Everest Canadian Resources

McKay River Thermal Project

Scheme No. 11461 Performance Report

June 29, 2021

OUTLINE

1.1 Project background

1.2 Subsurface Overview Related to Resource Evaluation and Recovery

1.3 Surface Operations, Compliance, and Issues Not Related to Resource Evaluation and Recovery

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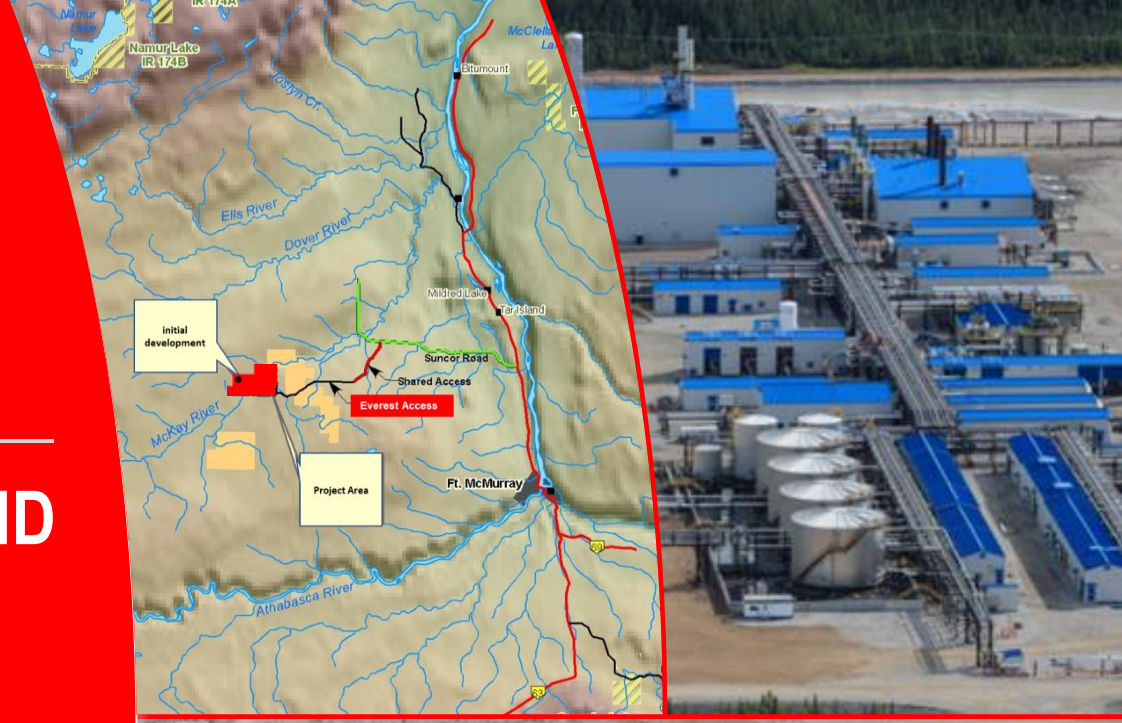
PROJECT BACKGROUND

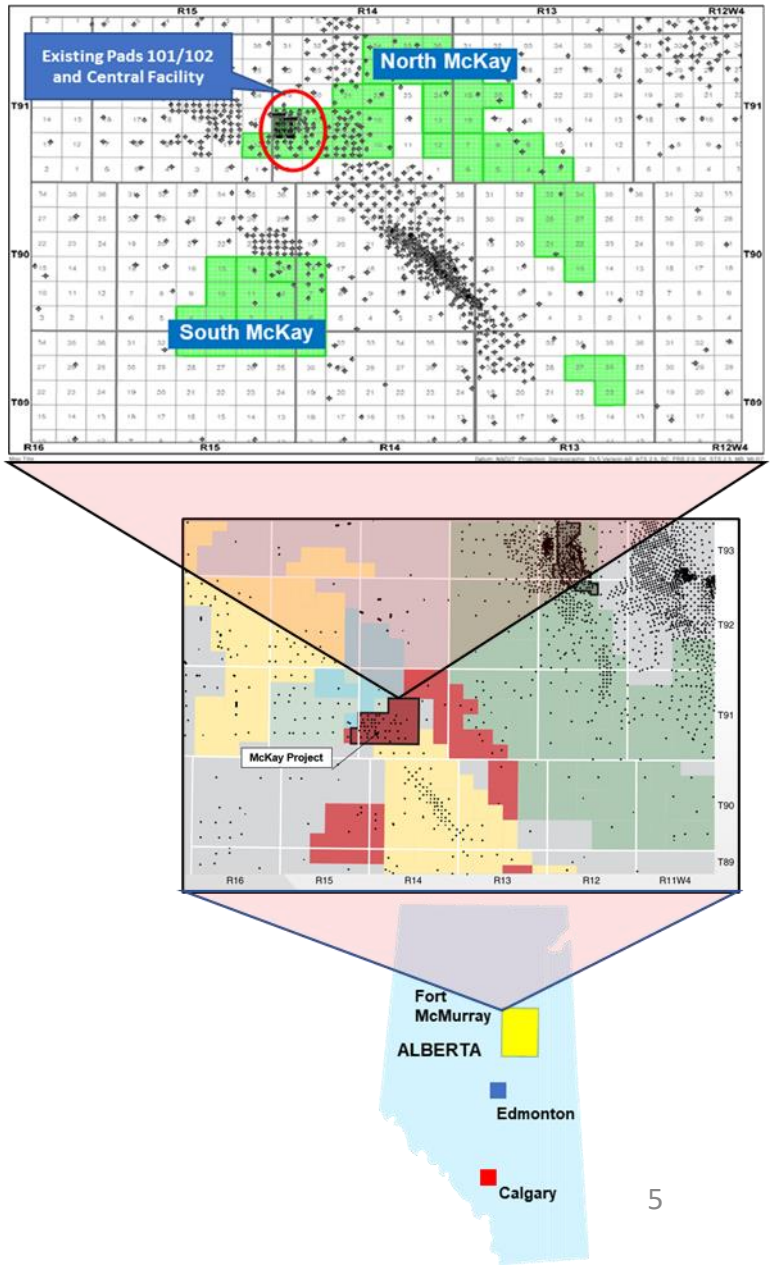


PROJECT BACKGROUND

- McKay River Project was previously owned and operated by Southern Pacific Resource Corp.
  - November 2010 - Receives project approval:
    - *EPEA Approval No. 255245-00-00*
    - *Oil Sands Conservation Act Approval No. 11461*
    - *Approved Capacity 12,000 bbl/d oil treating*
  - In January 2015, Southern Pacific Resources, previous owner of STP – McKay, was granted protection under the CCAA and subsequently entered Receivership in June 2015
  - Due to the depressed commodity price environment and high operating costs at the time, production was shut-in, and the Receiver initiated and completed a warm-hibernation program by August 2015
- Project was officially transferred to Everest Canadian Resources on February 2019

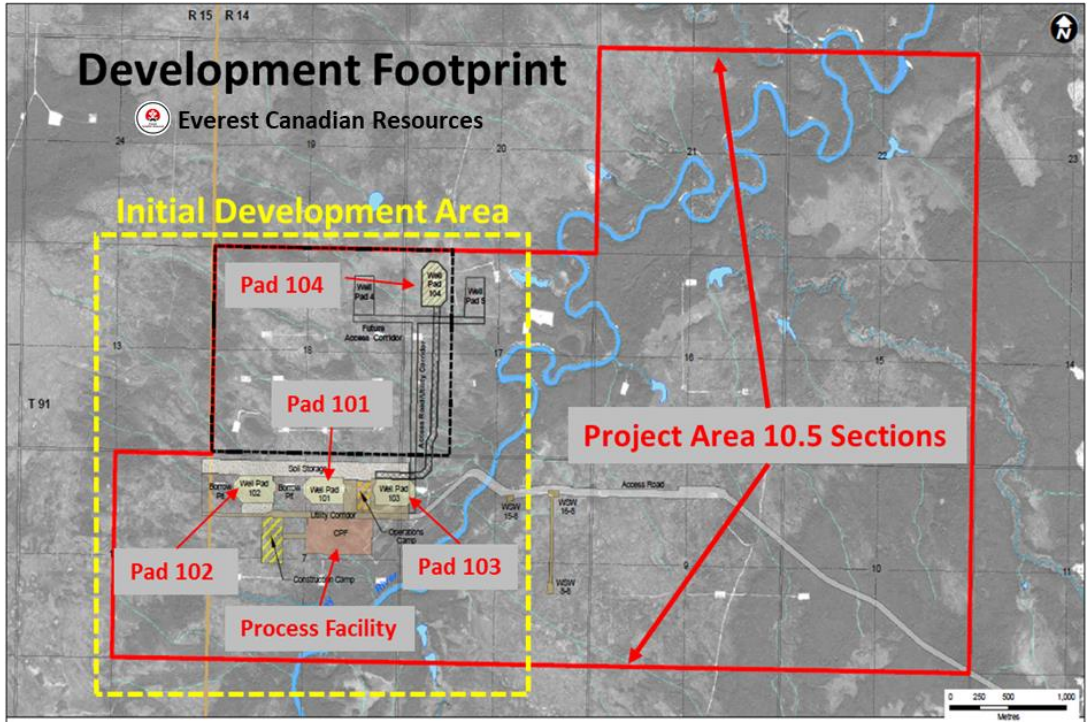
PROJECT BACKGROUND

- Everest Canadian Resources (ECR) – McKay is a 12,000 bpd Name Plate, Steam-Assisted-Gravity-Drainage (“SAGD”) facility.
- Located 45 km northwest of Fort McMurray on an approved 10.5 section development area within a larger acreage block
- Project Area is 10.5 sections in Township 91, Range 14, W4M and Township 91, Range 15, W4M
- Development Area is 1.25 Sections in Township 91, Range 14, W4M



PROJECT BACKGROUND

- Current approved development includes four well pads (101 to 104)
- The initial development is west of the MacKay River and includes well pads 101 & 102
- Process Facility existing capacity of 12,000 bbld oil and 37,400 bbld steam



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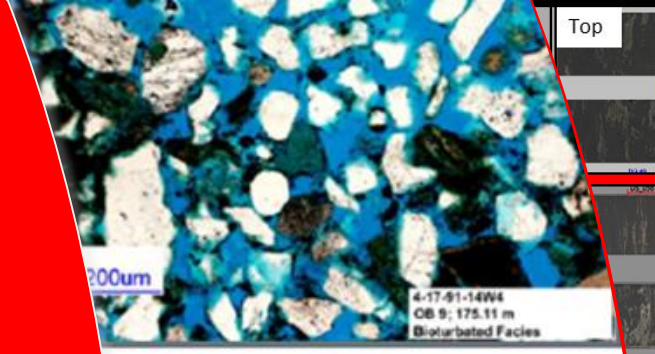
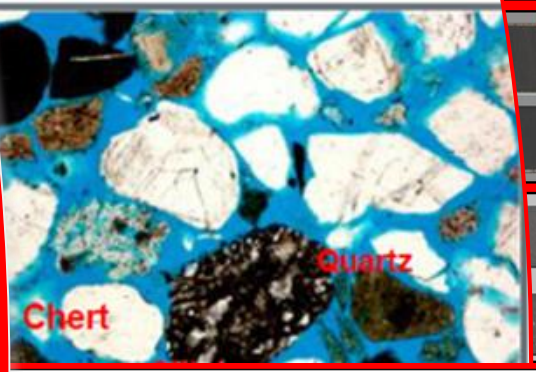
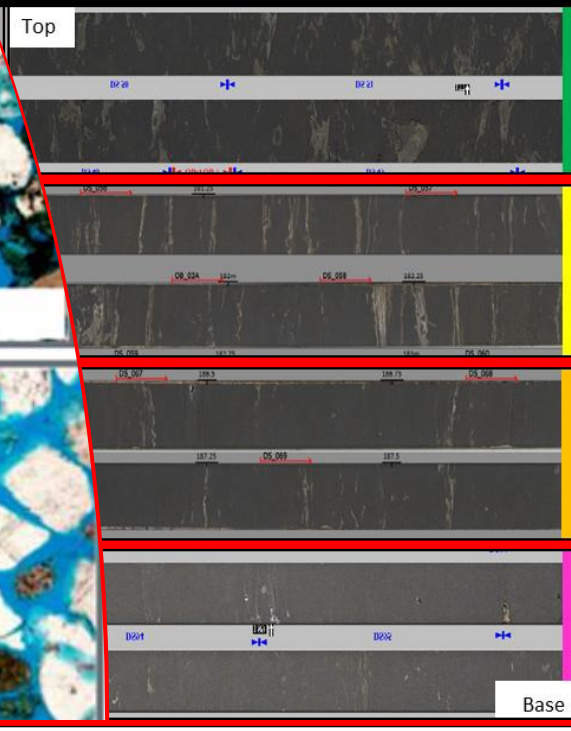
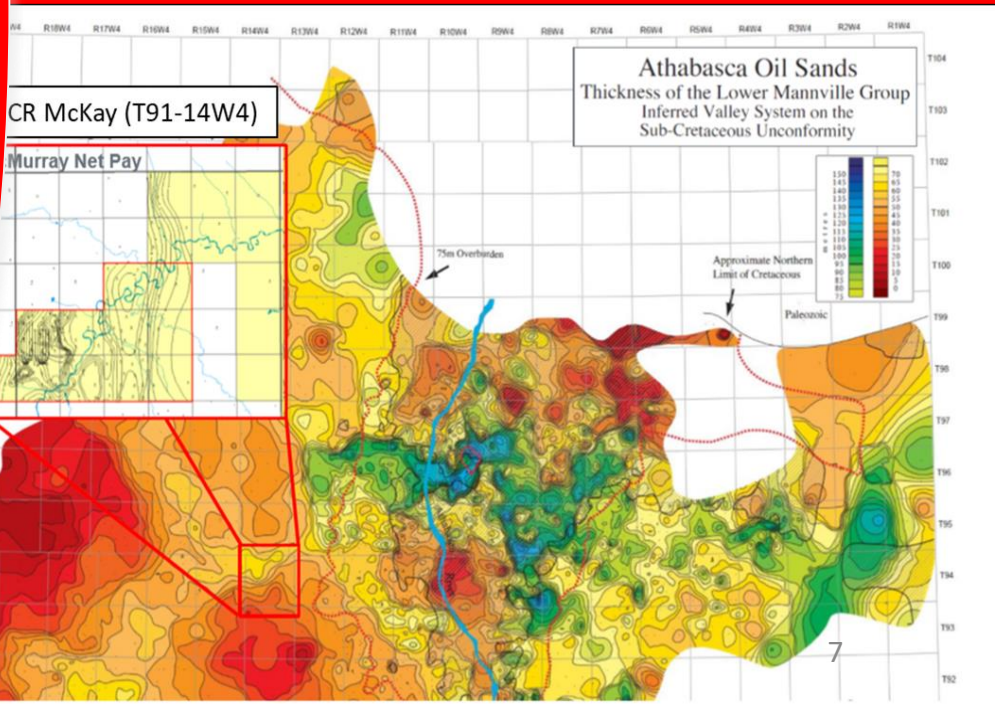
SUBSURFACE









1.2 SUBSURFACE

- GEOLOGY & GEOSICENCE
- HEAVE MONITORING & CAPROCK
- DRILLING & COMPLETIONS
- OBSERVATION WELLS
- SCHEME PERFORMANCE
- SUBSURFACE FUTURE PLANS

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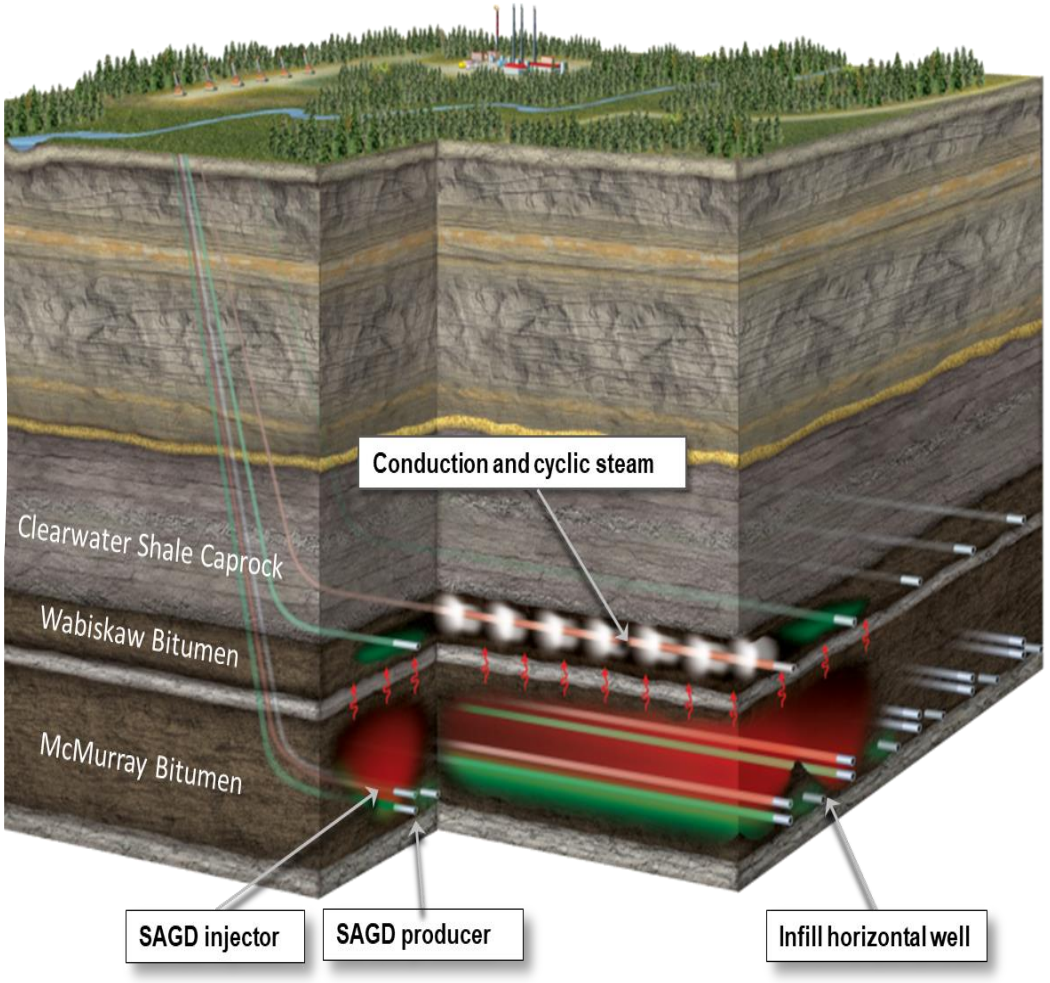
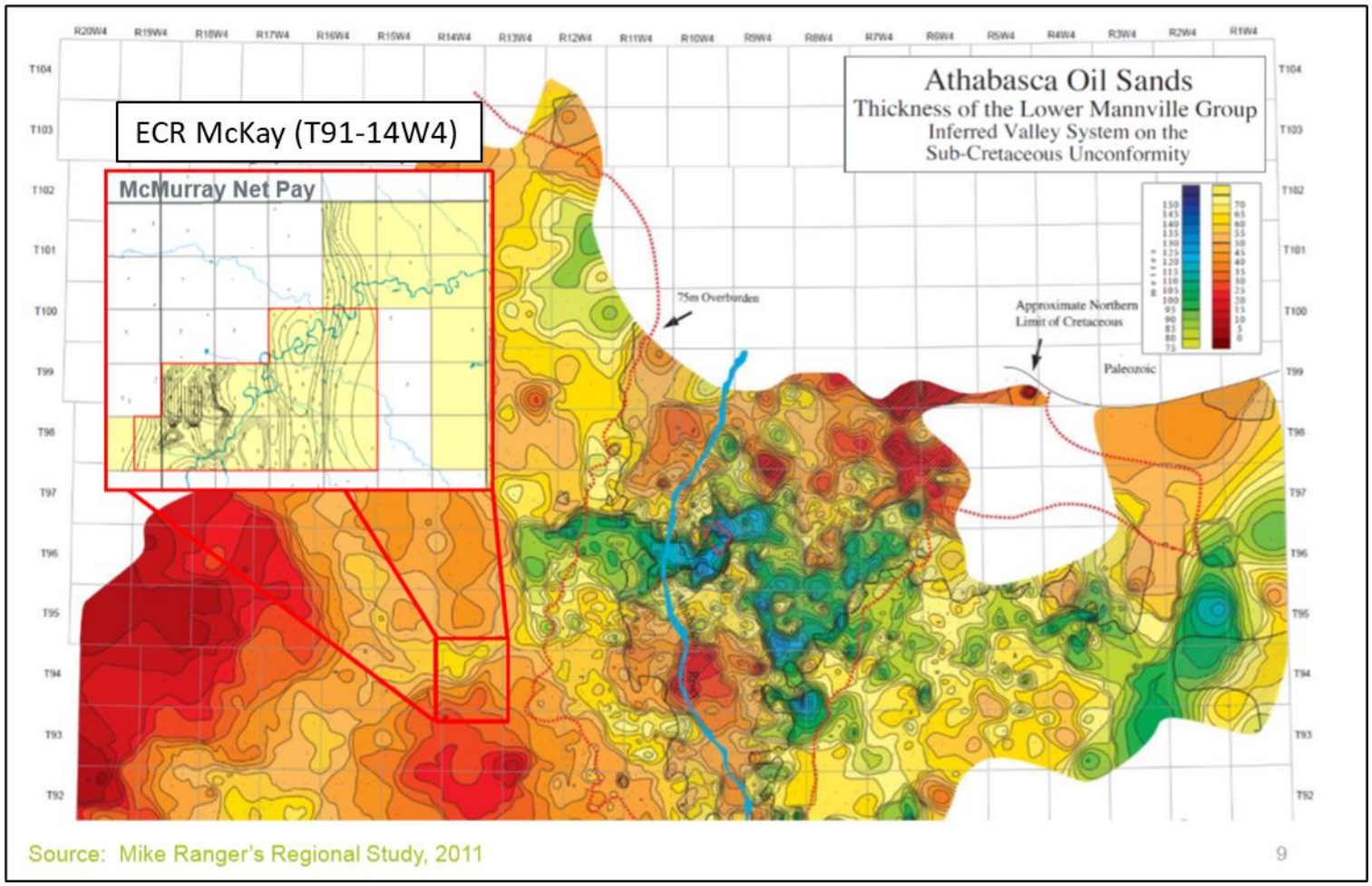
GEOLOGY & GEOSICENCE

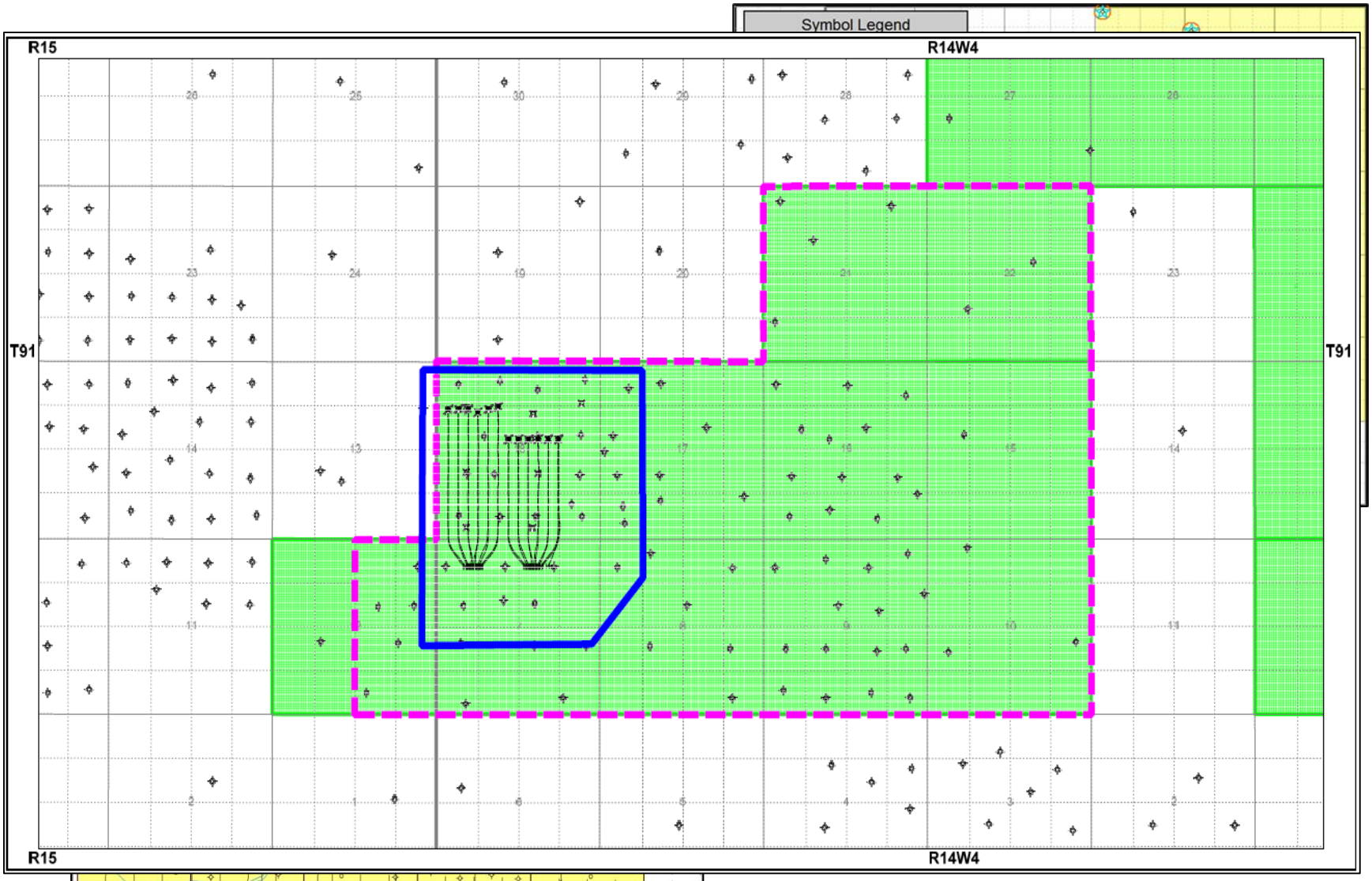
McKay: Full Bitumen Exploitation Plan



REGIONAL GEOLOGY - MCMURRAY



APPROVAL AREA

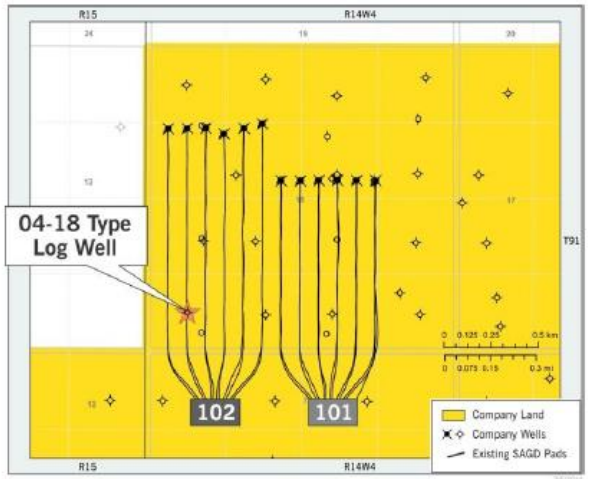


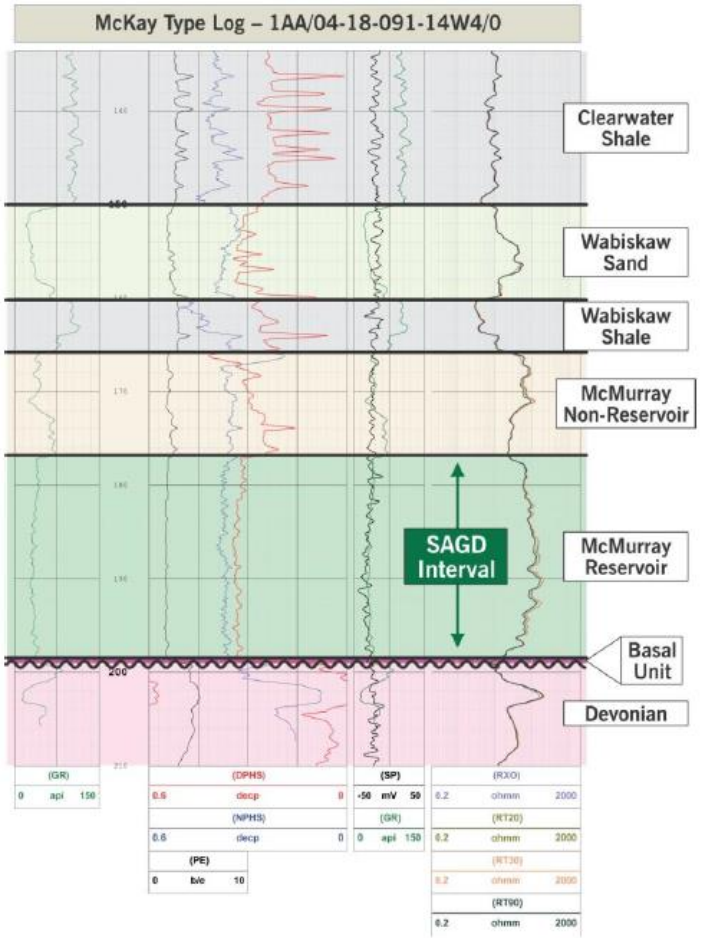
APPROVAL AREA STRATIGRAPHY

- Upper McMurray in North McKay
  - Estuarine/Deltaic deposits:

    The reservoir at STP's North McKay project ranges from a thickly bedded, tidally influenced, sand dominated tidal unit to a slightly brackish-water, sandy embayment.
  - Large continuous sand deposits:

    Ichnofossils in these sands include: *Planolites, Thalassinoides , Asterosoma with rare Cylindrichnus, Rhizocorralium*



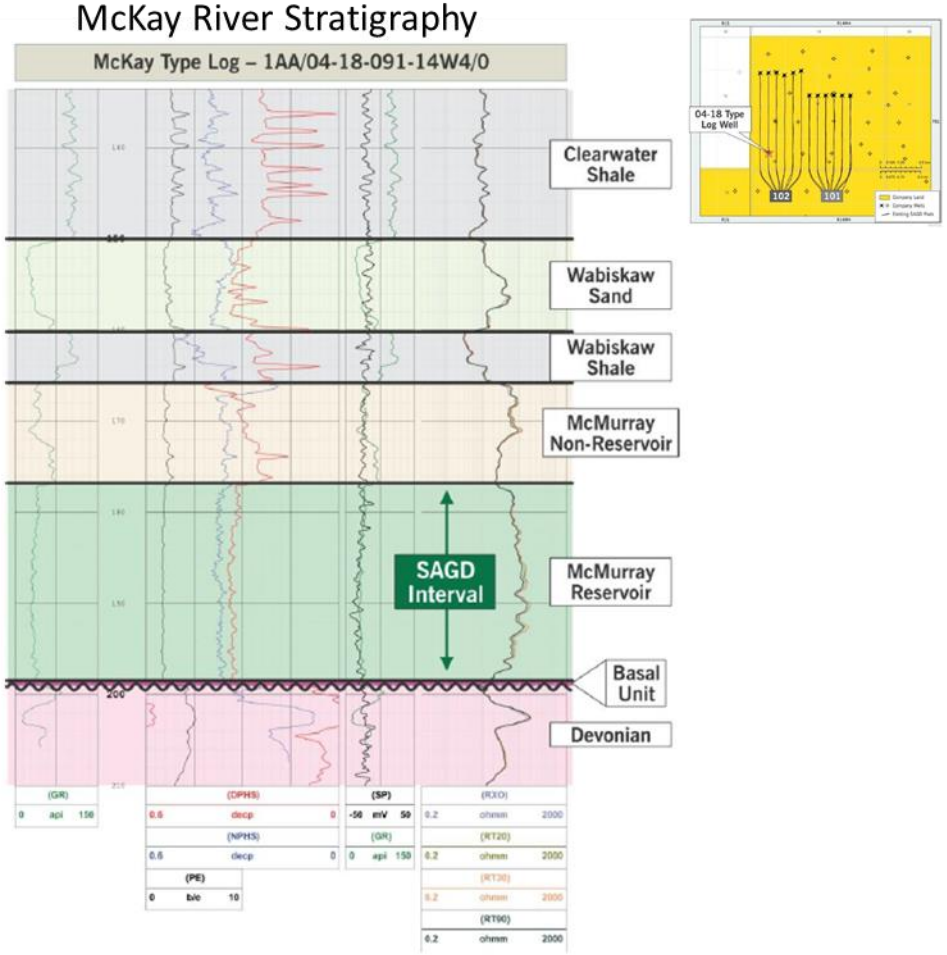


APPROVAL AREA Reservoir Properties

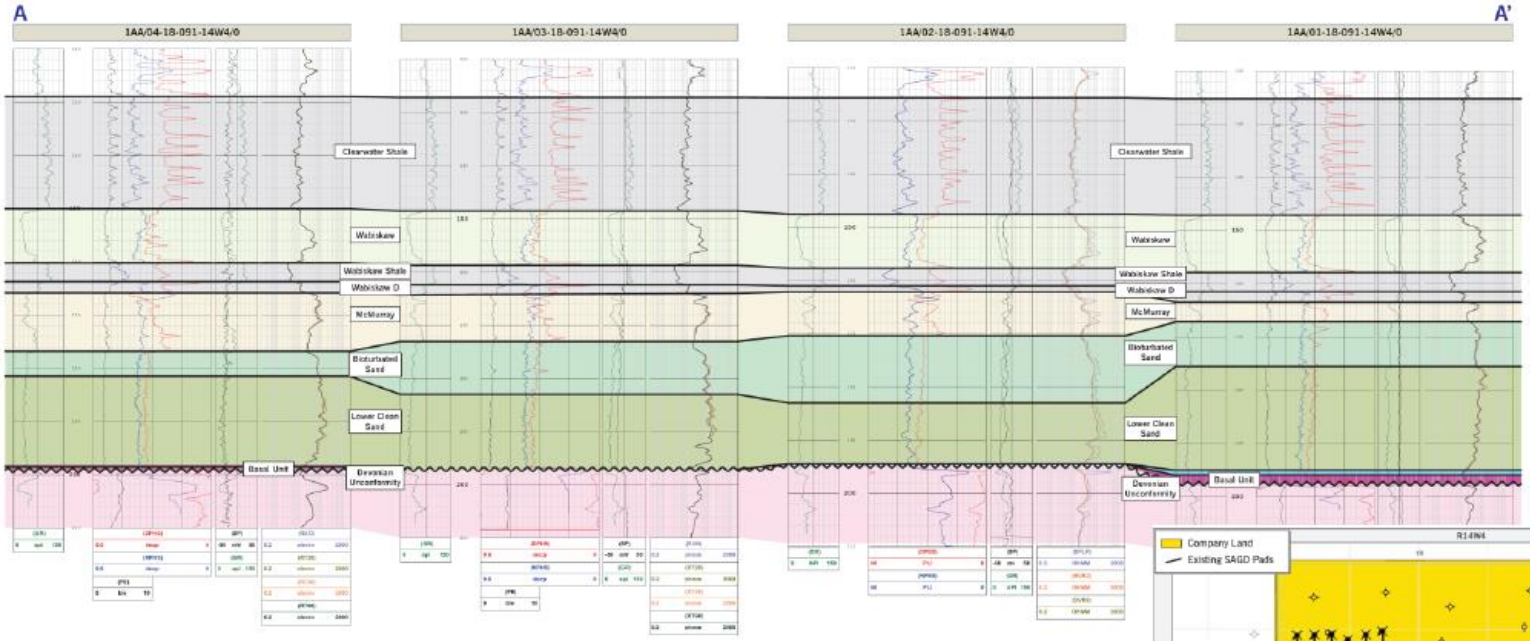
Average Reservoir Properties

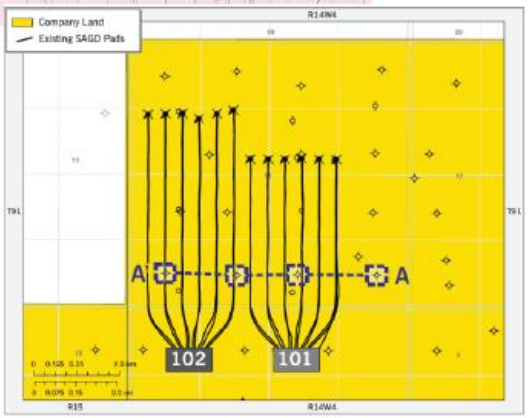
Depth (m TVD)	190
Pay Zone Thickness (m)	17 - 27
Lateral Well Pair Spacing (m)	100
Horizontal Well Length (m)	800 - 1100
Porosity (%)	32
Oil Saturation (%)	74
Original Reservoir Pressure (kPa)	650
Original Reservoir Temperature (°C)	8.5

McKay River Stratigraphy



APPROVAL AREA CROSS SECTION





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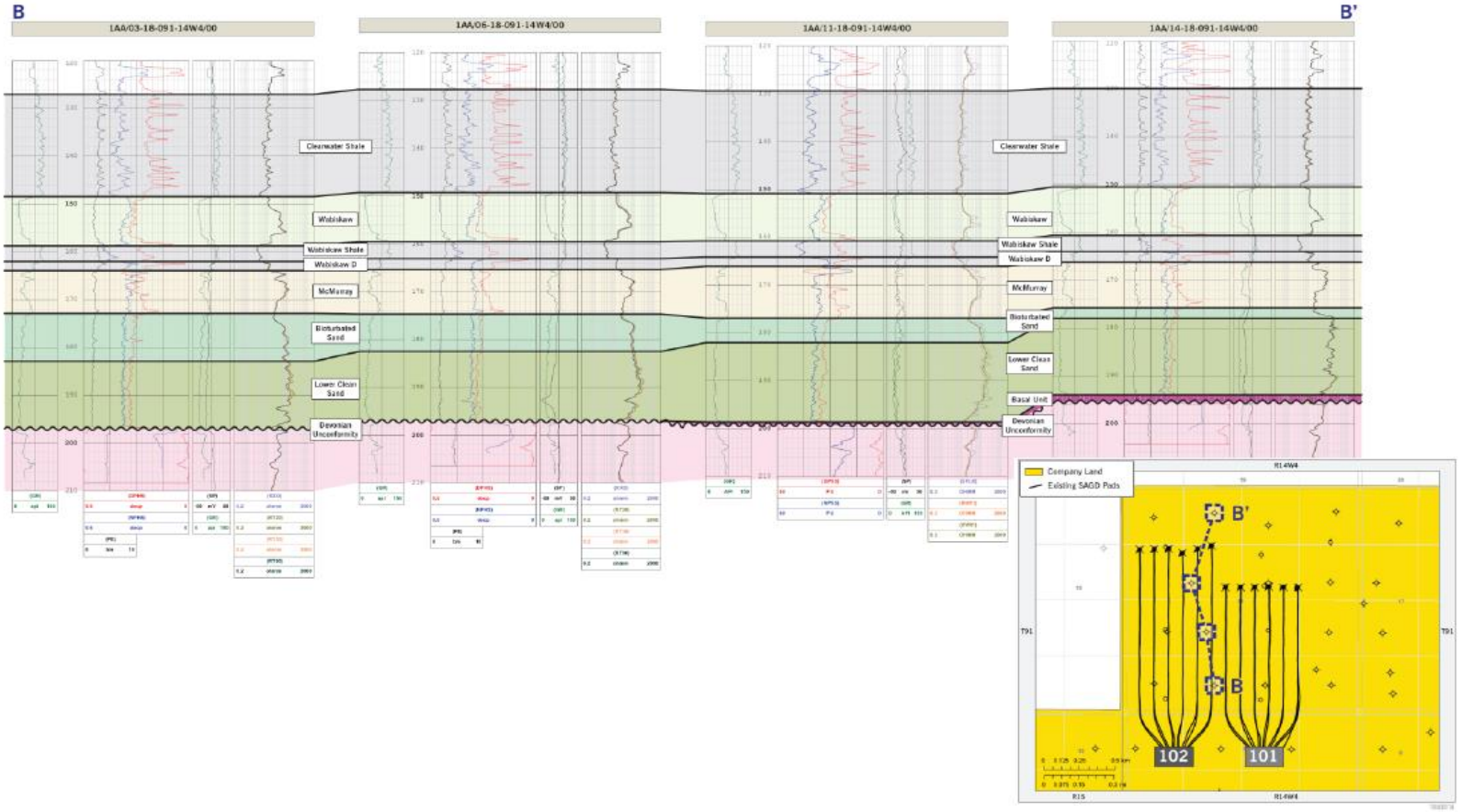

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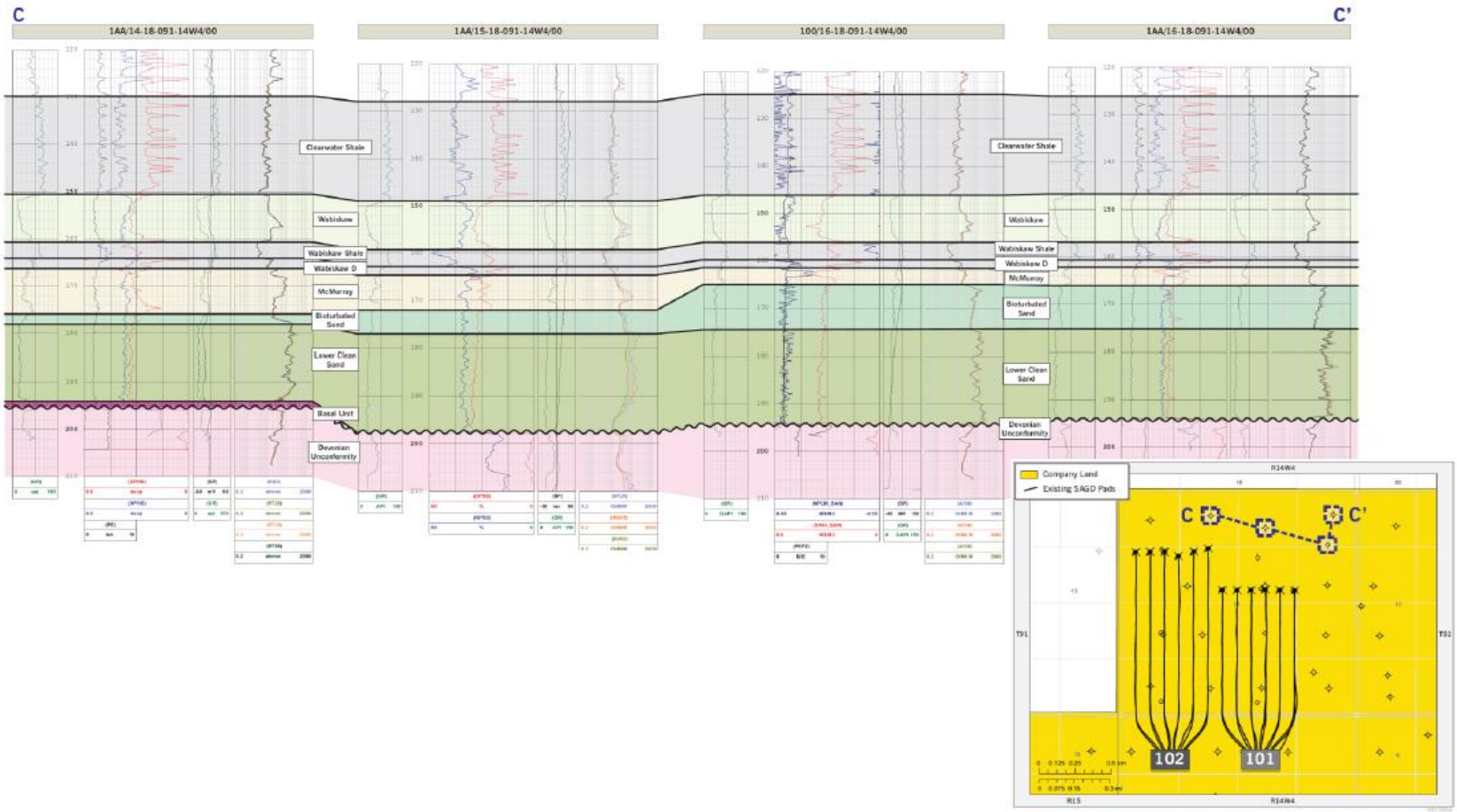
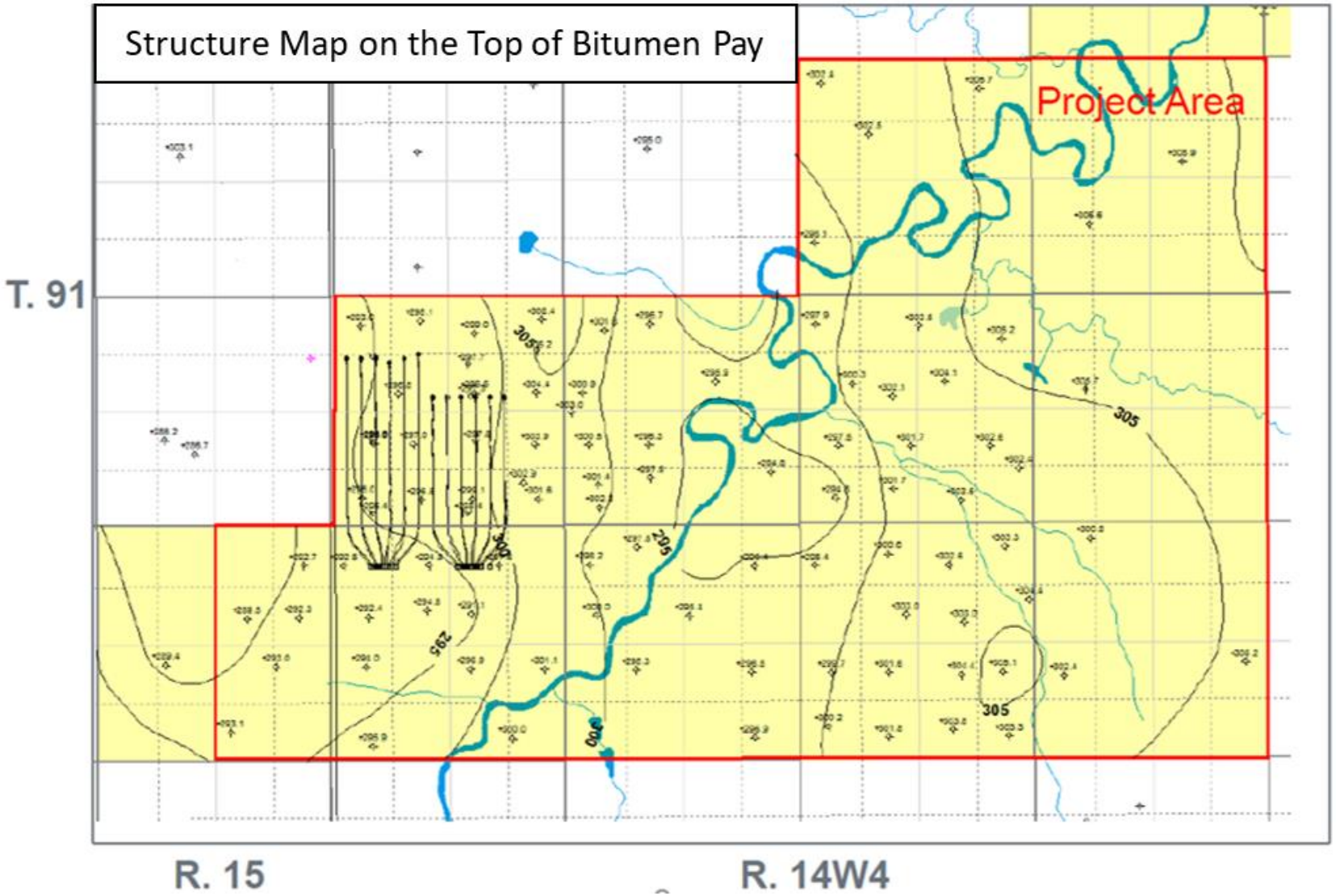


APPROVAL AREA STRUCTURE



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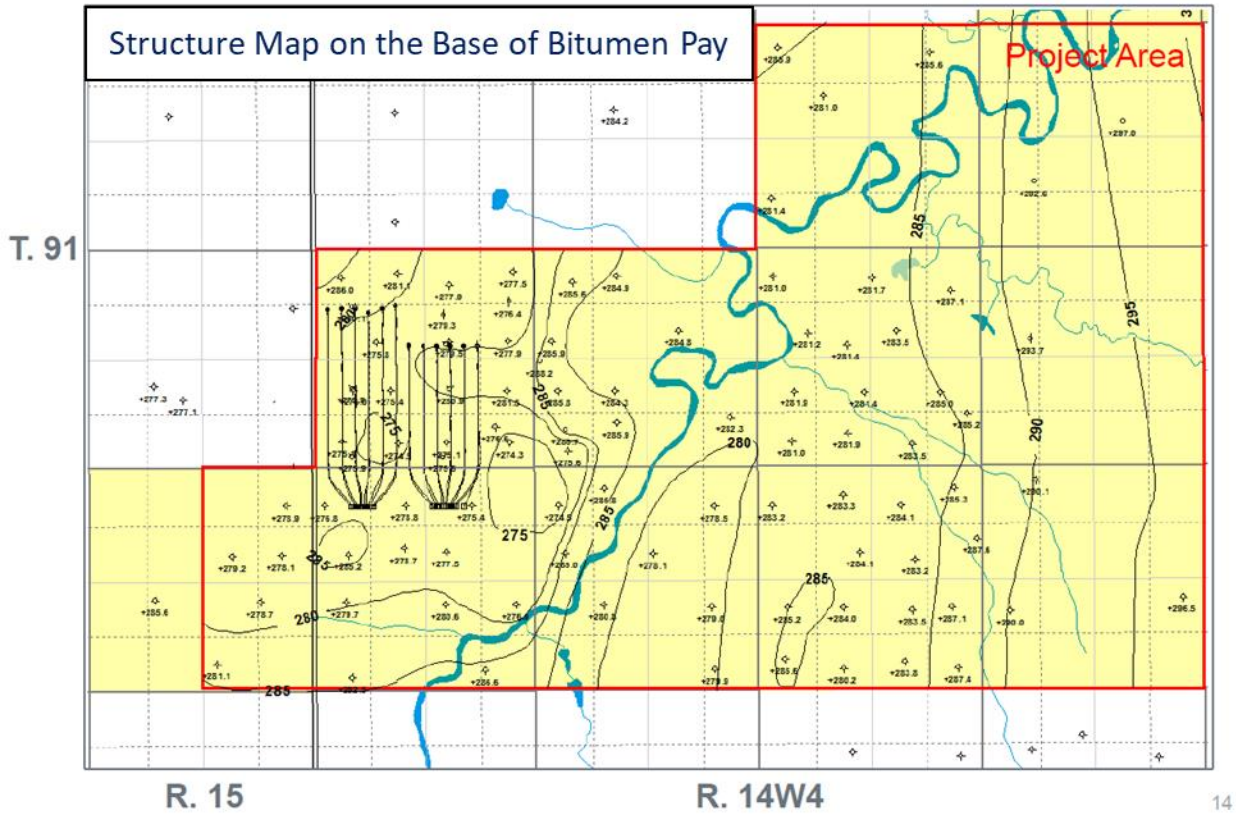
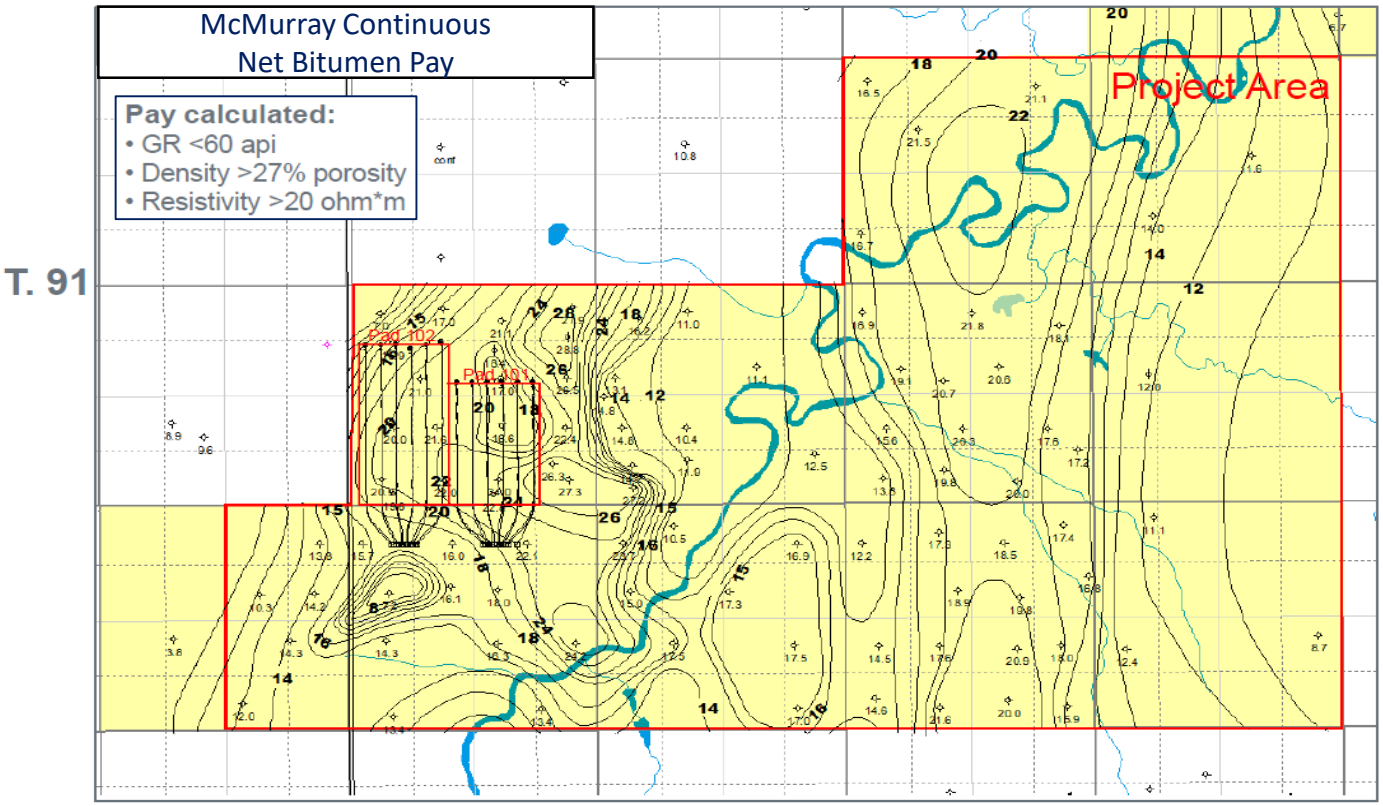
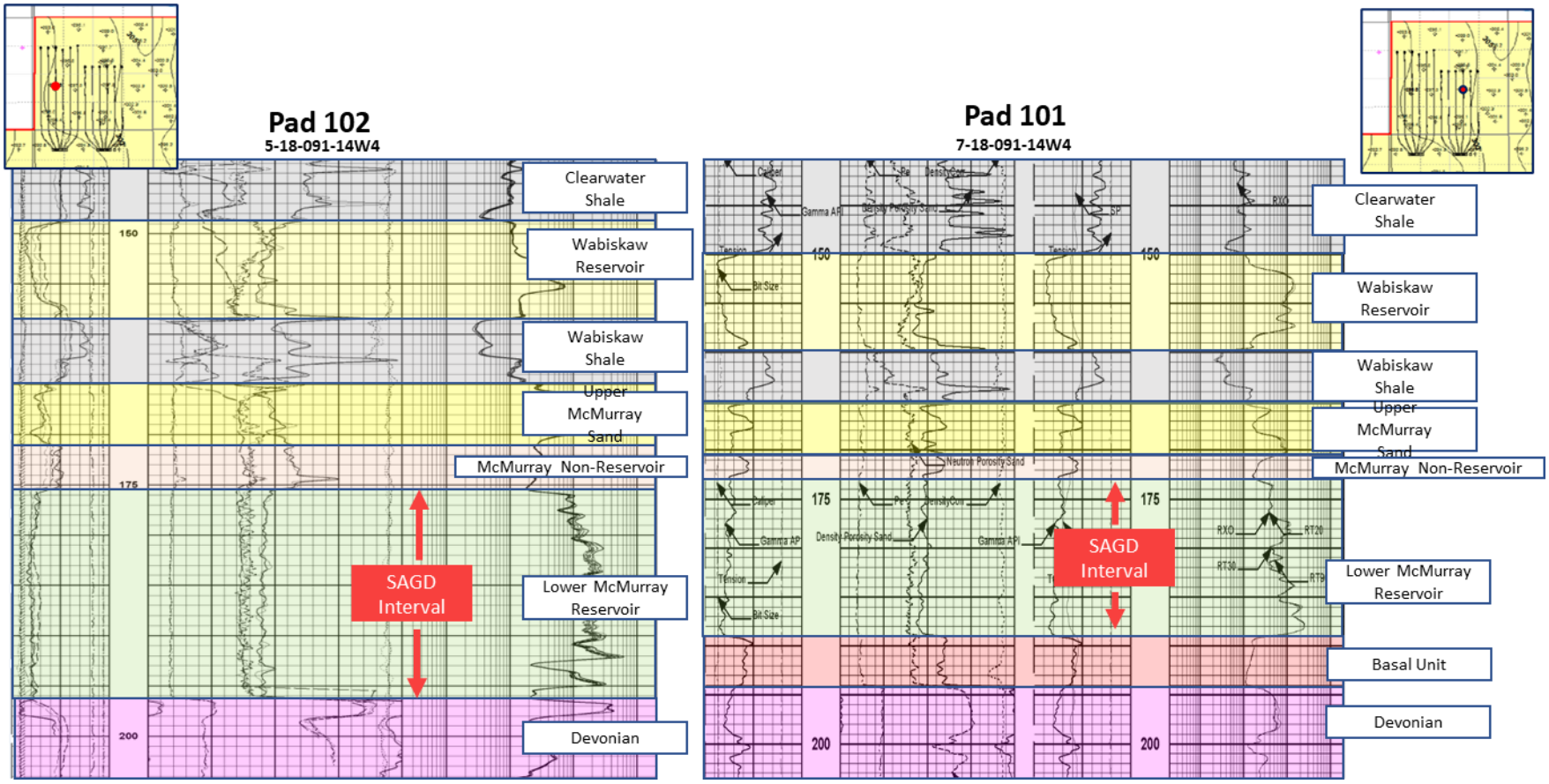


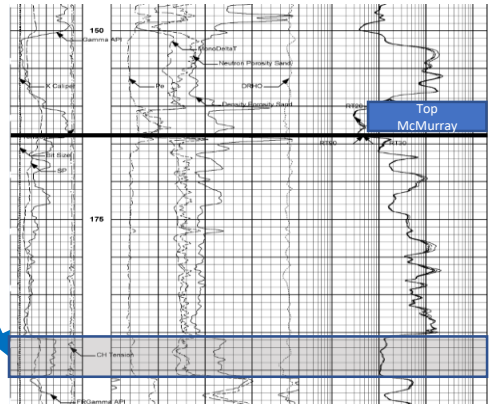
APPROVAL AREA CONTINUOUS NET PAY



APPROVAL AREA TYPE CURVE

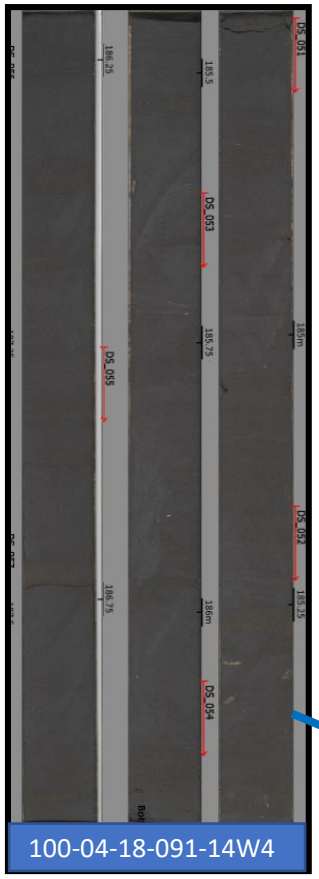


Approval Area Bitumen Pay Facies



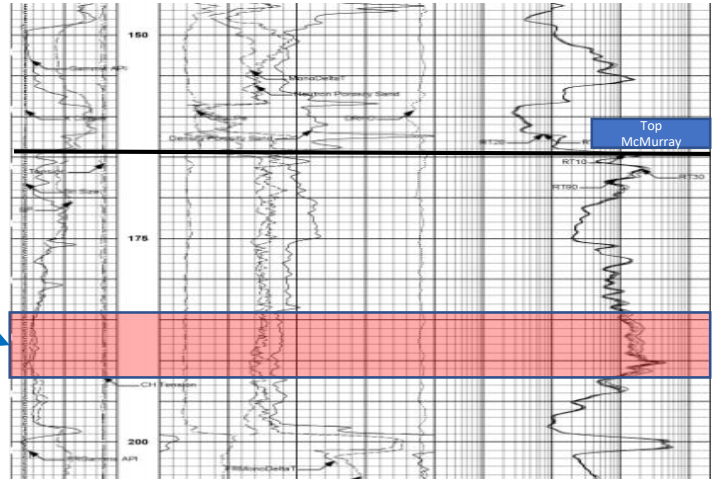
Basal Unit (non-Pay)

- Non-Producible Facies Common on Pad 1
- Terrestrial Depositional Environment
- Typically GR>75, Density Porosity < 27%, Resistivity < 20 ohms
- Porosity and Permeability – no sample, very low value by visual. Saturation - Negligible
- North section of Pad 1 producers encountered this facies.

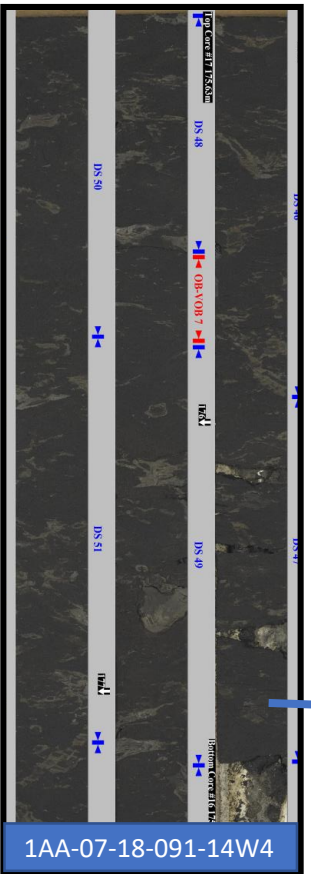


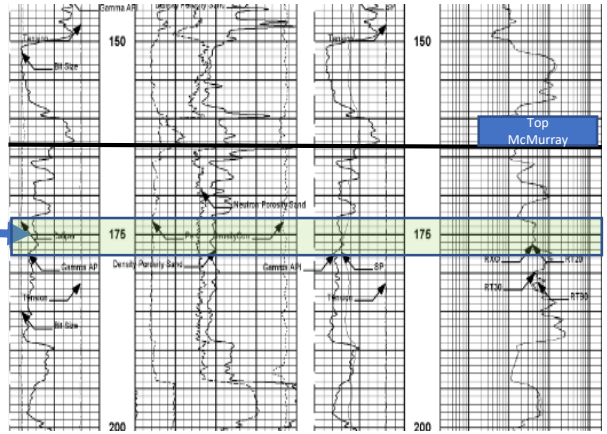
Clean Sand

- Producible Facies Common on Pad 1 and Pad 2
- Estuarial Channelized Depositional Environment
- Rare Bioturbation
- Typically < 5% mud
- Vertical Permeability Range – 2000mD to 4000mD
- Fine to Medium grained
- Porosity of 33% or better
- Saturations of 75-90%
- Locally Common Facies on Pad 1 and Pad 2



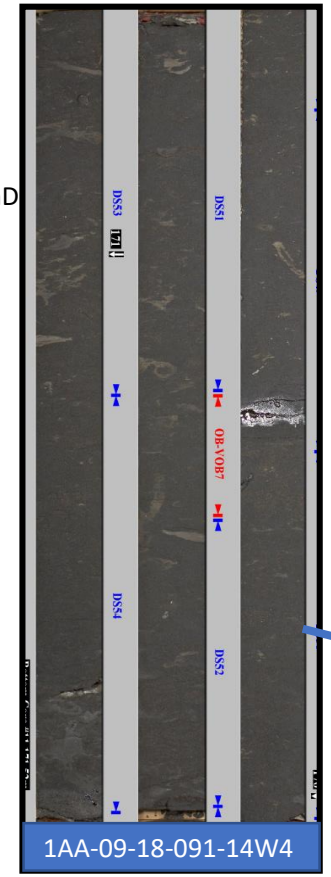
Approval Area Bitumen Pay Facies

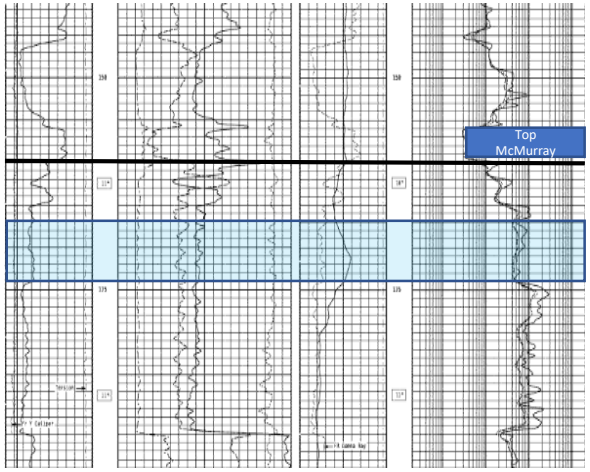




Bioturbated Sand

- Producible Facies Found in McKay
- Marginal-Marine Depositional Environment
- Common Bioturbation
- Typically 15 - 30% fines (mud)
- Vertical Permeability Range – 150 mD to 300 mD
- Porosity of 30-34%
- Saturations of 55-70%
- Only encountered on Pad 1 wells

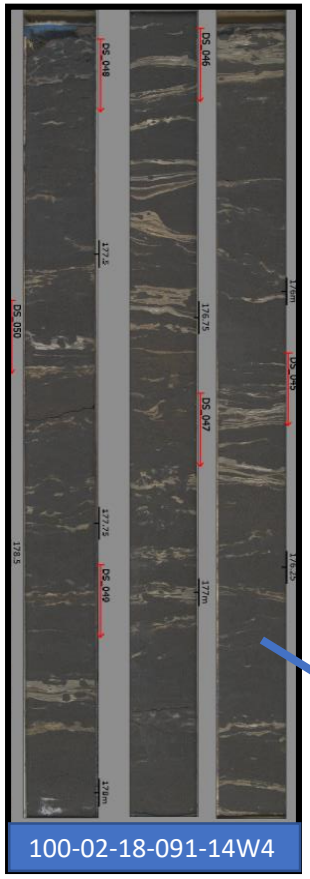




Bioturbated Sand

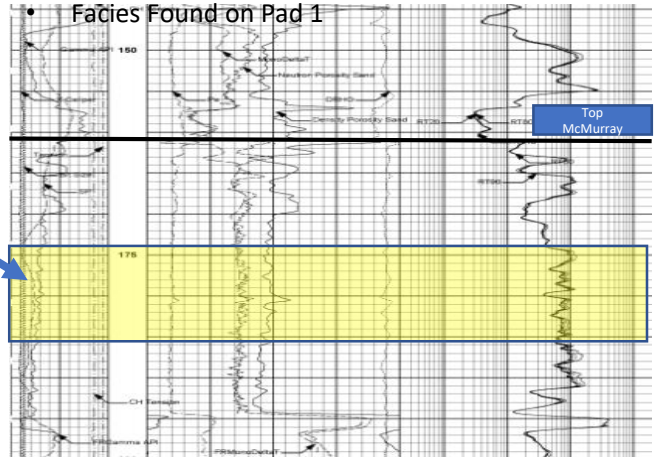
- Producible Facies Found in McKay
- Marginal-Marine Depositional Environment
- Typically <15% fines (mud)
- Vertical Permeability Range – 250mD to 475mD
- Porosity of 32 – 36%
- Saturations of 50-70%
- Locally Facies within Pad 3

Approval Area Bitumen Pay Facies



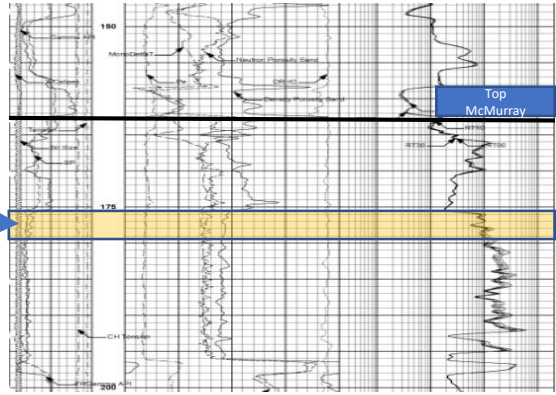
Interbedded Sand

- Producible Facies Found in McKay
- Marginal-Marine Depositional Environment
- Common Bioturbation
- Typically 15-30% fines (mud)
- Vertical Permeability Range – 400mD to 1500mD
- Porosity of 31-34%
- Saturations of 60-80%
- Interbeds form permeability baffles that decrease oil rates and increase SOR's
- Facies Found on Pad 1



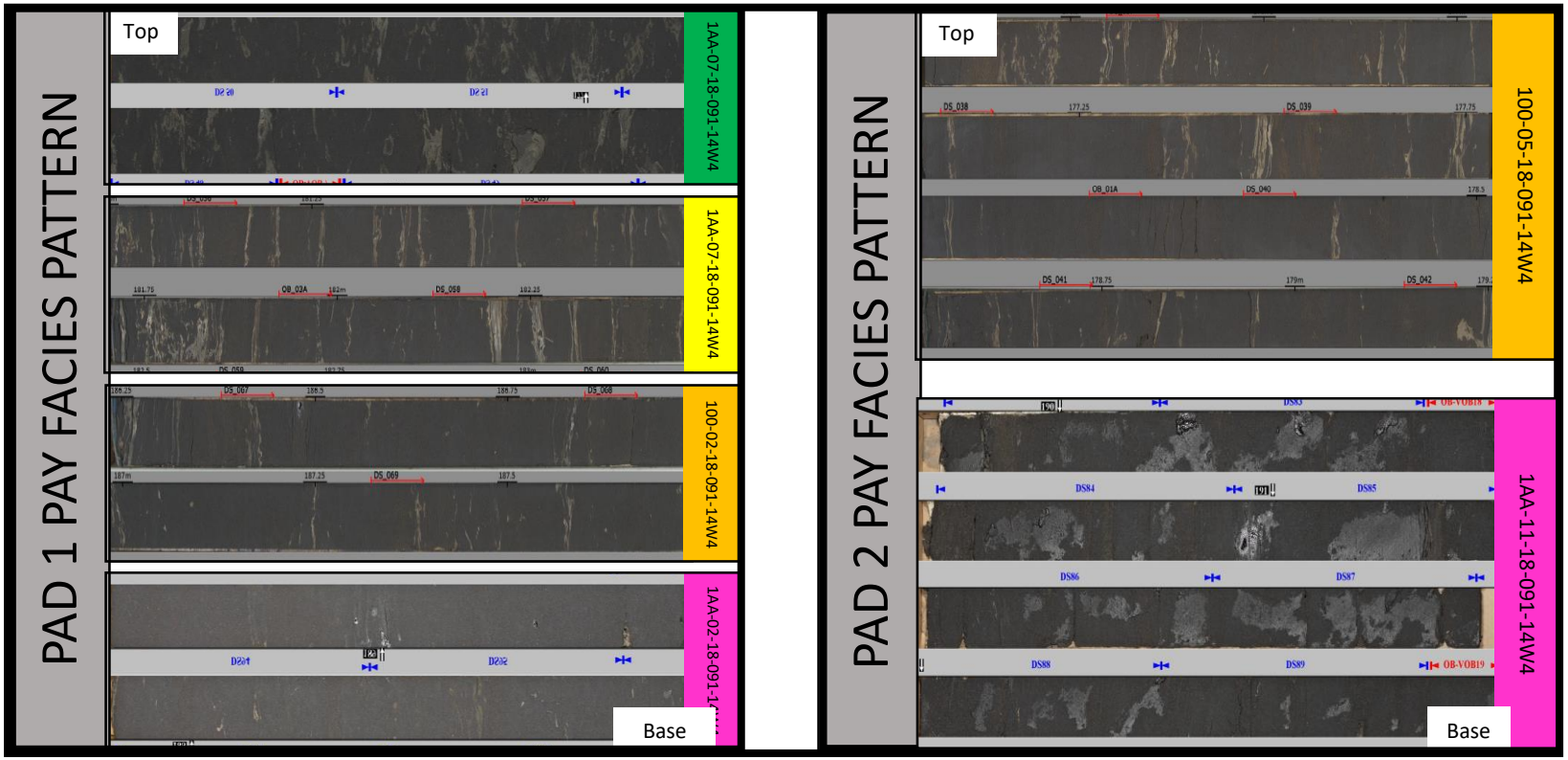
Interbedded Sand

- Producible Facies Common in McKay
- Marginal-Marine Depositional Environment
- Rare - common Bioturbation by various trace fossils
- Typically <15% fines (mud)
- Permeability Range – 400mD to 2000mD
- Porosity of 32 - 36%
- Saturations of 65-85%
- Locally Common Facies in McKay



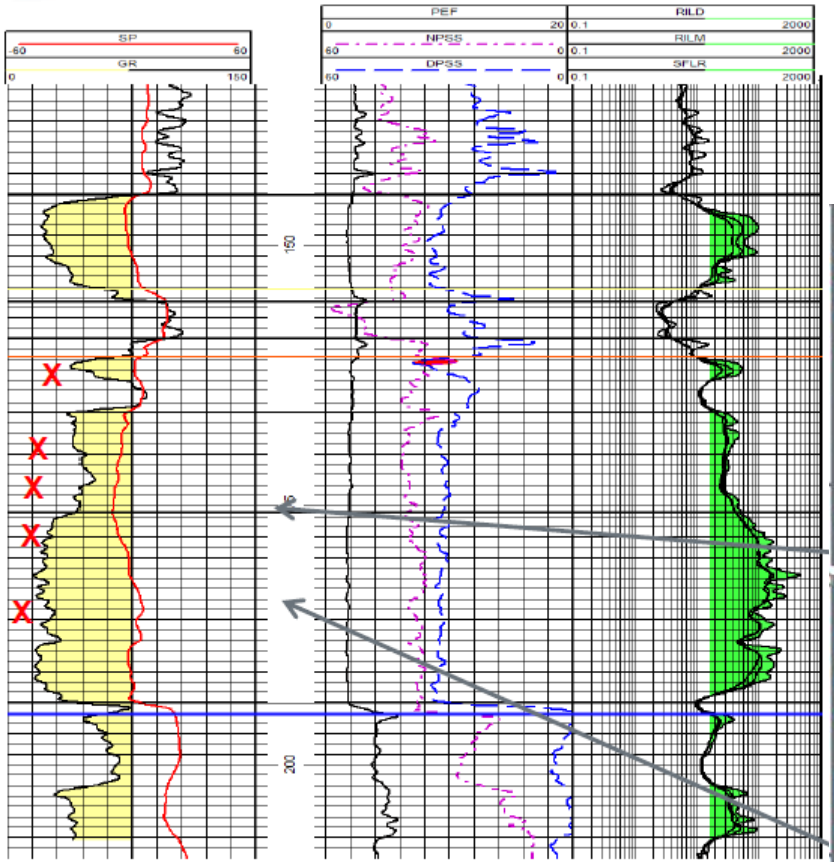
APPROVAL AREA BITUMEN PAY FACIES SUMMARY

BITUMEN PAY FACIES PATTERN ON PAD 1 & 2

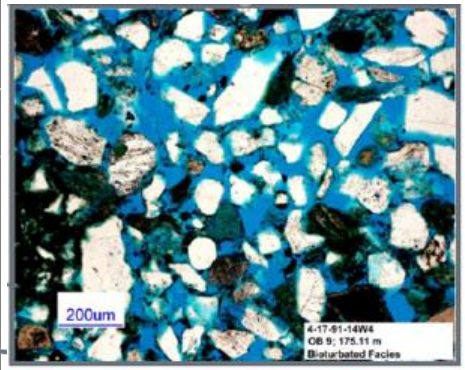


APPROVAL AREA PETROGRAPHICAL ANALYSIS

AA/04-17-91-14w4

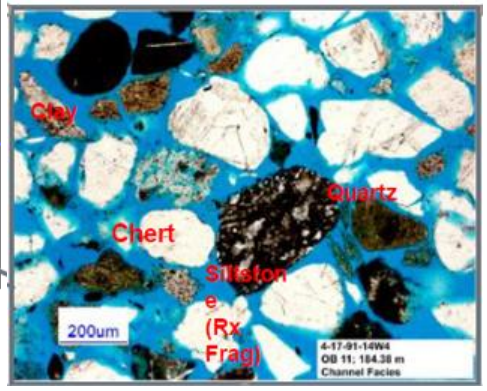


Core Analysis/Thin Section



Upper Reservoir (Bioturbated)

- Very Fine to Fine grained (<180 um)
- Moderately sorted, Subangular with elongate grains
- Framework consists of quartz, common chert, siltstones with some feldspars
- Clays are within the microporosity of the chert, but also exist within the pore spaces. Pore space has 10% clay in the pore space.
- **XRD:** Analysis shows 86% qtz, 4% K-feldspar, 2% Plagioclase, 1% dolomite, 1% pyrite and 6% total clay.



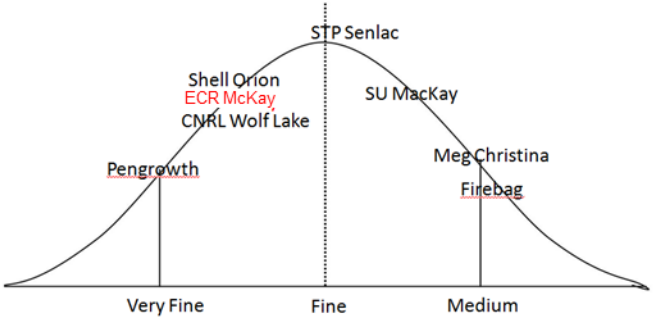
Main Reservoir

- Fine to Medium grained (180-250 um)
- Moderately sorted, Subrounded with elongate and spherical grains
- Framework consists of quartz, chert, siltstones with some feldspars
- Similar clays with less interstitial clay found in the rock matrix.
- **XRD:** Analysis shows 93% qtz, 2% K-feldspar, 1% pyrite and 4% total clay.

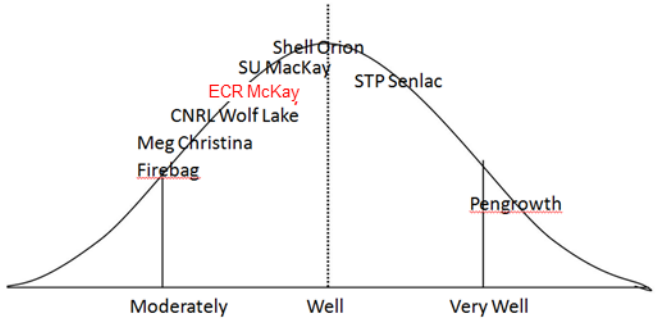
APPROVAL AREA RESERVOIR QUALITY COMPARISON

Reservoir Quality Comparison

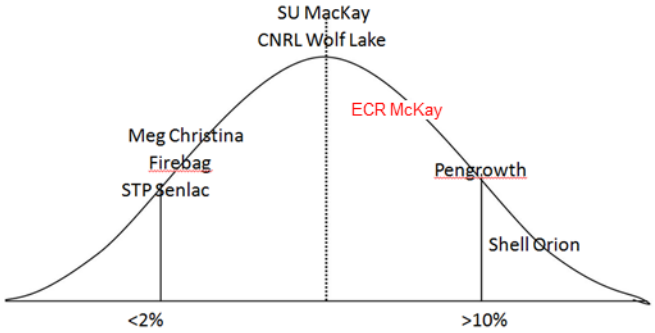
Grain Size



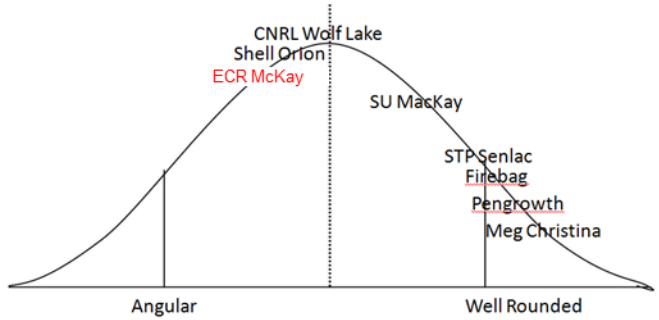
Sorting



Fines Content



Roundness



PAD 1 & PAD 2 RESERVES

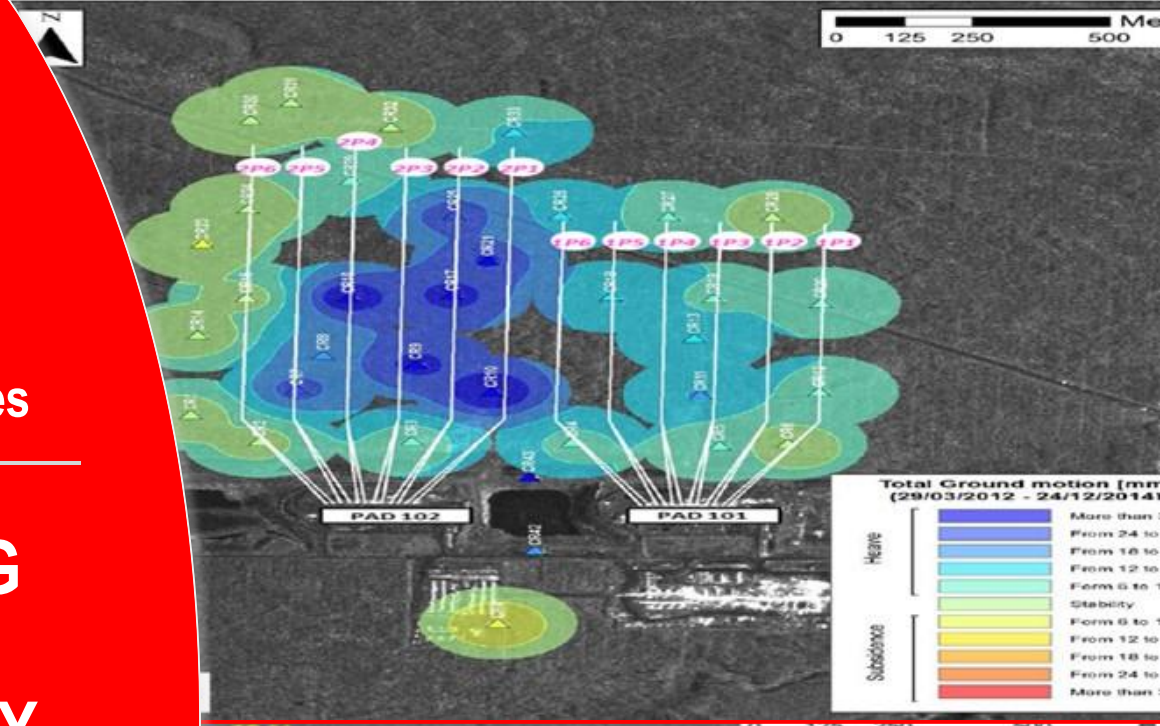
Pad	# Well Pairs	Drainage Box Area A (m2)	Average Pay Thickness H (m)	Average Porosity ø (%)	Average Sauturation So (%)	Average Vertical Permeability (mD)	Average Horizontal Permeability (mD)	OBIP (10^6 m^3)	PBIP (10^6 m^3)	Total Recovery to Date (%)	Estmated Ultimate Recovery (%)
Pad 1	5	540,000	20	31	74	1598	2210	2.5	2.2	1.9	59
Pad 2	6	720,000	20	32	78	2323	3137	3.6	3.2	6.2	65

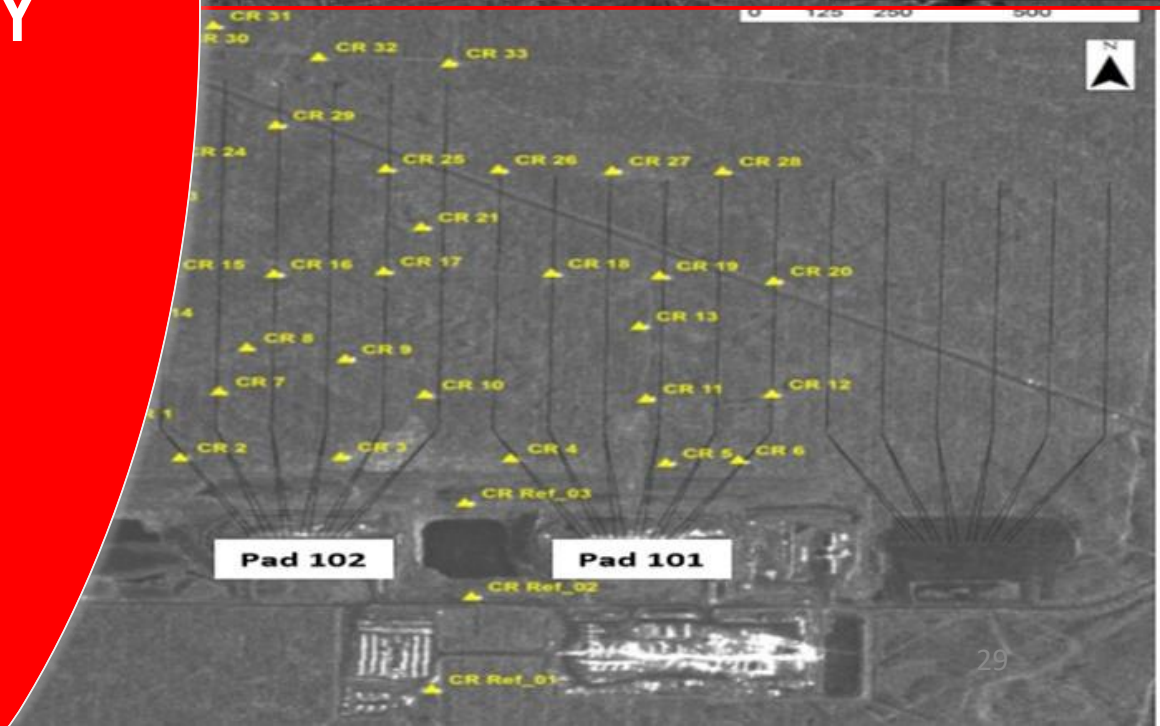
Ø = Average porosity from the SAGD reservoir interval
S = Average bitumen saturation from the SAGD reservoir interval
A = Drainage Area
H = Average Pay Thickness
OBIP = Original Bitumen In-Place and measured in $10^6 m^3$ units

$$OBIP = A \times H \times Ø \times S$$

Everest Canadian Resources

HEAVE MONITORING & CAPROCK INTEGRITY





SURFACE MONITORING (HEAVE MONUMENTS)

- 35 Corner reflectors were installed in 2012
- The Surface monitoring started in March 2012
- Based on historical, between 2012 and 2015, cumulative movement of the surface since SAGD operations started was insignificant, ranged between -10 mm (subsidence) and 38 mm (heave).
- Everest did not conduct Heave or other surface monitoring between February 2019 and April 2021 (Everest did not conduct performance between April – August, 2020 since Covid – 19).

CAPROCK INTEGRITY

- No change in Caprock integrity
- AER approved Maximum Operating Pressure (MOP) of 2,450 kPa.
- McKay met all AER conditions and information requests and received approval in 2011
- Caprock integrity studies was focused on:
  - Core and geological log evaluations
    - No fault planes observed on logs or in core.
    - No borehole breakouts/drilling induced fractures observed from 17 HMI logs.
  - Laboratory testing (reservoir & geomechanical)
    - Low permeability caprock.
    - Geomechanical properties derived from lab testing.
  - Mini-frac testing for characterizing in situ stress state
    - Mini-frac tests conducted at 2 wells.
  - Geomechanical simulation (Taurus Reservoir Solutions)
    - 2,450 kPa operating pressure is conservative

MINI-FRAC TESTS AND FRACTURE PRESSURE

- Mini-Frac Tests
  - Mini-frac tests completed at wells 5-16 and 1-18
  - Stress gradient results are consistent and similar to those expected in the Athabasca Oil Sands.
  - Vertical stress gradient is ~21.5 kPa/m.

- Fracture Pressure
  - Assessment of minimum fracture pressure (Smin) at the base of the Clearwater Formation using mini-frac test results.
  - Smin from both wells 5-16 and 1-18 were consistent.
  - Smin fracture pressure at the base of the Clearwater Formation caprock was between ~2,860 kPa and ~ 3,020 kPa.

Well	5-16-91-14W4	Date	March 2009
Depth (m TVD)	Lithology	Minimum Stress (kPa)	Minimum Stress Gradient (kPa/m)
126	Clearwater Shale	2520	20.0
140	Clearwater Shale	2760	19.7
155	Wabiskaw Shale	2710	17.5
174	McMurray Sandstone	2900	16.7

Well	1-18-91-14W4	Date	April 2011
Depth (m TVD)	Lithology	Minimum Stress (kPa)	Minimum Stress Gradient (kPa/m)
131	Clearwater Shale	No Breakdown	
138	Clearwater Shale	2900	21.0
147	Wabiskaw Sandstone	3060	20.8
156	Wabiskaw Shale	3250	20.8
164	Upper McMurray Sandstone	3300	20.1
186	McMurray Sandstone	3060	16.5

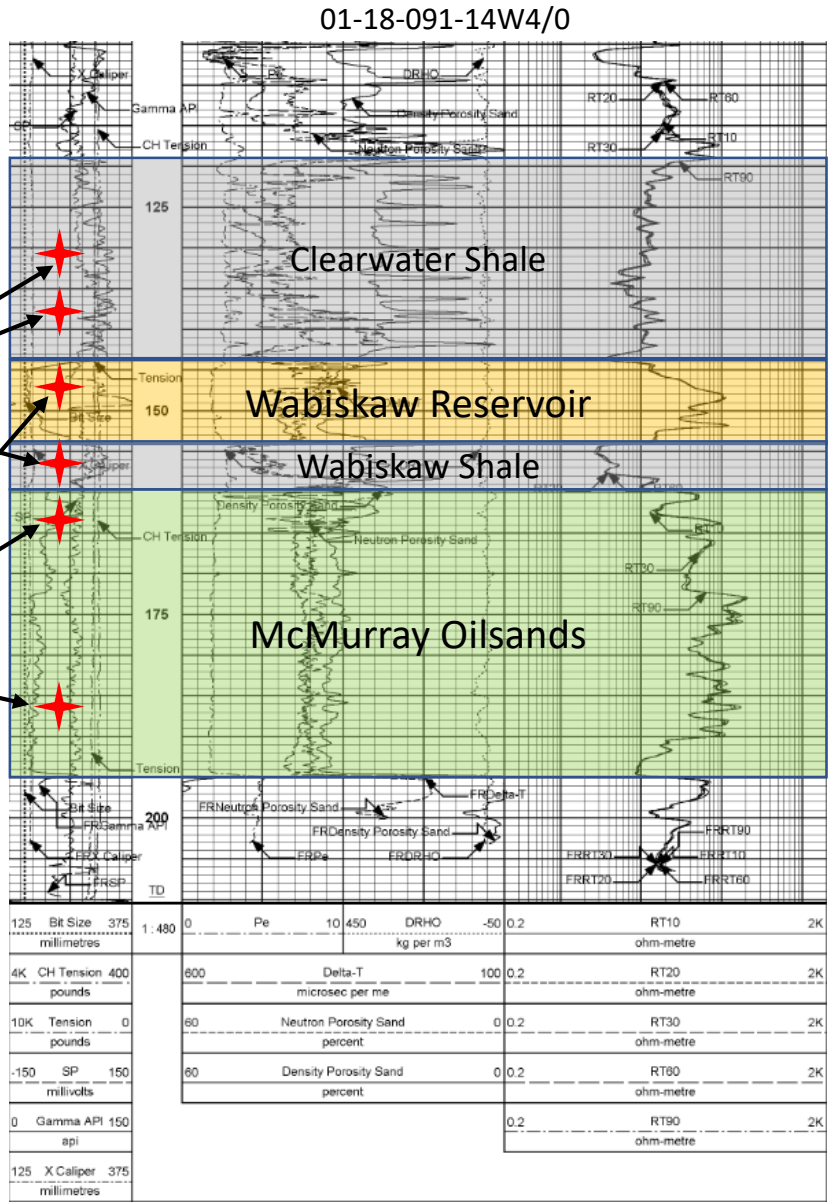
Well	Depth to Caprock Base (m)	Fracture Gradient (kPa/m)	Smin Fracture Pressure (kPa)
5-16	145	19.7	2857
1-18	144	21.0	3024

MINI-FRAC TESTS AND FRACTURE PRESSURE

Caprock – Clearwater Member
Caprock – Wabiskaw Shale

Caprock – mini-frac

Oilsands – mini-frac



CAPROCK INTEGRITY- MONITORING

- Clearwater Formation:
  - 6 vertical, nested observation wells measuring pressure and temperature.
- Wabiskaw Member:
  - 1 horizontal well measuring temperature and pressure
- Surface heave monitoring program
- Blanket Gas system to monitor bottomhole injection pressures.

Everest Canadian Resources

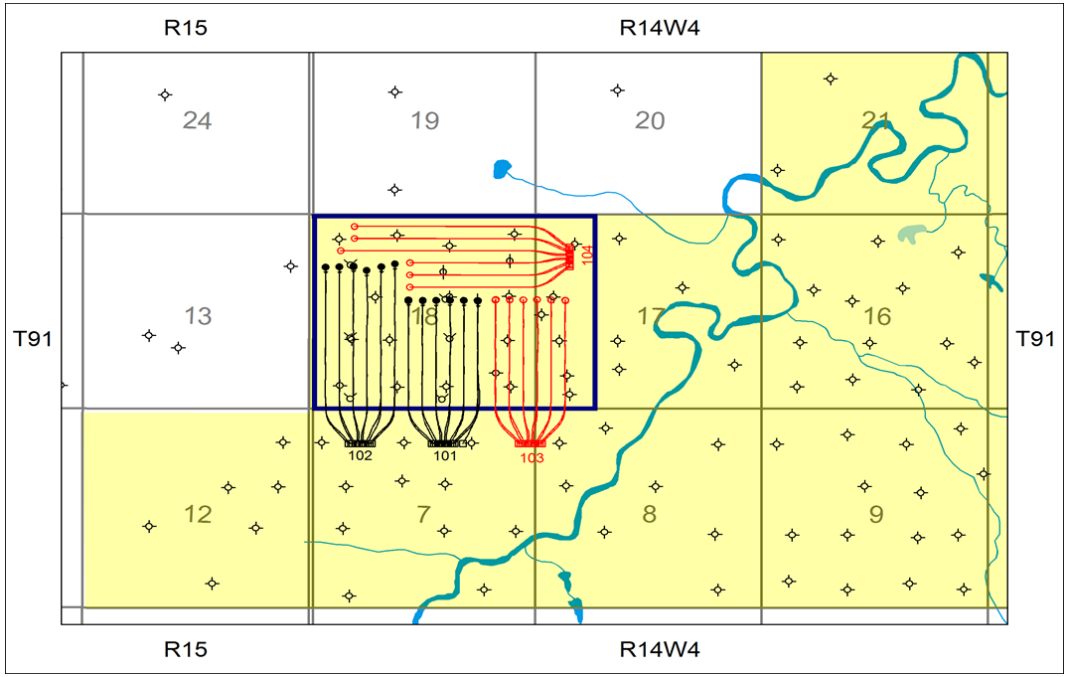
DRILLING & COMPLETIONS

WELL LAYOUT

- Approved Development area outlined in blue

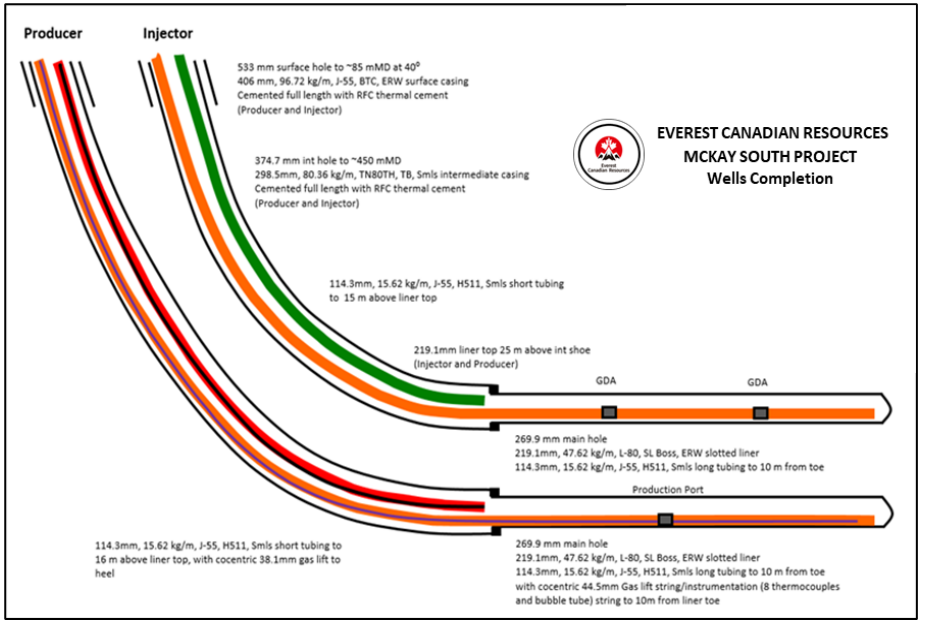
- Drilled to date (black):
  - Pad 101 (6 pairs) → 800 m Hz
  - Pad 102 (6 pairs) → ~ 1,000 m Hz
  - Wabiskaw observation well (lies above 1P1)

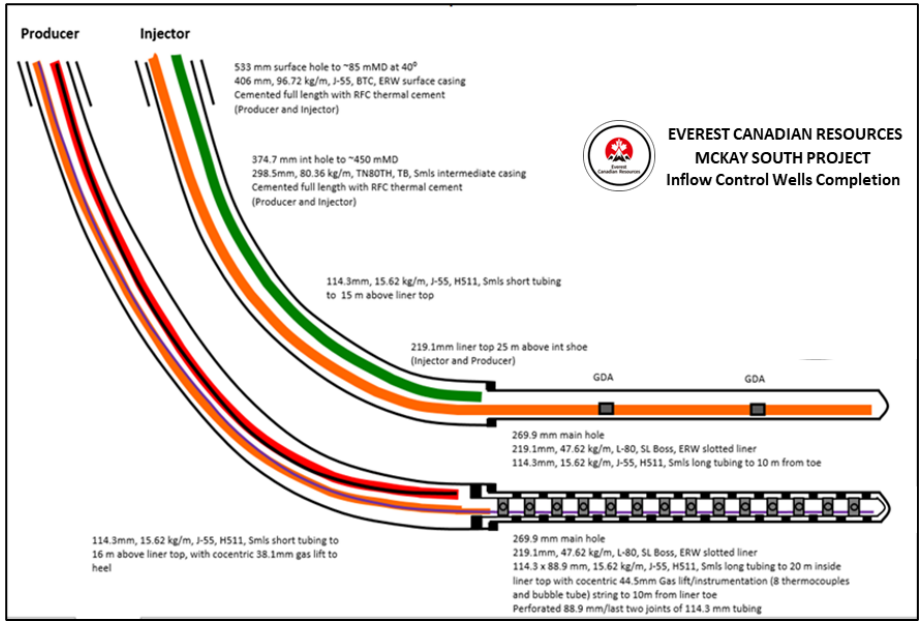
- Approved Pads (red):
  - Pad 103 (6 pairs)
  - Pad 104 (6 pairs)



WELLS COMPLETION SCHEMATICS

- Initial Wells completion design
  - Six installations in production wells
  - All production wells are equipped for gas lift
  - Coil tubing with temperature instrumentation is run to toe.



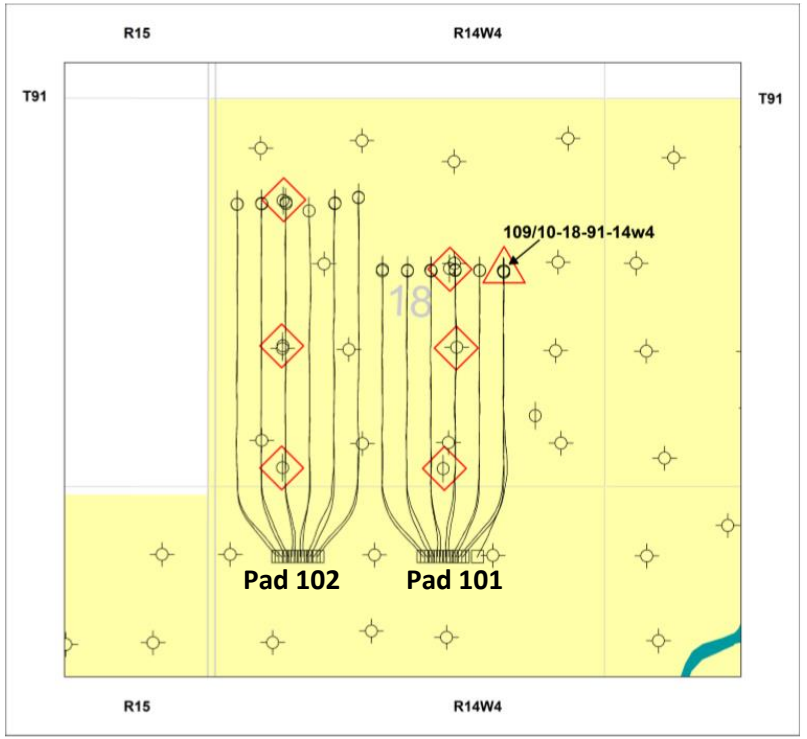


- ICD Installation Producer (Gas Lift)
  - Six installations in production wells
  - All production wells are equipped for gas lift
  - Coil tubing with temperature instrumentation is run to toe.

OBSERVATION WELLS

OBSERVATION WELLS

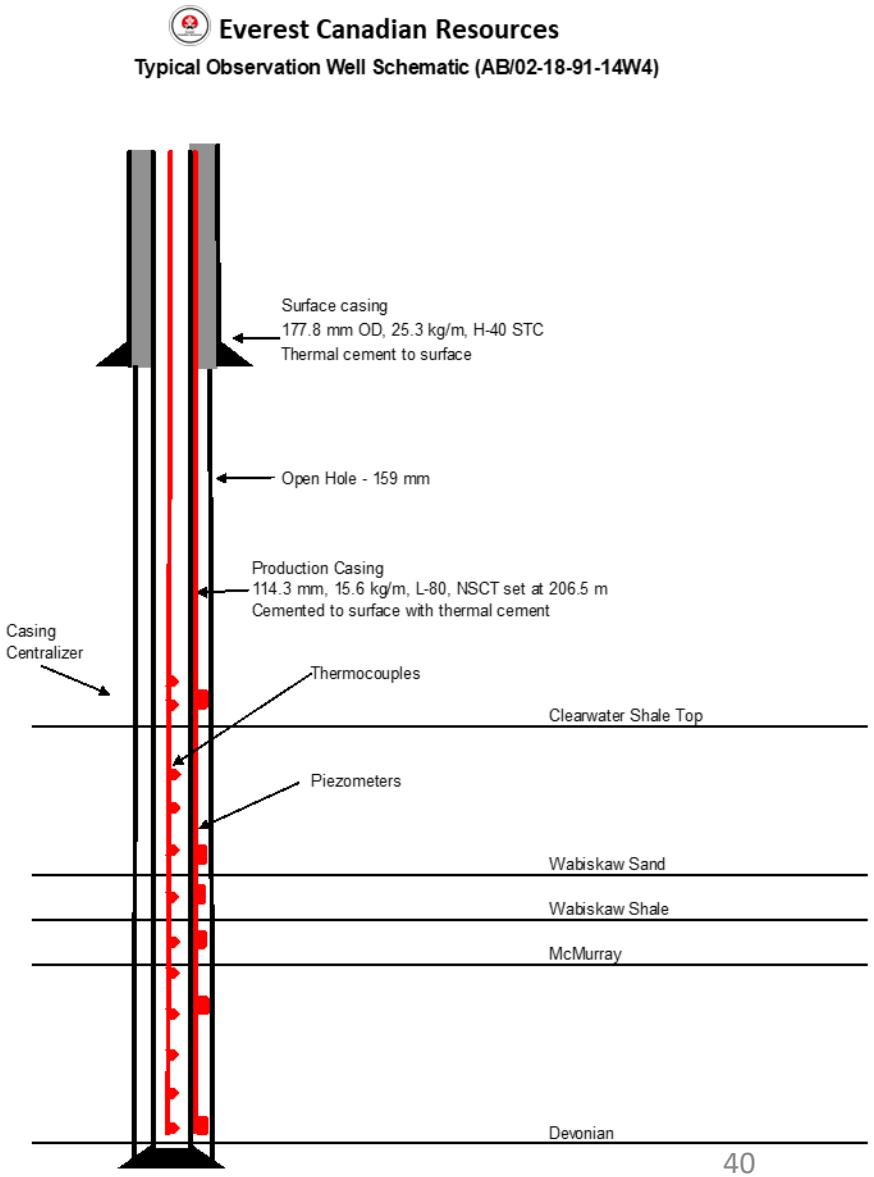
- 6 Vertical, Nested Observation Wells:
  - Pressure and temperature measurements extending from McMurray to Clearwater Formations
  - 10-18 and12-18 wells have experienced 1 TC failure each. 5-18 has experienced 4 TC failures.
- Horizontal Observation Well:
  - Wabiskaw Member
  - Temperature/Pressure measurements



Well	Temperature	Pressure
AB/2-18-91-14W4	12 temperature points	6 pressure points
AB/4-18-91-14W4	12 temperature points	6 pressure points
AB/5-18-91-14W4	12 temperature points	6 pressure points
AA/7-18-91-14W4	11 temperature points	5 pressure points
AB/10-18-91-14W4	12 temperature points	6 pressure points
AA/12-18-91-14W4	12 temperature points	6 pressure points
09/10-18-914-14W4	High Temperature Fibre	

TYPICAL VERTICAL WELL

- 12 thermocouples spaced between the Base of McMurray to Clearwater
- 6 piezometers spaced between Base of McMurray to Clearwater
- Instrumentation strapped to outside of casing string



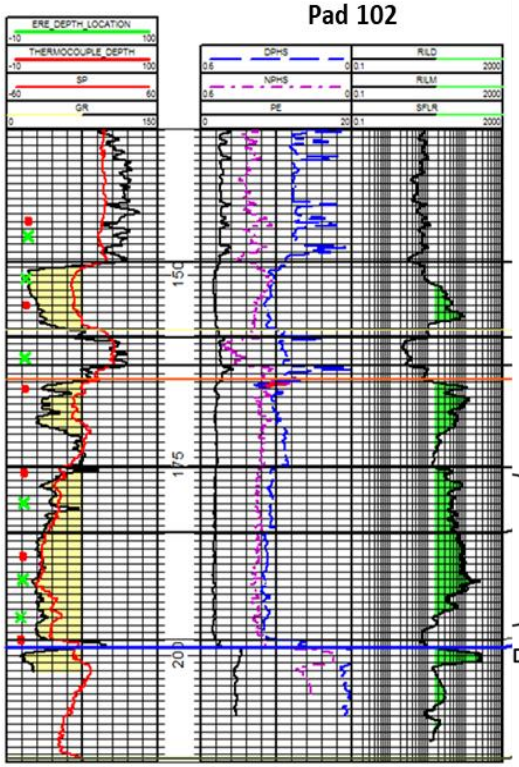
VERTICAL WELL

Everest Canadian Resources
ELEV_KB : 470.8
AB/04-18-091-14W4/0
RIG_DATE : 3/1/2011

X Pressure Gauge and Thermocouple Location

■ Thermocouple Location

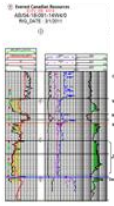
Pad 102



~80m to the West

2S5 (~187.5m TVD)

2P5 (~194.2m TVD)

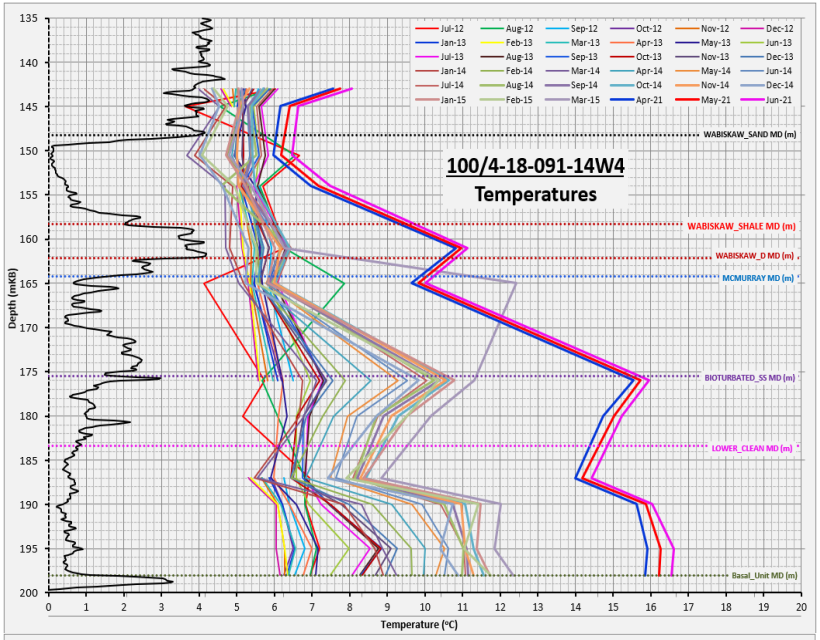


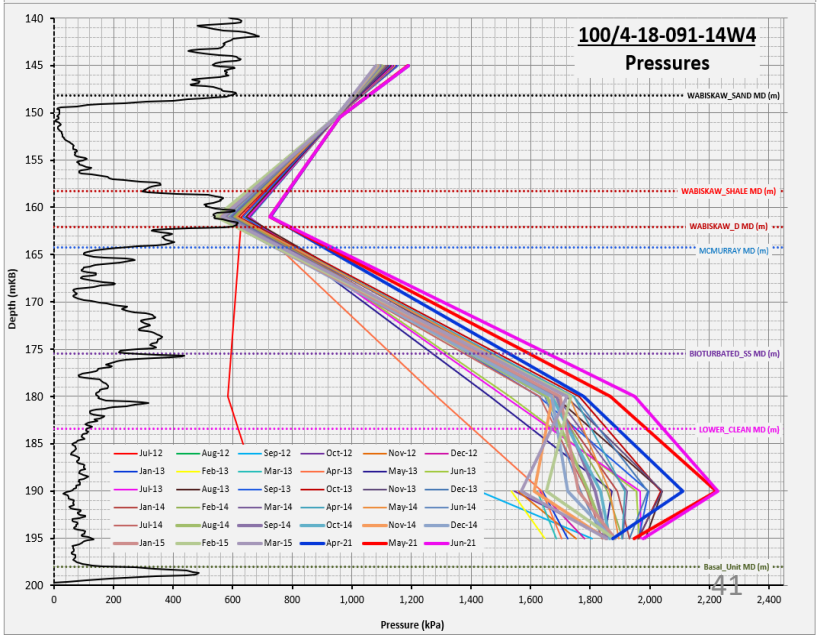
~20m to the East

2S4 (~188.3m TVD)

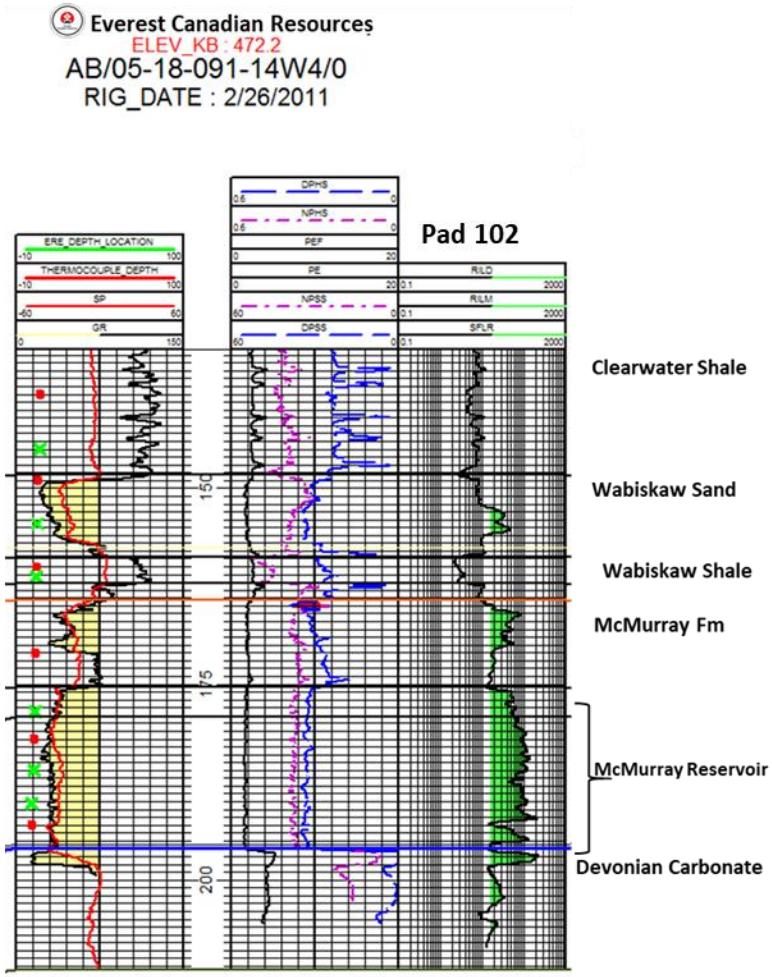
2P4 (~195.5m TVD)

AB/4-18-91-14W4





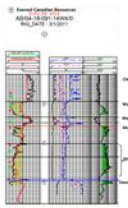
VERTICAL WELL



~77m to the West

2S5 (~186.6m TVD)

2P5 (~192.5m TVD)

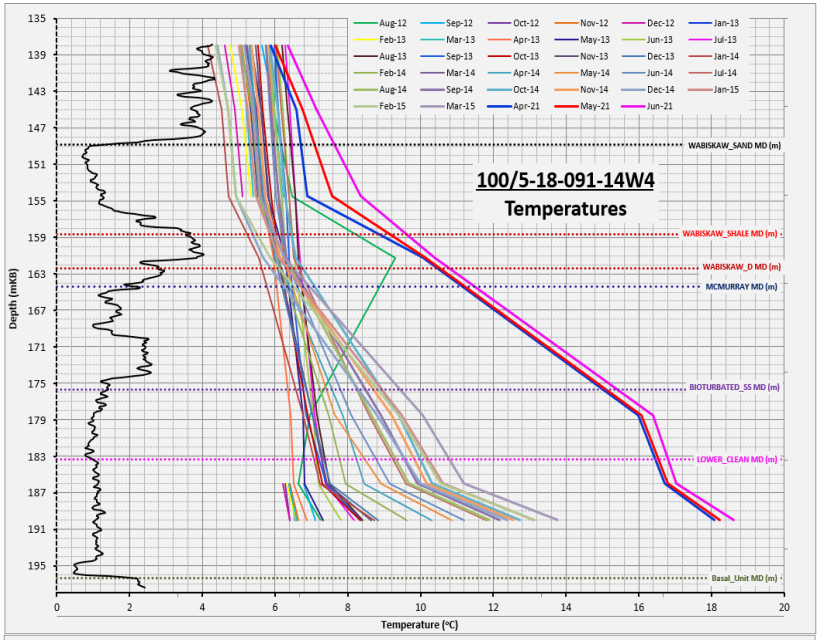


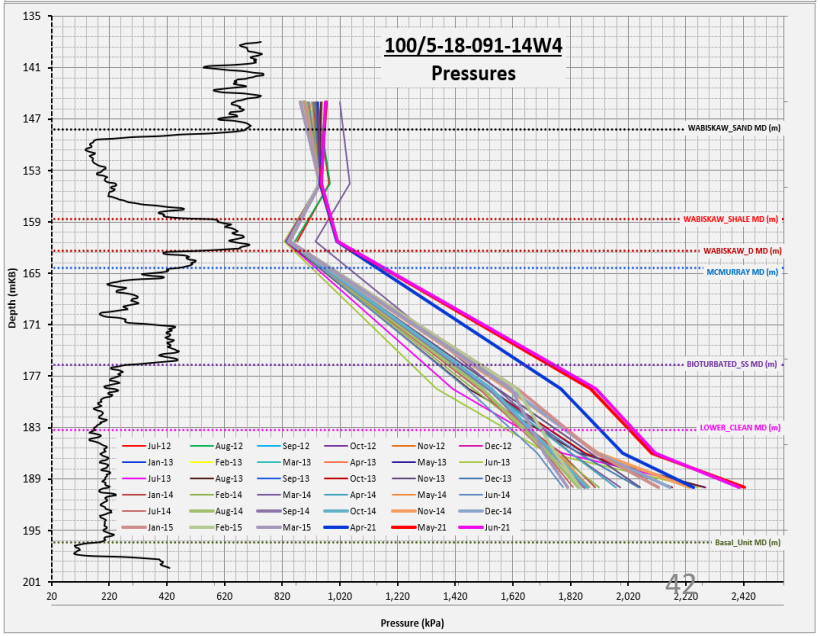
~23m to the East

2S4 (~188.6m TVD)

2P4 (~194.8m TVD)

AB/5-18-91-14W4



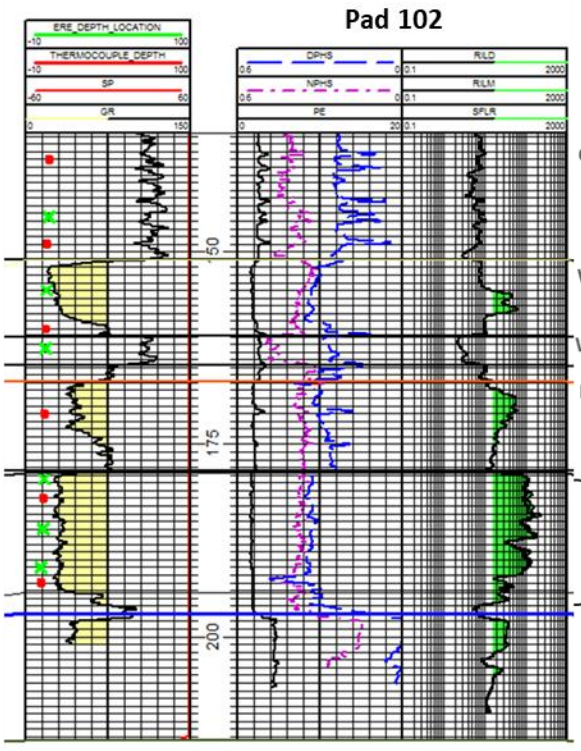


VERTICAL WELL

Everest Canadian Resources
WDBD
ELEV_KB : 474.5
AA/12-18-091-14W4/0
RIG_DATE : 2/23/2011

X Pressure Gauge and Thermocouple Location

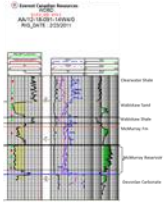
■ Thermocouple Location



~80m to the West

2S5 (~185.8m TVD)

2P5 (~191.2m TVD)

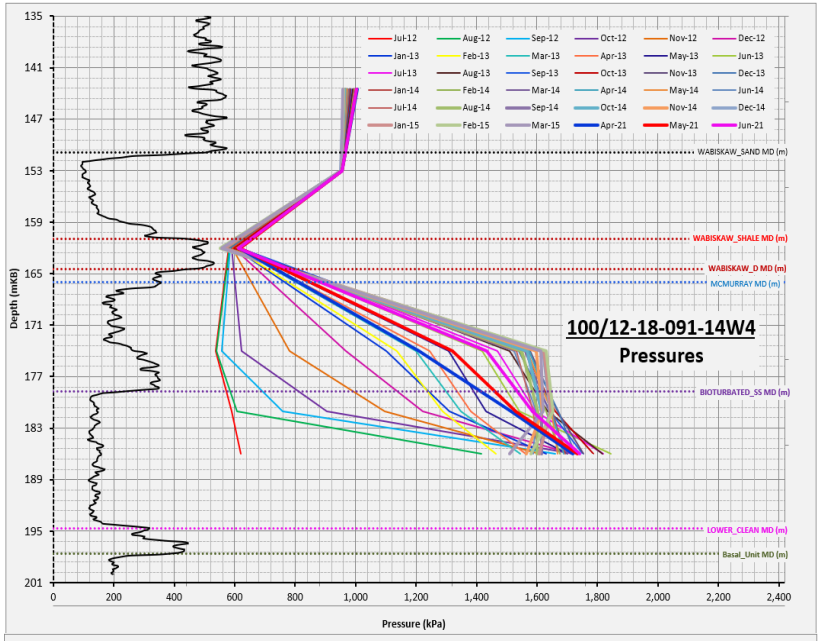


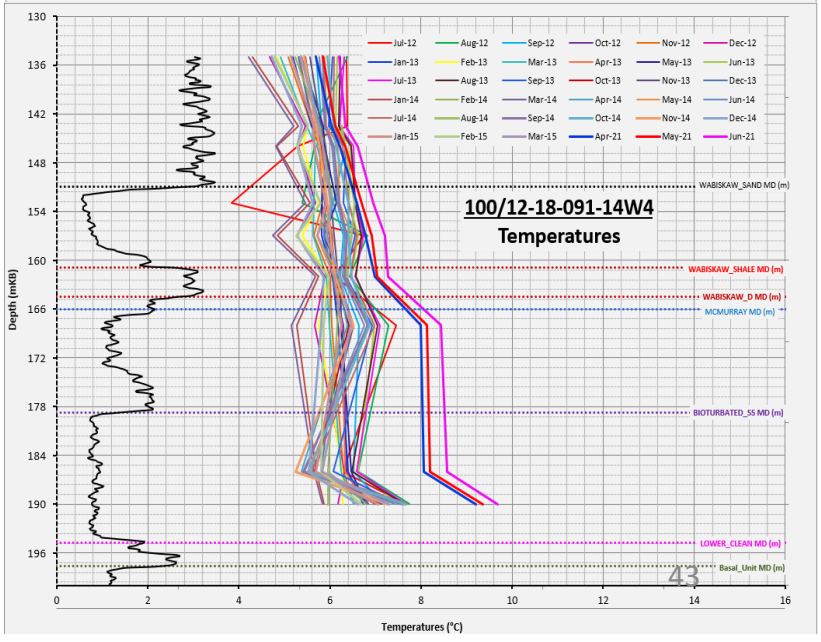
~20m to the East

2S4 (~187.7m TVD)

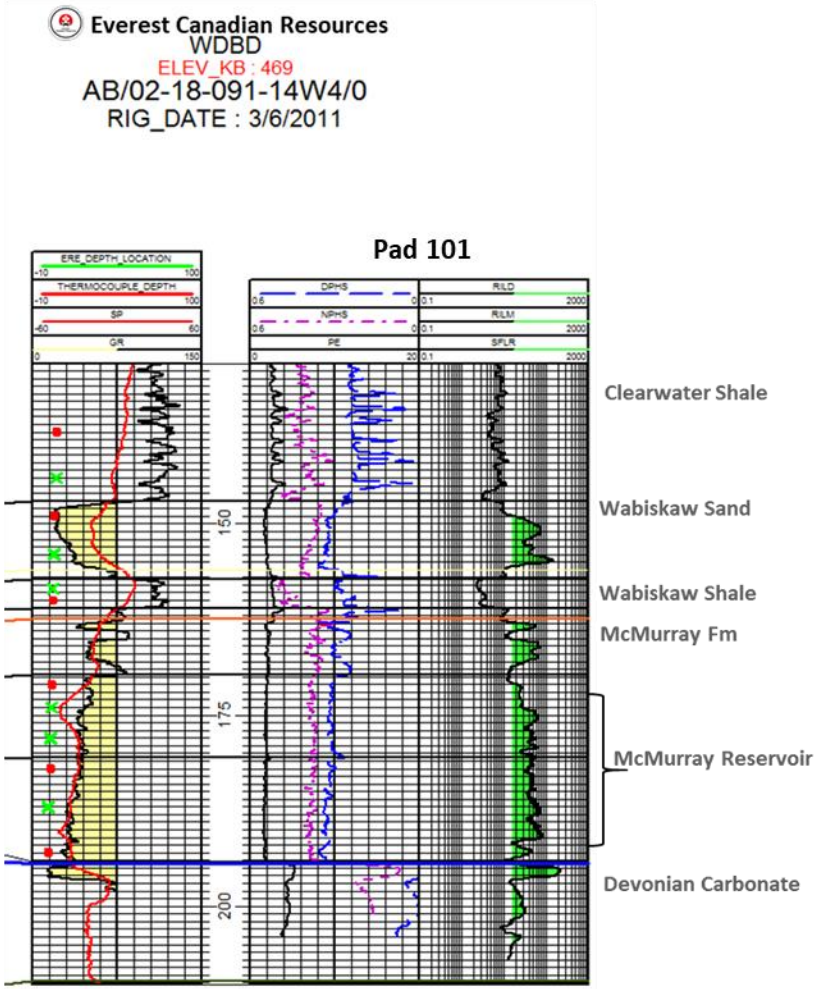
2P4 (~192.3m TVD)

AA/12-18-91-14W4





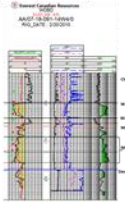
VERTICAL WELL



~40m to the West

1S4 (~186.7m TVD)

1P4 (~193.2m TVD)

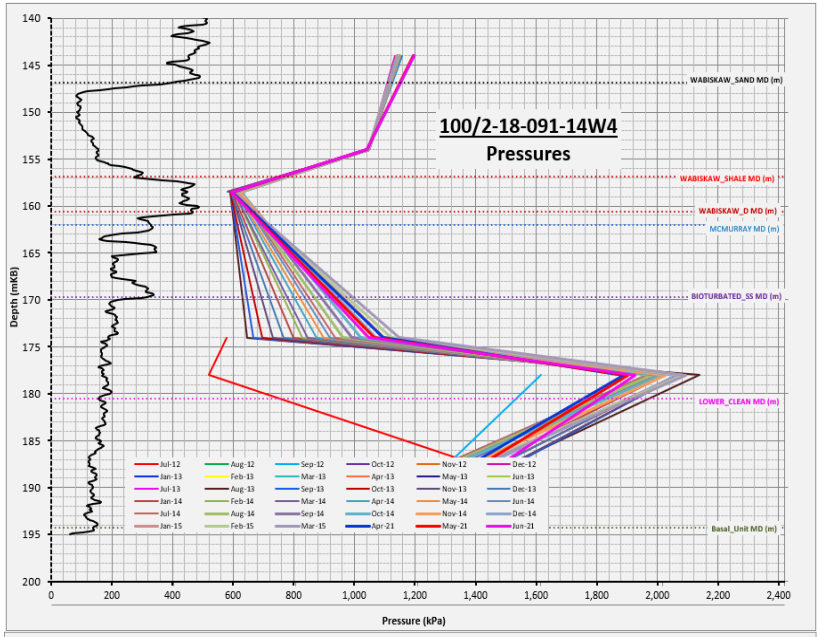


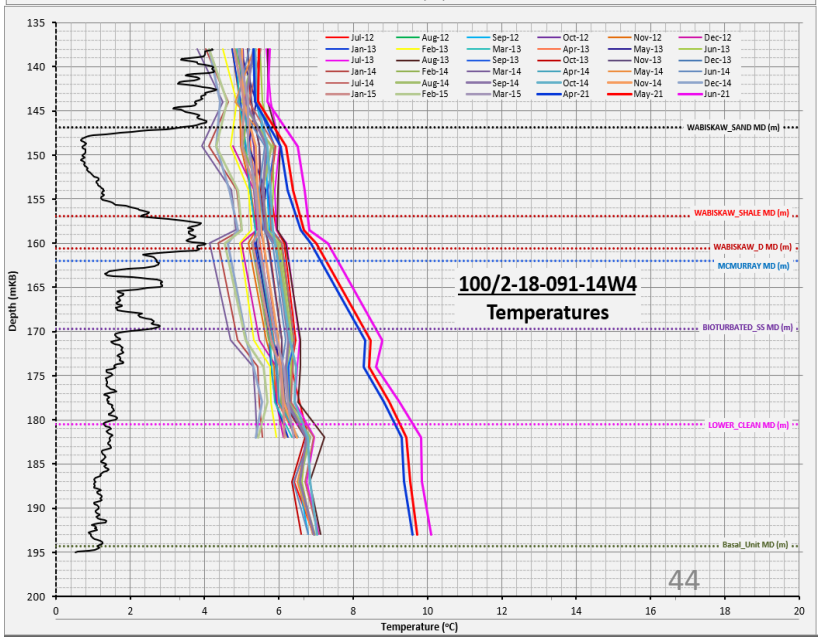
~60m to the East

1S3 (~186.5m TVD)

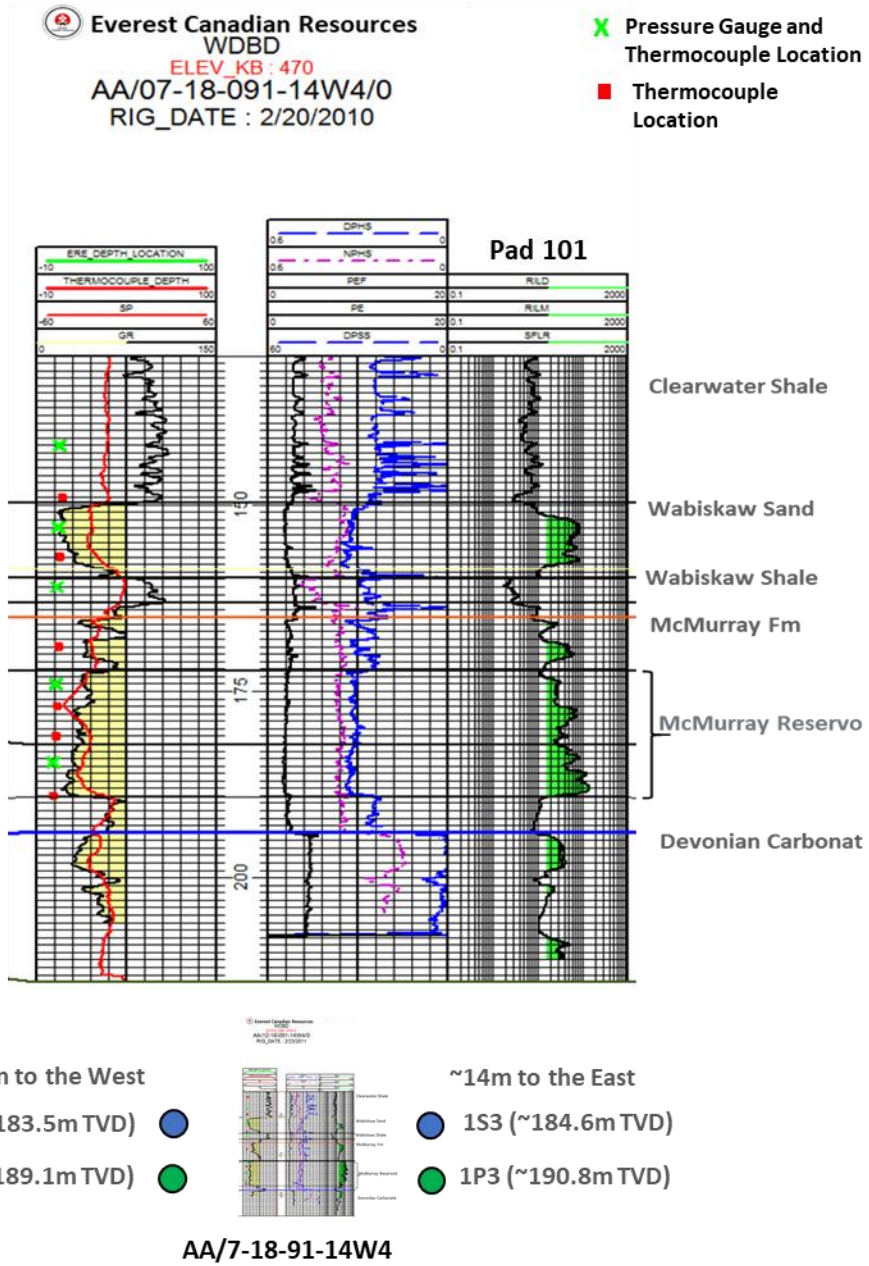
1P3 (~193.5m TVD)

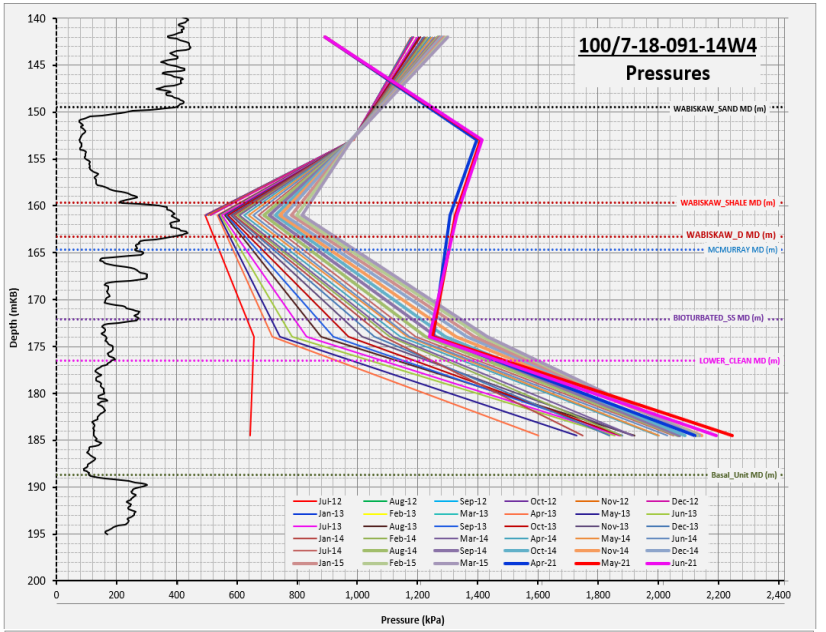
AB/2-18-91-14W4

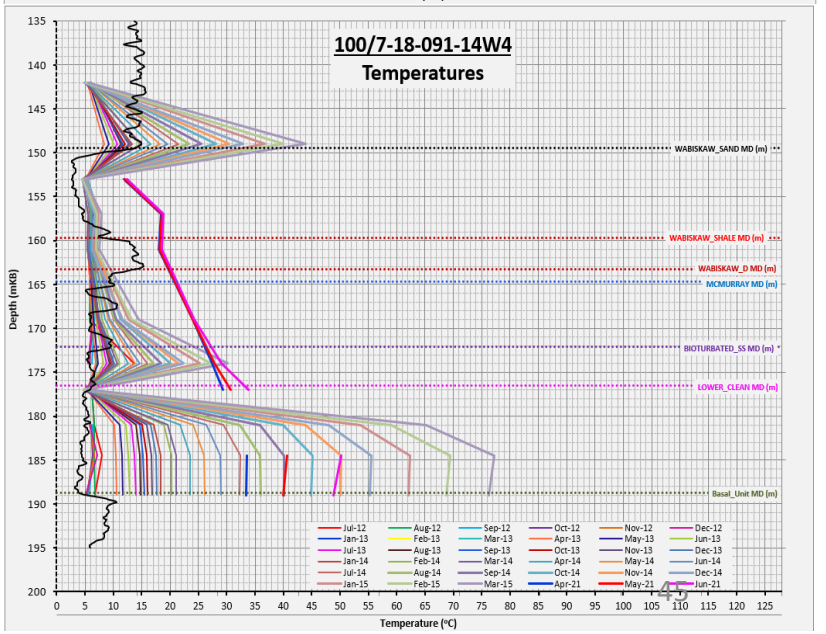




VERTICAL WELL



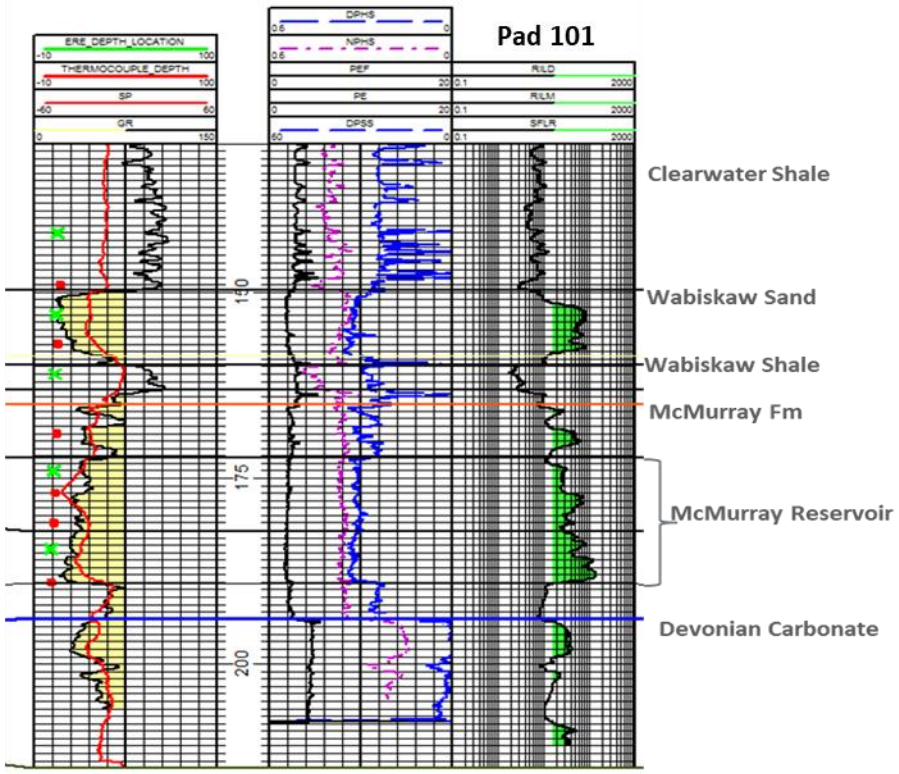




VERTICAL WELL

Everest Canadian Resources
WDBD

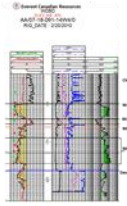
ELEV_KB:470.9
AB/10-18-091-14W4/0
RIG_DATE : 2/28/2011



~93m to the West

1S4 (~183.5m TVD)

1P4 (~189.9m TVD)

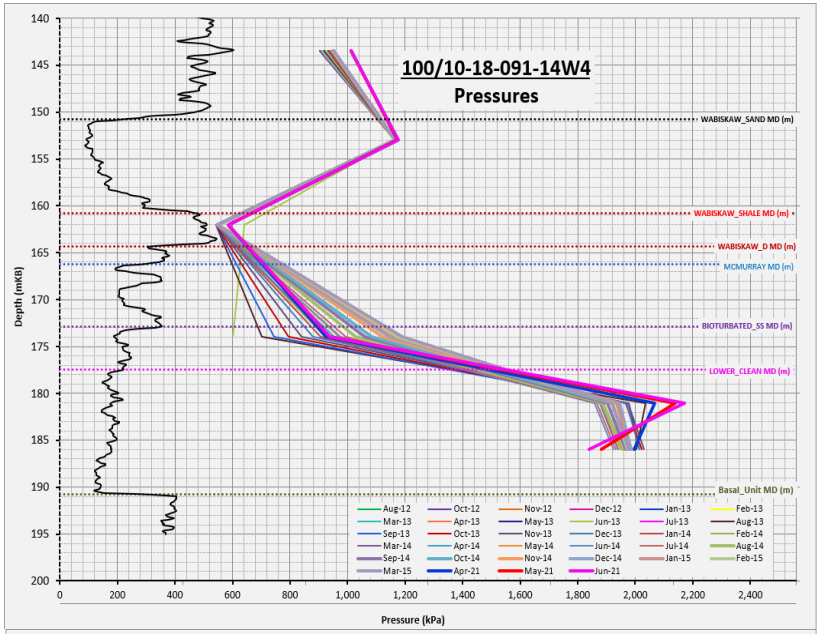


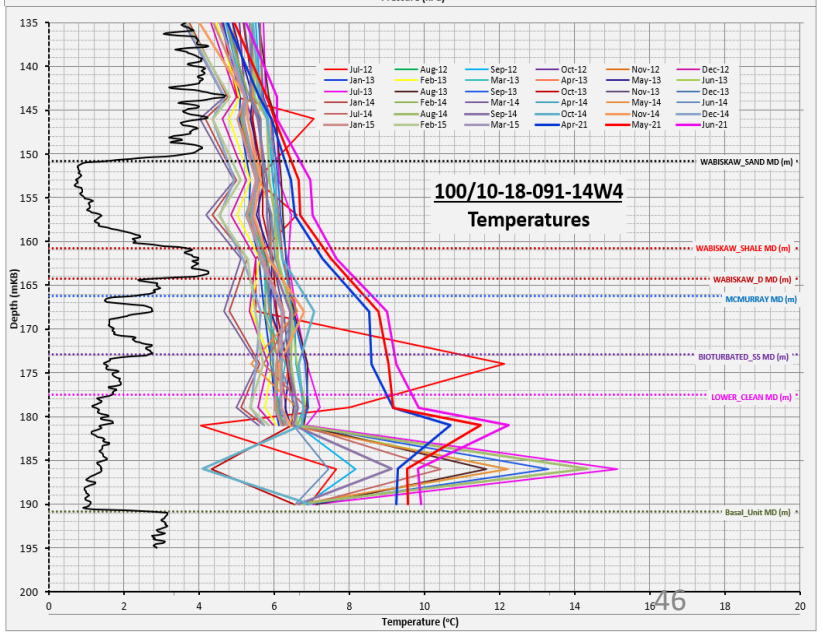
~14m to the East

1S3 (~184.0m TVD)

1P3 (~190.0m TVD)

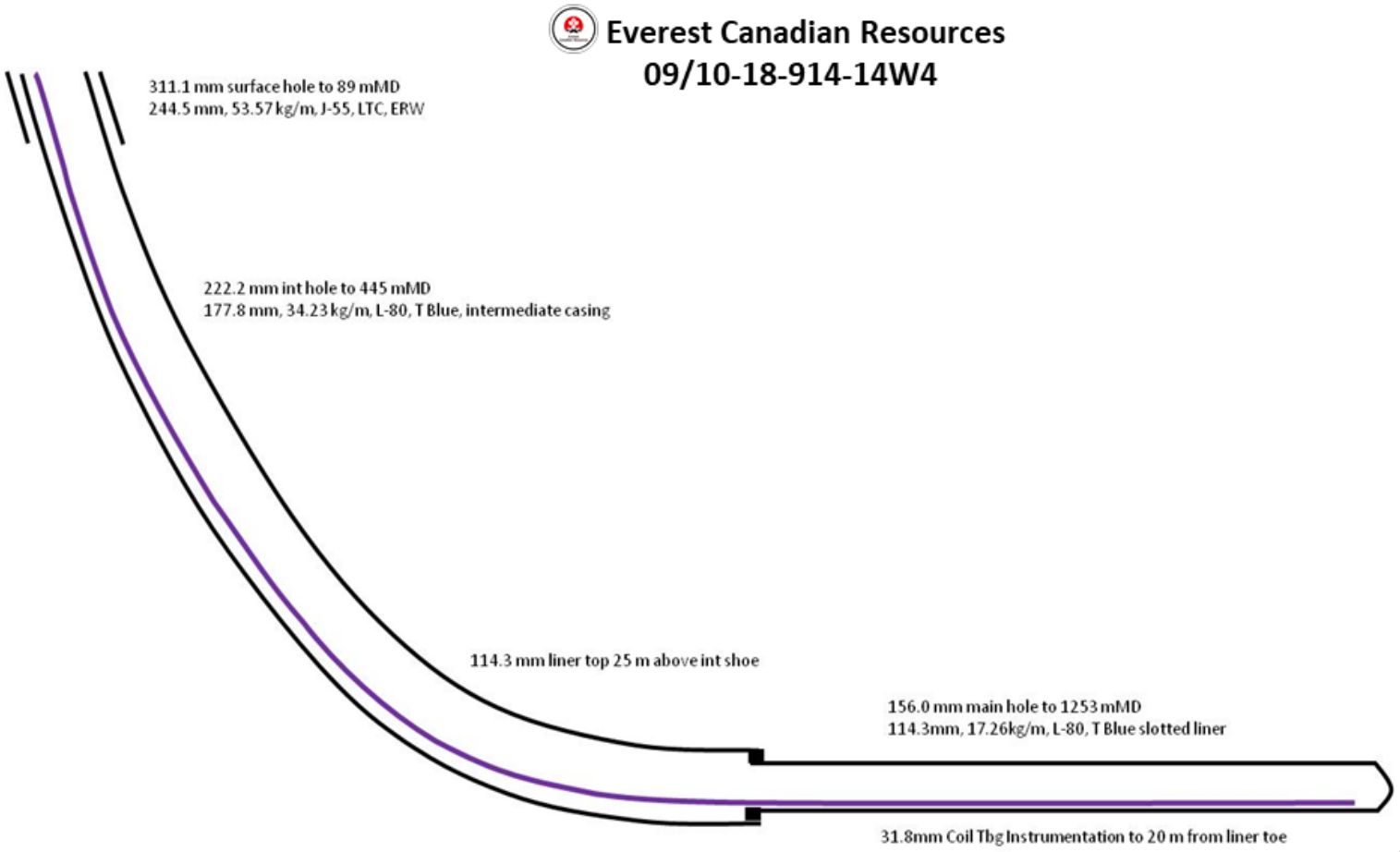
AB/10-18-091-14W4





HORIZONTAL WABISKAW OBSERVATION WELL

- Horizontal observation well designed and drilled in Wabiskaw formation for potential future production from zone



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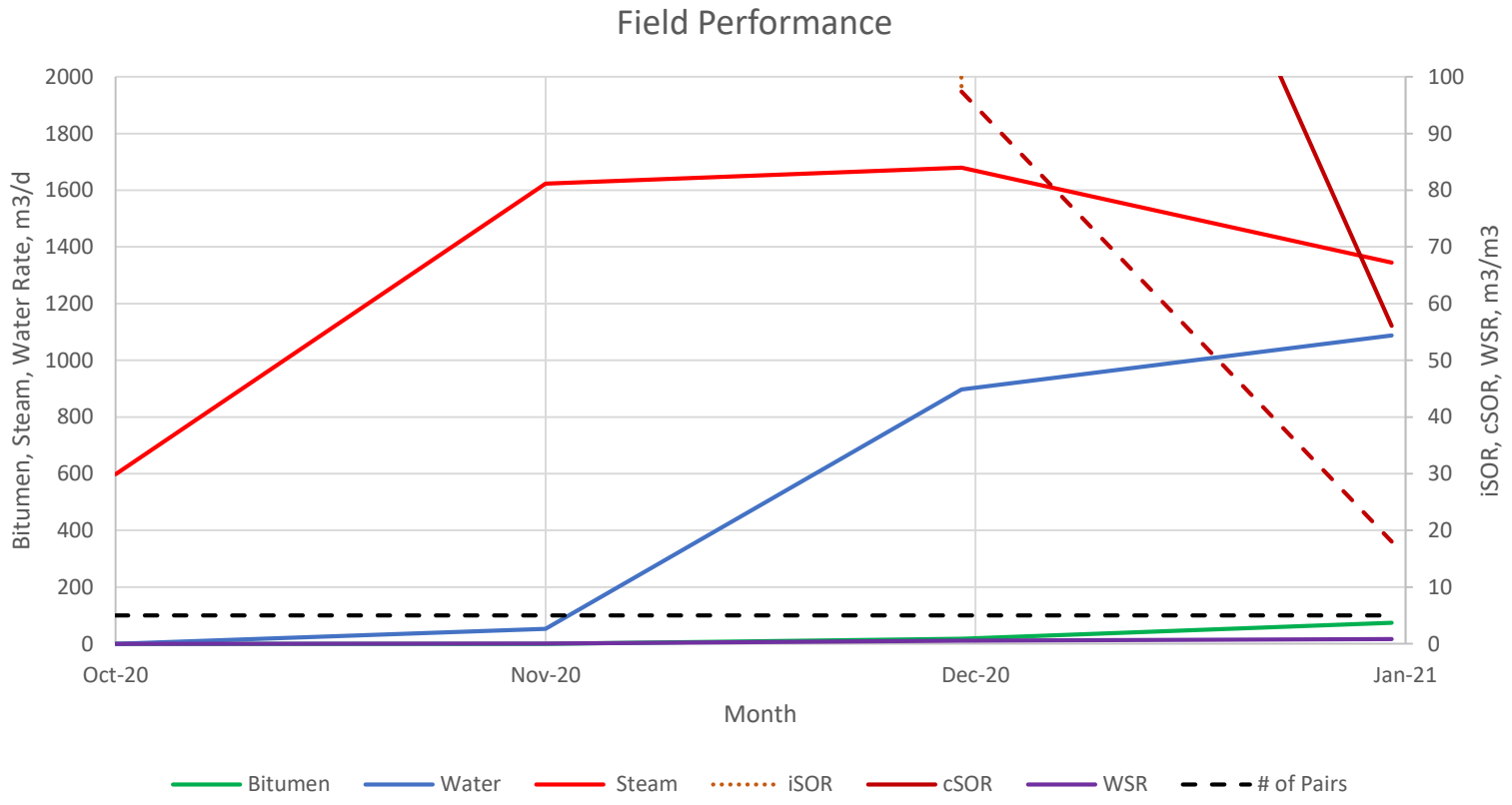
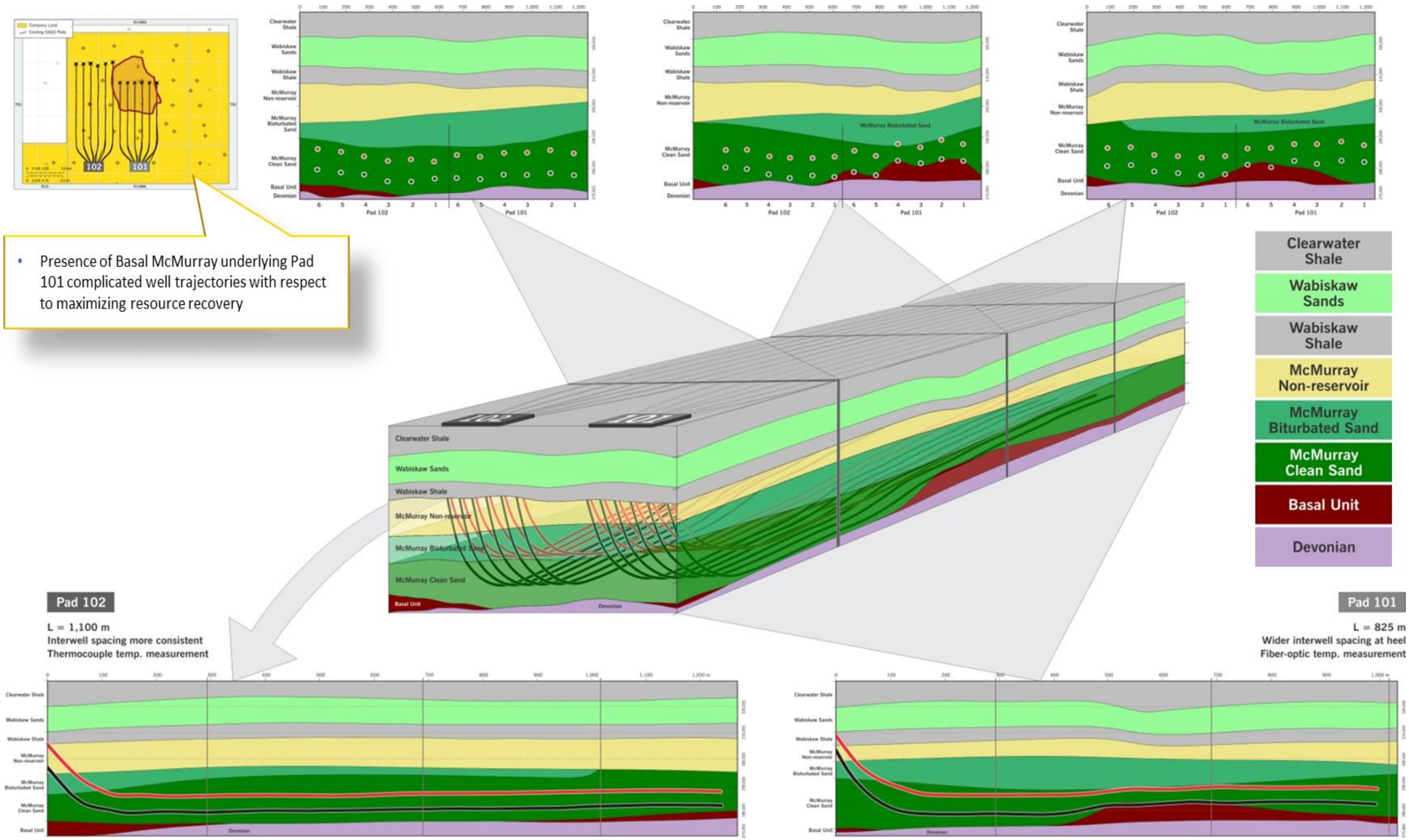
SCHEME PERFORMANCE

Scheme Performance



WELLPAIR CURRENT STATUS

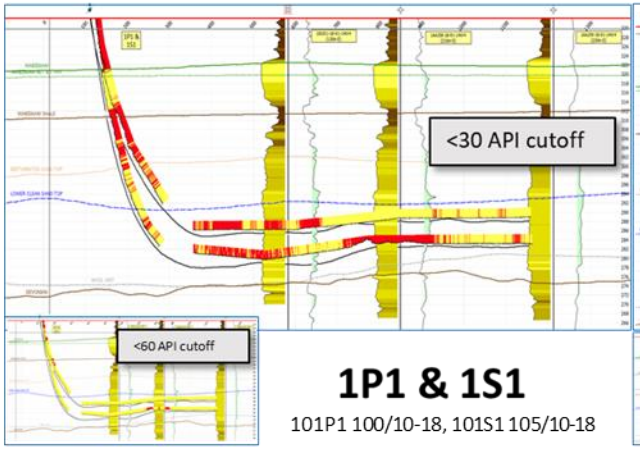
Pad 101 and 102 Schematic Sections



- Presence of Basal McMurray underlying Pad 101 complicated well trajectories with respect to maximizing resource recovery

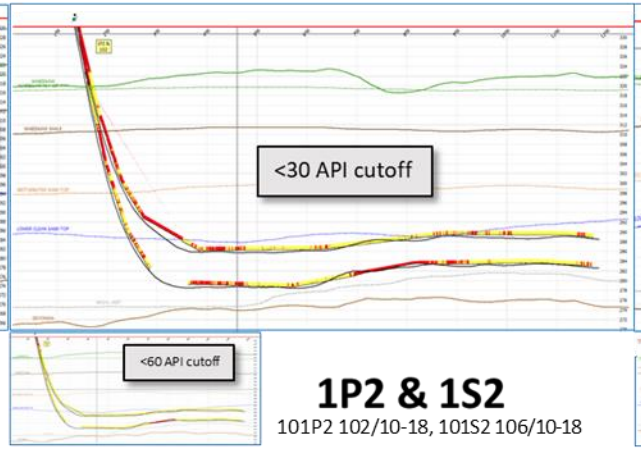
WELLPAIR CURRENT STATUS

Pad 101 Schematic Sections



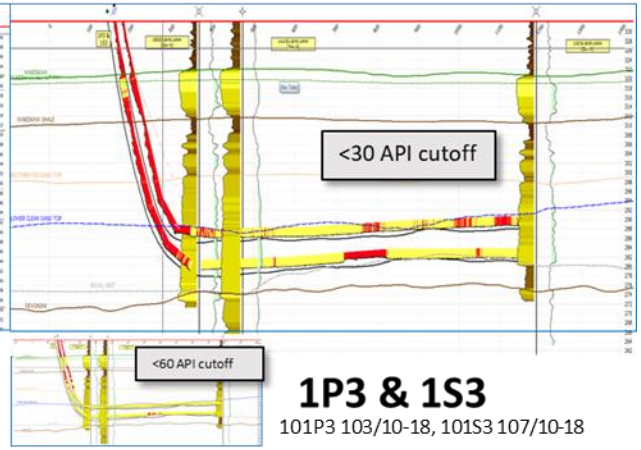
1P1 & 1S1

101P1 100/10-18, 101S1 105/10-18



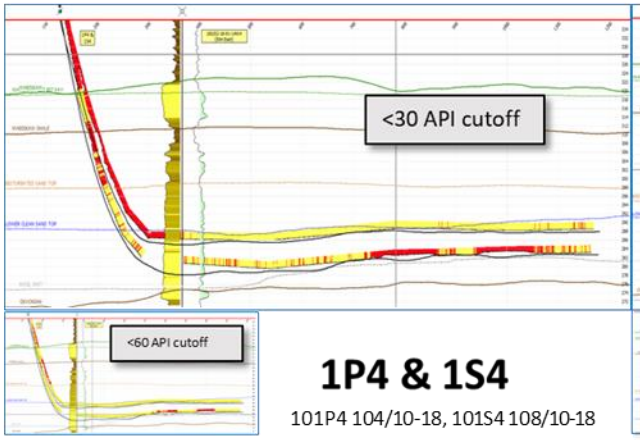
1P2 & 1S2

101P2 102/10-18, 101S2 106/10-18



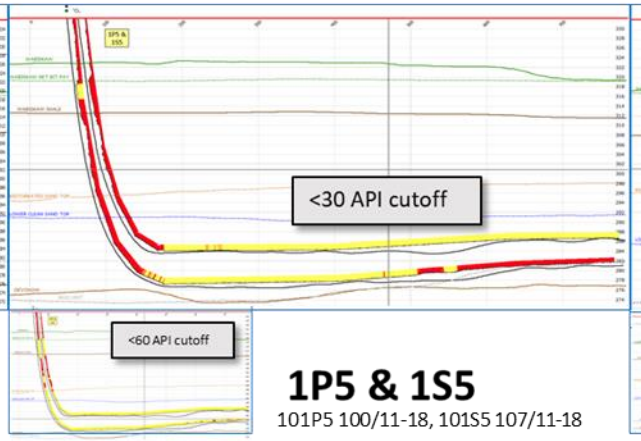
1P3 & 1S3

101P3 103/10-18, 101S3 107/10-18



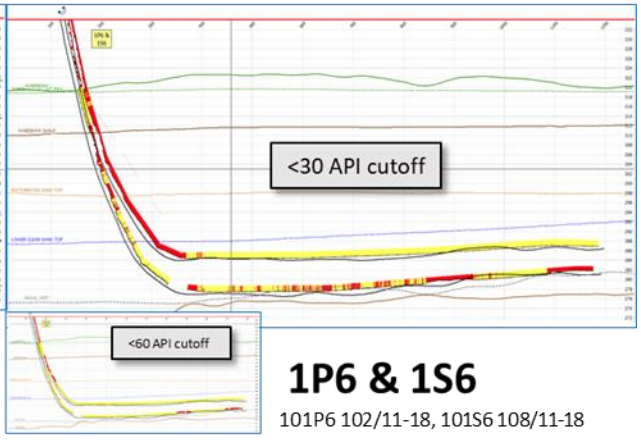
1P4 & 1S4

101P4 104/10-18, 101S4 108/10-18



1P5 & 1S5

101P5 100/11-18, 101S5 107/11-18

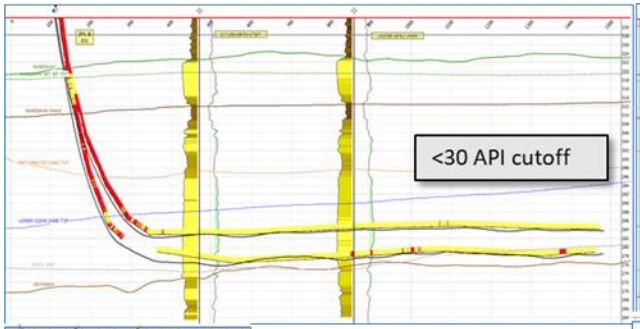


1P6 & 1S6

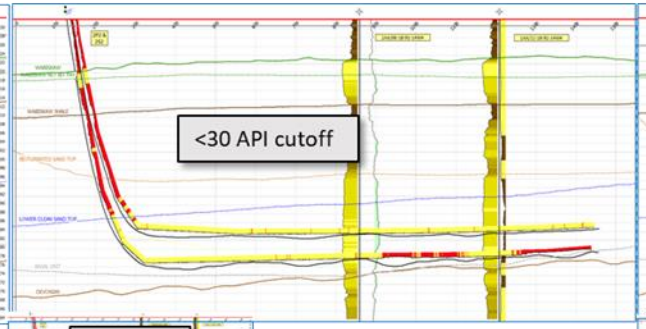
101P6 102/11-18, 101S6 108/11-18

WELLPAIR CURRENT STATUS

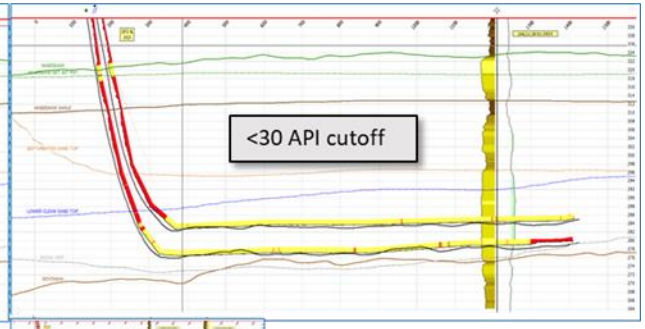
Pad 102 Schematic Sections



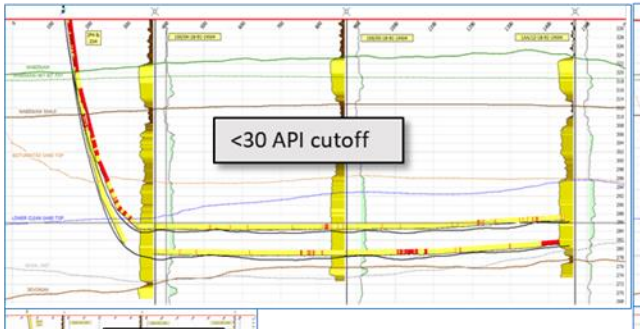
2P1 & 2S1
102P1 103/11-18, 102S1 105/11-18



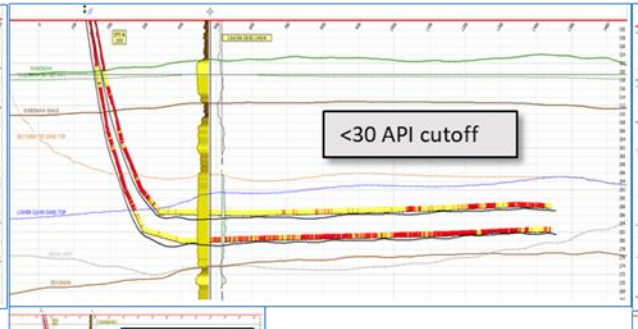
2P2 & 2S2
102P2 104/11-18, 102S2 106/11-18



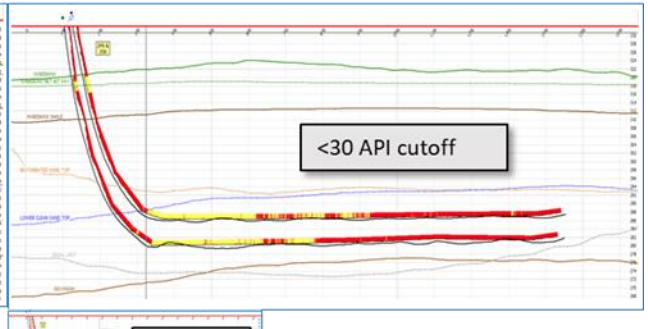
2P3 & 2S3
102P3 100/12-18, 102S3 105/12-18



2P4 & 2S4
102P4 102/12-18, 102S4 106/12-18



2P5 & 2S5
102P5 103/12-18, 102S5 107/12-18



2P6 & 2S6
102P6 104/12-18, 102S6 108/12-18

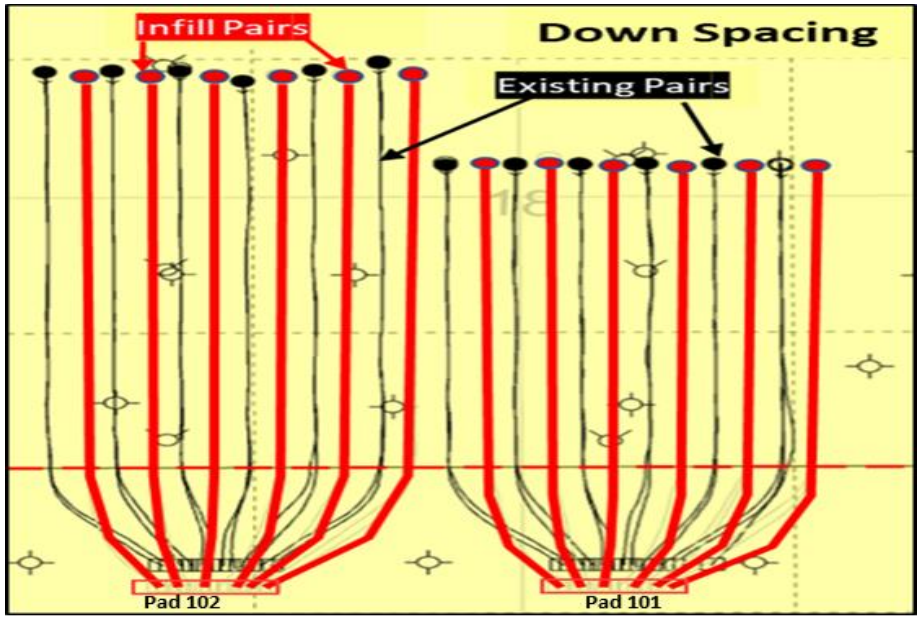
COMMISSIONING AND STARTUP

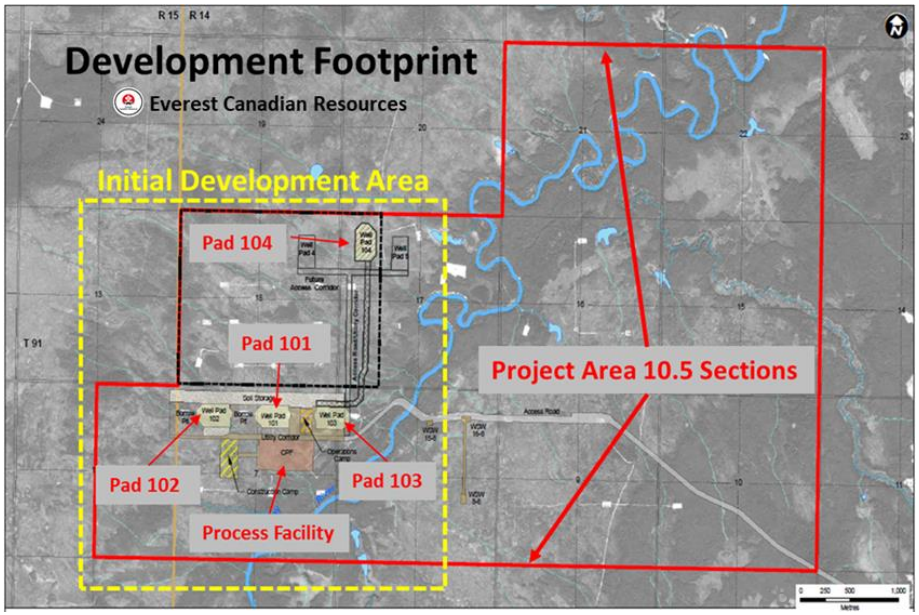
- Pad 102 was started September 2020
- Pad 101 was started early February 2021.

SUBSURFACE FUTURE PLANS

SUBSURFACE FUTURE PLANS

- Continue with Pad 102 and Pad 101 wellpairs rampup throughout 2021 until SAGD rampup is completed
- Drilling Plans Medium to Long Term
  - Pads 101 and 102 Downspacing
    - Down-spacing amendment application fully approved by AER
    - Capacity for 12 additional well pairs (infills) on existing Pads 101 and 102
  - Pads 103 and 104 are currently approved (with 100 m spacing/Six Pairs), an amendment will be submitted to the AER to reduce spacing increase well count

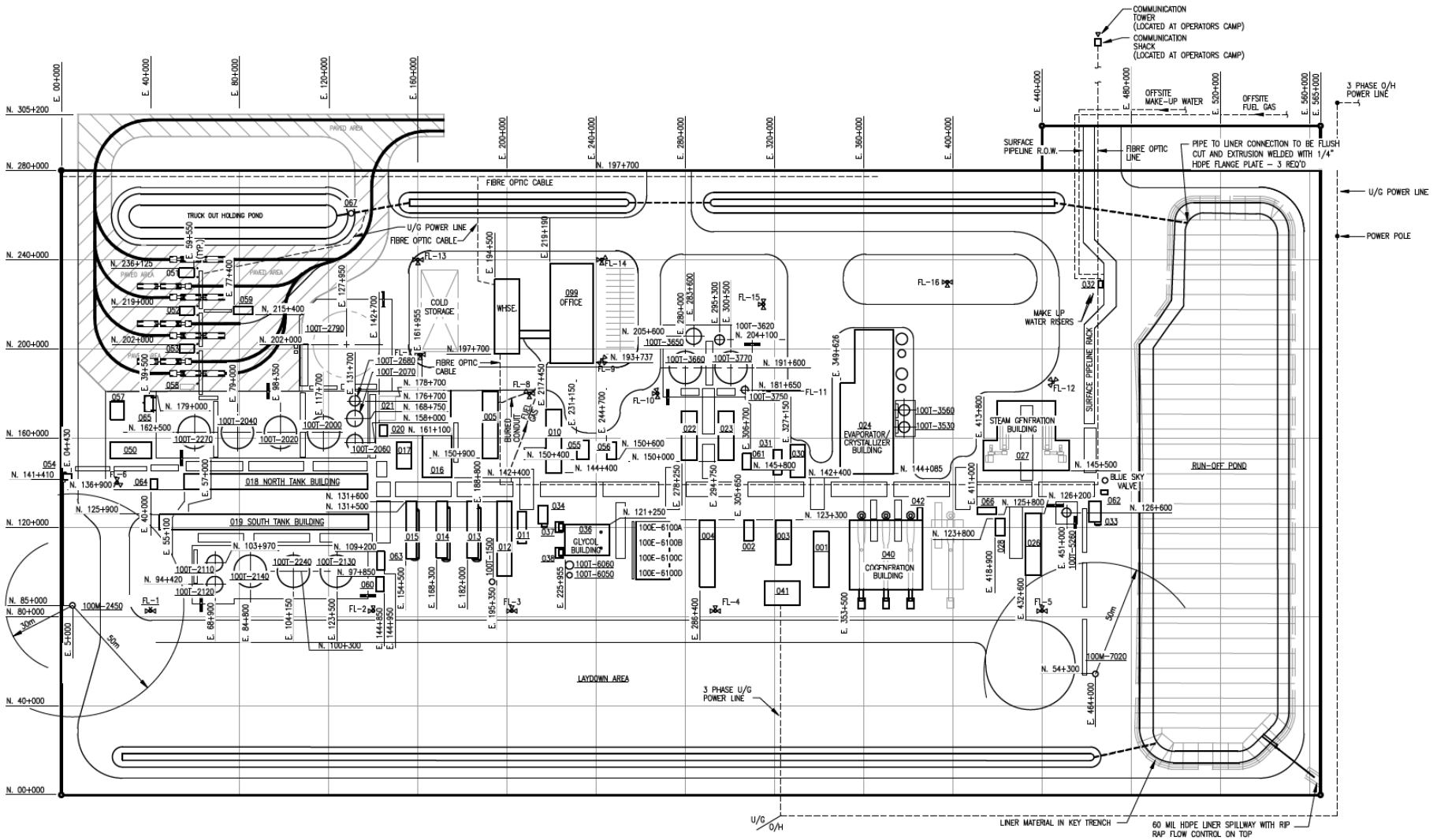




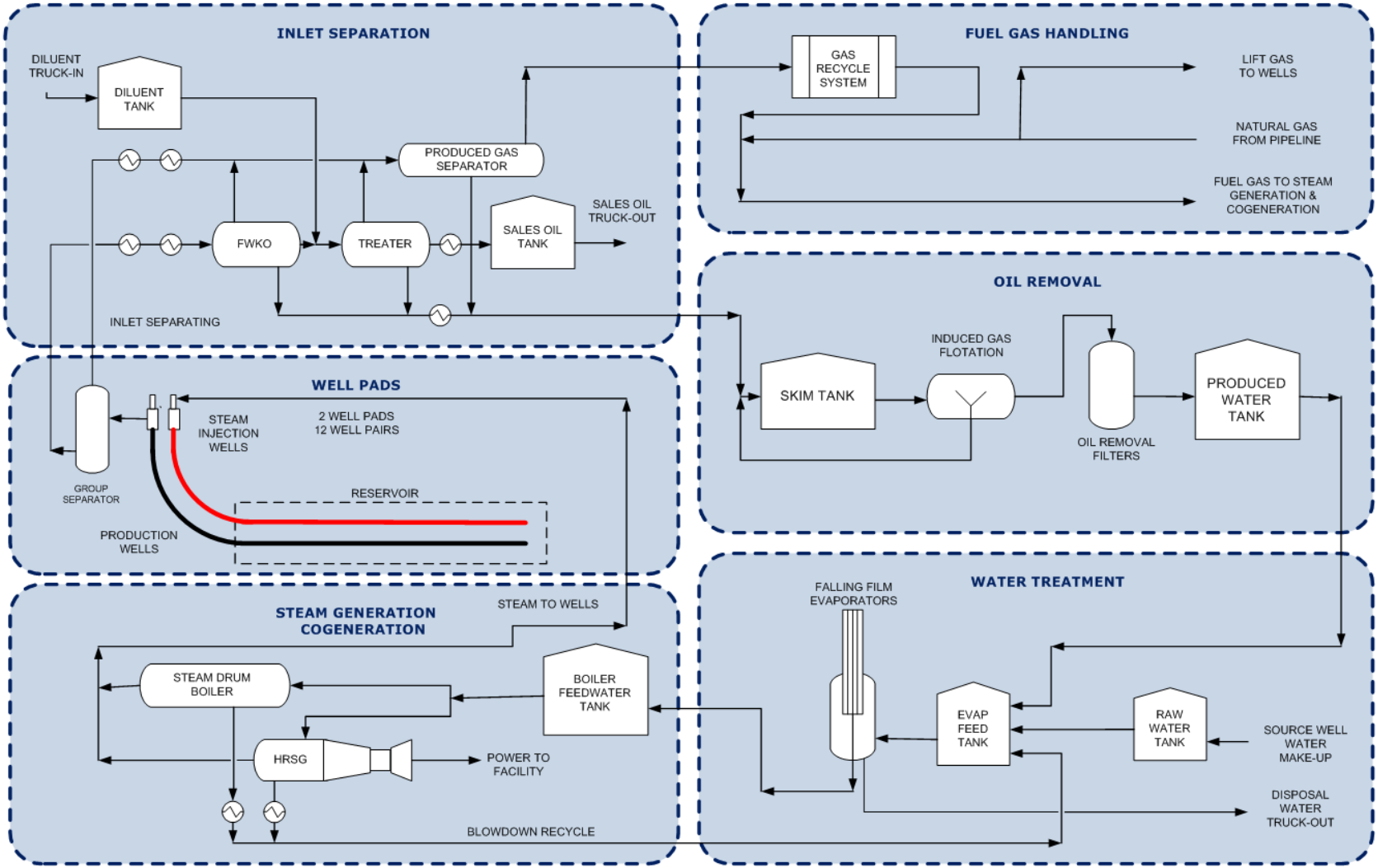
Everest Canadian Resources

SURFACE OPERATIONS

CENTRAL PROCESSING FACILITY PLOT PLAN



SIMPLIFIED FACILITY SCHEMATIC



MEASUREMENT AND REPORTING

- General
  - Everest's current EPEA expires on October 30, 2021 and a new EPEA approval is currently being worked on.
  - MARP approved: No updates
  - EPAP Declaration time-line
    - Company becomes Operator of Record on June 2020 and chooses March as the Declaration month.
    - Trial year: June 1, 2020 to May 31, 2021
    - Official Declaration period: April 1, 2021 to March 31, 2021
    - Annual Declaration will be submitted: Q1, 2022
  - Well Production / Injection Volumes
    - Well test separator liquid meters have been reinstalled and certified
      - Well production will be prorated from bulk scheme production using intermittent test data via dedicated test separators on Pads 101 (5 pairs)and 102 (6 pairs).
      - Wells will meet or exceed the current minimum well test requirements per Directive 17
      - Manual samples will be taken to determine bitumen, water, solids and chloride content and have proven reliable and repeatable.

WATER SOURCES & USES

- *Water Act* licence amendment No. 00262149-02-00 was granted on April 06, 2020 extending the licence expiry date to April 5, 2025
- Fresh Water Uses - make-up water for the project to be drawn from the McKay Channel Empress Formation. Details on the Water Act license are as follows:

Licence No. 00262149-02-00	
8-8-91-14-W4M	853 m^3/ day
16-8-91-14-W4M	2,401 m^3/ day
15-8-91-14-W4M	2,475 m^3/ day
Daily Maximum Diversion	5,729 m^3/ day
Annual Maximum Diversion	419,750 m^3

ENVIRONMENTAL SUMMARY

- AER Commercial Scheme Approval No. 11461 - no compliance issues
- EPEA Approvals all main approvals have been transferred to Everest:
  - EPEA Approval 255245-00-00
  - EPEA Approval 255245-00-01
  - EPEA Approval 255245-00-02
  - EPEA Approval 287052-00-00
- Water Act Diversion Licence Amended No. 00262149-02-00 – extended to April 5, 2025 - no compliance issues

ENVIRONMENTAL SUMMARY

- EPEA approval 287052-00-00 (Wastewater System)
  - We are currently using holding tanks for our sewage and having it trucked off site for disposal.
  - An extension(File No. 287052-00-03, Application No. 005-287052) has been issued on April 28, 2021 and the expiry is extended to May 1, 2022.

SURFACE FUTURE PLANS

- Everest Canadian Resources top priority is to re-establish safe, compliant and steady-state operations
- Plans include but not limited to:
  - CPF
    - Pursue optimization opportunities
  - Wellpads
    - Wellpad 102 → Continue with optimization and complete SAGD rampup
    - Wellpad 101 → Continue with optimization and complete SAGD rampup