to the ramp segment where an increase in cross valley faults is observed. These faults, in combination with the sand geometry, result in L-93 30z being unable to access the large main segment H Sand volumes. A low side scenario of an aerially limited valley system resulting in reduced volume was identified and can also be history matched. This scenario is incorporated as the updated low side estimate. This changes the low side estimate from 170 MBO (27M m^3) as reported in the Hebron JdA DPA to 140 MBO (22.3M m^3).

An associated change to the low side estimate for solution gas is captured in Table 6-2.

Table 6-1 Updated Original in place oil volumes by Sand and Fault Block (no cutoff)

		Low Side		Best Estimate		High Side	
Sand	**Fault Block**	**STOIIP ($10^6 m^3$)**	**STOIIP (MBO)**	**STOIIP ($10^6 m^3$)**	**STOIIP (MBO)**	**STOIIP ($10^6 m^3$)**	**STOIIP (MBO)**
H North Valley	**Horst**	22.3	140	27.0	170	39.0	245
H Sand	**Horst, A'**	0.5	3.2	0.9	5.9	1.4	8.9
G sand	***Horst, A'***	6.1	*38.5*	12.2	*76.9*	18.3	*115.4*
F Sand	***Horst, A'***	4.6	*29*	9.3	*58.3*	13.9	*87.5*
E Sand	**Horst, A'**	4.5	28.1	5.9	37.4	8.9	56.1
D Sand	***Horst, A'***	0.9	*5.6*	1.8	*11.4*	2.7	*17.1*
C Sand	**Horst, A'**	7.4	46.3	14.6	91.9	21.9	137.9
B Sand	**Horst, A'**	13.3	83.5	17.7	111.4	26.6	167
C Sand	**B'**	-	-	-	-	1.2	7.8
C Sand	**C'**	-	-	-	-	9.8	61.7
C Sand	**E'**	-	-	-	-	2.0	12.8
H Sand	**E'**	-	-	-	-	1.8	11.2
LHS	**E'**	-	-	-	-	26.9	169
C Sand	**F'**	-	-	-	-	3.0	18.9
Total		**59.5**	**374.2**	**89.6**	**563.2**	**177.5**	**1116.3**

Table 6-2 Updated Solution gas volumes by Sand and Fault Block

		Low Side	Best Estimate	High Side
Sand	**Fault Block**	**Solution GIIP (10^9 m^3)**	**Solution GIIP (10^9 m^3)**	**Solution GIIP (10^9 m^3)**
H North Valley	**Horst**	2.3	2.8	3.3
H Sand	**Horst, A'**	0.1	0.1	0.2
G sand	***Horst, A'***	0.8	1.5	2.3
F Sand	***Horst, A'***	0.6	1.1	1.7
E Sand	**Horst, A'**	1.8	2.4	3.6
D Sand	***Horst, A'***	0.4	0.7	1.1
C Sand	**Horst, A'**	2.2	4.3	6.4
B Sand	**Horst, A'**	4.2	5.6	8.4
C Sand	**B'**	-	-	0.2
C Sand	**C'**	-	-	1.2
C Sand	**E'**	-	-	0.6
H Sand	**E'**	-	-	0.5
LHS	**E'**	-	-	3.3
C Sand	**F'**	-	-	0.9
Total		**12.2**	**18.6**	**33.8**

6.2 Recoverable Resource Estimates

Recoverable estimates are shown in Table 6-3. No changes have been made to the development plans for G, F, E, D and C sands. H Sand has been deferred in the schedule to allow additional time to collect data. The best estimate EUR is maintained based on the assumption that new data will enable optimizations of the existing plan with the potential to commingle/dual inject into the H Sand via wells targeting deeper sands. The low side has been updated to capture the change in the low side in place estimate.

Early data collection wells are being planned for the Prime blocks with space on the rig schedule reserved for water injectors should the initial wells encounter economic volumes of hydrocarbons. Due to the uncertainty in the presence and volume of hydrocarbons in these blocks, the operator views this as a high side EUR outcome.

Table 6-3 Updated Estimated Ultimate Recoverable oil volume by Sand within the main Horst Block

		Low Side		Best Estimate		High Side	
Sand	**Fault Block**	**EUR (10^6m^3)**	**EUR, MBO**	**EUR (10^6m^3)**	**EUR, MBO**	**EUR (10^6m^3)**	**EUR, MBO**
H North Valley	**Horst**	4.7	29.4	8.1	50.7	11.4	72
H Sand	**Horst, A'**	-	-	-	-	0.5	3.1
G sand	***Horst, A'***	0.17	*1.05*	0.33	*2.1*	6.4	*40.4*
F Sand	***Horst, A'***	0.13	*0.79*	0.25	*1.6*	4.9	*30.6*
E Sand	**Horst, A'**	0.89	5.62	1.81	11.4	3.1	19.6
D Sand	***Horst, A'***	0.02	*0.15*	0.05	*0.3*	1.0	*6.0*
C Sand	**Horst, A'**	1.47	9.26	4.43	27.8	7.7	48.3
B Sand	**Horst, A'**	2.66	16.70	4.48	28.2	9.3	58.5
C Sand	**B'**	-	-	-	-	0.4	2.3
C Sand	**C'**	-	-	-	-	2.9	18.5
C Sand	**E'**	-	-	-	-	0.6	3.8
H Sand	**E'**	-	-	-	-	0.5	3.4
LHS	**E'**	-	-	-	-	8.1	50.7
C Sand	**F'**	-	-	-	-	0.9	5.7
Total		**10.0**	**63.0**	**19.4**	**122.1**	**57.7**	**362.9**

7 Summary

In summary, the Operator is proposing the following actions as an addendum to the Hebron Jeanne d'Arc Formation Development Plan Amendment:

- Defer dedicated H Sand wells to later in the rig schedule to allow for additional time to collect data and analyze results
- Incorporate additional comingled production/injection wells as a means of gathering static and dynamic data
- Pursue early data collection in off-Horst Prime blocks to inform potential high side

As stated previously, this addendum does not alter the scope of the submitted Hebron JdA DPA which was to include for development, sands in the Jeanne d'Arc Formation between the H and B sands not already covered by the existing Development Plan and to include fault blocks connected via juxtaposition to the Hebron Horst Block.

Good oil field practice requires planning for and managing uncertainty. This addendum has been made in response to the dynamic learnings for the H Sand and more clearly articulates how broader Pool 4 uncertainty is mitigated to preserve optionality, enable optimization of the development, and provide the maximum chance of economic success while reducing waste.