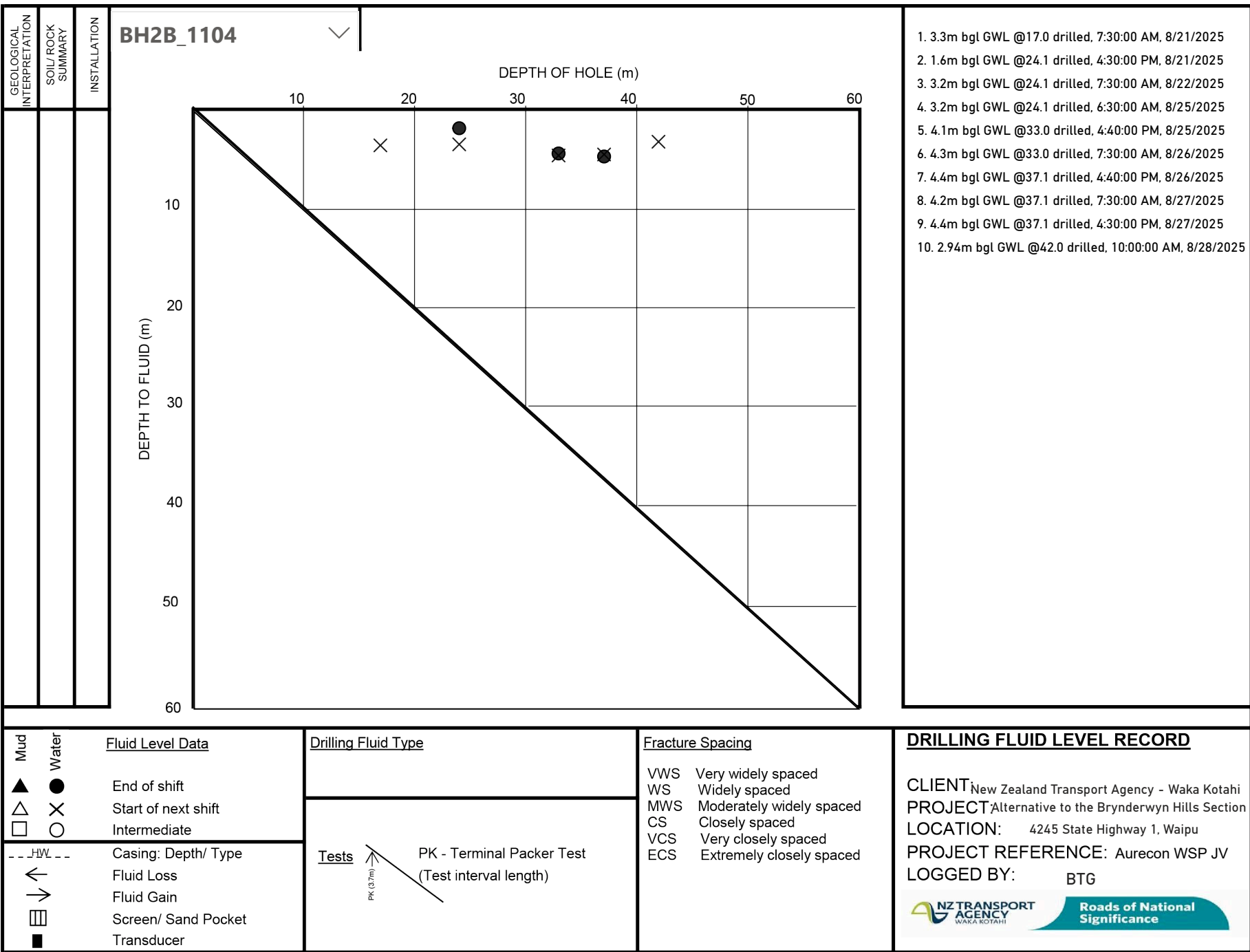
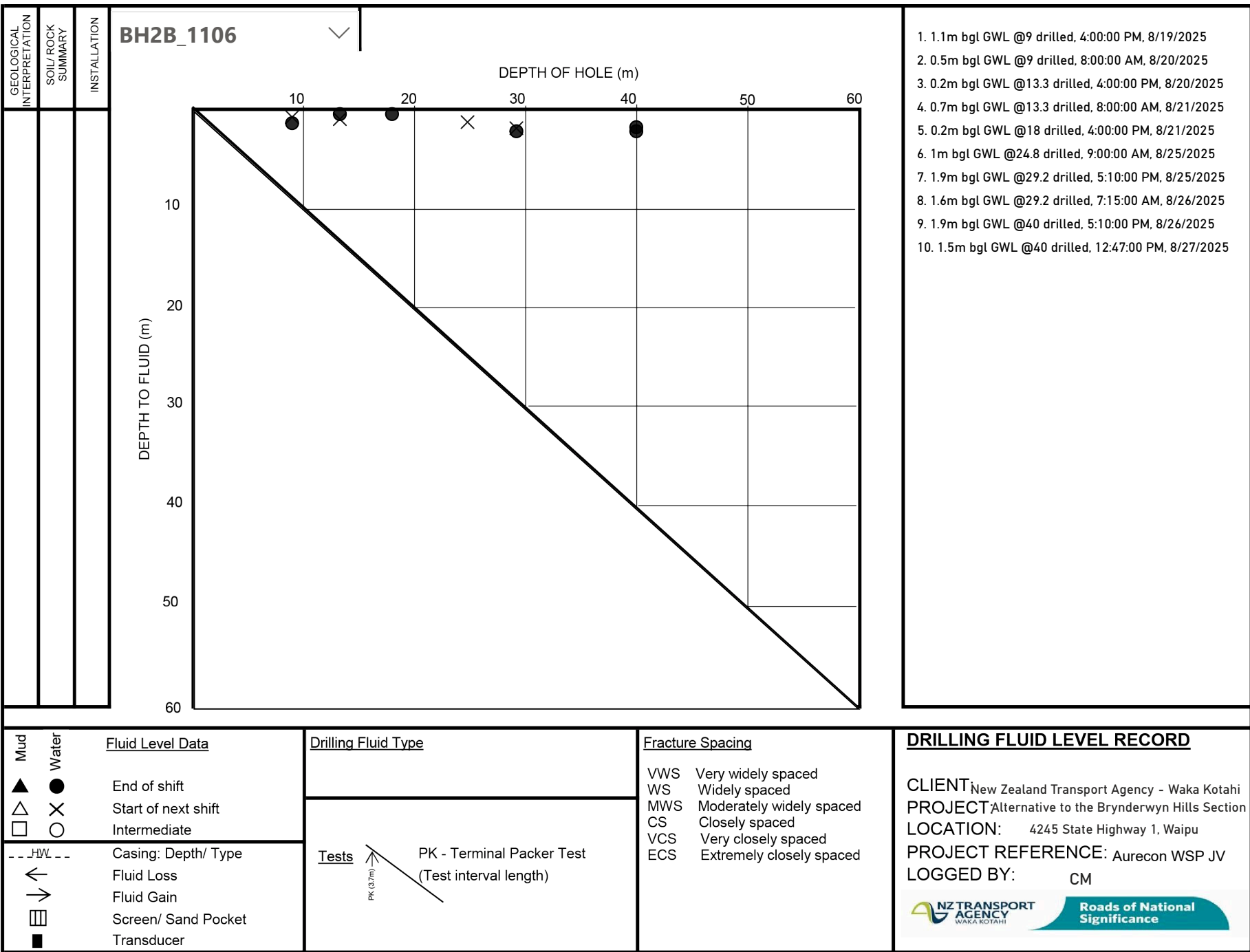
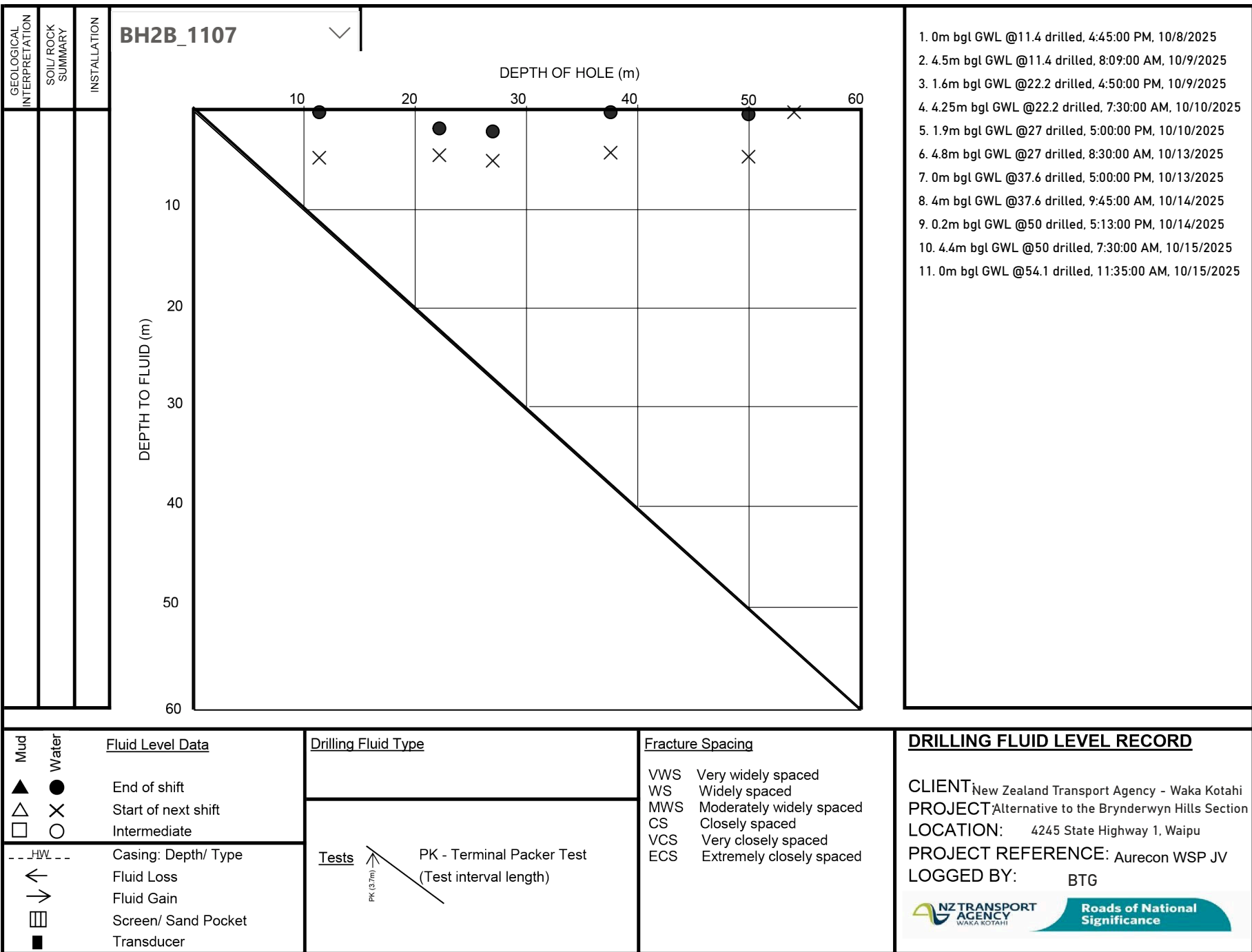
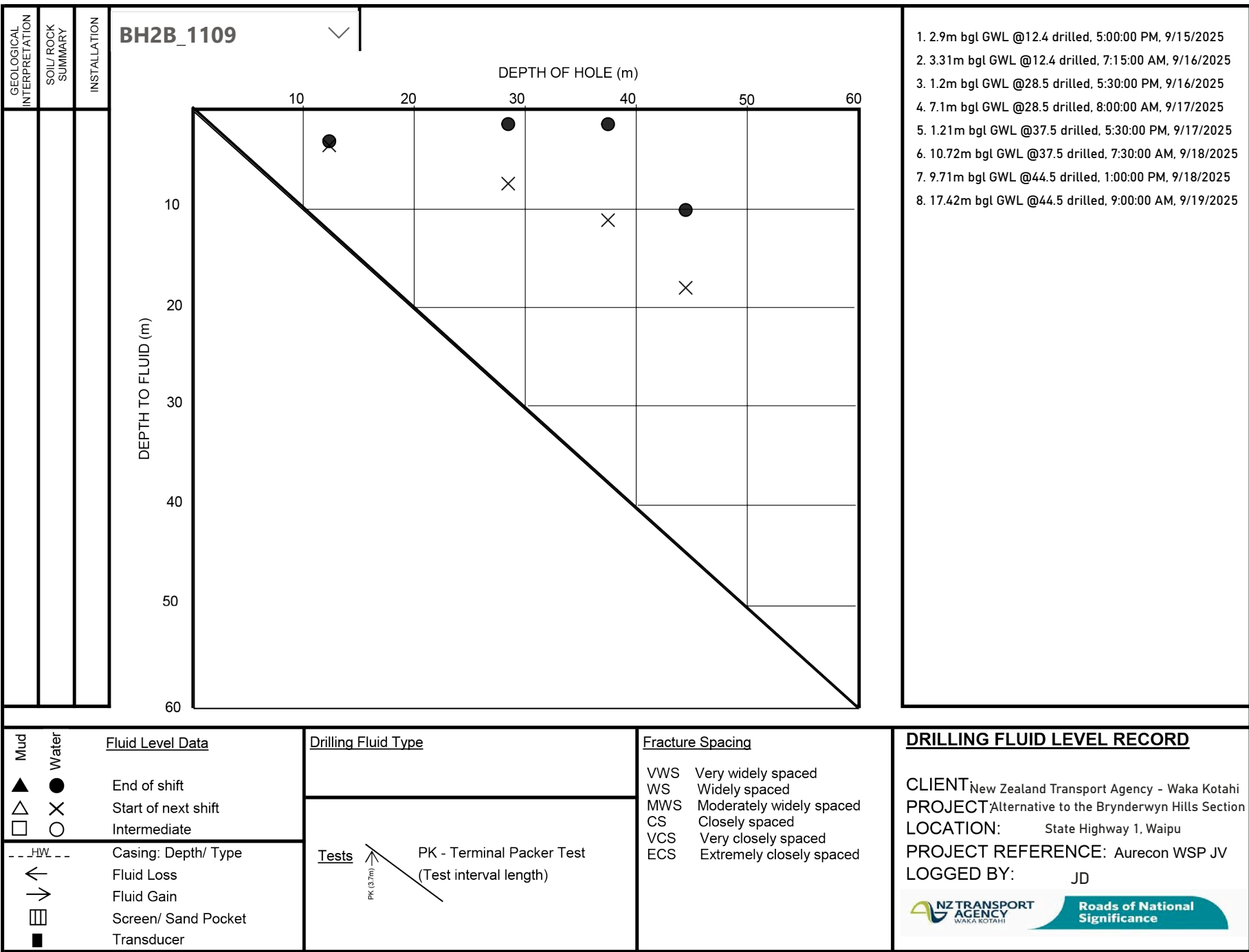






GEOLOGICAL INTERPRETATION		SOIL/ ROCK SUMMARY		INSTALLATION		BH2B_1106B		1. 0.2m bgl GWL @7.6 drilled, 11:30:00 AM, 12/8/2025			
						DEPTH OF HOLE (m) DEPTH TO FLUID (m)					
Mud ▲ △ □ --- ← → ▤ ■		Water ● × ○ --- ← → ▤ ■		Fluid Level Data End of shift Start of next shift Intermediate Casing: Depth/ Type Fluid Loss Fluid Gain Screen/ Sand Pocket Transducer		Drilling Fluid Type Tests PK (3.7m) PK - Terminal Packer Test (Test interval length)		Fracture Spacing VWS Very widely spaced WS Widely spaced MWS Moderately widely spaced CS Closely spaced VCS Very closely spaced ECS Extremely closely spaced		DRILLING FLUID LEVEL RECORD CLIENT: New Zealand Transport Agency - Waka Kotahi PROJECT: Alternative to the Brynderwyn Hills Section LOCATION: 4245 State Highway 1, Waipu PROJECT REFERENCE: Aurecon WSP JV LOGGED BY: AP NZ TRANSPORT AGENCY WAKA KOTAHĪ Roads of National Significance	





Mud

Water

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--- HWL ---

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Fluid Level Data

End of shift

Start of next shift

Intermediate

Casing: Depth/ Type

Fluid Loss

Fluid Gain

Screen/ Sand Pocket

Transducer

Drilling Fluid Type

Tests

PK (3.7m)

PK - Terminal Packer Test (Test interval length)

Fracture Spacing

VWS

WS

MWS

CS

VCS

ECS

Very widely spaced

Widely spaced

Moderately widely spaced

Closely spaced

Very closely spaced

Extremely closely spaced

DRILLING FLUID LEVEL RECORD

CLIENT

PROJECT

LOCATION:

PROJECT REFERENCE:

LOGGED BY:

New Zealand Transport Agency - Waka Kotahi

Alternative to the Brynderwyn Hills Section

State Highway 1, Waipu

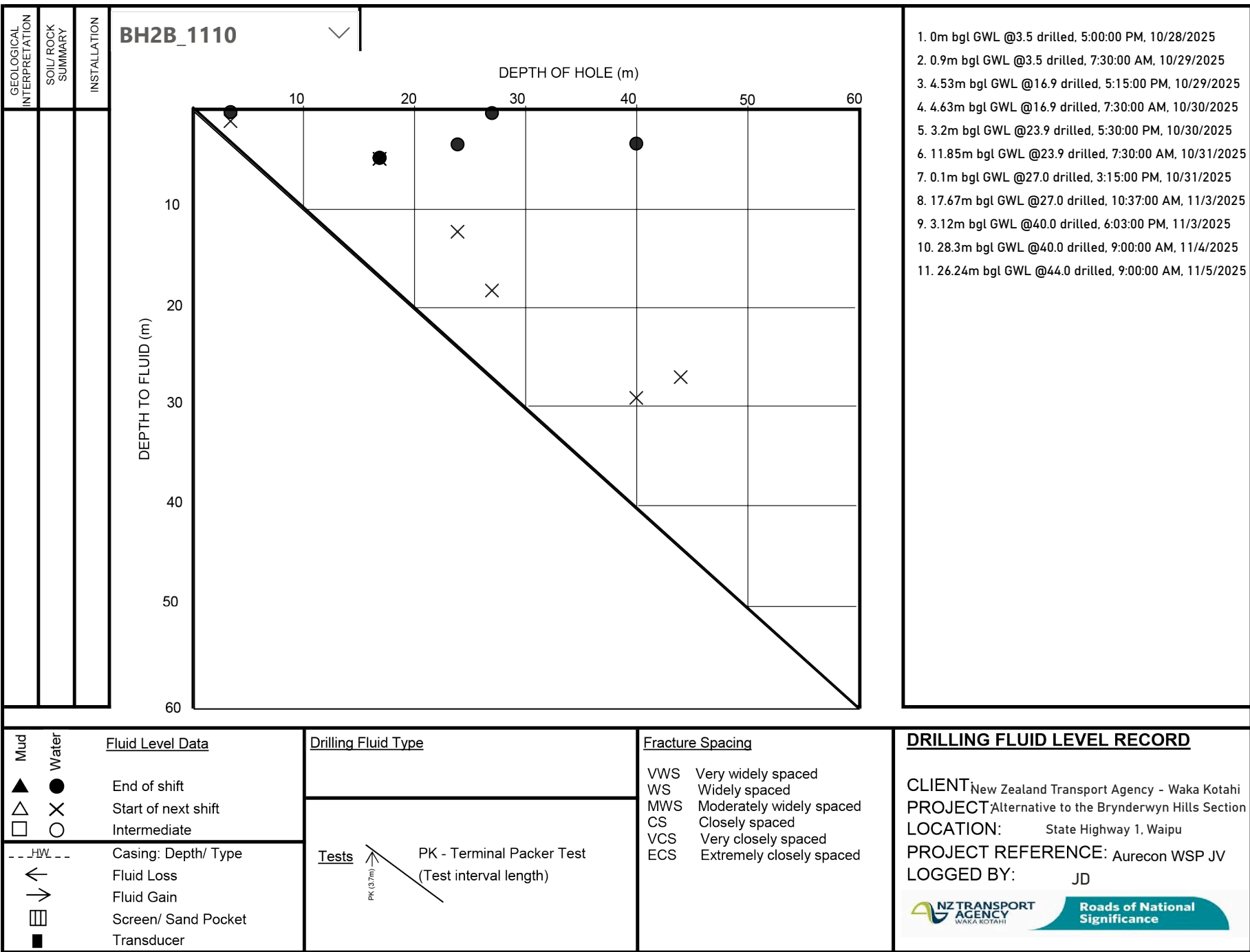
Aurecon WSP JV

JD

NZ TRANSPORT AGENCY

WAKA KOTAHİ

Roads of National Significance



GENERAL INFORMATION

SOLID ROCK SUMMARY

INSTALLATION

BH2B_1111

DEPTH OF HOLE (m)

DEPTH TO FLUID (m)

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Fluid Level Data

End of shift

Start of next shift

Intermediate

--- HWL ---

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Casing: Depth/ Type

Fluid Loss

Fluid Gain

Screen/ Sand Pocket

Transducer

Drilling Fluid Type

Tests

PK - Terminal Packer Test
(Test Interval length)

Fracture Spacing

VWS Very widely spaced

WS Widely spaced

MWS Moderately widely spaced

CS Closely spaced

VCS Very closely spaced

ECS Extremely closely spaced

Notes

18°

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

160

170

180

▲

1

23/09/2025

16:21

4.11

18.00

2

24/09/2025

08:22

14.13

18.00

3

24/09/2025

14:22

0.90

28.50

4

25/09/2025

06:23

0.40

28.50

5

25/09/2025

17:23

2.10

43.50

6

26/09/2025

06:24

13.30

43.50

7

26/09/2025

16:24

1.10

51.00

8

29/09/2025

06:25

18.69

51.00

9

29/09/2025

18:25

0.60

63.00

10

30/09/2025

07:26

11.28

63.00

11

30/09/2025

17:00

1.43

79.50

12

01/10/2025

08:00

22.11

79.50

13

01/10/2025

17:00

1.30

90.00

14

02/10/2025

07:30

20.80

90.00

DRILLING FLUID LEVEL RECORD

CLIENT: New Zealand Transport Agency - Waka Kotahi

PROJECT: Alternative to the Brynderwyn Hills Section

LOCATION: State Highway 1, Waipu

PROJECT REFERENCE: Aurecon WSP JV

LOGGED BY: MC

NZ TRANSPORT

WAKA KOTAHİ

Roads of National Significance

GENERAL INTERPRETATION

SOIL PROXY SUMMARY

INSTALLATION

BH2B_1113

DEPTH OF HOLE (m)

DEPTH TO FLUID (m)

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Fluid Level Data

End of shift

Start of next shift

Intermediate

--- HWL ---

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Casing: Depth/Type

Fluid Loss

Fluid Gain

Screen/ Sand Pocket

Transducer

Drilling Fluid Type

Tests

PK - Terminal Packer Test
(Test interval length)

Fracture Spacing

VWS Very widely spaced

WS Widely spaced

MWS Moderately widely spaced

CS Closely spaced

VCS Very closely spaced

ECS Extremely closely spaced

Notes

ID

▲

Date

Time

GW Depth(mbgl)

Hole Depth (mbgl)

1

29/10/2025

17:10

2.10

6.45

2

30/10/2025

07:39

1.50

6.45

3

30/10/2025

17:02

-1.00

22.60

4

31/10/2025

07:00

-0.70

22.60

5

03/11/2025

08:30

1.90

22.60

6

03/11/2025

16:50

3.40

42.00

7

04/11/2025

07:46

2.10

42.00

8

04/11/2025

16:13

2.00

60.00

9

05/11/2025

07:40

12.00

60.00

10

05/11/2025

14:34

7.30

74.00

11

06/11/2025

08:00

6.10

74.00

DRILLING FLUID LEVEL RECORD

CLIENT:

New Zealand Transport Agency - Waka Kotahi

PROJECT:

Alternative to the Brynderwyn Hills Section

LOCATION:

2941 State Highway 1, Kaiwaka

PROJECT REFERENCE:

Aurecon WSP JV

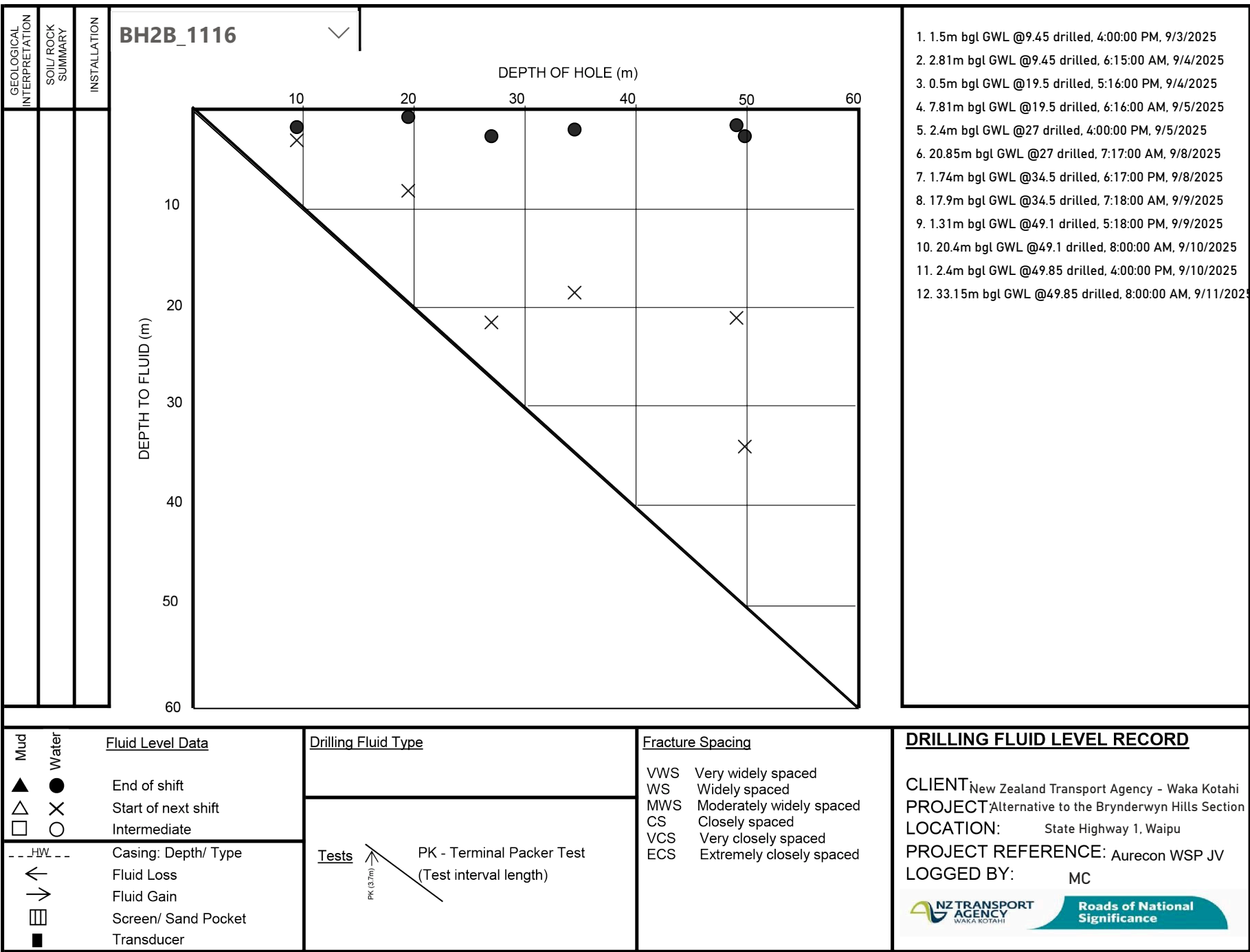
LOGGED BY:

BTG

NZ TRANSPORT AGENCY WAKA KOTAHİ

Roads of National Significance

Mud Water ▲ ● △ × □ ○ End of shift Start of next shift Intermediate	Fluid Level Data	Drilling Fluid Type	Fracture Spacing VWS WS MWS CS VCS ECS Very widely spaced Widely spaced Moderately widely spaced Closely spaced Very closely spaced Extremely closely spaced	DRILLING FLUID LEVEL RECORD CLIENT: PROJECT: LOCATION: PROJECT REFERENCE: LOGGED BY: New Zealand Transport Agency - Waka Kotahi Alternative to the Brynderwyn Hills Section 67 Brynderwyn Road, Brynderwyn, Mau... Aurecon WSP JV (Blank)
-- HWL -- ← → ▢ ■ Casing: Depth/ Type Fluid Loss Fluid Gain Screen/ Sand Pocket Transducer	Tests PK (3.7m) PK - Terminal Packer Test (Test interval length)			NZ TRANSPORT AGENCY WAKA KOTAHİ Roads of National Significance



DEPTH TO FLUID (m)

DEPTH OF HOLE (m)

DEPTH TO FLUID (m)

DEPTH OF HOLE (m)

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

160

170

180

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

160

170

180

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□

End of shift

Start of next shift

Intermediate

--- HWL ---

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Casing: Depth/ Type

Fluid Loss

Fluid Gain

Screen/ Sand Pocket

Transducer

Tests

PK - Terminal Packer Test
(Test Interval length)

Fracture Spacing

VWS Very widely spaced

WS Widely spaced

MWS Moderately widely spaced

CS Closely spaced

VCS Very closely spaced

ECS Extremely closely spaced

Notes

DRILLING FLUID LEVEL RECORD

CLIENT: New Zealand Transport Agency - Waka Kotahi

PROJECT: Alternative to the Brynderwyn Hills Section

LOCATION: State Highway 1, Waipu

PROJECT REFERENCE: Aurecon WSP JV

LOGGED BY: DRB

NZ TRANSPORT
WAKA KOTAHİ

Roads of National
Significance

ID	Date	Time	GW Depth (mbgl)	Hole Depth (mbgl)
1	06/10/2025	17:15	1.57	7.95
2	07/10/2025	7:00	1.46	7.95
3	08/10/2025	7:30	5.81	20.00
4	08/10/2025	17:00	0.00	30.00
5	09/10/2025	7:00	8.44	30.00
6	09/10/2025	17:33	0.30	33.30
7	10/10/2025	7:27	13.57	33.30
8	10/10/2025	15:00	1.80	36.00
9	13/10/2025	10:10	15.30	36.00
10	13/10/2025	17:00	0.00	37.95
11	14/10/2025	6:45	7.58	37.95
12	14/10/2025	17:10	-0.25	39.70
13	15/10/2025	6:50	15.25	39.70
14	15/10/2025	16:56	1.10	40.85
15	16/10/2025	6:57	8.41	40.85
16	16/10/2025	16:45	5.67	43.50
17	17/10/2025	7:01	9.61	43.50
18	17/10/2025	13:11	2.25	49.40
19	20/10/2025	14:00	14.10	49.40
20	20/10/2025	17:00	0.00	51.00
21	21/10/2025	7:30	8.00	51.00
22	21/10/2025	17:30	3.28	70.00
23	22/10/2025	7:40	22.57	70.00
24	23/10/2025	8:15	26.83	73.00

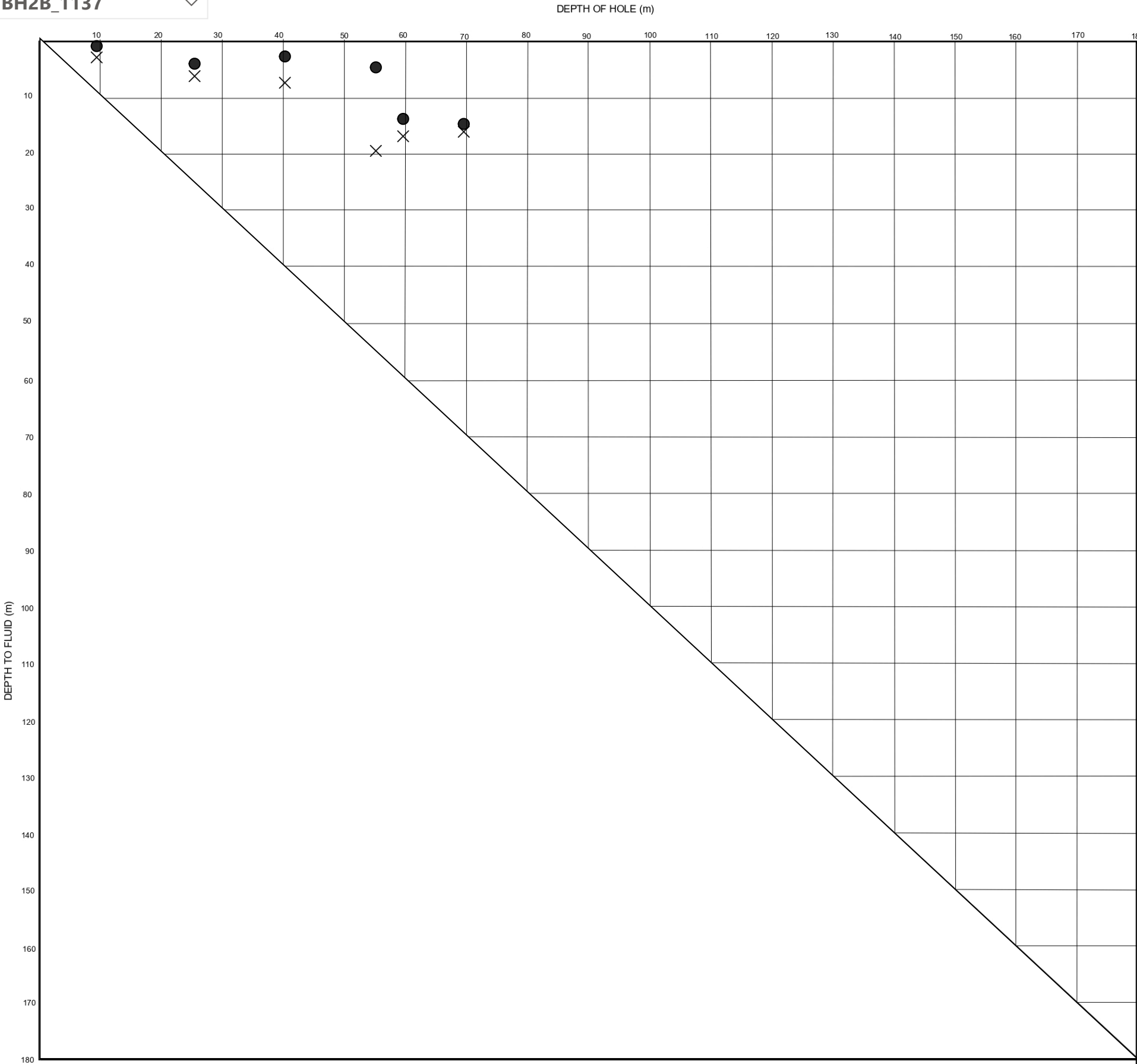
GEOLOGICAL
INTERPRETATION

SOIL ROCK
SUMMARY

INSTALLATION

BH2B_1137

▼



ID	Date	Time	GW Depth(mbgl)	Hole Depth (mbgl)
▲				
1	29/09/2025	17:00	0.10	9.45
2	30/09/2025	07:47	2.12	9.45
3	30/09/2025	17:00	3.25	25.60
4	01/10/2025	08:40	5.47	25.60
5	01/10/2025	17:00	1.95	40.50
6	02/10/2025	07:45	6.65	40.50
7	02/10/2025	16:40	3.90	55.50
8	03/10/2025	07:30	18.81	55.50
9	03/10/2025	14:00	13.10	60.00
10	06/10/2025	10:00	16.20	60.00
11	06/10/2025	17:15	14.00	70.00
12	07/10/2025	07:40	15.40	70.00

Mud

▲

Water

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End of shift

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Start of next shift

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Intermediate

□

Fluid Level Data

Fluid Loss

---H/C---

Fluid Gain

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Screen/ Sand Pocket

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Transducer

■

Drilling Fluid Type

Tests

PK - Terminal Packer Test

(Test interval length)

Fracture Spacing

VWS Very widely spaced

WS Widely spaced

MWS Moderately widely spaced

CS Closely spaced

VCS Very closely spaced

ECS Extremely closely spaced

Notes

DRILLING FLUID LEVEL RECORD

CLIENT:

New Zealand Transport Agency - Waka Kotahi

PROJECT:

Alternative to the Brynderwyn Hills Section

LOCATION:

4245 State Highway 1, Waipu

PROJECT REFERENCE:

Aurecon WSP JV

LOGGED BY:

BTG

NZTRANSPORT
AGENCY
WAKA KOTAHİ

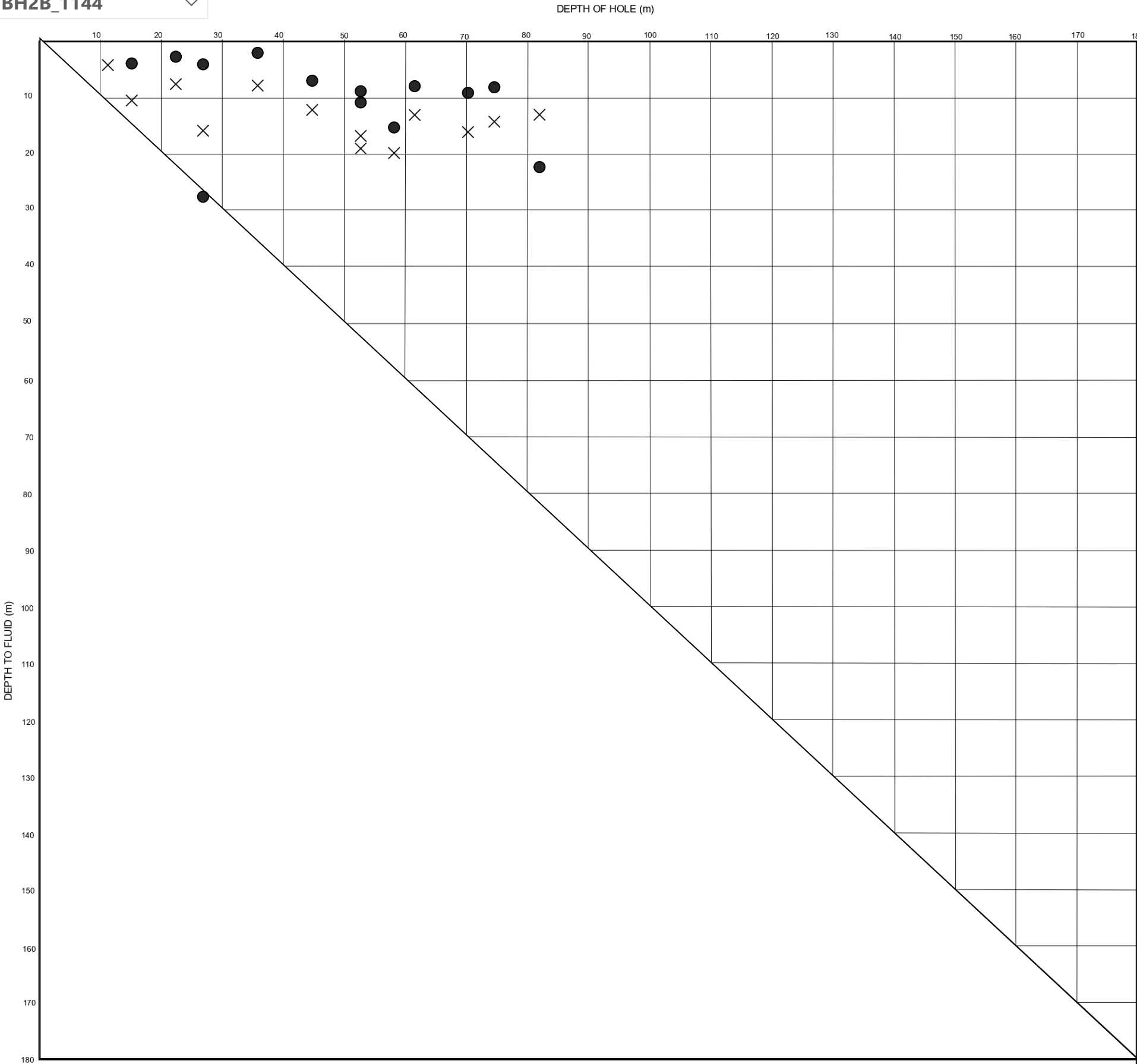
Roads of National
Significance

GEOLOGICAL INTERPRETATION

SOIL ROCK SUMMARY

INSTALLATION

BH2B_1144



ID	Date	Time	GW Depth(mbgl)	Hole Depth(mbgl)
1	20/08/2025	8:00	3.49	11.30
2	20/08/2025	15:00	3.20	15.23
3	21/08/2025	11:00	9.82	15.23
4	21/08/2025	18:00	2.00	22.50
5	22/08/2025	9:00	6.90	22.50
6	22/08/2025	14:30	27.00	27.00
7	22/08/2025	17:00	3.36	27.00
8	25/08/2025	10:00	15.21	27.00
9	25/08/2025	18:15	1.31	36.00
10	26/08/2025	8:40	7.15	36.00
11	26/08/2025	17:00	6.28	45.00
12	27/08/2025	8:30	11.50	45.00
13	27/08/2025	17:20	10.16	53.00
14	28/08/2025	9:15	18.40	53.00
15	28/08/2025	16:30	8.16	53.00
16	29/08/2025	9:00	16.14	53.00
17	29/08/2025	14:30	14.63	58.50
18	01/09/2025	11:00	19.20	58.50
19	01/09/2025	18:00	7.26	61.90
20	02/09/2025	8:00	12.40	61.90
21	02/09/2025	18:00	8.45	70.70
22	03/09/2025	8:00	15.45	70.70
23	03/09/2025	18:00	7.45	75.04
24	04/09/2025	8:00	13.60	75.04
25	04/09/2025	15:00	21.70	82.50
26	05/09/2025	7:30	12.36	82.50

Mud

Water

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End of shift

Start of next shift

Intermediate

---H/C---

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Casing: Depth/ Type

Fluid Loss

Fluid Gain

Screen/ Sand Pocket

Transducer

Drilling Fluid Type

Tests

PK - Terminal Packer Test

(Test interval length)

Fracture Spacing

VWS

Very widely spaced

WS

Widely spaced

MWS

Moderately widely spaced

CS

Closely spaced

VCS

Very closely spaced

ECS

Extremely closely spaced

Notes

DRILLING FLUID LEVEL RECORD

CLIENT: New Zealand Transport Agency - Waka Kotahi

PROJECT: Alternative to the Brynderwyn Hills Section

LOCATION: State Highway 1, Waipu

PROJECT REFERENCE: Aurecon WSP JV

LOGGED BY: JD

NZTRANSPORT

AGENCY

WAKA KOTAHİ

Roads of National

Significance

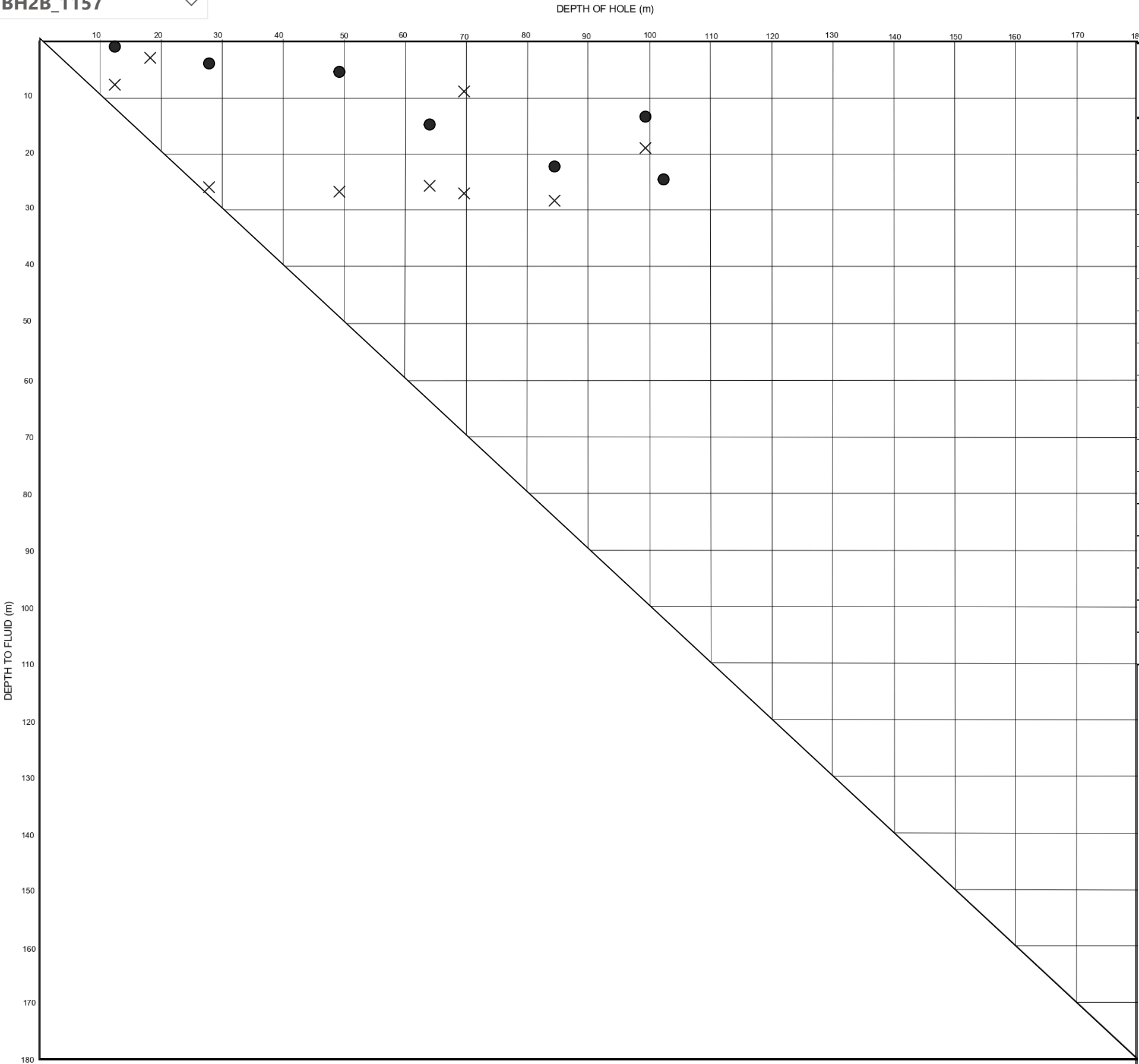
GEOLOGICAL
INTERPRETATION

SOIL ROCK
SUMMARY

INSTALLATION

BH2B_1157

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ID▲	Date	Time	GW Depth(mbgl)	Hole Depth(mbgl)
1	23/10/2025	16:00	0.20	12.45
2	24/10/2025	7:13	7.00	12.45
3	24/10/2025	11:14	2.20	18.30
4	28/10/2025	8:41	dry	18.30
5	28/10/2025	16:43	3.20	28.00
6	29/10/2025	7:30	25.30	28.00
7	29/10/2025	16:30	4.70	49.50
8	30/10/2025	7:30	26.10	49.50
9	30/10/2025	16:30	14.10	64.40
10	31/10/2025	7:30	25.05	64.40
11	31/10/2025	11:30	8.20	70.08
12	03/11/2025	7:30	26.40	70.08
13	03/11/2025	16:30	21.60	85.00
14	04/11/2025	7:30	27.70	85.00
15	04/11/2025	16:00	12.70	100.00
16	06/11/2025	7:30	18.30	100.00
17	06/11/2025	13:00	23.90	103.00

▲ Mud

● Water

△

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□

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End of shift

Start of next shift

Intermediate

--- HW ---

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Casing: Depth/ Type

Fluid Loss

Fluid Gain

Screen/ Sand Pocket

Transducer

Drilling Fluid Type

Tests

PK - Terminal Packer Test
(Test interval length)

Fracture Spacing

VWS Very widely spaced

WS Widely spaced

MWS Moderately widely spaced

CS Closely spaced

VCS Very closely spaced

ECS Extremely closely spaced

Notes

DRILLING FLUID LEVEL RECORD

CLIENT: New Zealand Transport Agency - Waka Kotahi

PROJECT: Alternative to the Brynderwyn Hills Section

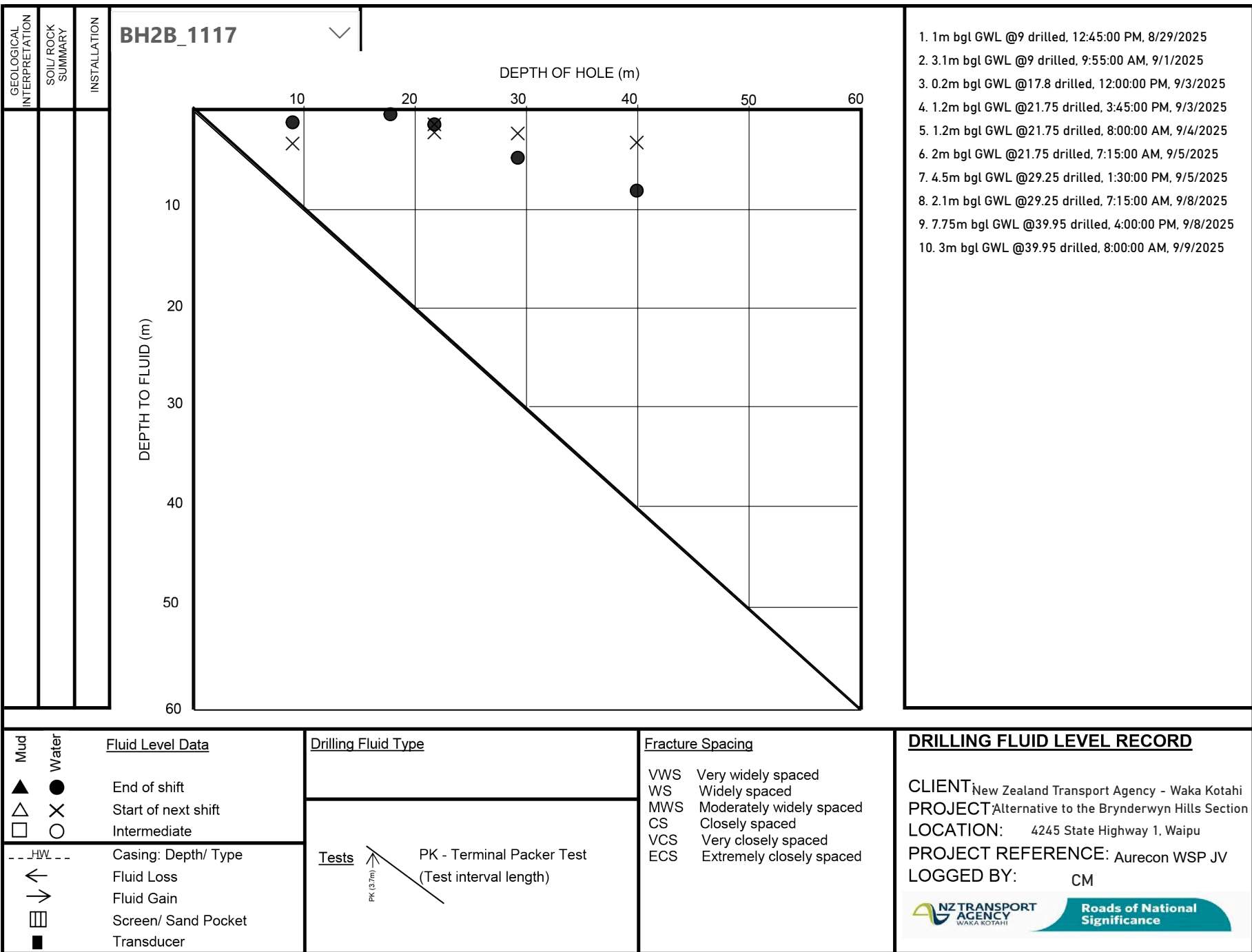
LOCATION: 2545 State Highway 1, Brynderwyn, Maungaturoto

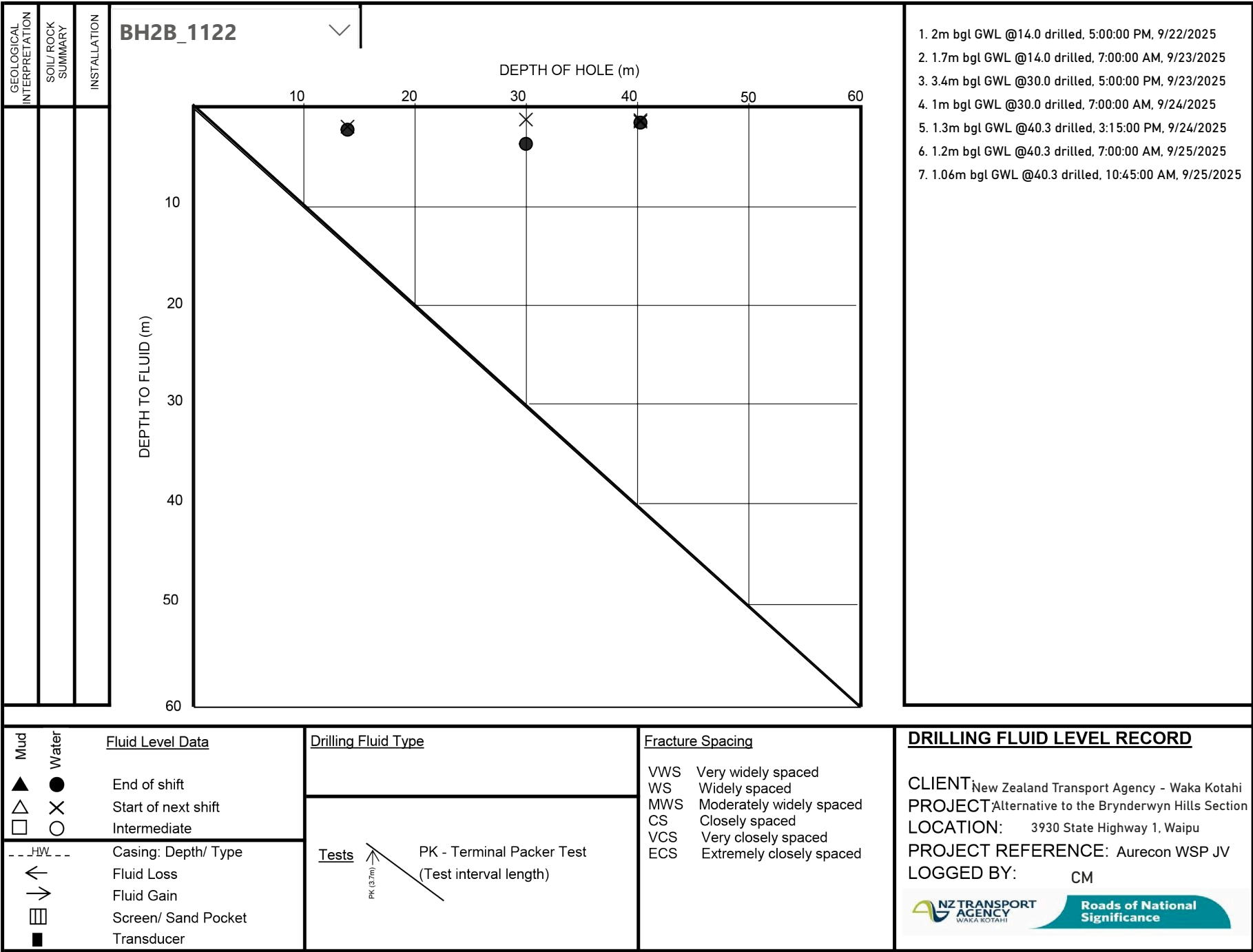
PROJECT REFERENCE: Aurecon WSP JV

LOGGED BY: BF

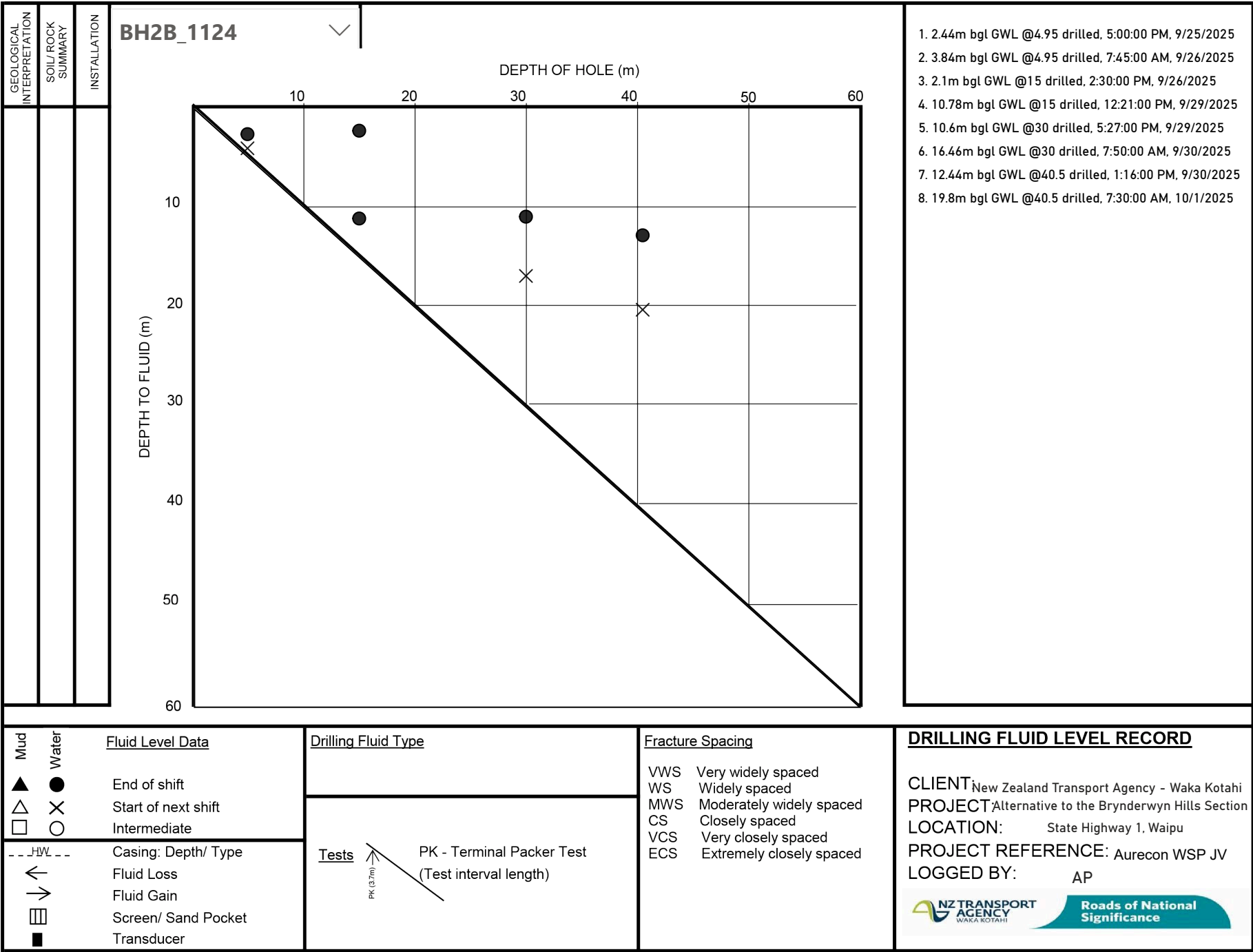
NZTRANSPORT
AGENCY
WAKA KOTAHİ

Roads of National
Significance

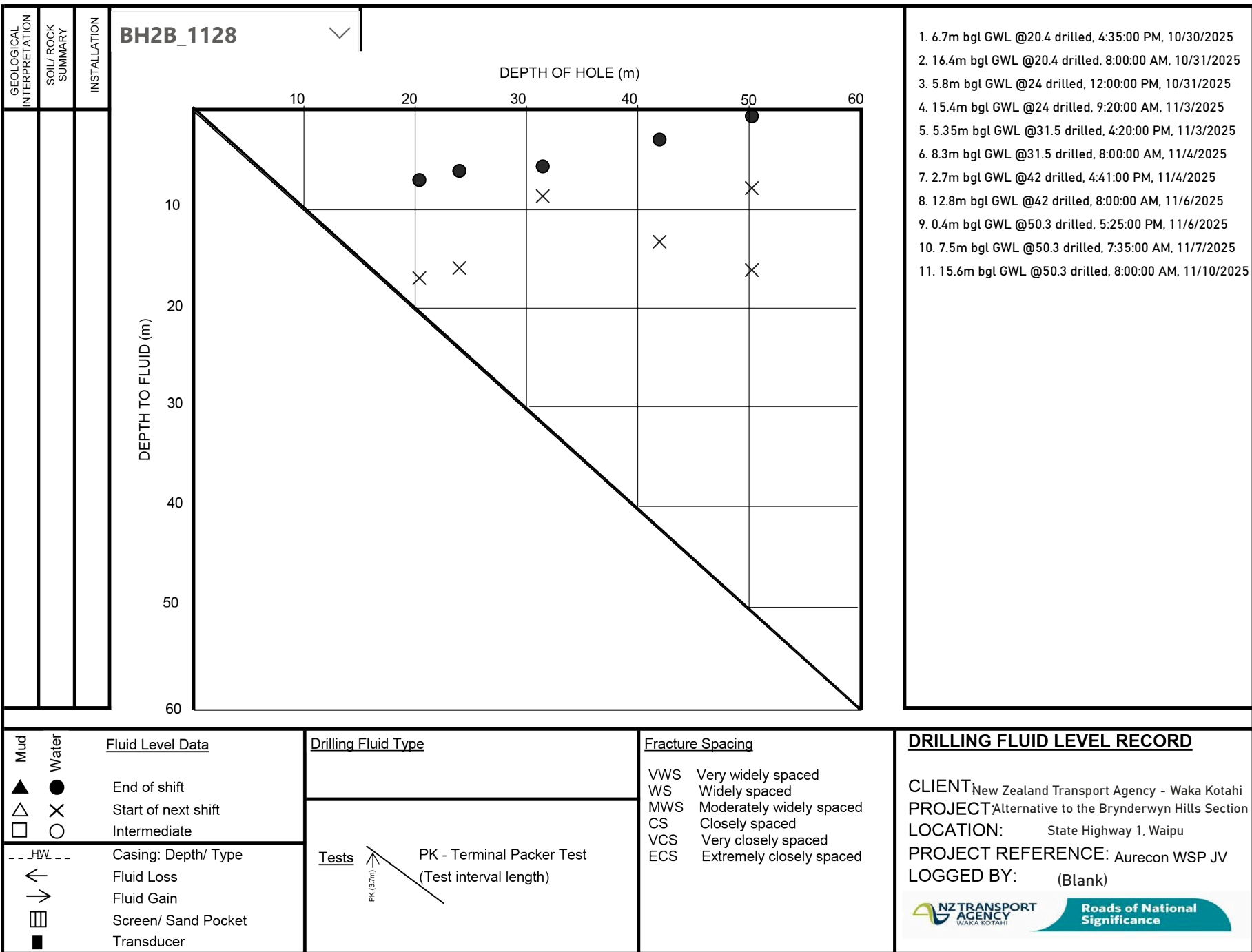


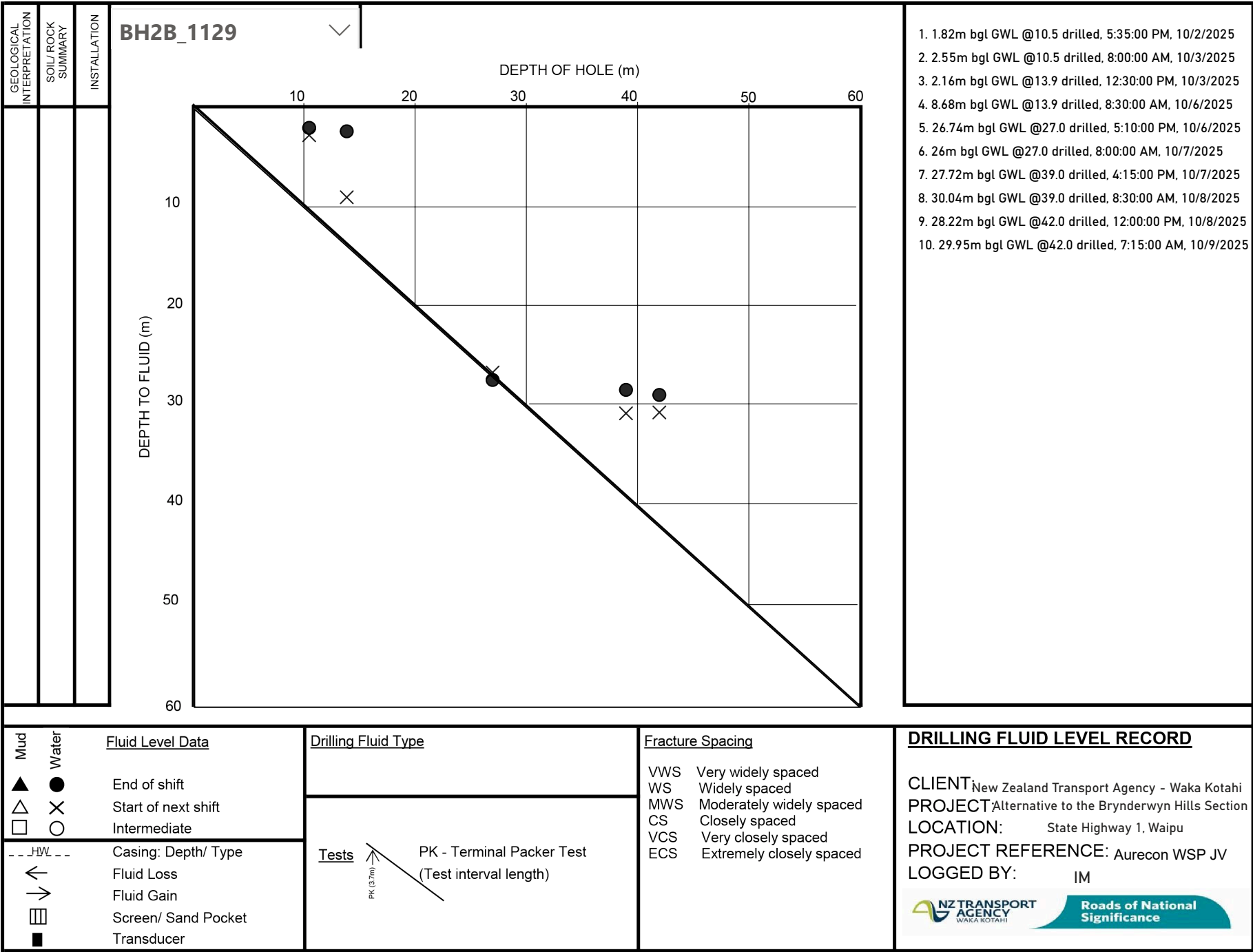


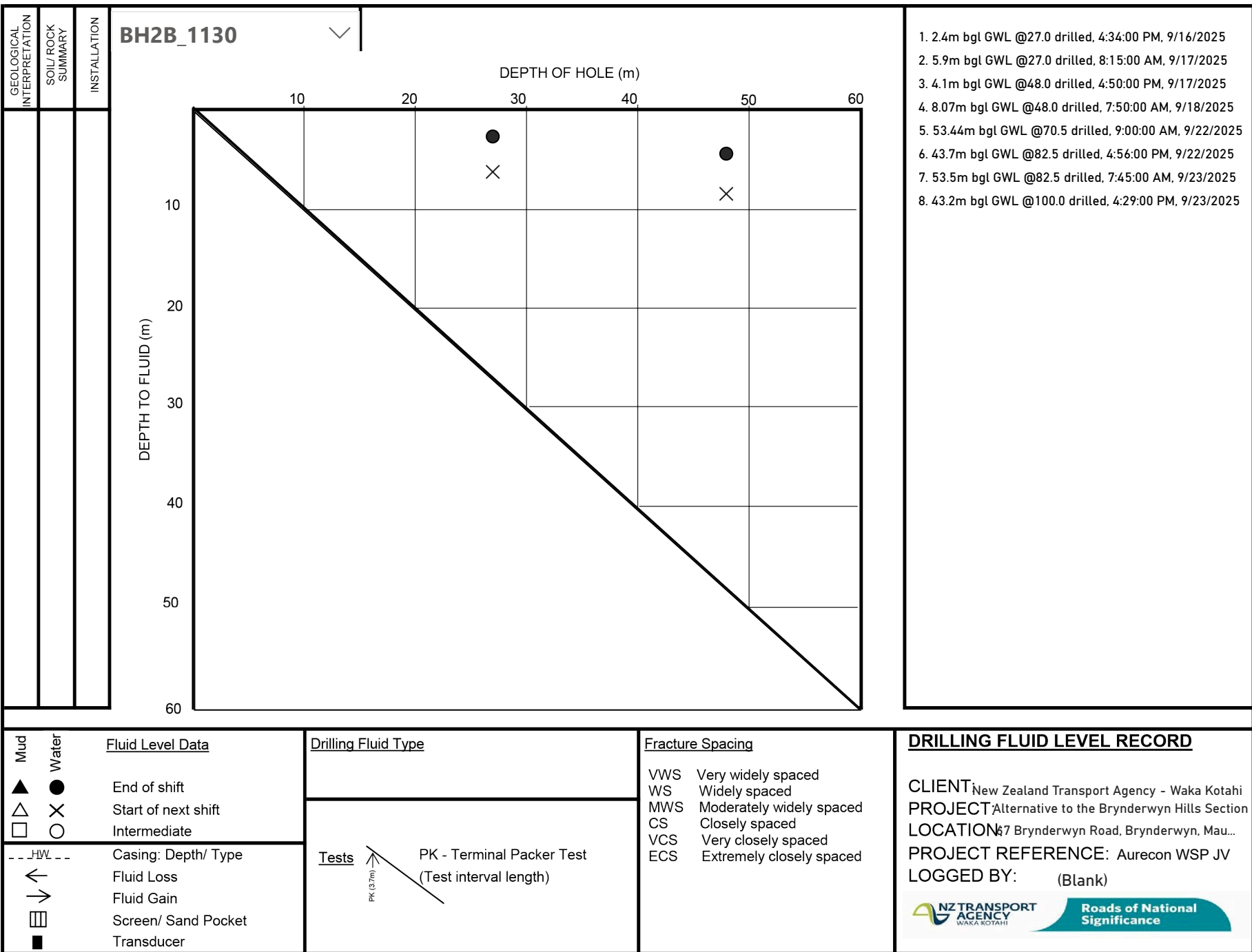
- 1. 2m bgl GWL @14.0 drilled, 5:00:00 PM, 9/22/2025
- 2. 1.7m bgl GWL @14.0 drilled, 7:00:00 AM, 9/23/2025
- 3. 3.4m bgl GWL @30.0 drilled, 5:00:00 PM, 9/23/2025
- 4. 1m bgl GWL @30.0 drilled, 7:00:00 AM, 9/24/2025
- 5. 1.3m bgl GWL @40.3 drilled, 3:15:00 PM, 9/24/2025
- 6. 1.2m bgl GWL @40.3 drilled, 7:00:00 AM, 9/25/2025
- 7. 1.06m bgl GWL @40.3 drilled, 10:45:00 AM, 9/25/2025



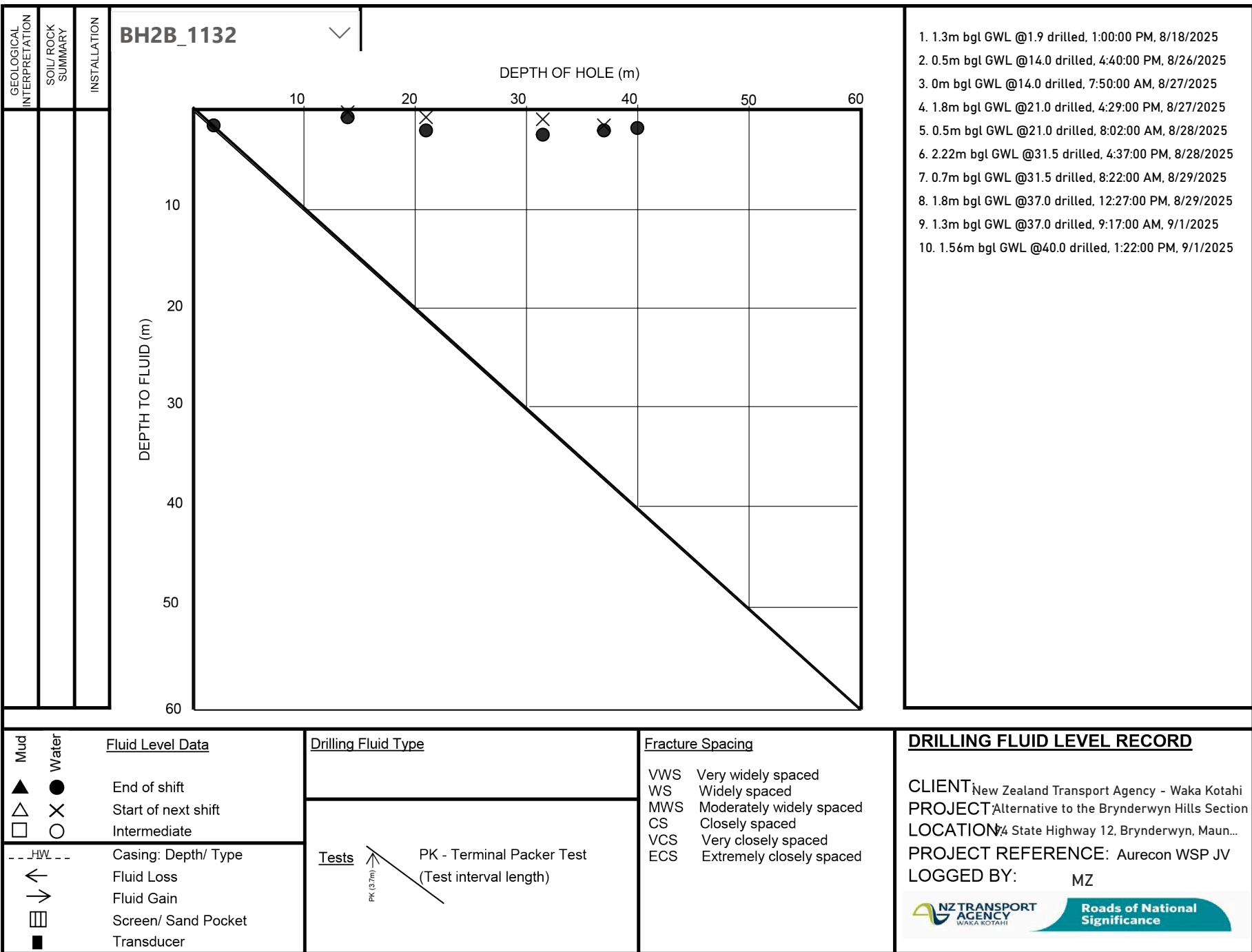
GEOLOGICAL INTERPRETATION		SOIL/ ROCK SUMMARY		INSTALLATION		BH2B_1126		✓	
								DEPTH OF HOLE (m) 102030405060 DEPTH TO FLUID (m) 102030405060	
								1. 4.6m bgl GWL @19.5 drilled, 5:38:00 PM, 10/2/2025 2. 2.9m bgl GWL @19.5 drilled, 7:00:00 AM, 10/3/2025 3. 3.5m bgl GWL @22.5 drilled, 9:15:00 AM, 10/6/2025 4. 8.6m bgl GWL @37.0 drilled, 4:29:00 PM, 10/6/2025 5. 7.15m bgl GWL @37.0 drilled, 8:02:00 AM, 10/7/2025	
Mud Water ▲ ● △ × □ ○ --- HW --- ← → ▨ ■ Fluid Level Data End of shift Start of next shift Intermediate Casing: Depth/ Type Fluid Loss Fluid Gain Screen/ Sand Pocket Transducer		Drilling Fluid Type Tests PK (3.7m) PK - Terminal Packer Test (Test interval length)		Fracture Spacing VWS WS MWS CS VCS ECS Very widely spaced Widely spaced Moderately widely spaced Closely spaced Very closely spaced Extremely closely spaced		DRILLING FLUID LEVEL RECORD CLIENT PROJECT LOCATION PROJECT REFERENCE LOGGED BY: KR			

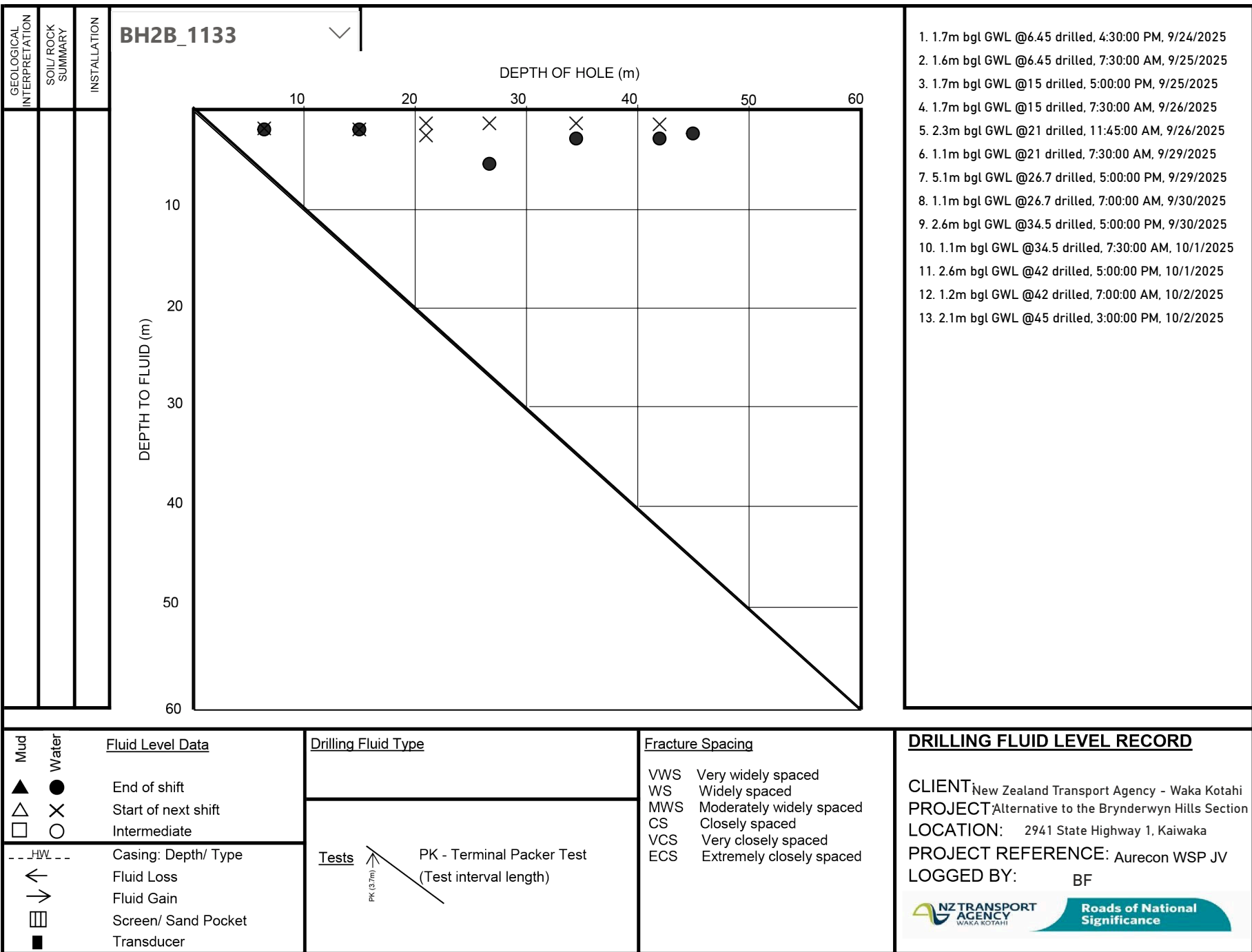




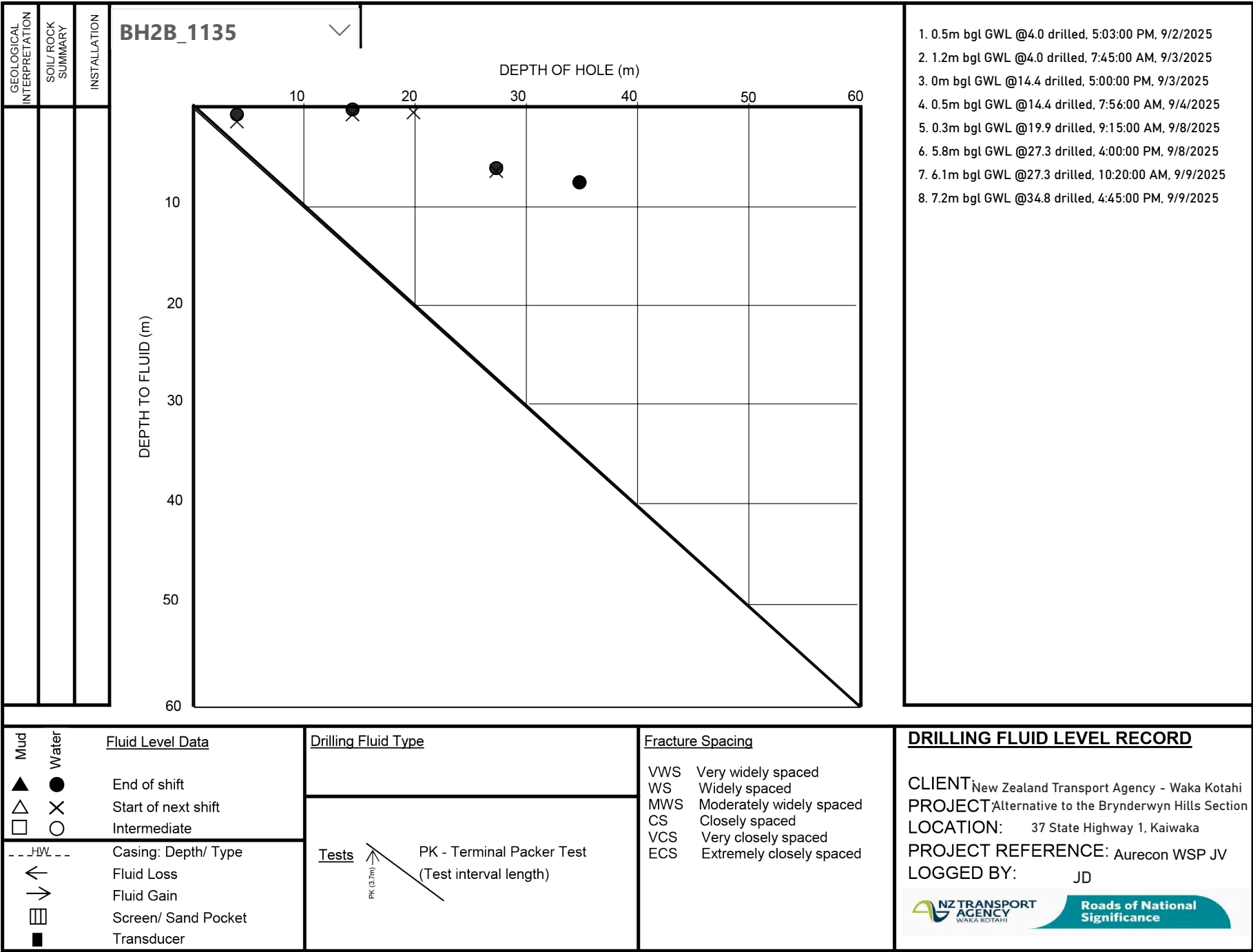


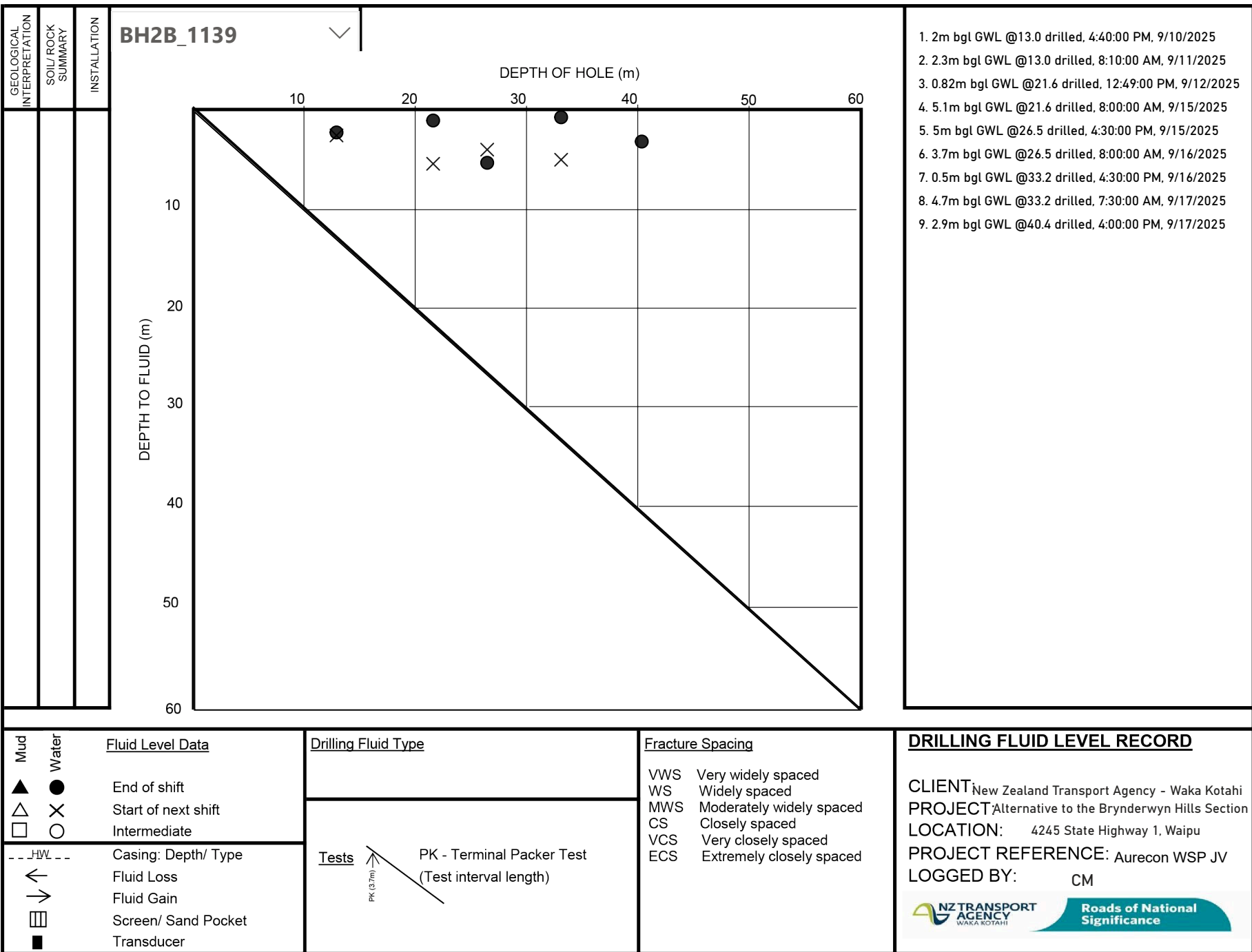
GEOLOGICAL INTERPRETATION		SOIL/ ROCK SUMMARY		INSTALLATION		BH2B_1131		1. 5.1m bgl GWL @34.5 drilled, 5:00:00 PM, 8/28/2025 2. 5.3m bgl GWL @34.5 drilled, 8:30:00 AM, 8/29/2025 3. 7.9m bgl GWL @42.0 drilled, 12:00:00 PM, 8/29/2025			
						DEPTH OF HOLE (m) DEPTH TO FLUID (m)					
Mud ▲ △ □ --- HWL --- ← → ▤ ■		Water ● × ○		Fluid Level Data End of shift Start of next shift Intermediate Casing: Depth/ Type Fluid Loss Fluid Gain Screen/ Sand Pocket Transducer		Drilling Fluid Type Tests PK (3.7m) PK - Terminal Packer Test (Test interval length)		Fracture Spacing VWS Very widely spaced WS Widely spaced MWS Moderately widely spaced CS Closely spaced VCS Very closely spaced ECS Extremely closely spaced		DRILLING FLUID LEVEL RECORD CLIENT: New Zealand Transport Agency - Waka Kotahi PROJECT: Alternative to the Brynderwyn Hills Section LOCATION: 7 Brynderwyn Road, Brynderwyn, Mau... PROJECT REFERENCE: Aurecon WSP JV LOGGED BY: (Blank) NZ TRANSPORT AGENCY WAKA KOTAHİ Roads of National Significance	

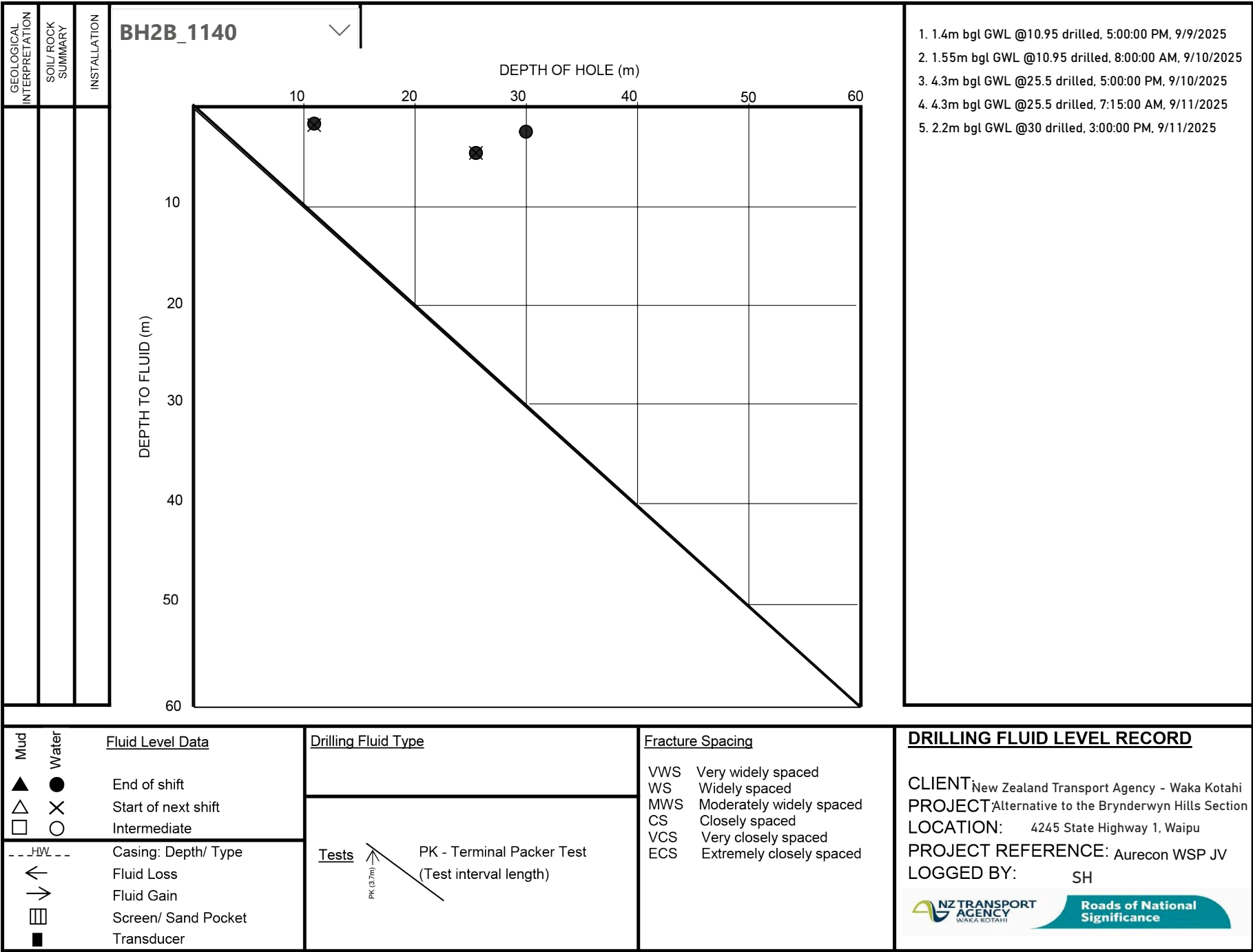


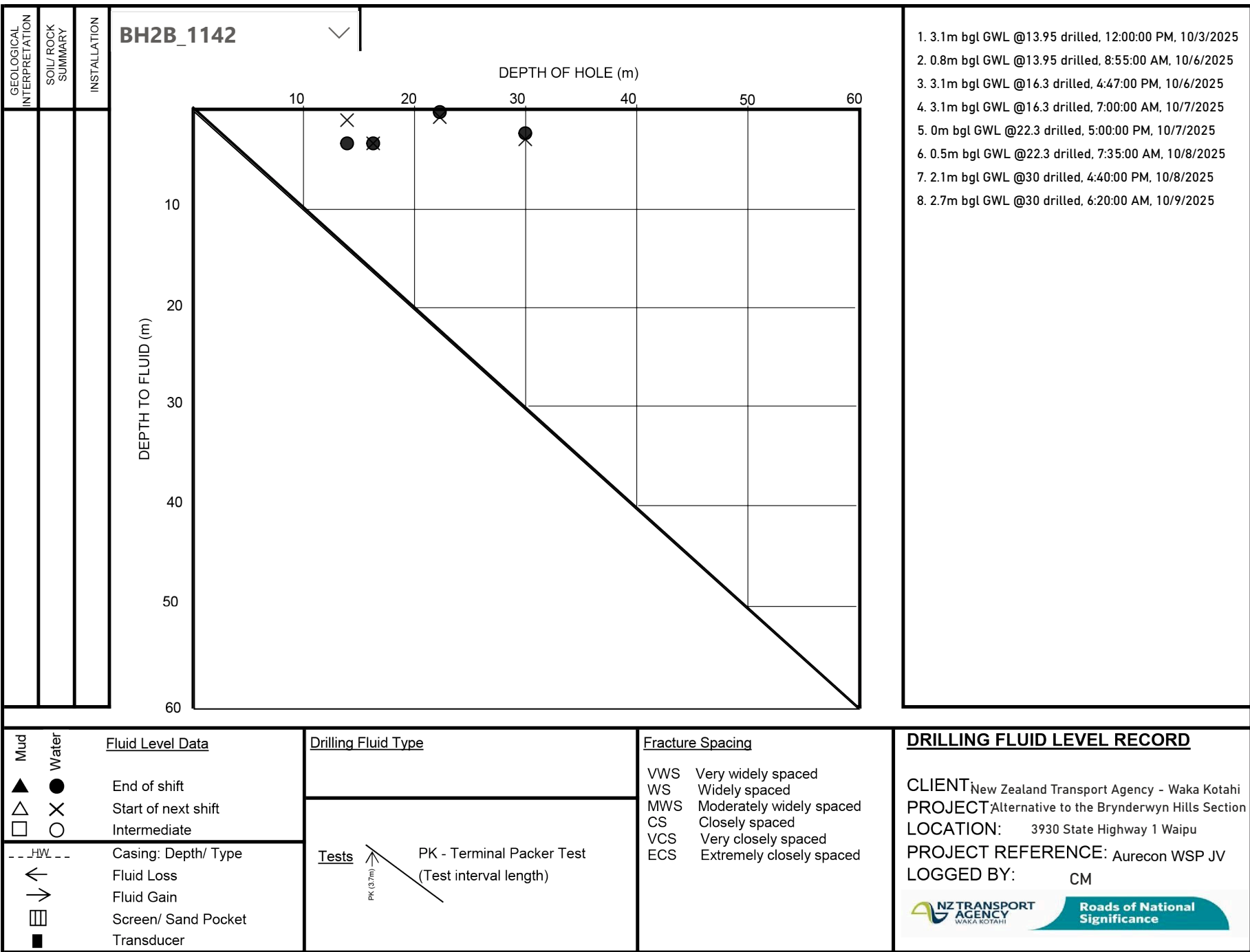


GEOLOGICAL INTERPRETATION		SOIL/ ROCK SUMMARY		INSTALLATION		BH2B_1133A		1. 3.2m bgl GWL @30 drilled, 7:30:00 AM, 11/11/2025 2. 5.2m bgl GWL @54 drilled, 4:40:00 PM, 11/11/2025 3. 3.4m bgl GWL @54 drilled, 7:30:00 AM, 11/12/2025 4. 3.2m bgl GWL @63.73 drilled, 2:00:00 PM, 11/12/2025			
						DEPTH OF HOLE (m) DEPTH TO FLUID (m)					
Mud ▲ △ □ --- HW --- ← → ▤ ■		Water ● × ○		Fluid Level Data End of shift Start of next shift Intermediate Casing: Depth/ Type Fluid Loss Fluid Gain Screen/ Sand Pocket Transducer		Drilling Fluid Type Tests PK (3.7m) PK - Terminal Packer Test (Test interval length)		Fracture Spacing VWS Very widely spaced WS Widely spaced MWS Moderately widely spaced CS Closely spaced VCS Very closely spaced ECS Extremely closely spaced		DRILLING FLUID LEVEL RECORD CLIENT: New Zealand Transport Agency - Waka Kotahi PROJECT: Alternative to the Brynderwyn Hills Section LOCATION: 2941 State Highway 1, Kaiwaka PROJECT REFERENCE: Aurecon WSP JV LOGGED BY: BTG NZ TRANSPORT AGENCY WAKA KOTAHİ Roads of National Significance	



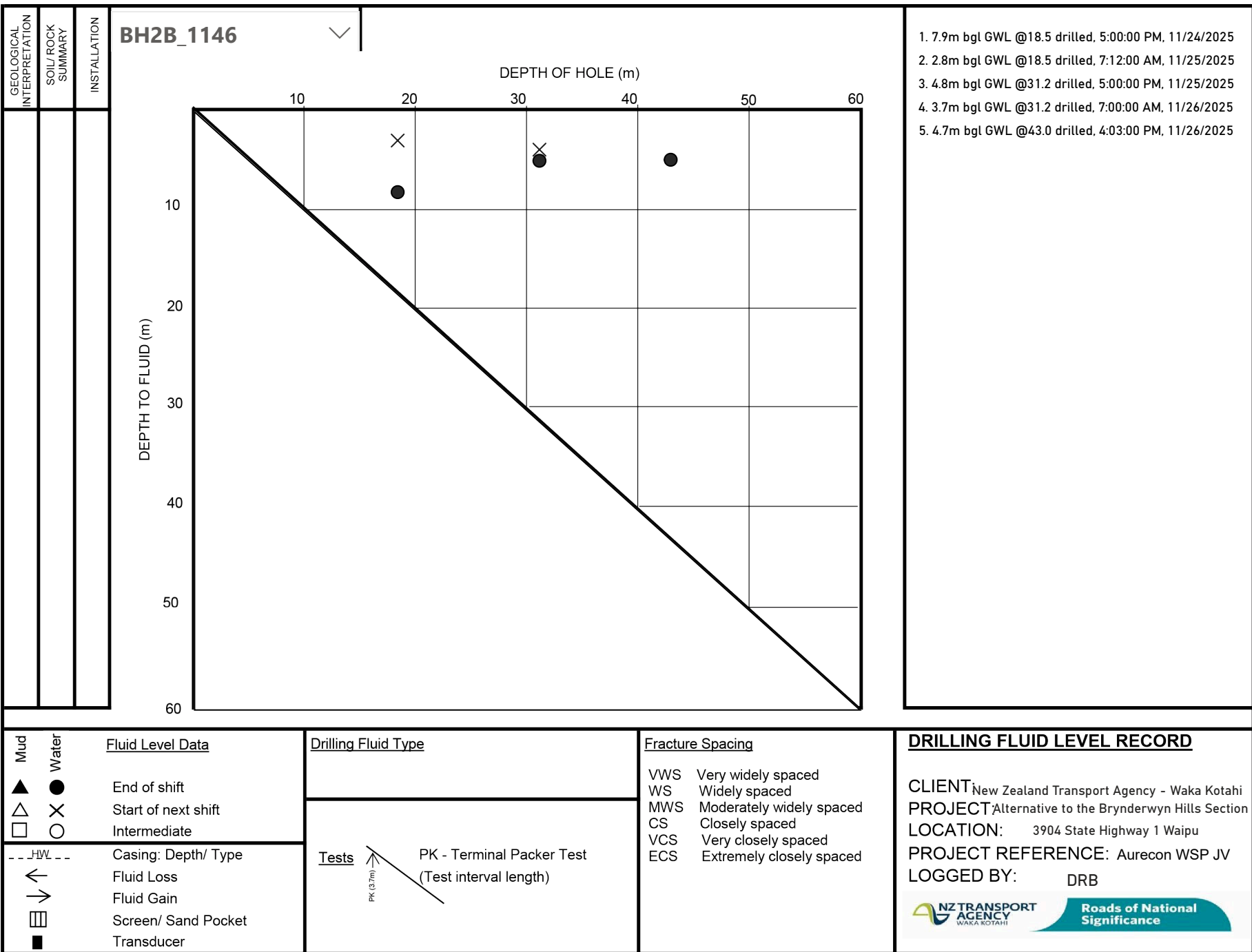






GEOLOGICAL INTERPRETATION		SOIL/ ROCK SUMMARY		INSTALLATION		BH2B_1143		1. 1.3m bgl GWL @21.5 drilled, 4:30:00 PM, 10/23/2025 2. 4.7m bgl GWL @21.5 drilled, 7:03:00 AM, 10/24/2025 3. 3.1m bgl GWL @31.5 drilled, 12:46:00 PM, 10/24/2025 4. 6.7m bgl GWL @31.5 drilled, 9:26:00 AM, 10/28/2025	
						DEPTH OF HOLE (m) DEPTH TO FLUID (m)			
Mud Water ▲ ● △ × □ ○ --- HWL --- ← → ▤ ■		Fluid Level Data End of shift Start of next shift Intermediate Casing: Depth/ Type Fluid Loss Fluid Gain Screen/ Sand Pocket Transducer		Drilling Fluid Type Tests PK (3.7m) PK - Terminal Packer Test (Test interval length)		Fracture Spacing VWS Very widely spaced WS Widely spaced MWS Moderately widely spaced CS Closely spaced VCS Very closely spaced ECS Extremely closely spaced		DRILLING FLUID LEVEL RECORD CLIENT: New Zealand Transport Agency - Waka Kotahi PROJECT: Alternative to the Brynderwyn Hills Section LOCATION: 3838 State Highway 1 Waipu PROJECT REFERENCE: Aurecon WSP JV LOGGED BY: BTG	

GEOLOGICAL INTERPRETATION		SOIL/ ROCK SUMMARY		INSTALLATION		BH2B_1145				DEPTH OF HOLE (m) 10 20 30 40 50 60 10 20 30 40 50 60 DEPTH TO FLUID (m)		1. 0.4m bgl GWL @10.5 drilled, 5:00:00 PM, 9/2/2025 2. 0.7m bgl GWL @10.5 drilled, 8:00:00 AM, 9/3/2025 3. 2.3m bgl GWL @30.0 drilled, 4:00:00 PM, 9/3/2025 4. 1.3m bgl GWL @30.0 drilled, 7:00:00 AM, 9/4/2025 5. 1.3m bgl GWL @49.5 drilled, 4:00:00 PM, 9/4/2025 6. 1.2m bgl GWL @49.5 drilled, 9:00:00 AM, 9/5/2025	
Mud Water		Fluid Level Data		Drilling Fluid Type		Fracture Spacing		DRILLING FLUID LEVEL RECORD					
▲ ● △ × □ ○		End of shift Start of next shift Intermediate				VWS WS MWS CS VCS ECS Very widely spaced Widely spaced Moderately widely spaced Closely spaced Very closely spaced Extremely closely spaced		CLIENT PROJECT LOCATION: PROJECT REFERENCE: LOGGED BY: New Zealand Transport Agency - Waka Kotahi Alternative to the Brynderwyn Hills Section 37 State Highway 1, Kaiwaka Aurecon WSP JV SH					
--- HWL --- ← → ▤ ■		Casing: Depth/ Type Fluid Loss Fluid Gain Screen/ Sand Pocket Transducer		Tests PK (3.7m) PK - Terminal Packer Test (Test interval length)				NZ TRANSPORT AGENCY WAKA KOTAHİ Roads of National Significance					



Mud

Water

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--- HWL ---

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End of shift

Start of next shift

Intermediate

Casing: Depth/ Type

Fluid Loss

Fluid Gain

Screen/ Sand Pocket

Transducer

Drilling Fluid Type

Tests

PK (3.7m)

PK - Terminal Packer Test
(Test interval length)

Fracture Spacing

VWS Very widely spaced

WS Widely spaced

MWS Moderately widely spaced

CS Closely spaced

VCS Very closely spaced

ECS Extremely closely spaced

DRILLING FLUID LEVEL RECORD

CLIENT: New Zealand Transport Agency - Waka Kotahi

PROJECT: Alternative to the Brynderwyn Hills Section

LOCATION: 3904 State Highway 1 Waipu

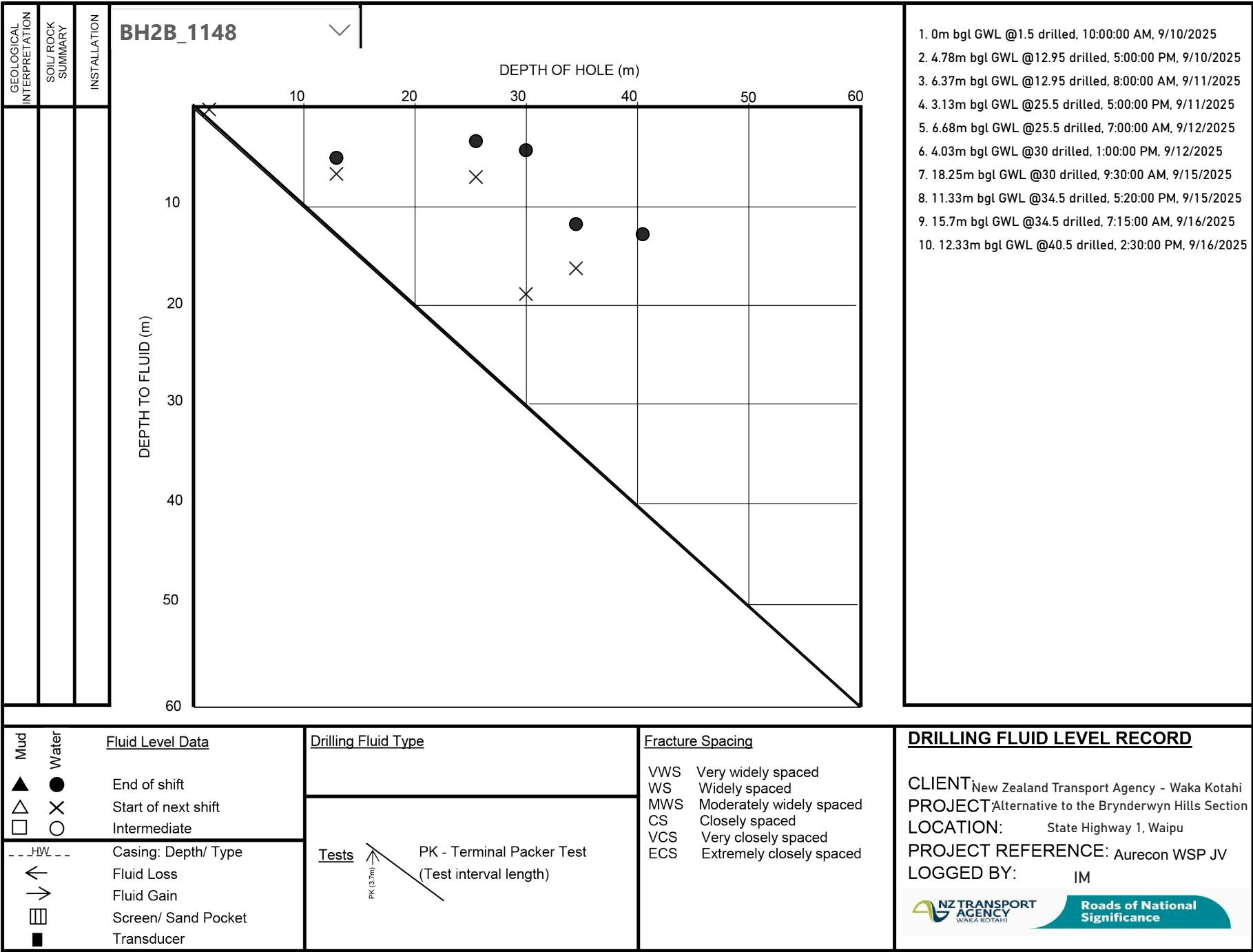
PROJECT REFERENCE: Aurecon WSP JV

LOGGED BY: DRB

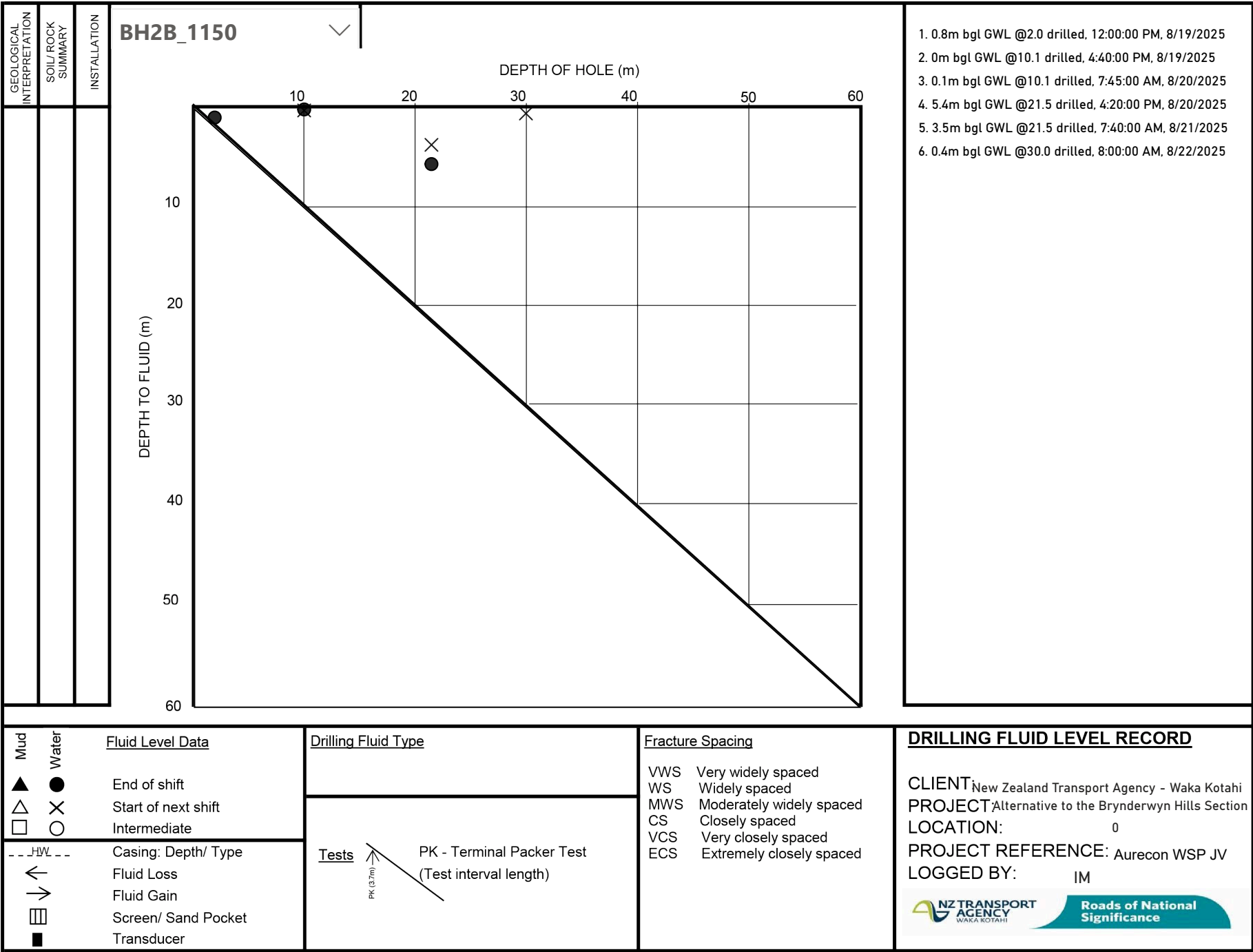
NZ TRANSPORT AGENCY

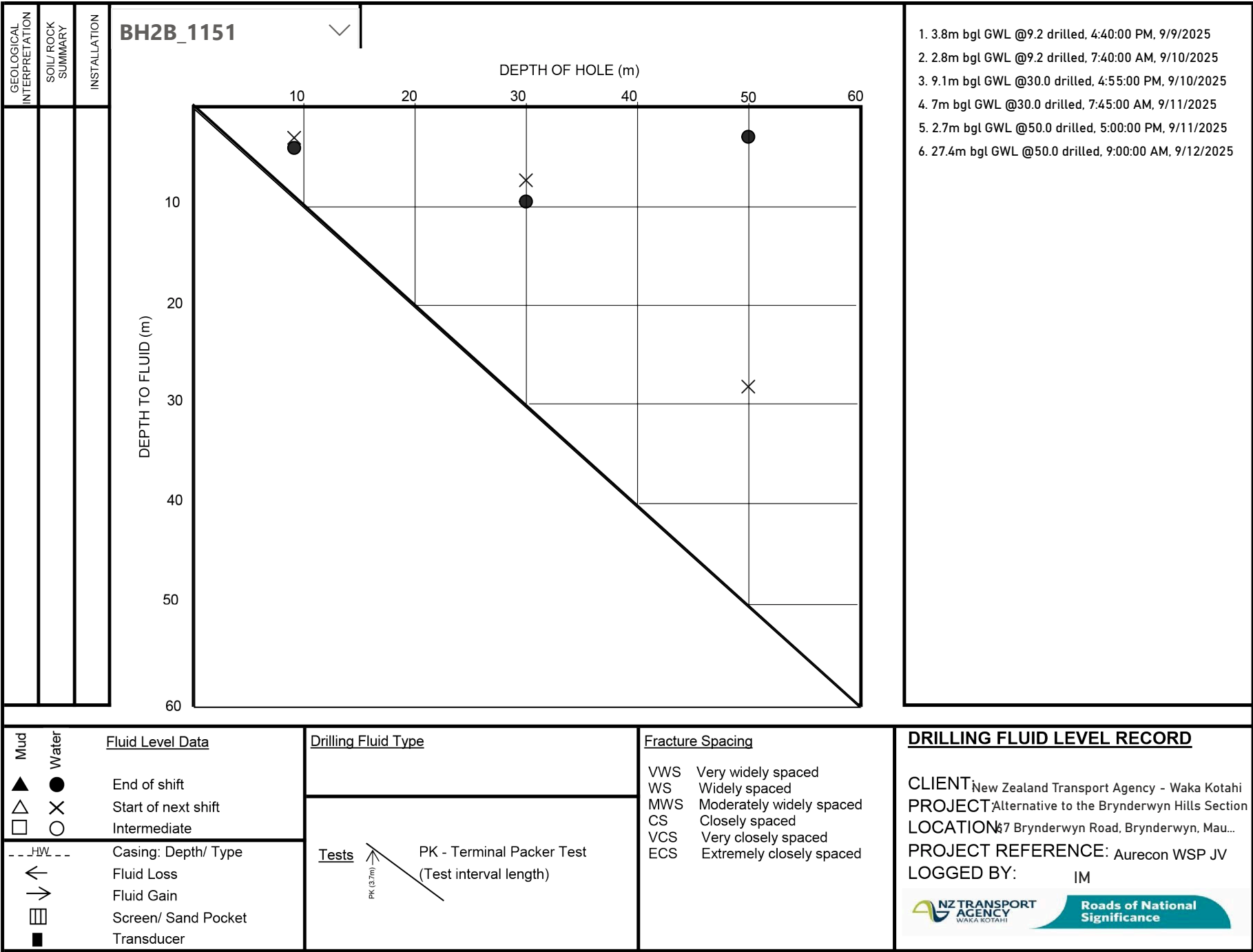
WAKA KOTAHİ

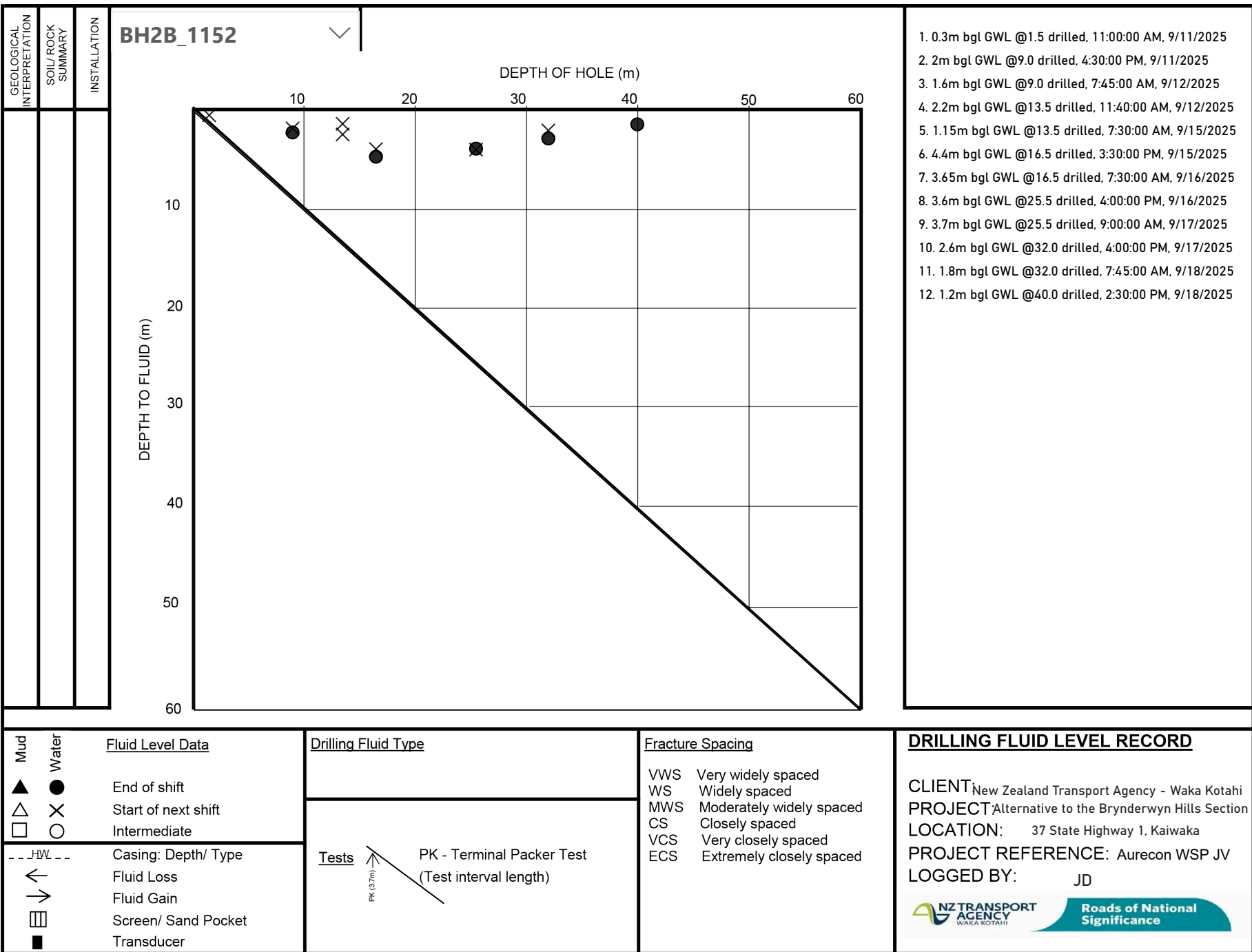
Roads of National Significance



GEOLOGICAL INTERPRETATION		SOIL/ ROCK SUMMARY		INSTALLATION		BH2B_1149		1. 0.2m bgl GWL @10.5 drilled, 5:00:00 PM, 8/25/2025 2. 0.2m bgl GWL @10.5 drilled, 8:00:00 AM, 8/26/2025 3. 9.3m bgl GWL @34.5 drilled, 5:00:00 PM, 8/26/2025 4. 9.7m bgl GWL @34.5 drilled, 8:00:00 AM, 8/27/2025	
						DEPTH OF HOLE (m) DEPTH TO FLUID (m)			
Mud Water ▲ ● △ × □ ○ --- HW --- ← → ▤ ■		Fluid Level Data End of shift Start of next shift Intermediate Casing: Depth/ Type Fluid Loss Fluid Gain Screen/ Sand Pocket Transducer		Drilling Fluid Type Tests PK (3.7m) PK - Terminal Packer Test (Test interval length)		Fracture Spacing VWS Very widely spaced WS Widely spaced MWS Moderately widely spaced CS Closely spaced VCS Very closely spaced ECS Extremely closely spaced		DRILLING FLUID LEVEL RECORD CLIENT: New Zealand Transport Agency - Waka Kotahi PROJECT: Alternative to the Brynderwyn Hills Section LOCATION: 7 Brynderwyn Road, Brynderwyn, Mau... PROJECT REFERENCE: Aurecon WSP JV LOGGED BY: (Blank) NZ TRANSPORT AGENCY WAKA KOTAHİ Roads of National Significance	







Mud

Water

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Fluid Level Data

End of shift

Start of next shift

Intermediate

Casing: Depth/ Type

Fluid Loss

Fluid Gain

Screen/ Sand Pocket

Transducer

Drilling Fluid Type

Tests

PK (3.7m)

PK - Terminal Packer Test (Test interval length)

Fracture Spacing

VWS Very widely spaced

WS Widely spaced

MWS Moderately widely spaced

CS Closely spaced

VCS Very closely spaced

ECS Extremely closely spaced

DRILLING FLUID LEVEL RECORD

CLIENT: New Zealand Transport Agency - Waka Kotahi

PROJECT: Alternative to the Brynderwyn Hills Section

LOCATION: 37 State Highway 1, Kaiwaka

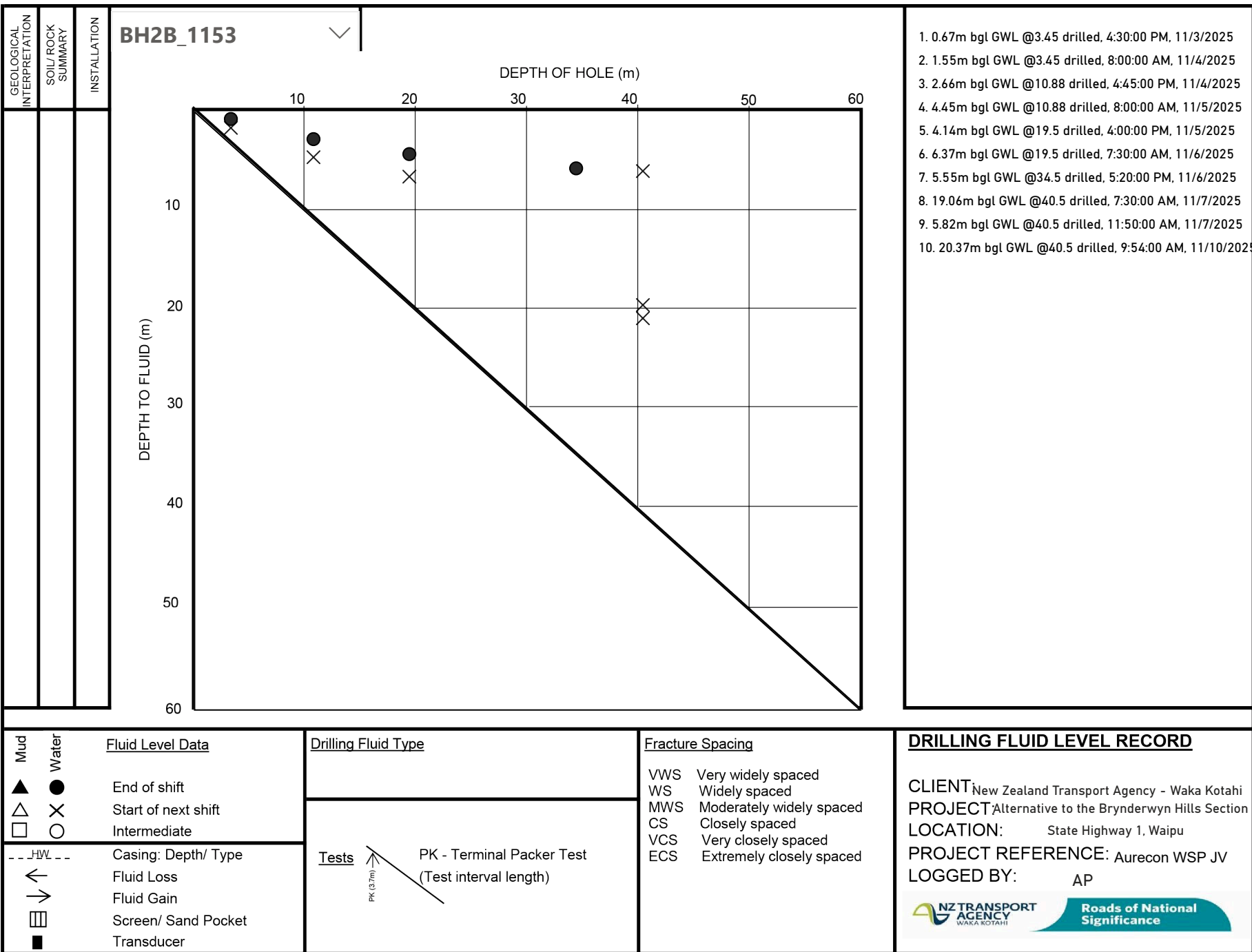
PROJECT REFERENCE: Aurecon WSP JV

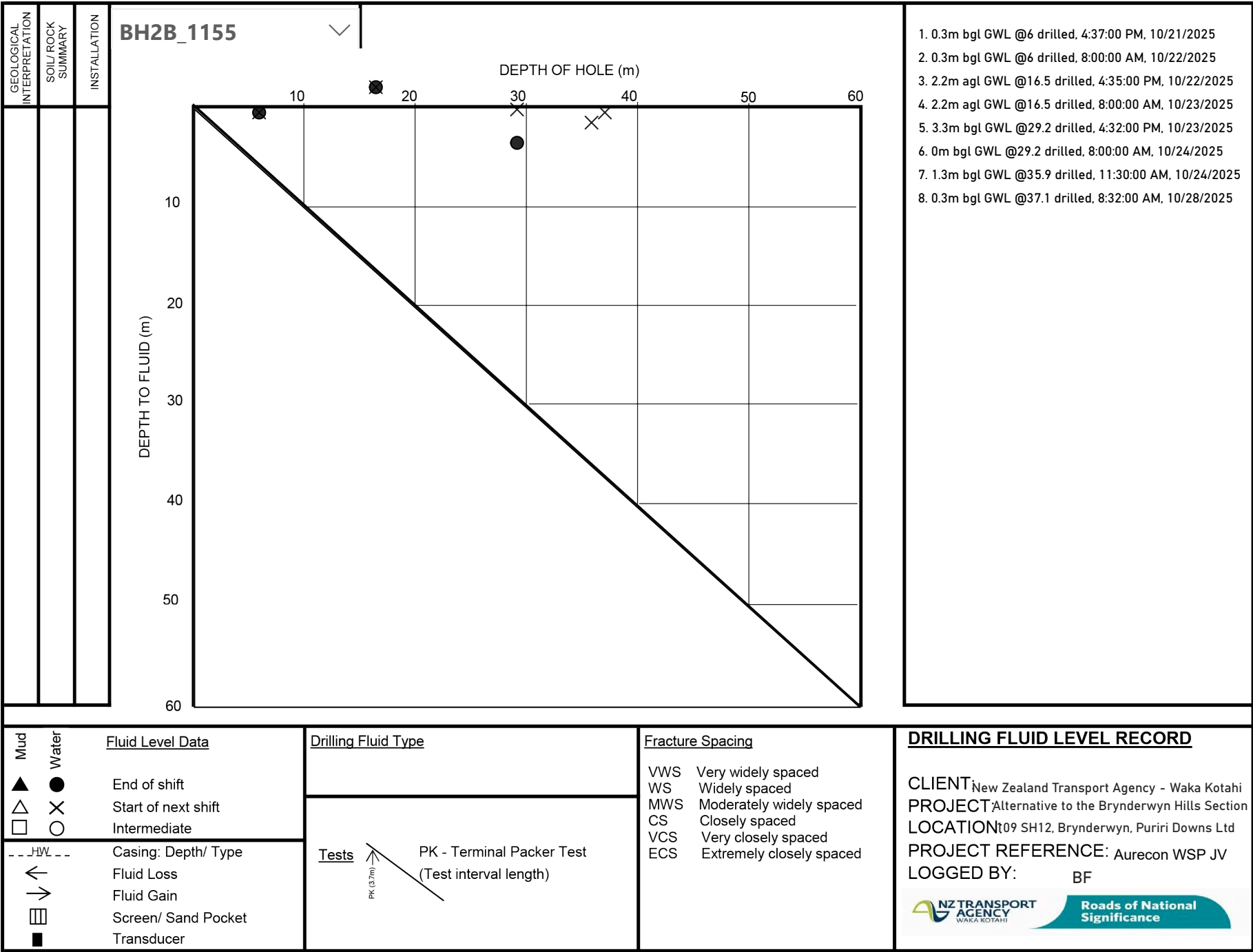
LOGGED BY: JD

NZ TRANSPORT AGENCY

WAKA KOTAHİ

Roads of National Significance





GEOLOGICAL INTERPRETATION		SOIL/ ROCK SUMMARY		INSTALLATION		BH2B_1156		✓	
						DEPTH OF HOLE (m) DEPTH TO FLUID (m)		1. 0m bgl GWL @6 drilled, 5:00:00 PM, 10/17/2025 2. 3.5m bgl GWL @6 drilled, 7:30:00 AM, 10/20/2025 3. 2.2m bgl GWL @15 drilled, 5:00:00 PM, 10/20/2025 4. 4.3m bgl GWL @15 drilled, 7:00:00 AM, 10/21/2025 5. 0.2m bgl GWL @30 drilled, 4:00:00 PM, 10/21/2025 6. 3.5m bgl GWL @30 drilled, 7:30:00 AM, 10/22/2025	
Mud Water ▲ ● △ × □ ○ --- HW --- ← → ▤ ■		Fluid Level Data End of shift Start of next shift Intermediate Casing: Depth/ Type Fluid Loss Fluid Gain Screen/ Sand Pocket Transducer		Drilling Fluid Type Tests PK (3.7m) PK - Terminal Packer Test (Test interval length)		Fracture Spacing VWS Very widely spaced WS Widely spaced MWS Moderately widely spaced CS Closely spaced VCS Very closely spaced ECS Extremely closely spaced		DRILLING FLUID LEVEL RECORD CLIENTNew Zealand Transport Agency - Waka Kotahi PROJECTAlternative to the Brynderwyn Hills Section LOCATIONt09 SH12, Brynderwyn, Puriri Downs Ltd PROJECT REFERENCE: Aurecon WSP JV LOGGED BY: BF NZ TRANSPORT AGENCY WAKA KOTAHĪ Roads of National Significance	

