PROPOSED SOUTH PIERSON UNIT NO. 5

Application for Enhanced Oil Recovery Waterflood Project

Mission Canyon Formation

MC 3b

Pierson Field, Manitoba

January 14, 2026

MRL 2 Ltd.

Section

INTRODUCTION

The Pierson Oil Field is located in Townships 1, 2 and 3, Ranges 27 ,28 and 29 W1M (Figure 1). The Mission Canyon 3B field has been delineated in the Pierson Oil Field since the 1960s. The Mission Canyon 3B is a geology and geophysics reservoir. Some of the trapping mechanisms are low permeability. Advancements in horizontal drilling have made poorer quality Mission Canyon 3B reservoir viable.

The proposed South Pierson Unit No. 5 was developed with horizontal drilling and conventional open hole completions starting in 2015. The proposed unit had been drilled with vertical wells in 1979 and 1992. The vertical wells were deemed uneconomic for production and abandoned. Horizontal drilling accesses additional reservoir to resolve the issue of poor permeability to increase well performance.

In the Central part of the Pierson field, potential exists for increased production and reserve recovery through a Waterflood Enhanced Oil Recovery (E O R) project in the Mission Canyon 3B Reservoir. The following documentation is an application by MRL 2 Ltd. to establish South Pierson No. 5 (The South Half of Section 29, Township 2, Range 28 West of the first Meridian LSDs – 1, 2, 3, 4, 5, 6, 7 & 8) to implement a Waterflood EOR scheme within the Mission Canyon 3B.

The proposed project area falls within the existing designated 07-42E Mission Canyon 3B E Pool of the Pierson Oilfield (Figure 3).

SUMMARY

1. The proposed South Pierson Unit No. 5 will include 6 horizontal wells within 8 Legal Sub Divisions (LSD) of the Mission Canyon 3B producing reservoir residing on South half of Section 29-2-28W1 (Figure 2).

2. Total Net Original Oil in Place (OOIP) in South Pierson Unit No. 5 has been calculated to be **365.9 e^3m^3 (2,302 Mbbl)** for an average of **45.7 e^3m^3 (287 Mbbl)** OOIP per 40 acre LSD based on a 0.5 mD and 6% cutoff for the Mission Canyon 3B.

3. Cumulative allocated production to the end of November 2025 from the 8 wells within the proposed South Pierson Unti No. 5 project area was **24.2 e^3m^3** (**152.2 Mbbl**) of oil, representing a 6.6**%** Recovery of the Net OOIP.

4. The production from the proposed South Pierson Unit No. 5 peaked in Feb 2016 at 21.6 m^3 oil per day and 22.3 m3 water per day, which is a 50.8% cut BS&W shown in Figure 4. As of September 2025, production was 2.5m^3 OPD, 14.2m^3 of water per day water per day, which is an 85% cut BS&W.

5. In April 2018, production averaged 8.6 m^3 OPD per well in South Pierson Unit No. 5. As of September 2025, average production has declined to 2.5 m^3 OPD. Decline analysis of the group primary production data forecasts total oil to continue declining at an annual rate of approximately **14.4 %** in the project area.

6. Estimated Ultimate Recovery (EUR) of primary production oil reserves in the proposed South Pierson Unit No. 5 project area has been calculated to be **26.7** e^3m^3 (**168.2** Mbbl), with **3.0** e^3m^3 (**18.6** Mbbl) remaining as of the end of November 2025.

7. Ultimate oil recovery of the proposed South Pierson Unit No. 5, under the current Primary production, is forecasted to be **7.4 %**

8. Estimated Ultimate Recovery (EUR) of proved oil reserves under Waterflood EOR for the proposed South Pierson Unit No. 5 has been calculated to be **50.3** e^3m^3 (**316.4** Mbbl), with **26.1** e^3m^3 (**164.1** Mbbl) remaining. An incremental **23.1** e^3m^3 (145.5 Mbbl) of proved oil reserves, or **6.3%,** are forecasted to be recovered under the proposed Unitization and Waterflood EOR Production vs the existing Primary Production method.

9. The Total recovery factor under Secondary EOR in the proposed South Pierson Unit No. 5 is estimated to be **13.7%.**

10. Based on the waterflood response in the Pierson Fields and greater Williston Basin, the Mission Canyon 3B reservoir in the proposed project area is believed to be a suitable reservoir for Waterflood EOR operations.

11. Existing horizontal wells, will be converted to injection to provide waterflood support to existing horizontal producing wells within the proposed South Pierson Unit No. 5 to complete the waterflood pattern.

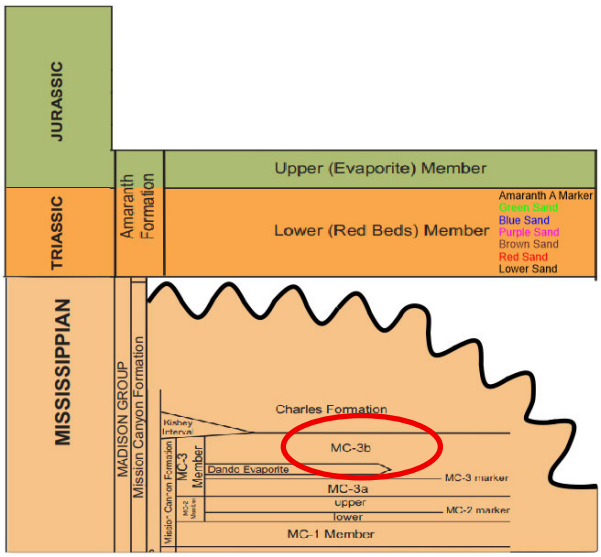
RESEVOIR PROPERTIES AND TECHNICAL DISCUSSION

GEOLOGY

Stratigraphy:

The Mission Canyon, MC3b sub-member is Mississippian-aged zone and is bound below by the slightly argillaceous, widely lateral, extensive MC3 marker, and the above Mississippian Unconformity altered anhydrityc cap.

The productive intervals of the Mission Canyon beds are based on the regional dip and local structure.



Sedimentology:

The MC3b member beds are generally described as a white to cream limestone, mainly bioclastic with oolitic, occasional pisolitic and abundant pellets. Generally, it is slightly dolomitic and can have a significant amount of anhydrite, porosity can range from 6–15%, unless there is secondary porosity development through dolomitization and recrystallization in that occurrence, the porosity can exceed 25%. Locally, the MC3b member is up to 17 meters and thins to the northeast until the sub-crop edge.

Depositional Environment:

The depositional environment of the Mission Canyon and, in general, the Paleozoic can be interpreted or described as a time of high calcareous deposition in the shallow restricted seas. The general region has been described and interpreted as a time when there was a shallow confined inland sea, with the present eastern edge of the Williston basin being the shoreline. With variable relative sea level over the time of deposition of the Mission Canyon beds, there is a series of linear beach/shoreline shoal deposits as well as flooding surfaces that are generally represented as laterally extensive markers.

Reservoir Barriers:

The reservoir has strong upper and lower anhydritic binding units. The upper anhydrite is laterally extensive and considered the Mississippian erosional surface cap. The erosional surface cap varies greatly in thickness but is generally secondary anhydrite that plugs and alters the wackestone to grainstone beds of the Mission Canyon. The lower reservoir binding beds are generally thinner anhydritic mudstone beds.

There are minor downdip lateral barriers to reservoir continuity; the available data from local well logs does not show any apparent lateral facies changes within the proposed unit that would result in significant lateral permeability barriers. The isopach contour map of the reservoir interval (Appendix 4) shows that the reservoir thickness remains consistent from 10 to 12 meters in the proposed unit.

Also, as mentioned above, there are no indications of any structural features that could set up any lateral permeability barriers within the proposed unit. The lack of lateral permeability barriers suggests this pool is well-suited for secondary oil recovery.

Structure:

The supplied structure contour map (Appendix 2 and 3) represents the observed current subsea elevation of the top of the Mission Canyon and the top of the MC3b. This current elevation is very typical across the northeast margins of the Willison basin and dips to the Southwest slightly with a strike, dip in this area of about N45°W, 89.5°SW.

Reservoir Quality and Characteristics

The net pay for this area was compiled through wireline logs and horizontal wells. Porosity for the area was calculated from the publicly available logs which include various generations of sonic, sonic corrected by the wireline operator and porosity calculated logs using the standard conversion methods, as well as cross-checked with cores.

$$\text{Sonic porosity} = \frac{\Delta t - \Delta t\text{martix}}{\Delta t \text{ water} - \Delta t \text{ matrix}}$$

- Δt = sonic travel time (log observed μs/m)
- Δt matrix = travel time of the rock matrix (LS sonic transit time 164μs/m (slumbered Por-3m charts)
- Δt water(fluid) = 620μs/m very little gas effect in this OOIP reservoir
- As well, the industry standard sonic conversion charts were used, and in this case, it was the Schlumberger Por-3 charts.
- The immediate area has very few vertical penetrations and fewer with core or core analysis; however, it is safe to assume there is some level of comparability in the area, the 2-30-2-28W1, 11-30-2-28W1, &, 4-34-2-28W1 Core analysis was used as the best porosity/permeability reference. The core analysis was used to back-check Sonic log porosity calculations and provided a greater level of accuracy.

OOIP and Methodology

Standard OOIP calculation was used for this project, the use of logs, regional knowledge, offsetting unit applications, well productivity, Core Analysis, cataloged water values, and resistivity were all incorporated to generate an OOIP estimation.

$$OOIP = 7758\ Ah\phi(1-Sw)/\ Boi$$

A=~320 acres
H= 5.0 – 9.0 m (16-30-ft)
ϕ = ave 12.0%

(1-Sw) Sw =60% (Decimal)

Sw is calculated with the standard Archie Equation, catalogue water, and corrected Rt

$$S_w = C * (R_w R_t / Por)^{1/2}$$

Sw = Saturation of Fm water
C = Constant = 1.0(carb)
Rw= Reservoir water 0.035 catalogue
Rt= Wireline resistivity (3-5ohm-m) -observed
Por = Porosity (ϕ) - observed/Calc

Core Analysis was not completed on any wells in this section. However, Core Analysis in the adjacent section with the Core Saturation was completed and is helpful in determining water saturation. Core saturation is a good method, but deriving an absolute fluid composition is not as reliable as we would like. The nature of core recovery, transport, time and final analysis all add to the variability of the result.

All the calculations in this area have been conducted in-house.

Historical Production

A historical group production history plot for the proposed South Pierson Unit No. 5 is shown as Figure 4. Oil production commenced from the proposed Unit area in June 2015. The unit was then drilled out over the next 2 years with 6 horizontal wells. Production peaked in February 2016 at 21.6 m^3 oil per day as shown in Figure 4. As of November 2025, production was 2.5 m^3 oil per day and 14.2 m^3 of water per day which is an 84.5% water cut.

From peak production in June 2015 to date, base oil production has declined 92.7%. After the initial flush production and typical cut change the annual rate of decline is 14.4**%** under the current Primary Production method.

High decline from initial production and reduced inflow to the wells indicate the need for pressure restoration and maintenance. Waterflooding is deemed to be the most efficient means of introducing energy back into the system, thus increasing production and recovering additional oil from the area.

UNITIZATION

Unitization and implementation of a Waterflood EOR project is forecasted to double overall recovery of OOIP from the proposed project area.

Unit Name

MRL 2 Ltd. proposes that the official name of the new Unit shall be South Pierson Unit No. 5.

Unit Operator

MRL 2 Ltd. will be the Operator of record for South Pierson Unit No. 5.

Unitized Zone

The Unitized zone to be Waterflooded in South Pierson Unit No. 5 will be the Mission Canyon 3B formation.

Unit Wells

The 6 horizontal wells to be included in the proposed South Pierson Unit No. 5 are outlined below.

UWI	License #
100/01-29-002-28W1/00	10482
102/01-29-002-28W1/00	10521
103/01-29-002-28W1/00	10569
102/04-29-002-28W1/00	10335
104/04-29-002-28W1/00	10568
100/08-29-002-28W1/00	10752

Unit Lands

The South Pierson Unit No. 5 will consist of 8 LSDs as follows:

- SE Section 29, Township 2, Range 28 West of the first Meridian, LSDs 1, 2, 7 and 8
- SW Section 29, Township 2, Range 28 West of the first Meridian, LSDs 3, 4, 5 and 6

Tract Factors

The proposed South Pierson Unit No. 5 will consist of 8 Tracts. The tracts will be the South Half of Section 29-02-28W1

The Tracts will consists of the two south quarters, SE 29-2-28W1 and SW 29-2-28W1. Which include the following 8 LSD 1, 2, 7, 8 and 3, 4, 5, 6 Township 2 Range 28 West of the First Meridain.

The Tract Factor contribution for each of the LSDs within the proposed South Pierson Unit No. 5 was calculated as follows:

• Gross OOIP by LSD, minus cumulative production to date for the LSD as distributed by the LSD specific Production Allocation (PA)% in the applicable producing horizontal or vertical well (to yield Remaining Gross OOIP).

• Last twelve (12) months production to date for the LSD as distributed by the LSD specific PA% in the applicable producing horizontal or vertical well.

• Tract Factor by LSD = Fifty percent (50%) of the product of Remaining Gross OOIP by LSD as a percentage of total proposed Unit Remaining Gross OOIP, and fifty percent (50%) of the product of the Last 12 Months Production as a percent of total proposed Unit Last 12 Months Production.

Tract Factor calculations for all individual LSDs based on the above methodology are outlined within Table 2. In the past, multiple methods of assigning tract participation factors have been used in the area. MRL 2 Ltd. believes that the method provided above has become the area standard. This method provides the most equitable assignment of tract participation factors to all mineral owners, given the geological, reservoir and well completion risks associated with water flooding horizontal to horizontal wellbores in MC3b formation.

Working Interest Owners

Table 1 outlines the working interest (WI) for each recommended Tract within the proposed South Pierson Unit No. 5. MRL 2 Ltd. holds a 100% WI ownership in all the proposed Tracts.

WATERFLOOD EOR DEVELOPMENT

Technical Studies

The waterflood performance predictions for the proposed South Pierson Unit No. 5 Mission Canyon 3B project are based on internal engineering assessments, as well as empirically observed waterflood performance in nearby waterflood units. MRL 2 Ltd. has analyzed the waterflood responses from North Pierson Unit No. 1 and North Pierson Unit No. 3. The existing waterfloods have up to 10 years of data. The floods have used horizontal injectors and horizontal producers. The floods have all been successful in increasing cumulative oil production. The floods have utilized source water from different zones and treated produced water.

Horizontal Injection Wells and EOR Development

Primary production from the proposed South Pierson Unit No. 5 was developed with horizontal wells. The area was developed primarily with half mile horizontal legs on roughly 40 acre spacings. The last drill in the proposed unit was approximately a mile long lateral to increase capital efficiencies. 40 acre spacing equates to approximately 200 m between the well bores. Primary development is complete in South Pierson Unit No. 5.

MRL 2 Ltd. believes 40 acre spacing is ideal for horizontal injection to horizontal production. As such two wells will be converted from production to injection.

MRL 2 Ltd. will monitor injection pressures, injection rates, reservoir pressure, fluid production and decline rates in the pattern to optimize performance.

Reserves Recovery Profiles and Production Forecasts

The primary production waterflood performance predictions for the proposed South Pierson Unit No. 5 are based on oil production decline curve analysis. The secondary predictions are based primarily on internal engineering analysis. The engineering analysis focused on voidage replacement, current reservoir pressure and empirical data from existing offset projects.

Primary Production Forecast

Cumulative allocated production to the end of November 2025 from the 6 wells within the proposed South Pierson Unit No. 5 project area was **24.2** e^3m^3 (152.2 Mbbl) of oil, representing a **6.6%** recovery of the Net OOIP.

Ultimate Primary Production oil reserves recovery for South Pierson Unit No. 5 has been estimated to be **27.2** e^3m^3 or a **7.4%** recovery of OOIP. Remaining primary production reserves has been estimated to be **3.0** e^3m^3 to the end of February 2031.

Estimated Ultimate Recovery (EUR) of oil reserves under Waterflood EOR for the proposed South Pierson Unit No. 5 has been calculated to be **50.3** e^3m^3 **(316.3** Mbbl), with **26.1** e^3m^3 **(164.2** Mbbl) remaining. An incremental **23.1** e^3m^3 (145.5 Mbbl) of oil reserves, or **6.3%,** are forecasted to be recovered under the proposed Unitization and Waterflood EOR production vs the existing Primary Production method. The total recovery factor under Waterfood EOR in the proposed South Pierson No. 5 is estimated to be **13.7%** of OOIP.

The expected production decline and forecasted cumulative oil recovery under continued Primary Production is shown in Figure 5.

Timing for Conversion of Horizontal Wells to Water Injection

Upon approval of the enhanced oil recovery waterflood application and unitization, MRL 2 Ltd. will commence conversion of the production wells to injection wells. MRL 2 Ltd. anticipates the timing to the third quarter of 2026.

Conversion to Water Injection Well

MRL 2 Ltd. has monitored production rates and static bottom hole pressures in the proposed South Pierson Unit No. 5. Static bottom hole pressures have declined to 3,000-3,900 Kpa. Production in the unit has declined 92% from a peak of 21.6 m3 (OPD) in June of 2016 to 2.5 m3 (OPD) in October 2026 The wells converted to injection will create a pattern of producer, injector, producer. As such the following two wells are ready for injection conversion; 100/01-29-02-28W1 and 104/04-29-2-28W1

The above pattern allows for the proposed South Pierson Unit No. 5 project to be developed equitably, efficiently, and start the waterflood as quickly as possible. It also provides the Unit Operator flexibility to manage the reservoir conditions and respond to the conditions to ensure maximum recovery of reserves.

Injection wells for the proposed South Pierson Unit No. 5 will be converted from declined and depressurized production wells. The wells are conventional horizontals and have been open hole completed. The production equipment will be removed from the wells and will be configured for injection with an injection packer and corrosion resistant tubing as shown in Figure 7.

All injection wells will be equipped with injection volume metering and rate/pressure control. An operating procedure for monitoring water injection volumes and meter balancing will also be utilized to monitor the entire system for volume measurement and integrity on a daily basis.

The proposed South Pierson Unit No. 5 horizontal water injection well rate is forecasted to average 10 - 40 m^3 water per day, based on expected reservoir permeability and pressure.

Estimated Fracture Pressure

Completion data from the existing producing wells within the project area indicate an actual fracture pressure gradient range of 17.0 to 18.0 kPa/m true vertical depth (TVD).

WATERFLOOD OPERATING STRATEGY

Water Source

The proposed injection water for the South Pierson Unit No. 5 is produced water from the MRL 2-29-2-28W1 Battery. The produced water at 2-29 Battery is a blend of Mission Canyon 3B and Lower Amaranth waters. The water is cleaned through vessel and tank treating. An electrical driven triplex pump at the battery will generate the pressure needed to supply the injection system. A diagram of the injection system is shown in Figure 6.

Based on past experience, MRL 2 Ltd. believes that the produced water can be cleaned to the required specifications. The conventional Mission Canyon 3B reservoir has much higher permeability in comparison to the lower amaranth and does not foul with produced water injection.

Produced waters from the 2-29-2-28W1 Battery has been extensively tested for compatibility with Mission Canyon 3B fluids, by qualified third party Labs. All potential mixture ratios between the two waters, under a range of temperatures, have been simulated and evaluated for scaling and precipitate producing tendencies. Testing of multiple scale inhibitors has also been conducted and minimum inhibition concentration requirements for the source water volume determined. MRL 2 Ltd. plans to utilize continuous scale inhibitor into the injection wells. Routine sampling and analysis of the 2-29-2-28W1 produced battery water will be part of the waterflood maintenance program.

All new water injection wells will be equipped with injection volume metering and rate/pressure control. An operating procedure for monitoring water injection volumes and meter balancing will also be utilized to monitor the entire system for volume and integrity on a daily basis.

Reservoir Pressure

No representative initial pressure surveys are available for the proposed South Pierson Unit No. 5 project area in the Mission Canyon 3B production zone. The long shut-in and build-up times required to obtain a representative reservoir pressure were economically prohibitive at the time of drilling these locations. A Drill Stem Test was completed while drilling 100/02-29-002-28W1 yielded initial Reservoir Pressure at 9,058 to 9,439 Kpa. As expected this is in line with the Mission Canyon 3B being slightly lower than normally pressured. As such we have lost two thirds of our initial reservoir drive. The Mission Canyon 3B is assumed to be a solution gas drive reservoir in the area. With a low gas oil ratio 27 scm/m it is no surprise the reservoir pressure has declined and needs pressure maintenance to support continued production.

Reservoir Pressure Management during Waterflood

MRL 2 Ltd. expects it will take 2-4 years to re-pressurize the reservoir due to cumulative primary production voidage and pressure depletion. Initial monthly Voidage Replacement Ratio (VRR) is expected to be approximately 1.5 to 2 within the patterns during the fill up period. As the cumulative VRR approaches 1, target reservoir operating pressure for waterflood operations will be 75-90% of original reservoir pressure.

Waterflood Surveillance and Optimization

South Pierson Unit No. 5 waterflood surveillance and optimization will consist of the following:

- Regular Production well rate and WC testing.
- Daily water injection rate and pressure monitoring vs target.
- Water injection rate/pressure/time vs. cumulative injection plot.
- Reservoir pressure surveys as required to establish pressure trends Pattern VRR.
- Potential use of chemical tracers to track water injector/producer responses.
- Use of some or all of: Water Oil Ratio (WOR) trends, Log WOR vs Cum

  Oil, Hydrocarbon Pore Volumes Injected, Conformance Plot.

The above surveillance methods will provide an increasing understanding of reservoir performance and provide data to continually control and optimize the South Pierson Unit No. 5 waterflood operation.

Controlling the waterflood operation will significantly reduce or eliminate the potential for out-of-zone injection, undesired channeling, water breakthrough, or migration. The monitoring and surveillance will also provide early indicators of any such issues so that waterflood operations may be altered to maximize ultimate secondary reserves recovery from the proposed South Pierson Unit No. 5.

On Going Reservoir Pressure Surveys

Any pressures taken during the operation of the proposed unit will be reported within the Annual Progress Reports for South Pierson Unit No. 5 as per Section 73 of the Drilling and Production Regulation.

Economic Limits

Under the current Primary Recovery method, existing wells within the proposed South Pierson Unit No. 5 will be deemed uneconomic when the net oil rate and net oil price revenue stream becomes less than the current producing operating costs. With any positive oil production response under the proposed Secondary Recovery method, the economic limit will be significantly pushed out into the future. The actual economic cut-off point will then again be a function of net oil price, the magnitude and duration of production rate response to the waterflood, and then current operating costs. Waterflood projects generally become uneconomic to operate when Water Oil Ratios (WOR's) exceed 100.

WATER INJECTION FACILITIES

South Pierson Unit No. 5 waterflood operation utilized traditional water injection facility. The existing 2-29-2-28W1 disposal triplex will be utilized to generate pressure for injection. The injection wells will be completed with manual chokes and volume meters. As such the existing disposal system can also be utilized for injection. We will be able to divert the appropriate volume of produced water into the injectors to meet our voidage replacement and pressure targets.

The source to injection system is laid out in Figure 6. A complete description of all planned system design and operational practices to prevent corrosion related failures are shown in Figure 8.

NOTIFICATION OF MINERAL AND SURFACE RIGHTS OWNERS

MRL 2 Ltd. is in the process of notifying all mineral rights and surface rights owners of the proposed EOR project and formation of South Pierson Unit No. 5. Copies of the notices and proof of service, to all surface and mineral rights owners will be forwarded to the Petroleum Branch when available, to complete the South Pierson No. 5 application.

South Pierson No. 5 Unitization, and execution of the formal South Pierson Unit No. 5 Agreement by affected Mineral Owners, is expected during Q2 2026. Copies of same will be forwarded to the Petroleum Branch, when available, to complete the South Pierson Unit No. 5 Application.

Should the Petroleum Branch have further questions or require more information, please contact Greg Barrows, 204-522-5132 or by email at gbarrows@melitaresources.com.

MRL 2 Ltd.

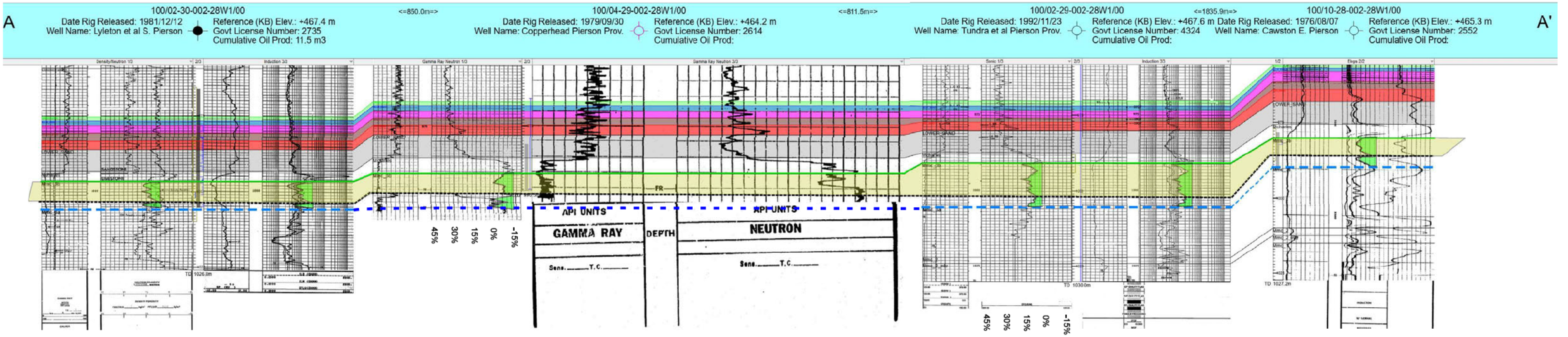
[redacted]

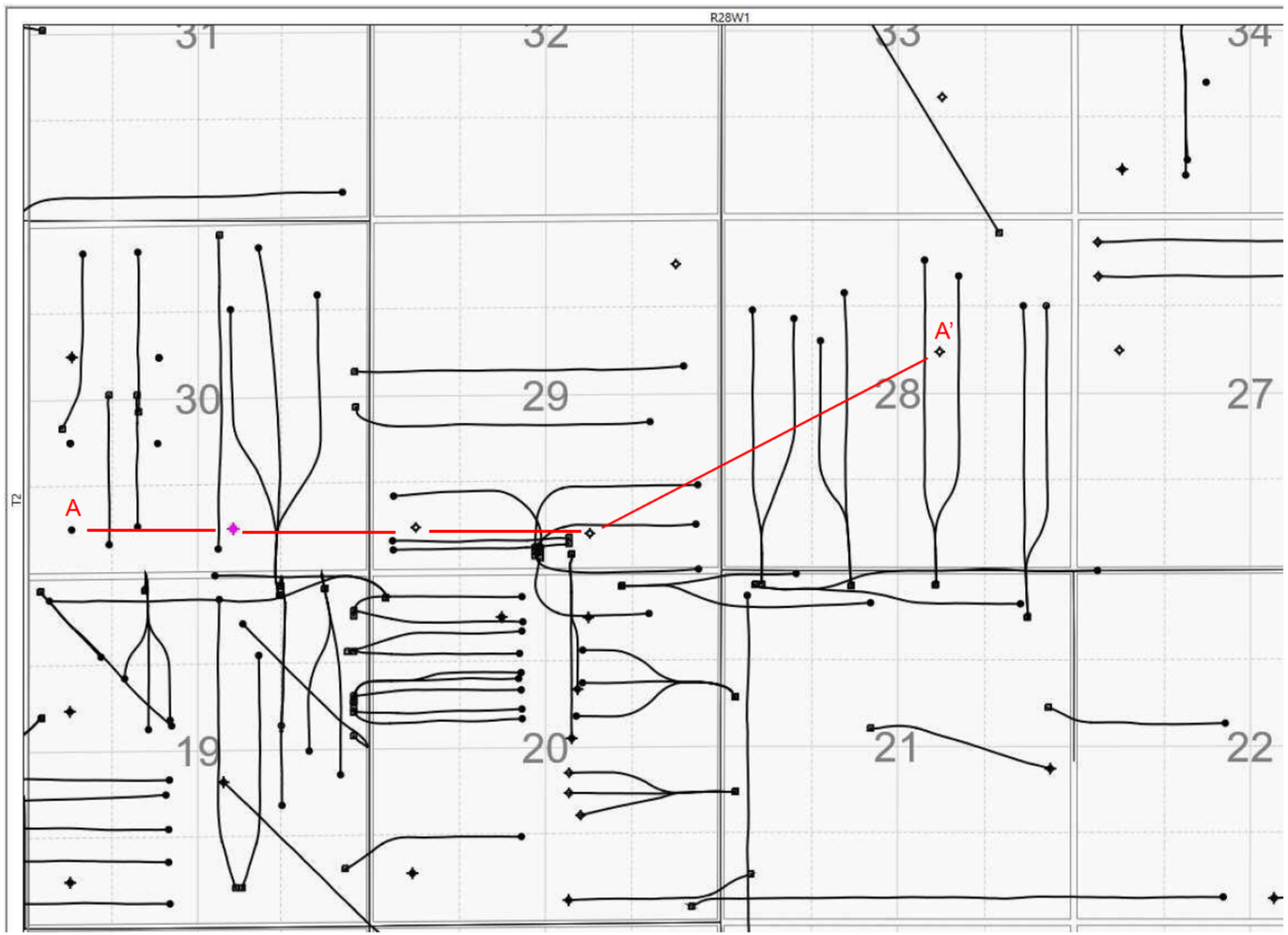
Original Signed by Greg Barrows, Jan 15, 2026, in Melita, MB

Proposed South Pierson Unit No. 5

Application for Enhanced Oil Recovery Waterflood Project

List of Appendices





Datum Sea Level

Appendix 1

29-2-28 Cross Section

Legend

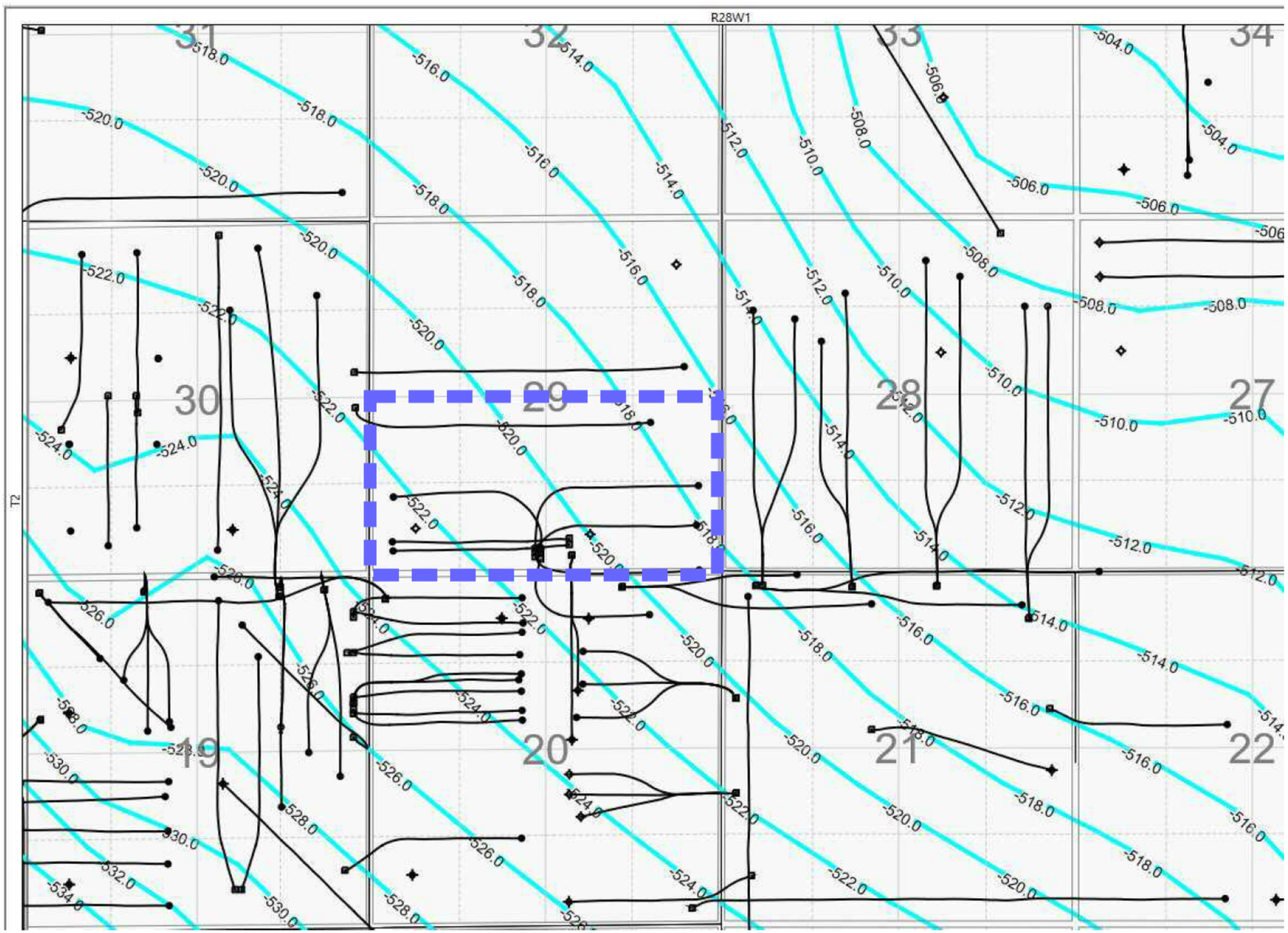
- Green Sand
- Blue Sand
- Purple Sand
- Brown Sand
- Red Sand
- Lower Sand

Locally named Spearfish

- MC Charles or Miss Unconformity
- MC 3b
- inter un-named tight streak

Waterflood Target Zone

Waterflood Area



29-2-28 Mission Canyon Top

Legend

- Green Sand
- Blue Sand
- Purple Sand
- Brown Sand
- Red Sand
- Lower Sand

Locally named Spearfish zones

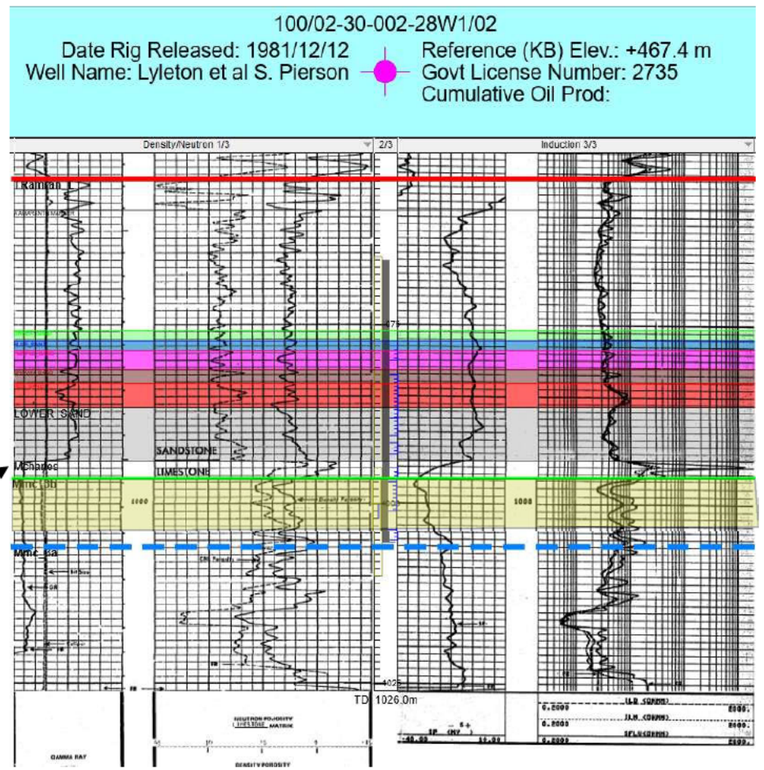
- MC Charles or Miss Unconformity
- MC 3b
- inter un-named tight streak

Waterflood Target Zone

Waterflood Area

Appendix 2

Charles Top



29-2-28 MC-3b Top

Legend

- Green Sand
- Blue Sand
- Purple Sand
- Brown Sand
- Red Sand
- Lower Sand

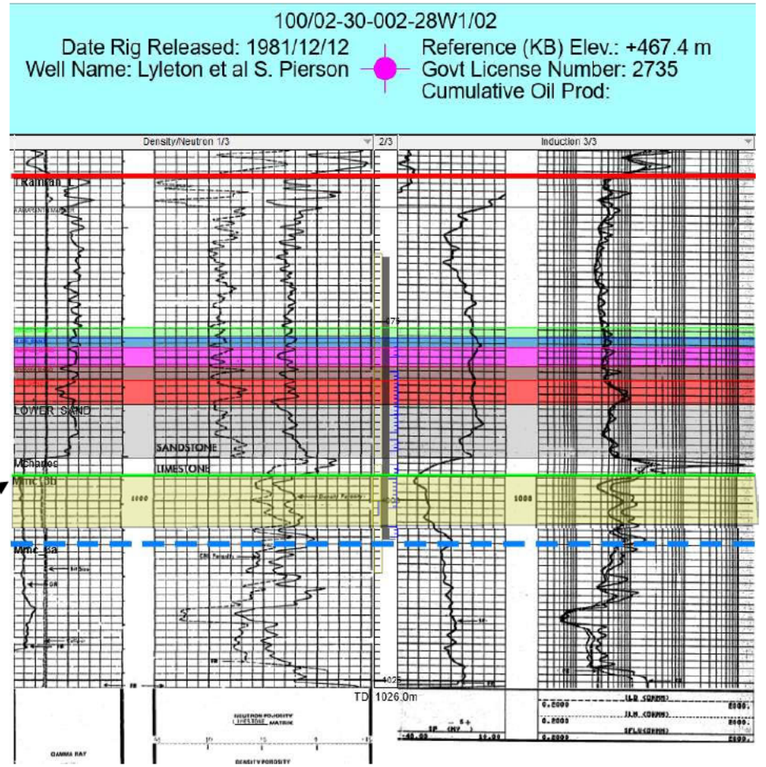
Locally named Spearfish zones

MC Charles or Miss Unconformity
MC 3b
inter un-named tight streak

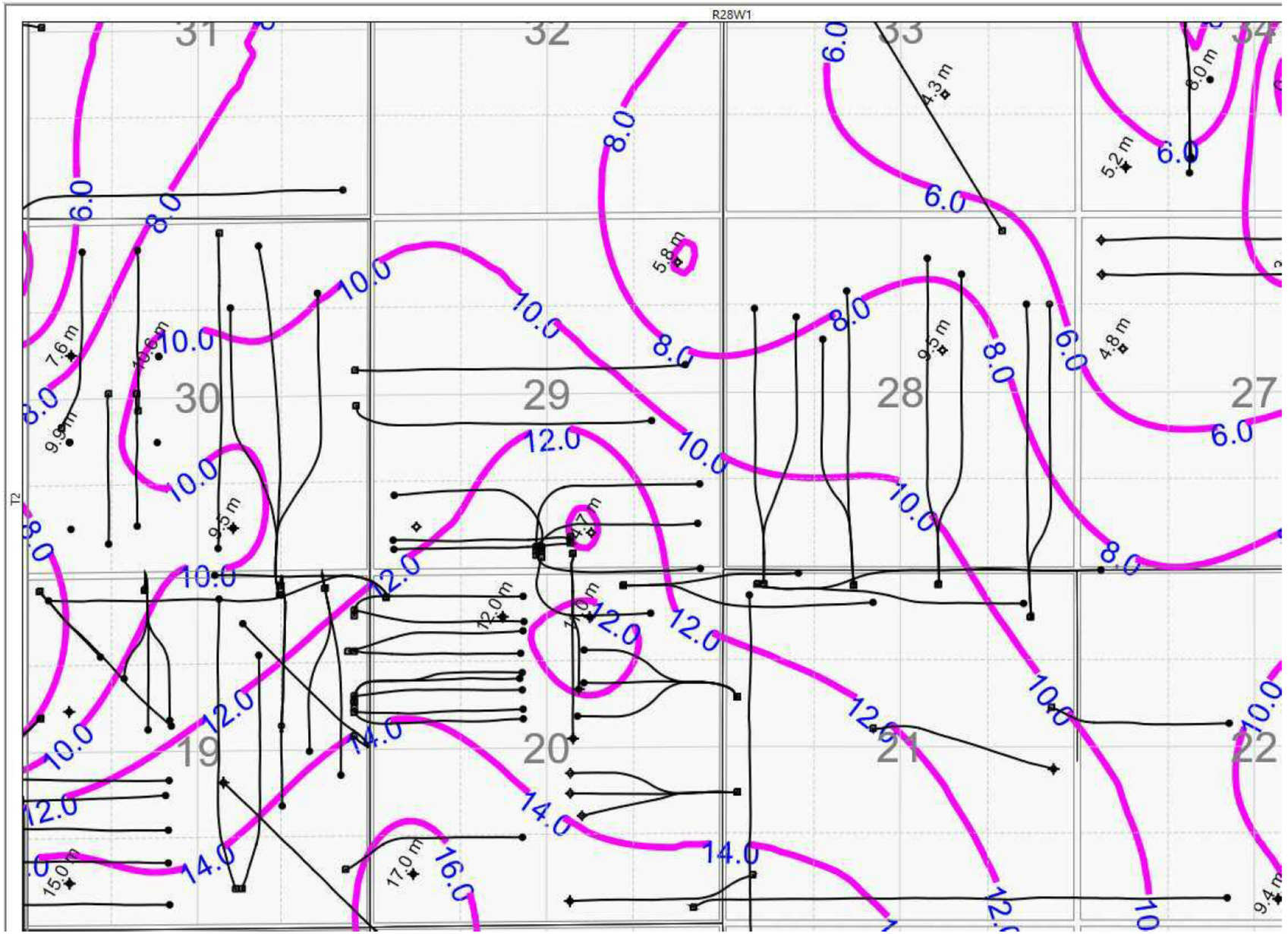
Waterflood Target Zone

Waterflood Area

Appendix 3



MC 3b Top



29-2-28 MC-3b Top to Internal Tight Streak (gross) (M)

Legend

- Green Sand
- Blue Sand
- Purple Sand
- Brown Sand
- Red Sand
- Lower Sand

Locally named Spearfish zones

- MC Charles or Miss Unconformity
- MC 3b
- inter un-named tight streak

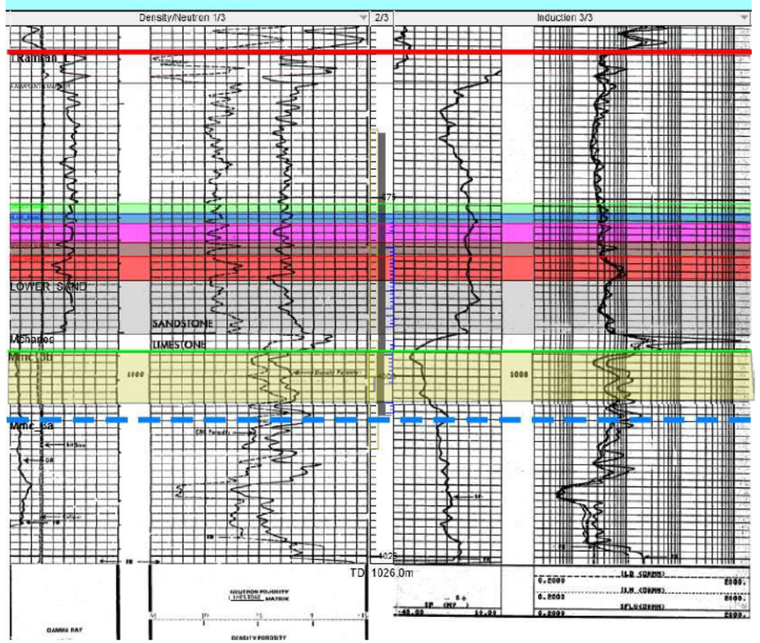
Waterflood Target Zone

Waterflood Area

100/02-30-002-28W1/02

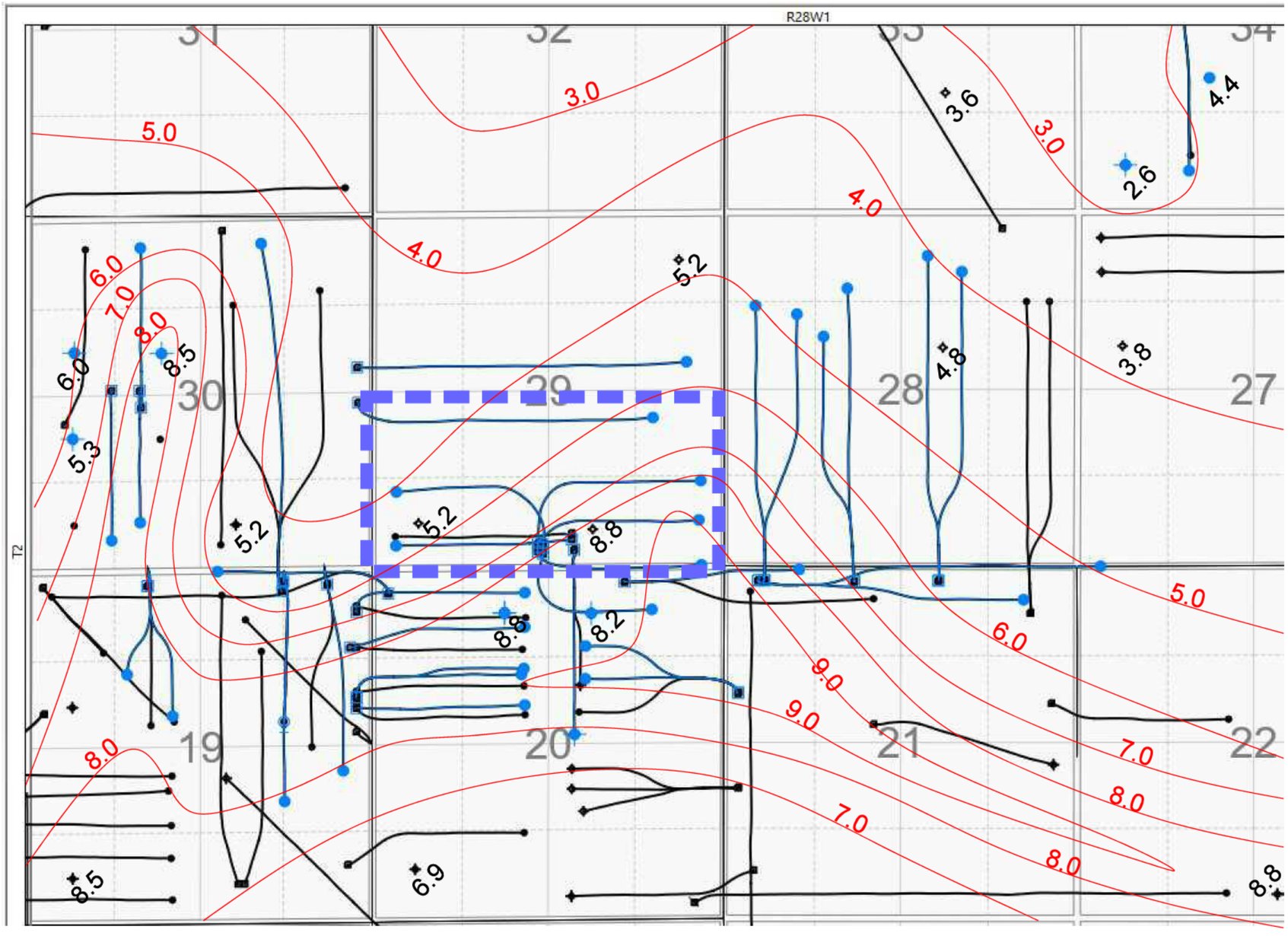
Date Rig Released: 1981/12/12
Well Name: Lyleton et al S. Pierson

Reference (KB) Elev.: +467.4 m
Govt License Number: 2735
Cumulative Oil Prod:



Isopach

Appendix 4



29-2-28 MC-3b Isopach Net Pay (M)

Legend

- Green Sand
- Blue Sand
- Purple Sand
- Brown Sand
- Red Sand
- Lower Sand

Locally named Spearfish zones

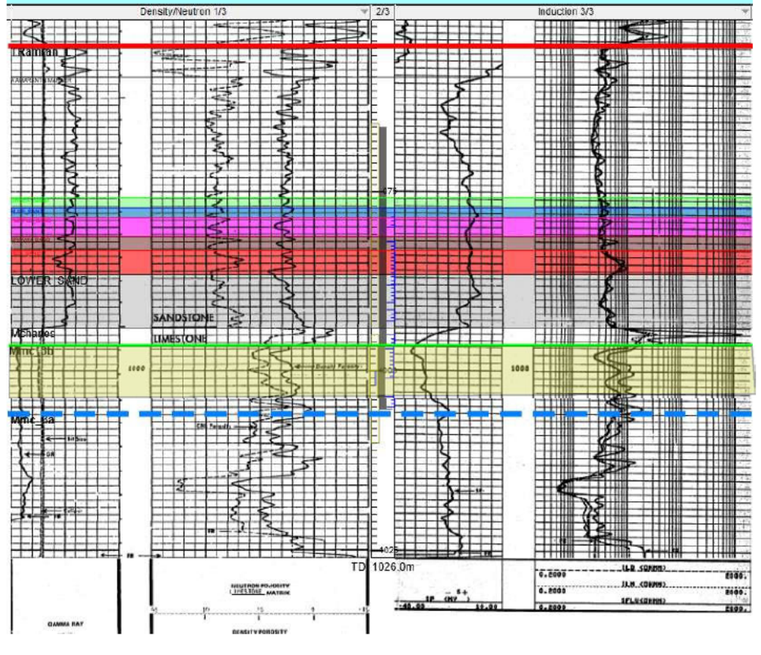
- MC Charles or Miss Unconformity
- MC 3b
- inter un-named tight streak

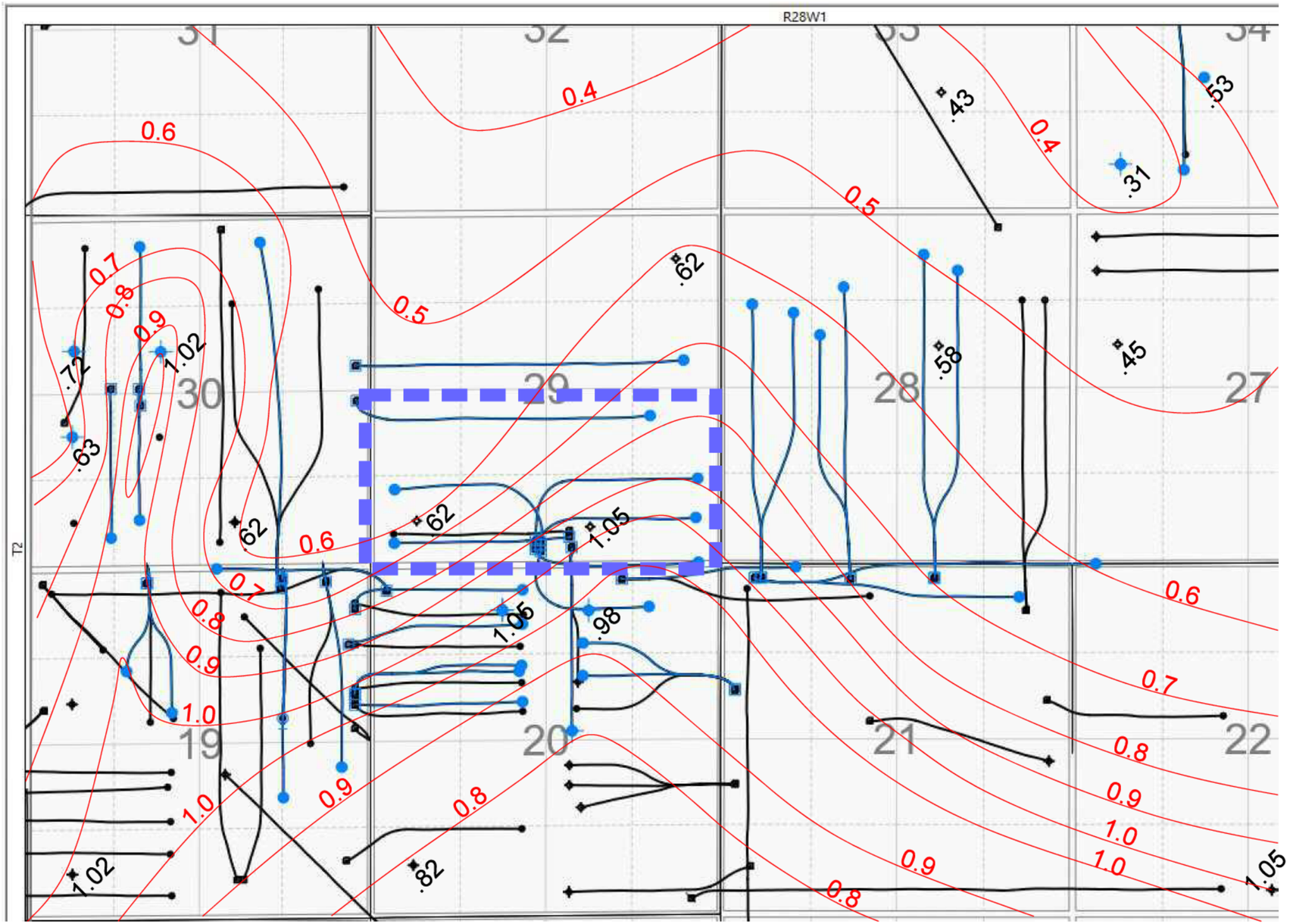
Waterflood Target Zone

Waterflood Area

Appendix 5

Isopach





29-2-28 MC-3b Isopach Porosity Height (M)

Legend

- Green Sand
- Blue Sand
- Purple Sand
- Brown Sand
- Red Sand
- Lower Sand

Locally named Spearfish zones

- MC Charles or Miss Unconformity
- MC 3b
- inter un-named tight streak

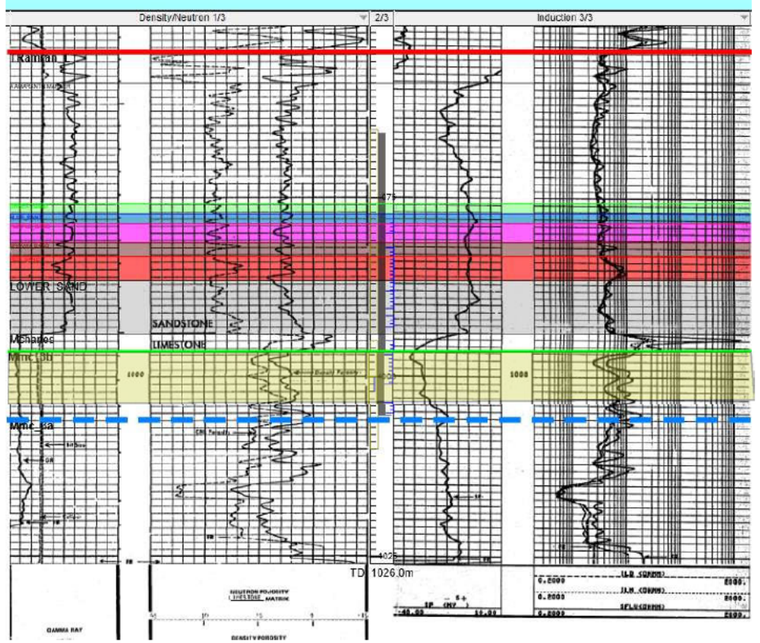
Waterflood Target Zone

Waterflood Area

100/02-30-002-28W1/02

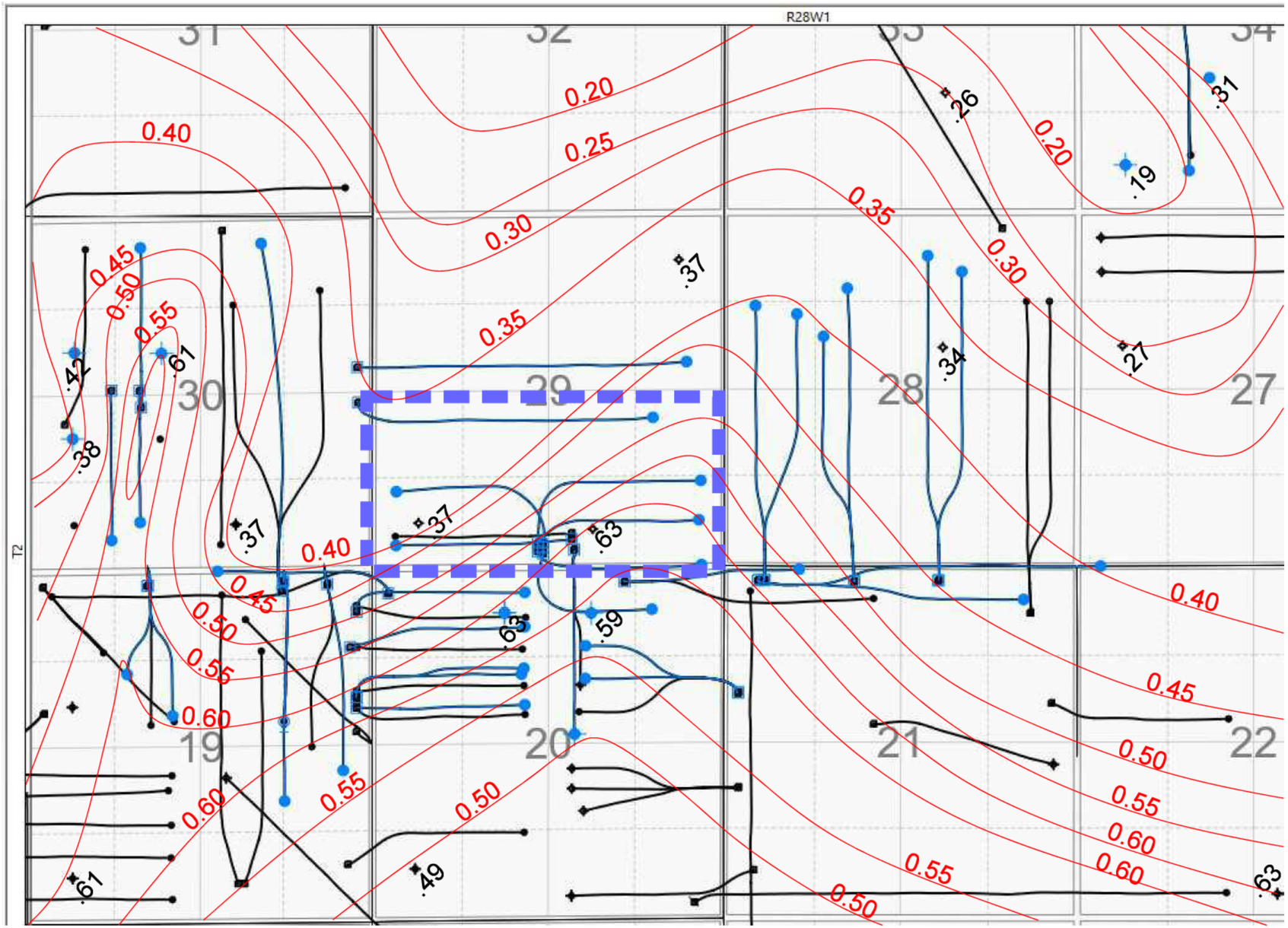
Date Rig Released: 1981/12/12
Well Name: Lyleton et al S. Pierson

Reference (KB) Elev.: +467.4 m
Govt License Number: 2735
Cumulative Oil Prod:



Isopach Por x h

Appendix 6



29-2-28 MC-3b Isopach HC Porosity Vol (M)

Legend

- Green Sand
- Blue Sand
- Purple Sand
- Brown Sand
- Red Sand
- Lower Sand

Locally named Spearfish zones

- MC Charles or Miss Unconformity
- MC 3b
- inter un-named tight streak

Waterflood Target Zone

Waterflood Area

100/02-30-002-28W1/02

Date Rig Released: 1981/12/12
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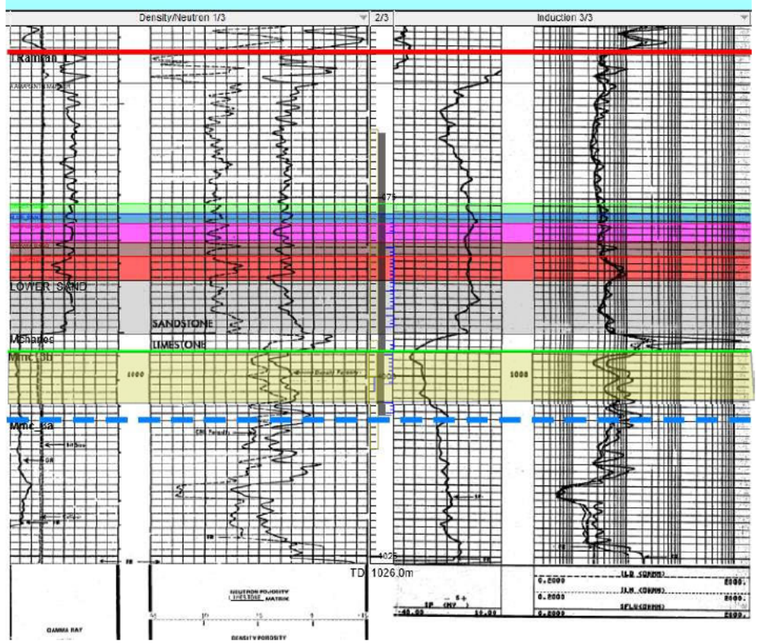
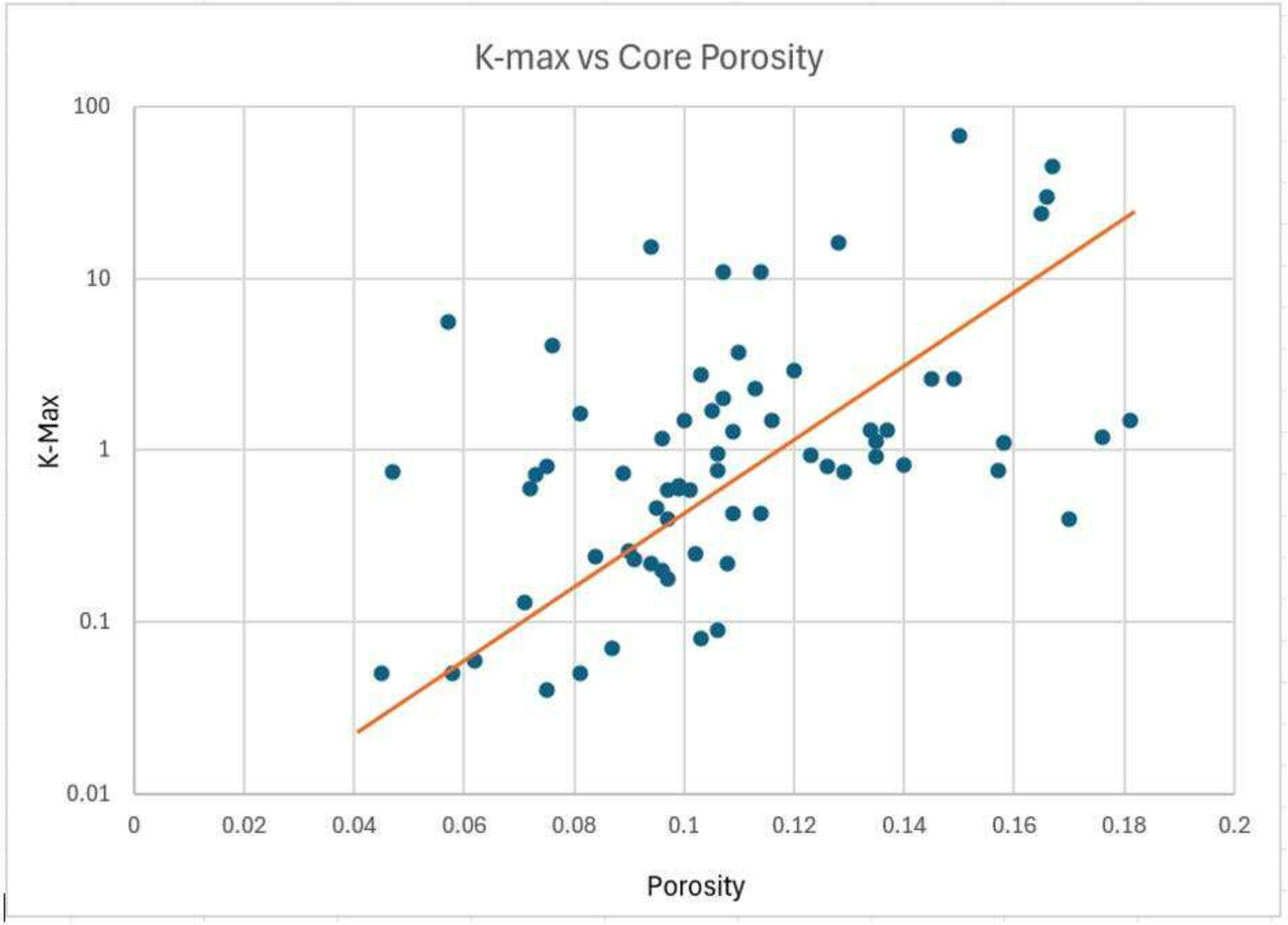


Isopach Por x h x Sat

Appendix 7

Appendix 8



4-29-2-28
2-30-2-28
4-34-2-28

Proposed South Pierson Unit No. 5

Application for Enhanced Oil Recovery Waterflood Project

List of Figures

Figure 1: Pierson Field (07) Area Map

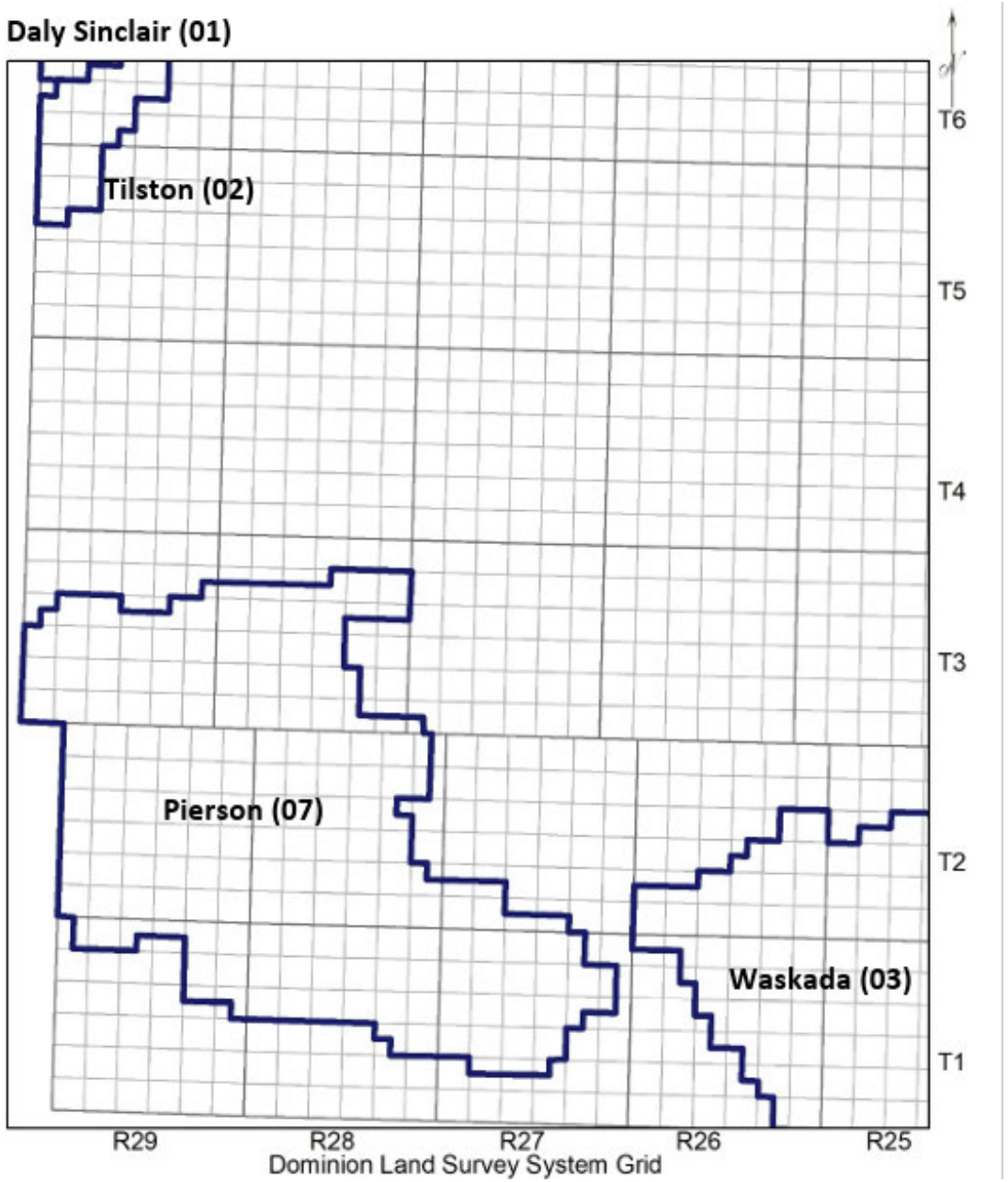


Figure 2: South Pierson Unit No. 5 Boundary

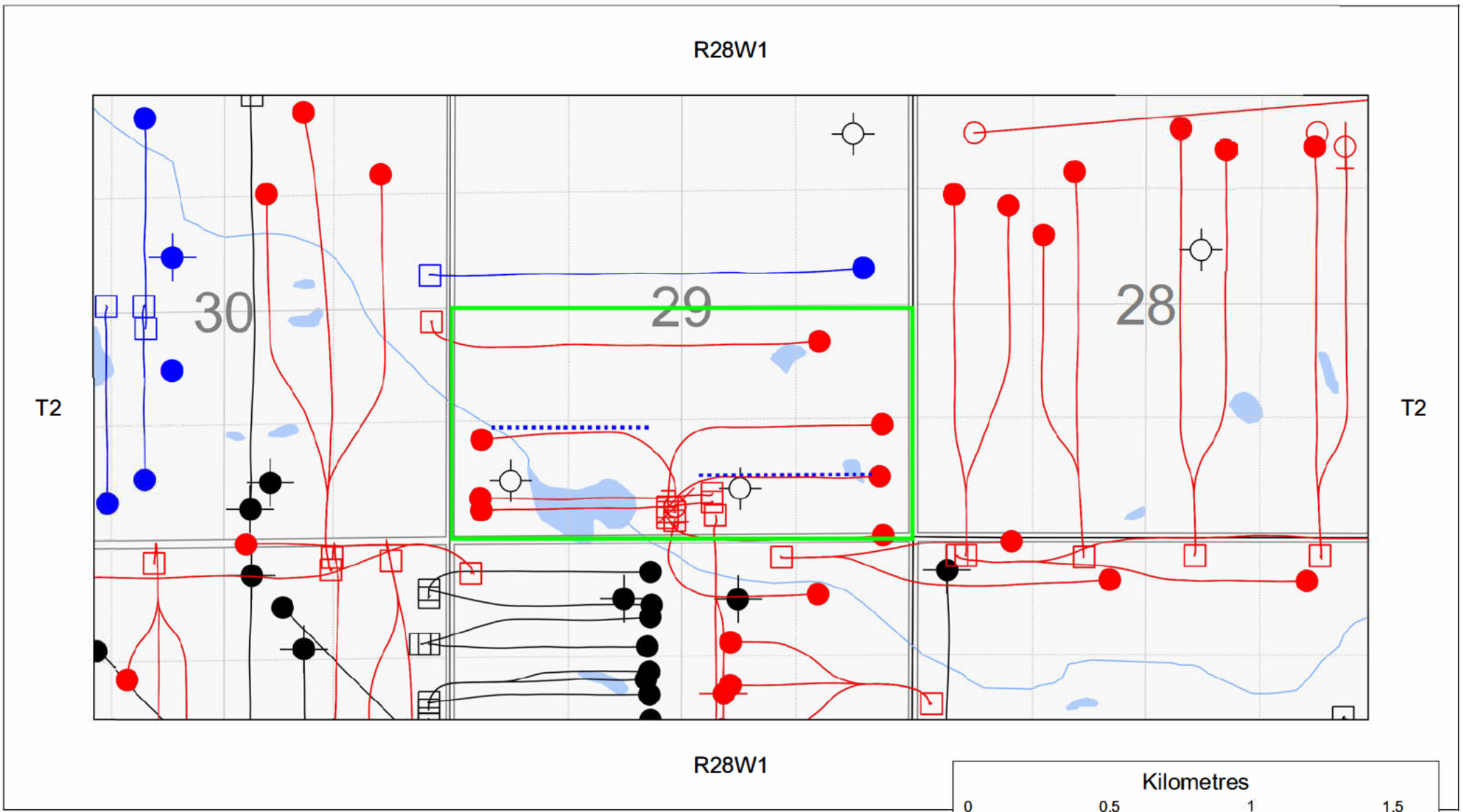


Figure 3: Pierson Mission Canyon 3B Map

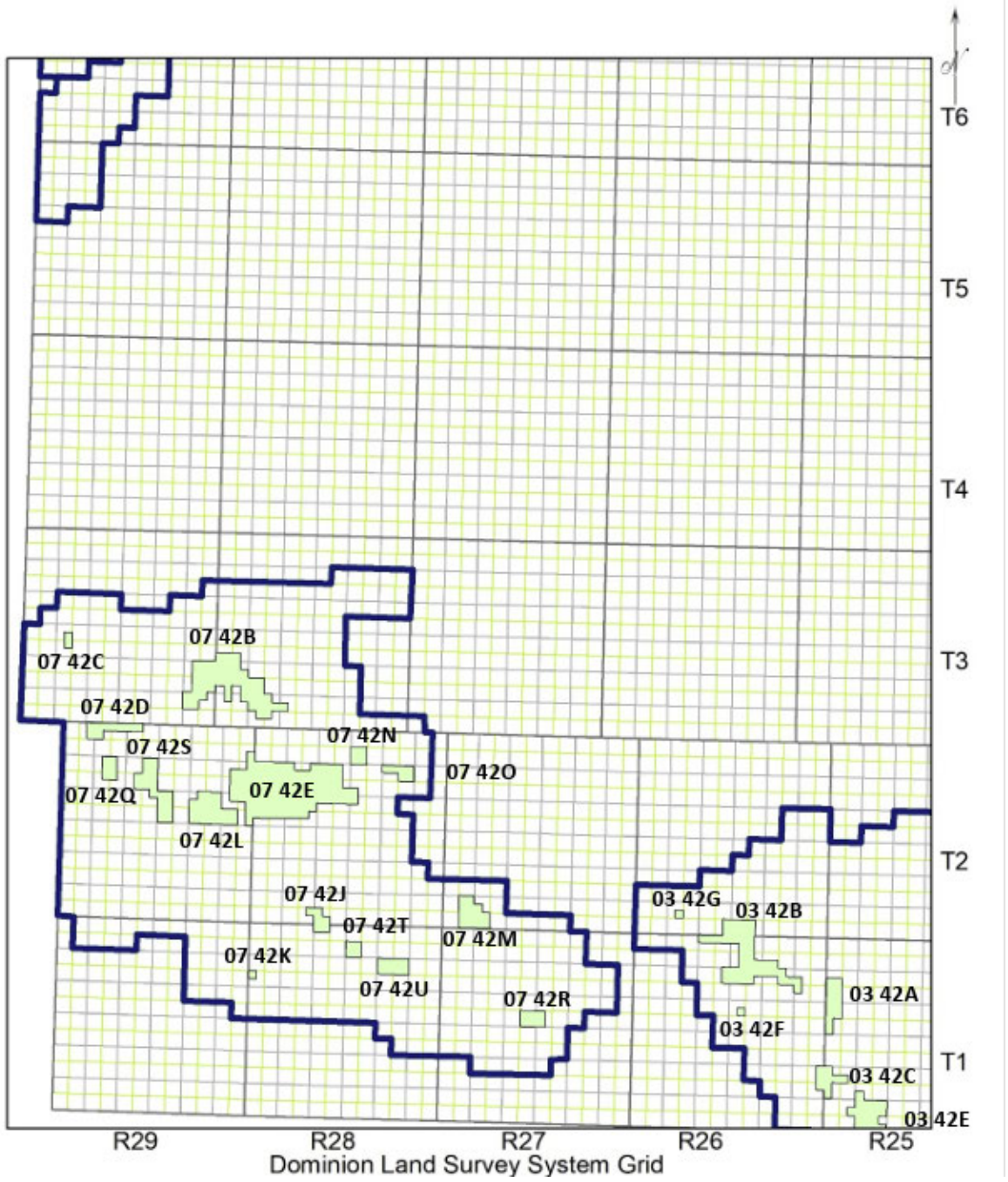


Figure 4: South Pierson Unit No. 5 Production Plot

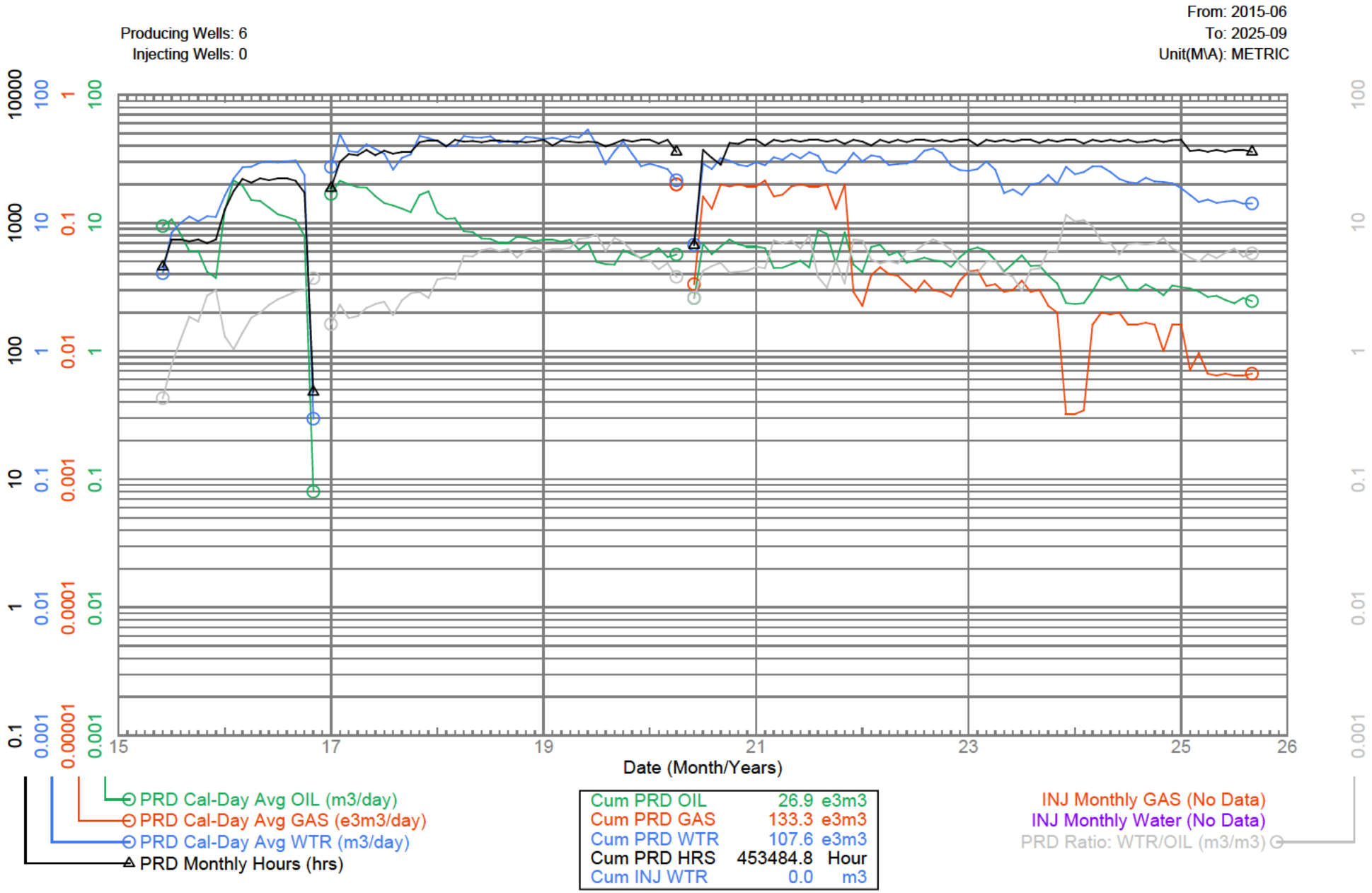


Figure 5: South Pierson Unit No. 5 Production Forecast

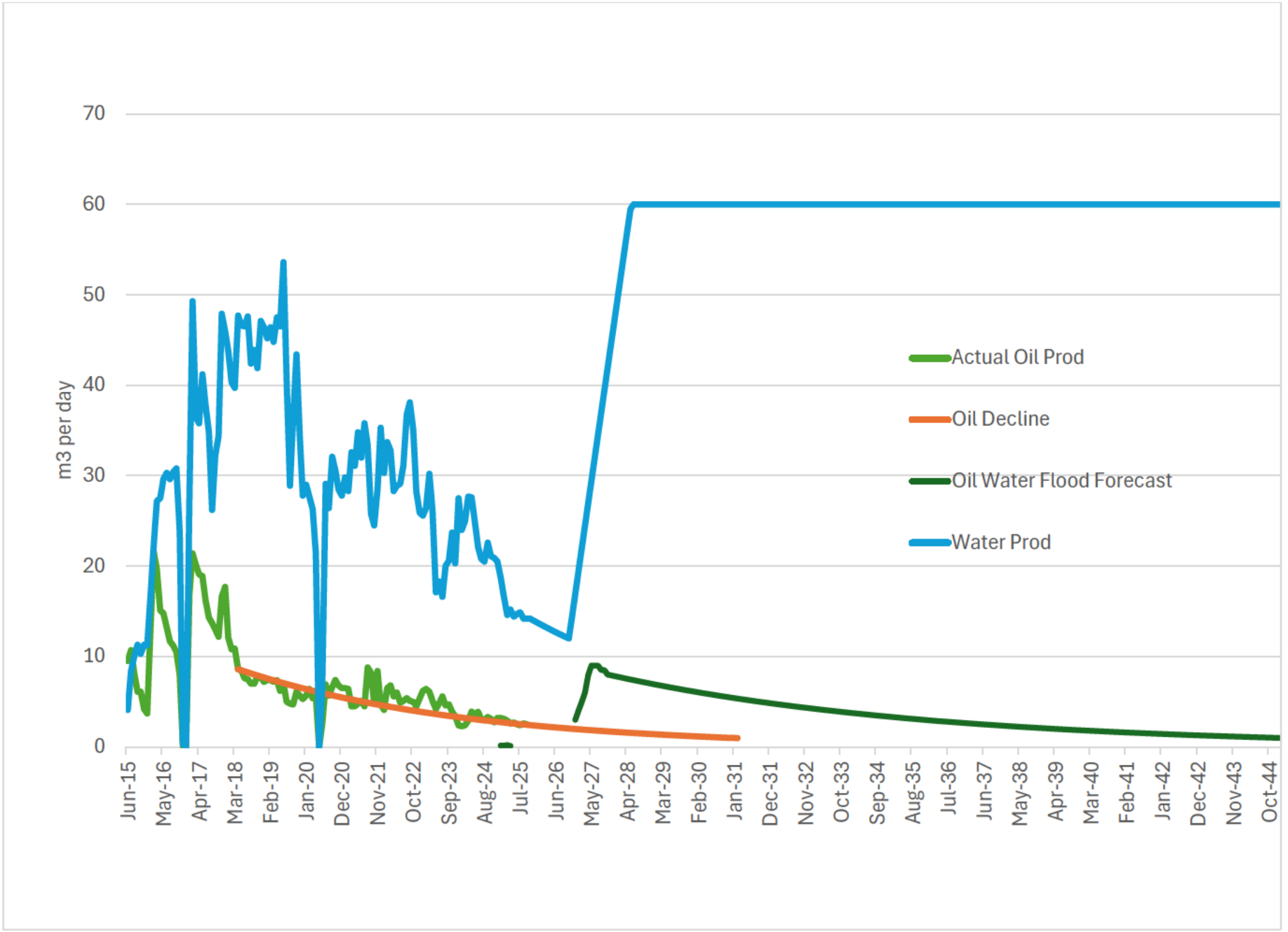
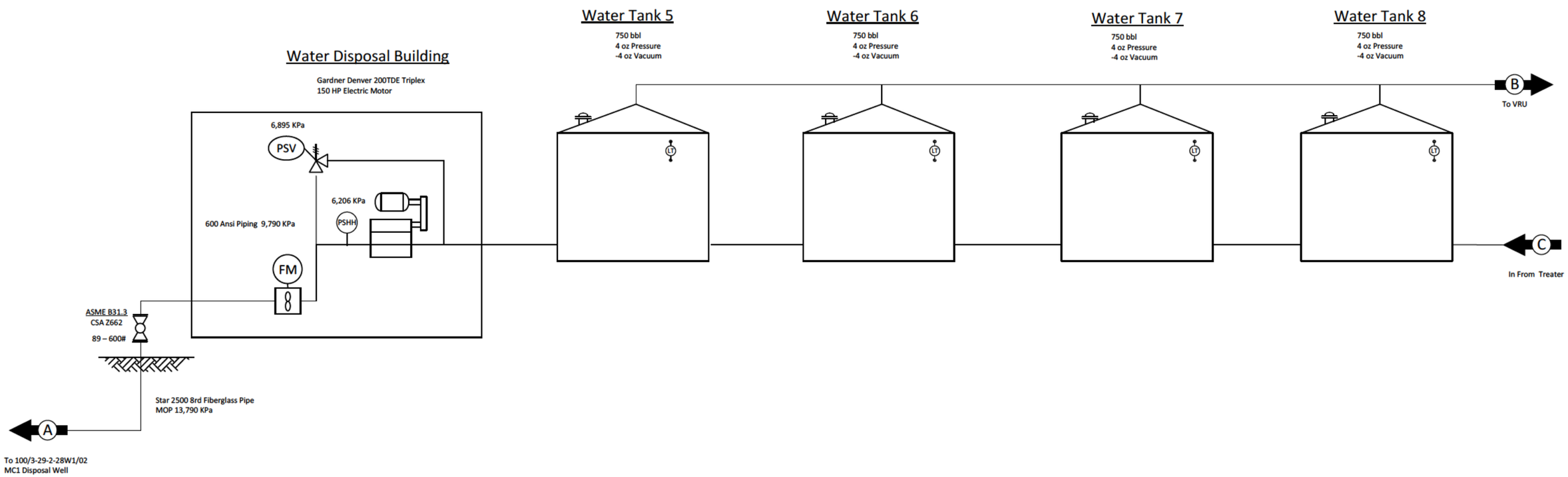


Figure 6: Water Injection System



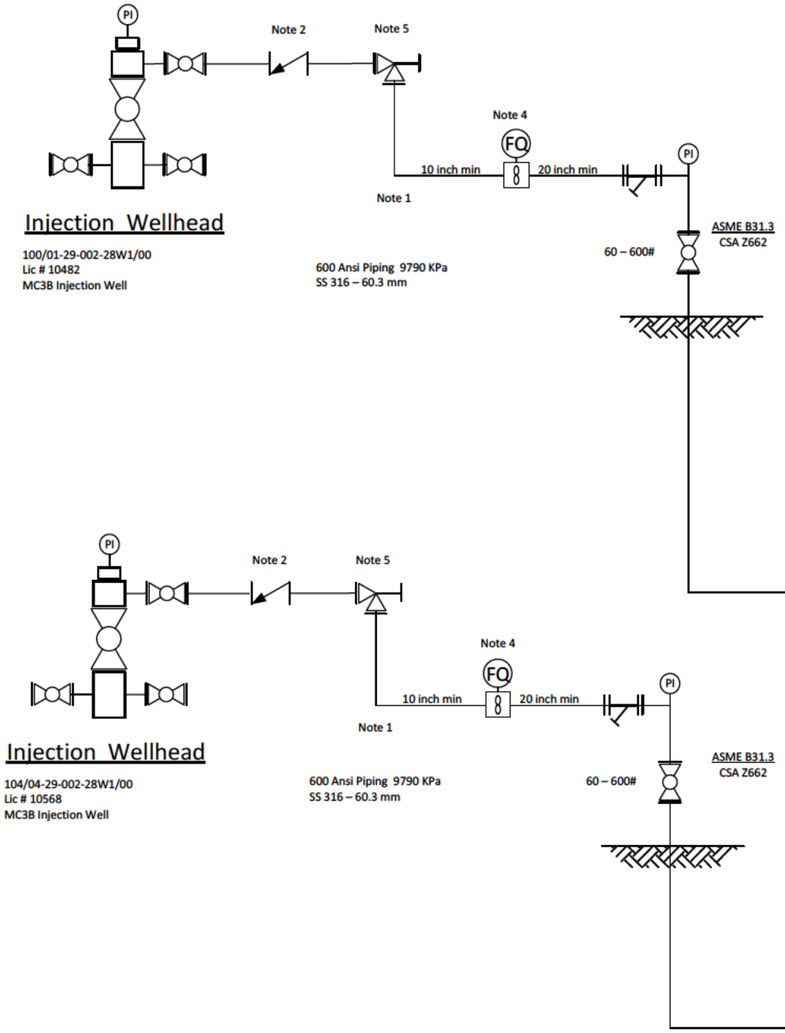
REV.	DESCRIPTION	DRAWN	DATE MM/DD/YY	CHECKED	APP.
0	ISSUED FOR REVIEW				

TITLE: 2-29-2-28W1 Battery
Water Injection
Process Flow Diagram

SCALE	PAGE	DRAWING NO.	REV.
NTS	1 OF 2		0

Melita Resources LTD.

Figure 6: Water Injection System



Note 1: Above Ground Piping will be insulated to protect against freezing
Note 2: 600 ANSI Wafer Check SS 316
Note 3: 2 x 1.5 inch Wafer Style Turbine Meter
Note 4: 2 x 0.5 inch Wafer Style Turbine Meter
Note 5: Adjustable Angle Choke

REV.	DESCRIPTION	DRAWN	DATE MM/DD/YY	CHECKED	APP.
0	ISSUED FOR REVIEW				

TITLE: 2-29-2-28W1 Battery
Water Injection
Process Flow Diagram

SCALE	PAGE	DRAWING NO.	REV.
NTS	2 OF 2		0

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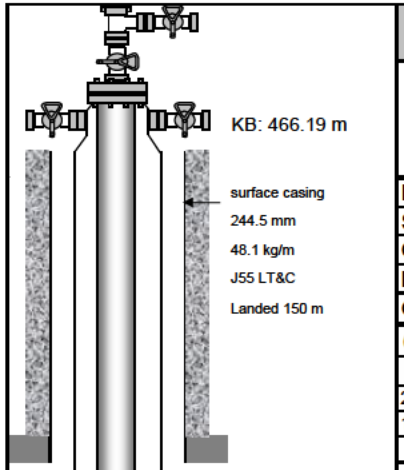
Figure 7: Typical Down Hole WIW Wellbore Schematic



Melita Resources Ltd. 2

UWI: 100/100-01-29-002-28W1/00

Purpose of Job	Convert to water injection	**Date:**	26-Jan-16	**TVD:**	992.10
Supervisor		**KB:**	466.19	**PBTD:**	1695.00
Current Status	Active Oil Producer	**GR:**	462.09	**KB-CF:**	
Drilling Licence #	**10482**	**KB-GR:**	4.10	**KB-TH:**	
GPS Coordinates:					

Casing Description

Size	String	Weight (kg/m)	Grade	Depth (m)	Remarks
244.5	Surface	48.1	J-55	151	
177.8	Production	29.8	J-55	1092.00	

Injection formation

Zone	Interval (s) mKB		Comments
Mission Canyon 3b	1092.00	1695.00	Open Hole 159 mm

Tubing Description

Size	String	Weight (kg/m)	Grade	Depth	Remarks
73.0	Injection	9.67	J-55	1116.00	Internally Coated PolyCore or TK-99
or					
60.3	Injection	6.99	J-55	1116.00	Internally Coated PolyCore or TK-99

Figure 8: Planned Corrosion Program South Pierson Unit No. 5

Production Wells

- Batch down hole corrosion inhibition
- Continuous surface scale inhibitor injection as required
- Corrosion resistant valves and internally coated surface piping

Pipelines

- High Pressure Pipeline to South Pierson Unit No. 5:
  - 2500 psi high pressure Fiberglass
  - 600# ANSI 316 Stainless Steel or Carbon Steel internally coated

Injection Wellhead / Surface Piping

- Corrosion resistant valves and stainless steel and/or internally coated steel surface piping
- 600# ANSI

Injection Well

- Continuous Scale inhibition
- Casing cathodic protection where required
- Wetted surfaces coated downhole packer
- Corrosion inhibited water in the annulus between tubing / casing
- Internally coated tubing surface to packer
- Surface freeze protection of annular fluid
- Corrosion resistant master valve
- Corrosion resistant pipeline valve

Producing Wells

- Casing cathodic protection where required
- Downhole batch corrosion inhibition as required
- Downhole scale inhibitor injection as required

** subject to final design and Engineering

Proposed South Pierson Unit No. 5

Application for Enhanced Oil Recovery Waterflood Project

List of Tables

TABLE NO. 1: TRACT PARTICIPATION

Tract No.	Land Description	Working Interest		Royalty Interest		Tract Participation
	LSD	Owner	Share (%)	Royalty Owner	Share (%)	Tract (%)
1	01-29-002-28W1M	MRL 2 Ltd.	100.00	Minister of Finance	100.00	18.514667052
2	02-29-002-28W1M	MRL 2 Ltd.	100.00	Minister of Finance	100.00	18.539072898
3	03-29-002-28W1M	MRL 2 Ltd.	100.00	Minister of Finance	100.00	13.496590308
4	04-29-002-28W1M	MRL 2 Ltd.	100.00	Minister of Finance	100.00	12.622077758
5	05-29-002-28W1M	MRL 2 Ltd.	100.00	Minister of Finance	100.00	7.440604161
6	06-29-002-28W1M	MRL 2 Ltd.	100.00	Minister of Finance	100.00	7.595730959
7	07-29-002-28W1M	MRL 2 Ltd.	100.00	Minister of Finance	100.00	11.221166106
8	08-29-002-28W1M	MRL 2 Ltd.	100.00	Minister of Finance	100.00	10.570090758
						100.000000000

TABLE NO. 2: OOIP Calculations

LSD	ACRES	Fm	STB OOIP	POROSITY	THICKNESS in FEET	Sw	FVF constant for basin	STM3 OOIP	Recovery %	Cumulative Production	OOIP - Cum	OOIP - Cum Allocation Factor	Last 12 Months Production	Last 12 Months Production Allocation Factor	50% OOIP -Cum + 50% Last 12 Month Prod Tract Factor
								(m3)		(m3)	(m3)		(m3)		
1-29-2-28W1	40	MC3b	365,613	12%	27	60%	1.1	58126.1	9.49%	5515.6	52610.5	0.154034304	218.7	0.216259037	0.185146671
2-29-2-28W1	40	MC3b	379,155	12%	28	60%	1.1	60279.0	8.98%	5413.0	54866.0	0.160637913	212.6	0.210143545	0.185390729
3-29-2-28W1	40	MC3b	311,448	12%	23	60%	1.1	49514.9	6.69%	3314.0	46200.8	0.135267816	136.2	0.134663990	0.134965903
4-29-2-28W1	40	MC3b	270,825	12%	20	60%	1.1	43056.4	7.83%	3371.0	39685.4	0.116191886	137.8	0.136249669	0.126220778
5-29-2-28W1	40	MC3b	216,660	12%	16	60%	1.1	34445.1	4.07%	1402.5	33042.7	0.096743045	52.7	0.052069039	0.074406042
6-29-2-28W1	40	MC3b	216,660	12%	16	60%	1.1	34445.1	4.06%	1399.2	33046.0	0.096752705	55.8	0.055161914	0.075957310
7-29-2-28W1	40	MC3b	270,825	12%	20	60%	1.1	43056.4	5.27%	2268.6	40787.8	0.119419439	106.2	0.105003883	0.112211661
8-29-2-28W1	40	MC3b	270,825	12%	20	60%	1.1	43056.4	4.05%	1744.8	41311.6	0.120952893	91.5	0.090448922	0.105700908
Total	320	MC3b	2302010	12%	2125%	60%	110%	365979.4	6.97%	25505.6	341550.8	1.000000000	1011.5	1.000000000	1.000000000