



West Energy Ltd.

Review and Variance of Alberta Energy and Utilities Board
Decision Respecting Off-Target Status of Well
00/03-34-048-08W5/0

Pembina Field

June 20, 2006

ALBERTA ENERGY AND UTILITIES BOARD

Decision 2006-058: West Energy Ltd., Review and Variance of Alberta Energy and Utilities Board
Decision Respecting Off-Target Status of Well 00/03-34-048-08W5/0, Pembina Field

June 20, 2006

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ALBERTA ENERGY AND UTILITIES BOARD

Calgary Alberta

WEST ENERGY LTD.

REVIEW AND VARIANCE OF DECISION RESPECTING OFF-TARGET STATUS OF WELL 00/03-34-048-08W5/0 PEMBINA FIELD

Decision 2006-058
Proceeding No. 1444342

1 DECISION

Having carefully considered all of the evidence, the Alberta Energy and Utilities Board (EUB/Board) hereby approves the application of West Energy Ltd. (West) to vary the EUB's decision of September 30, 2005, designating the Highpine Oil & Gas Limited (Highpine) well 00/03-34-048-08W5/0 (the 3-34 well) as the first well in the Pembina Nisku SS Pool (the SS Pool) and not subject to an off-target penalty under the provisions of EUB *Interim Directive (ID) 94-2: Revisions to Oil and Gas Well Spacing Administration*. For the reasons noted below, the Board has decided that the 3-34 well does not meet the criteria required to be designated as the first well in the SS Pool and it will therefore be subject to an off-target penalty.

2 INTRODUCTION

2.1 Proceeding

In August 2005, West applied for an off-target penalty to be applied to production from the SS Pool through the 3-34 well licensed to Highpine. This application was registered as Application No. 1413462.

By letter dated September 30, 2005, the EUB indicated that it had determined that the 3-34 well met the criteria for first well in a pool status, and that in accordance with *ID 94-2* no off-target penalty would be applied.

In October 2005, West filed a request for a review and variance of the EUB's decision of September 30, 2005, pursuant to Section 40 of the *Energy Resources Conservation Act*. The Board held an oral proceeding to determine whether the decision should be reviewed (phase 1 proceeding). On January 20, 2006, the EUB issued a letter indicating that it would hold a review hearing into the Board's decision to deny Application No. 1413462 (phase 2 proceeding).

2.2 Intervention

Highpine filed a submission opposing West's request for a review and variance of the EUB's September 30, 2005, decision.

2.3 Hearing

The Board held a public hearing in Calgary, Alberta, on May 9, 2006, before Board Member J. D. Dilay, P.Eng. (Presiding Member), Board Member J. R. Nichol, P.Eng., and Acting Board Member C. A. Langlo, P.Geol. Those who appeared at the hearing are listed in Appendix 1.

3 BACKGROUND

3.1 Applicable Directive and Legislation for First Well in Pool Policy

ID 94-2 provides that the first well in a pool that is capable of production is not subject to any off-target penalty. This policy was intended to benefit companies willing to take the risk of drilling exploratory wells. For oil wells, *ID 94-2* states that

The “first well” in an oil pool is defined as the well with the earliest spud date that is capable of oil production and that commences oil production within 6 months of the spud date.

A capable oil well is a well that is placed on production.

Under *ID 94-2*, the first well policy was effective as of April 1, 1994, and applied to wells spudded on or after that date.

In 1998, the policy respecting first well in a pool was given statutory recognition by the enactment of subsections 4.060(4) and 4.060(5) of the *Oil and Gas Conservation Regulations (OGCR)* which state

(5) Where a well is spudded on or after 1 April 1994 and is the first well in a new pool, the off-target penalty factor prescribed for the well under section 4.070 shall not apply.

(6) For the purposes of this section,

(a) “capable”, when that term is used in connection with a first well, means

(i) an oil well that is placed on production within 6 months of the spud date, and

(ii) a gas well that is completed and a suitable test has demonstrated to the Board’s satisfaction that the well has the ability to produce gas at commercial rates on a sustained basis;

(b) “first well” means the well is in a new pool with the earliest spud date that is capable of production.

When determining whether a well qualifies for “first well” status the Board must be guided by the terms of the *OGCR*.

3.2 Applicable Directive for Spud Date

In determining the spud date, the Board refers to *EUB Directive 059: Well Drilling and Completion Data Filing Requirements* which states the following:

Drilling to set conductor casing is not considered spud unless it is conducted by the drilling rig that continues to drill the remainder of the well.

Drilling surface hole and setting of surface casing by a surface hole rig constitutes spud of a well.

3.3 Chronology of Development of Wells Discussed at the Hearing

Currently the EUB defines the SS Pool as an oil pool containing 3 wells: 04/14-27-048-08W5/0 (the 14-27 well) and 02/16-28-048-08W5/0 (the 16-28 well) both licensed to West, and the 3-34 well, licensed to Highpine. The gas encountered in the SS Pool contains approximately 6 per cent hydrogen sulphide (H₂S). Wells in the pool may be produced in accordance with good production practice subject to maintaining a minimum pool pressure.

EUB records indicate that the 16-28 well was spudded in December 2004 and commenced production in January 2005. The spud date and the date the well was shown to be capable of production was not discussed at the hearing. Discussion at the hearing focused on the 14-27 and 3-34 wells.

Sections 27 and 34 of Township 48, Range 8, West of the 5th Meridian, are subject to one-quarter section drilling spacing units for oil, with target areas in Legal Subdivisions 6, 8, 14, and 16. The 14-27 well is therefore on target, while the 3-34 well is off target (see Figure 1).

Information filed at the hearing and the public record show the following chronology for the development of the two wells of interest:

Event	West 14-27 well	Highpine 3-34 well
Initial applications for well licences filed	July 30, 2004 Filed as category E622 (see below)	August 13, 2004 Filed as category D570 (see below)
Well licence issued by EUB for 3-34 well	-	August 16, 2004
EUB directs Highpine to refile for 3-34 well licence as category E622 and to provide related information	-	August 23, 2004
Highpine voluntarily suspends well licence for 3-34 well	-	August 25, 2004
West refiles application for 14-27 well as a category E622 (correction from gas well to oil well)	September 8, 2004	-
Highpine refiles application and related materials for 3-34 well licence as category E622 well	-	September 14, 2004
Well licence for 14-27/resume drilling licence for 3-34 issued by EUB	September 14, 2004	September 17, 2004
West sets conductor casing for the 14-27 well with a rig from Morrill's Water Drilling Service (water Rig No. 3) and continues to drill surface hole with same rig	September 20, 2004, 8:00 p.m.	-
Highpine commences drilling 3-34 with Lakota Drilling Rig No. 9	-	September 20, 2004, 9:30 p.m.
West continues drilling 14-27 with Precision Drilling Rig No. 230	September 23, 2004	-
Highpine completes 3-34 and commences 72 hours of production before well is shut in	-	October 26, 2004
West completes 14-27 well	November 12, 2004	-
West produces 14-27 well for 504 hours before shutting in well	November 2004	-
Highpine commences production from 3-34 well	-	July 2005
West commences production from 14-27 well	March 2006	-

There was substantial discussion at the hearing regarding D570 and E622 category wells. Table 7.1 of EUB *Directive 056: Energy Development Applications and Schedules* sets out the minimum consultation and notification requirements for licensing numerous well types and categories. These requirements for the two well types discussed at the hearing are as follows:

Category	Name	Type	Description	Personal consultation and confirmation of nonobjection	Notification
D	Wells ≥ 0.3 cubic metres per second (m^3/s) but $< 2.0 m^3/s$ H_2S release rate	570	Single well	<ul style="list-style-type: none"> Landowners and occupants with regard to well-site location Landowners and occupants regarding well-site access Landowners within 0.5 kilometres (km) with regard to setbacks Residents within 0.2 km or calculated Emergency Planning Zone (EPZ) radius, whichever is greater 	<ul style="list-style-type: none"> Crown disposition holders Local authorities Freehold coal rights owner or coal rights lessee Urban authorities within 1.5 km Unlighted airports within 1.6 km Lighted airports within 5 km
E	Wells $\geq 0.3 m^3/s$ but $< 2.0 m^3/s$ release rate and well is within 5 km of urban centre (deemed non-routine)	622	Proximity critical well	<ul style="list-style-type: none"> Landowners and occupants with regard to well-site location Landowners and occupants regarding well-site access Landowners within 0.5 km with regard to setbacks Residents and local authorities within 0.2 km or calculated EPZ radius, whichever is greater Urban authorities within 5 km 	<ul style="list-style-type: none"> Crown disposition holders Freehold coal rights owner or coal rights lessee Unlighted airports within 1.6 km Lighted airports within 5 km

The key difference between the requirements of D570 and E622 well categories is that for an E622 well, the applicant must consult with and obtain confirmation of nonobjection from all urban authorities within 5 km of the well. This requirement results in the category E622 well being considered as proximity critical and the well licence application being considered as non-routine.

4 ISSUE

The Board considers the issue respecting the proceeding to be whether the 3-34 well meets the criteria for being first well in the pool as set out in the *OGCR*. In this regard, the Board specifically examined

- the spud dates for the 14-27 and 3-34 wells, and
- whether the well with the earliest spud date in the SS Pool demonstrated that it is capable of production by commencing production within 6 months of the spud date.

The Board notes that the above is not the interpretation of the first well in the pool that was suggested in the EUB's September 30, 2005, decision. In this regard, the Board acknowledges that the wording of *ID 94-2* and Sections 4.060(4) and (5) of the *OGCR* may lead to different interpretations. The Board believes that where there are differences between *ID 94-2* and the *OGCR*, the *OGCR* must take precedence, and it has considered the subject proceeding in light of the *OGCR* rather than *ID 94-2*.

5 CONSIDERATION OF THE ISSUE

5.1 Views of West

West submitted that the Board should find that Highpine's 3-34 well is not the first well in the pool and that an off-target penalty should be applied to the well.

West referenced the definition of first well in a pool as set out in *ID 94-2*, that is, that the first well in an oil pool is defined as the well with the earliest spud date that is capable of oil production and that commences oil production within 6 months of the spud date, and that a capable oil well is a well that is placed on production. It made submissions regarding spud date and whether the 3-34 well met the definition of a capable oil well.

With respect to spud date, West indicated that the access to the 14-27 well site was blocked by Highpine equipment, and it was not able to move in Precision Drilling Rig No. 230 to commence drilling the well. It decided to commence drilling with water Rig No. 3; operations commenced at 8:00 p.m. September 20, 2004, and conductor casing was set. West continued drilling a smaller diameter surface hole with the same rig; however, this operation was terminated at approximately 56 metres. Subsequently this rig was removed and Precision Drilling Rig No. 230 was moved to the well site. Drilling recommenced on September 23, 2004. West submitted that the spud date for the 14-27 well of 8:00 p.m. September 20, 2004, (earlier than the spud date of 9:30 p.m. September 20, 2004, of the 3-34 well) should be accepted by the Board because of the circumstances involved. These circumstances were not only that the access to its well site for the larger Precision rig was initially blocked by Highpine equipment, but that Highpine received its well licence earlier than it would otherwise have done by contravening the Board's application and public consultation process.

West submitted that Highpine contravened the EUB application process by incorrectly applying on August 13, 2004, for the 3-34 well licence on a routine basis as a category D570 well. West argued that Highpine should have known that the 3-34 well was within 5 km of the urban centre of Violet Grove, and based on the EUB's regulations and the H₂S release rate for the well was consequently a category E622 proximity critical well. West also submitted that prior to filing its initial well licence application, it had held open house meetings in Lodgepole and Violet Grove where it provided information that described the 14-27 well, among others, as a proximity critical category E622 well. It said that Highpine had attended the open house in Lodgepole and should have obtained the information regarding the E622 proximity category for the 14-27 well.

West noted that Highpine received its well licence on August 16, 2004, but that subsequently on August 23, 2004, the EUB directed Highpine to refile its application as a nonroutine, category E622 well. West indicated that on August 25, 2004, Highpine voluntarily suspended its well licence, but not before it was able to substantially prepare the 3-34 well site. On September 14, 2004, Highpine filed a further well licence application correctly identifying the 3-34 well as an E622 well. West submitted that it would have expected the EUB to at least "put the application at the bottom of the pile"; however, the EUB issued a resume drilling licence on September 17, 2004.

West maintained that use of the proximity critical well category raised the public profile of the 14-27 well and appeared to be the trigger for the interest and questions asked. It argued that without the E622 category, its public consultation and notification process would have been

much easier and completed sooner, as occurred with the 3-34 well. West concluded that had Highpine applied for the 3-34 well as an E622 category well in the first instance, it would not have received its well licence on August 16, 2004, and hence would not have been in a position to prepare the well site. The application would have been subject to the EUB's nonroutine application process and would likely have required a more intensive and extensive consultation period. In West's opinion, it would have drilled the 14-27 well before Highpine had even licensed its well.

With respect to whether the 3-34 well met the definition of a capable well under *ID 94-2*, West disputed that the well was actually on production on October 26, 2004, as claimed by Highpine. It noted that wells in the SS Pool cannot produce without equipment and facilities to handle H₂S, and that the on-production date for the wells occurs when they are connected to such facilities. West considered that fluids produced from the 3-34 well in October 2004 during a test did not qualify as production as the well was not tied in at the time. West submitted that the 3-34 well did not commence production within the 6 months required by *ID 94-2* to qualify as the first well in the pool.

West concluded that as the 14-27 well was spud earlier than the 3-34 well, and as the 3-34 well did not commence production within the 6 month period specified by *ID 94-2*, the 3-34 well did not meet the criteria for being the first well in the SS Pool under *ID 94-2*, and should be subject to an off-target penalty.

5.2 Views of Highpine

Highpine submitted that its 3-34 well met the spud date and production criteria set out in *ID 94-2* to qualify as the first well in the pool. On that basis, it said that the West application should be denied and the EUB's September 30, 2005, decision should be confirmed.

Highpine submitted that the 3-34 well had the earliest spud date in the SS Pool, with drilling commencing at 9:30 p.m. on September 20, 2004. Highpine argued that the commencement of drilling of the West 14-27 well by water Rig No. 3 on September 20, 2004, did not meet the definition of spud date in *Directive 059* in that water Rig No. 3 set conductor casing but did not continue to drill the remainder of the well. The spud date as defined by *Directive 059* for the 14-27 well was September 23, 2004, three days after the spud date of Highpine's 3-34 well, when drilling of the 14-27 well commenced with Precision Drilling Rig No. 230.

Highpine denied and disputed West's assertions that it had manipulated the EUB's well licensing process and thereby was able to obtain its well licence sooner than it would otherwise have done. Highpine submitted that it never received the information that West provided at an open house meeting as claimed. Highpine said that in any event, it had applied for the 3-34 well as a category D570 well following its assessment that there were less than 50 occupied dwellings in Violet Grove and thus it was not an urban centre for well licensing purposes. Highpine stated that when the EUB advised that Violet Grove was an urban centre and directed that Highpine refile its application with the E622 classification, Highpine worked closely with EUB staff to ensure that all regulatory requirements were met, including those relating to consultation and notification. Highpine argued that in any event, arguments about well licensing were irrelevant to a proceeding respecting off-target penalties. It said that if West wished to challenge the validity of the 3-34 well licence, it had the opportunity to do so directly, but that West's attempts to

challenge the 3-34 well licence collaterally through the off-target well proceeding was inappropriate.

With respect to the production criterion associated with the first well in the pool policy, Highpine stated that it considered the 3-34 well to be capable when it was completed on October 26, 2004, and produced significant quantities of oil and gas. Highpine acknowledged that the well was not brought on continuous production until July 2005; however, it considered that the fluid produced on October 26, 2004, counted as production and thus the well met the requirement for the first well in the pool by commencing production within six months of the spud date of September 20, 2004. It noted that October 26, 2004, is the on-production date for the well on EUB records and that royalties were paid on the production.

On the basis of the foregoing, Highpine concluded that Board should reject West's application and confirm the EUB's September 30, 2005, decision that the 3-34 well was the first well in the SS Pool and not subject to an off-target penalty.

5.3 Views of the Board

As noted above, in accordance with Sections 4.060(5) and (6) of the *OGCR* the first well in an oil pool

- must be the first well to be spudded in the pool, and
- must demonstrate that it is capable of production by commencing production within 6 months of the spud date.

First Spud Date

The Board reviewed the spud dates of the 3-34 and 14-27 wells in the context of the statement in *Directive 059* that "Drilling to set conductor casing is not considered spud unless it is conducted by the drilling rig that continues to drill the remainder of the well." There was no dispute that the spud date for the 3-34 well was September 20, 2004. In the case of the 14-27 well, water Rig No. 3, which commenced drilling the 14-27 well on September 20, 2004, and set conductor casing, did not continue to drill the remainder of the well, therefore, the September 20, 2004, date was not the spud date. The spud date for the 14-27 well that meets the definition of *Directive 059* was September 23, 2004, when Precision Drilling Rig No. 230 commenced drilling.

The Board notes West's arguments that the Board should accept a spud date of September 20, 2004, because the access to the 14-27 well site was blocked to the Precision Drilling Rig No. 230, and Highpine was able to spud its well earlier than would normally be the case by contravening the EUB well licence application process. In this regard, the Board notes that once it had been directed to refile its application, Highpine worked with EUB staff to ensure that all regulatory requirements were met in a timely manner. The Board saw no evidence to suggest that all regulatory requirements, including consultation and notification requirements, were not met to the satisfaction of the EUB prior to the issuance of the resume drilling licence for the 3-34 well.

On the basis of the foregoing, the Board concludes that the 3-34 well has the earliest spud date in the SS Pool.

Capable of Production

The Board believes that to be considered as having commenced production, a well must operate under conditions that could allow for sustained production. Production could not occur on a sustained basis from a well in the SS Pool without appropriate facilities to handle the H₂S. These facilities were not in place on October 26, 2004, when Highpine completed and produced the 3-34 well. The facilities were, however, in place in July 2005 when Highpine commenced producing its well. Accordingly, the Board considers that the production that occurred on October 26, 2004, constituted a test rather than production, and that the on-production date for the 3-34 well was in July 2005.

On the basis of the foregoing, the Board concludes that although the 3-34 well has the earliest spud date in the SS Pool, Highpine did not demonstrate that the well was capable of production by commencing production within 6 months of the spud date of September 20, 2004. As such, the Board concludes that the 3-34 well does not meet the criteria for a first well in an oil pool as set out in the *OGCR* and should be subject to a penalty.

6 OTHER MATTERS

The Board believes that an effort to qualify as the first well as defined by the provisions of *ID 94-2* led Highpine and West to become engaged in a race to be the first to spud a well. This is of particular concern to the Board because the race in this case involved the drilling of proximity critical sour wells. While there is no indication that safety was compromised by either West or Highpine in the drilling of their respective wells, the Board is of the view that both the imperative and spectacle of a race is not conducive to the safe and prudent practices required for the drilling of wells mandated by this Board and expected by the citizens of the province.

It was the intent of *ID 94-2* to encourage exploration but not to foster races for first spud date. The Board notes that this is the first instance of such behaviour to have come to its attention and to that extent is satisfied that the circumstances of this case are unique. Should further similar examples come to light in the future, the hearing panel recommends that serious consideration be given by the Board to the complete or partial revocation of the first well policy.

Dated in Calgary, Alberta, on June 20, 2006.

ALBERTA ENERGY AND UTILITIES BOARD

<original signed by>

J. D. Dilay, P.Eng.
Presiding Member

<original signed by>

J. R. Nichol, P.Eng.
Board Member

<original signed by>

C. A. Langlo, P.Geol.
Acting Board Member

APPENDIX 1 HEARING PARTICIPANTS

Principals and Representatives
(Abbreviations used in report)**Witnesses**

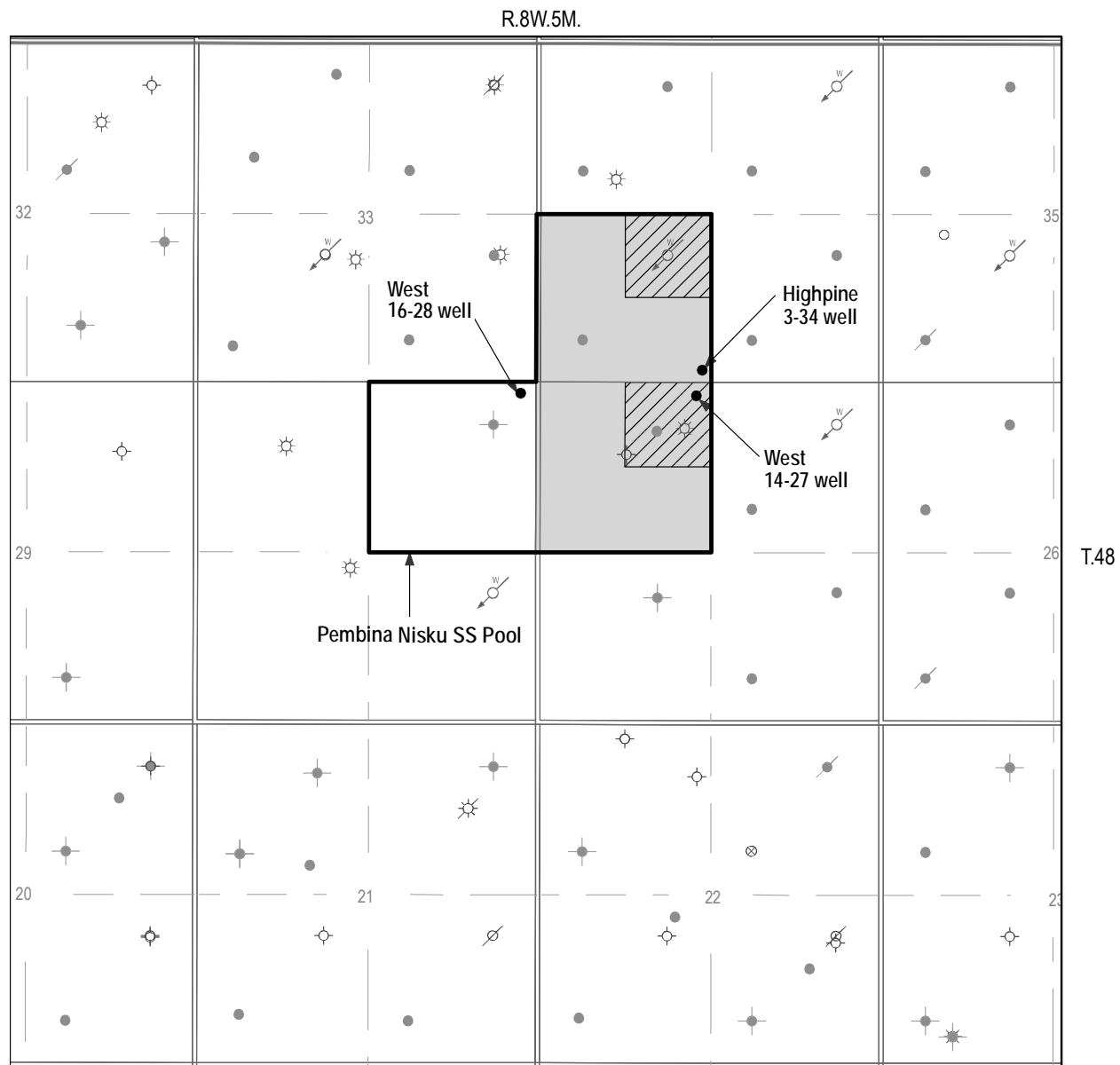
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Legend

- | | | |
|-----------------------|---------------------|-------------------|
| Pembina Nisku SS Pool | Well symbols | Suspended |
| Drilling spacing unit | Abandoned | Drilled and cased |
| Well target area | Abandoned oil | Gas |
| Well locations | Disposal | Injection |
| | | Suspended gas |
| | | Suspended oil |
| | | Undefined |

Figure 1. Overview of area of interest