



0 715 5000 O V1 51 (FES Logger)  U 2009 U 2009 U 2009 U 2009 U 2009 U 2009 U 2001 U 20	Bulk Modulus  to Mey 1000  Young's Modulus
RX1-1A - d1	0.5 9 MPn 2509
OPMANON DESCRIPTION OF THE PROPERTY OF THE PRO	
7.0	
7902	



Unit A3, 269a Mt Smart Road Onehunga Auckland, 1061 New Zealand

2.50

5919868.890

+20° 8' East

McMillans Drilling (NI) Ltd

60.00

Water

N/A

Vertical

Drillhole Information:

Log interval from (m):

Depth Driller (m):

Fluid Type:

Easting:

Elevation:

Hole Azimuth:

Drill Company:

Processed:

Magnetic Declination:

Printing Information: Depth Unit: Metres

J Connors

Ph: +64 6 8771652 Fax: +64 6 8775015 Email: info@rdcl.co.nz www.rdcl.co.nz

Log interval to (m):

Depth Logger (m):

Coord Ref System:

Magnetic Inclination:

Hole Inclination:

Log Reviewer:

Fluid Level (m):

Northing:

59.88

60.03 (Acoustic)

19.57 (Acoustic)

62° 49'

1757424.435

NZTM

>-88.5°

Log Version: Final

K Koria

# Structural Legend:

BP - Bedding Plane

BF - Bedding Fracture

JT - Joint

FR - Fracture

FZ - Fractured Zone

CZ - Crushed Zone

IF - Infilled Zone

DZ - Decomposed Zone

UF - Unidentified Feature

## Image-NM = Optical image oriented to magnetic north Amplitude-NM = Acoustic amplitude (magnetic north) Structures = Apparent Structures oriented to hole Structures - True =Structures Oriented to true north 3D Optical = 3D representation of optical log

Azimuth = Tool azimuth from magnetic north

Acoustic Calliper = 360° average from travel time

Calliper from Cent = Calliper derived from travel time

3D Acoustic = 3D representation of acoustic log DEN(CDL) = Compensated Density in g/ccm

GAM(NAT) = Natural Gamma

Log Nomenclature:

Tilt = Inclination from vertical

#### Comments:

1. Structures - True are reported in dip direction and dip relative to grid north.

2. Water quality turbid below 23.0 m

#### Basic Information:

Drill hole ID:

BH1107

Client: McMillians Drilling (NI) Ltd

Run Number(s):

01, 03 & 04

Tool Type(s): ABI40-2G-VLB Acoustic Televiewe OBI40-2G Optical Televiewer

QL40-CAL Mechanical Calliper

RDCL Service Company:

Operator:

H Soma

Date Logged:

Field:

27/03/2023 Auckland Light Rail

State / Province:

Auckland

Country:

New Zealand

### Location Description:

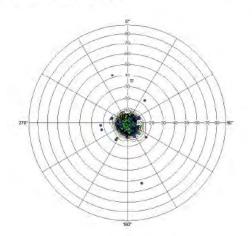
87 Wakefield Street

#### Bit Size Record: Casing Record:

Ì	Size (mm):	From (m):	To (m):	Type:	Size:	From (m):	To (m):	
İ	HQ	0.00	60.00	HWT	101.6	-0.55	2.84	
Ì	##.#	##.#	##.#	XX	##.#	##.#	##.#	
Ì	##.#	##.#	##.#	XX	##.#	##.#	##.#	
ì	##.#	##.#	##.#	XX	##.#	##.#	##.#	

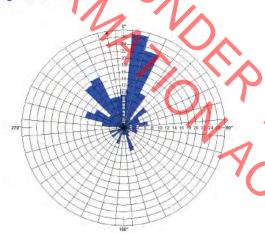
1:10

### Stereoplot - Polar Projection Dip

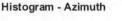


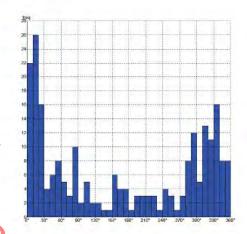
Schmidt Plot - Lower (Southern) Hemisphere - Structures - True Depth: 2.50 m to 59.88 m

Rose Diagram - Azimuth

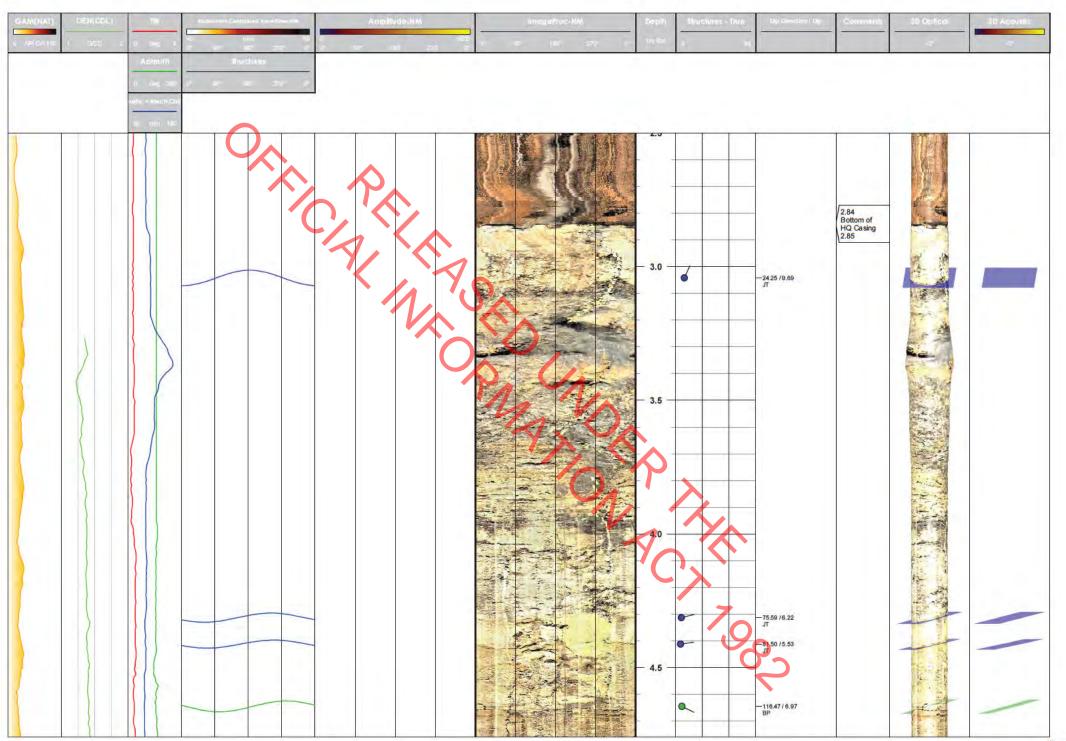


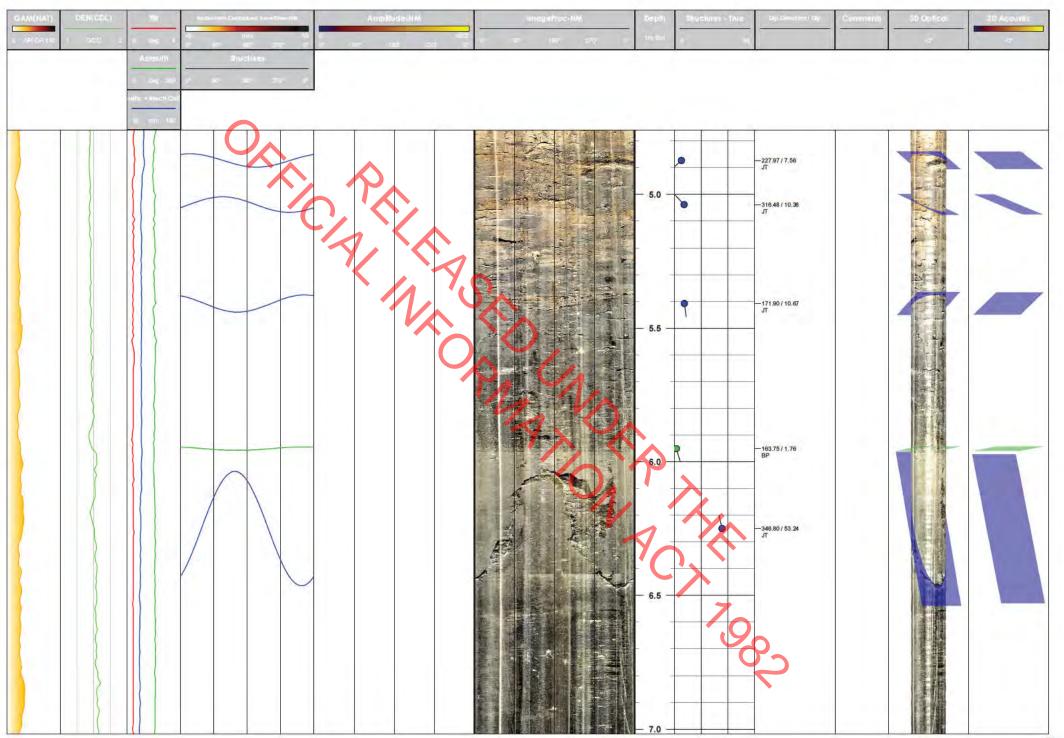
Depth: 2.50 m to 59.88 m

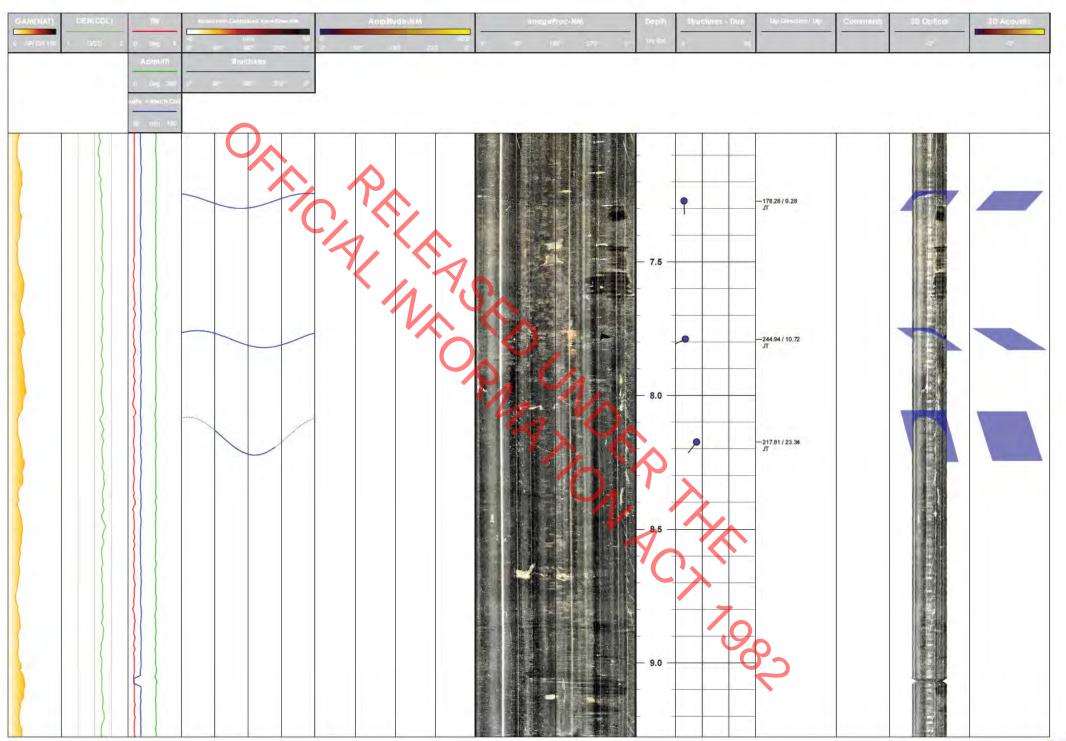


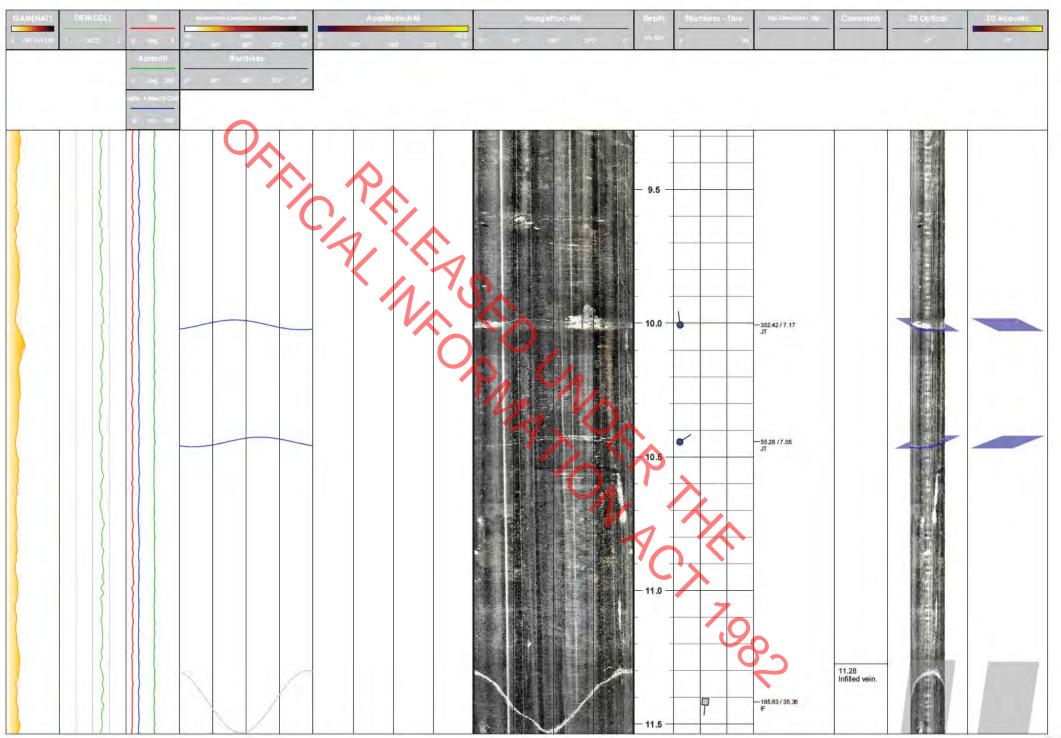


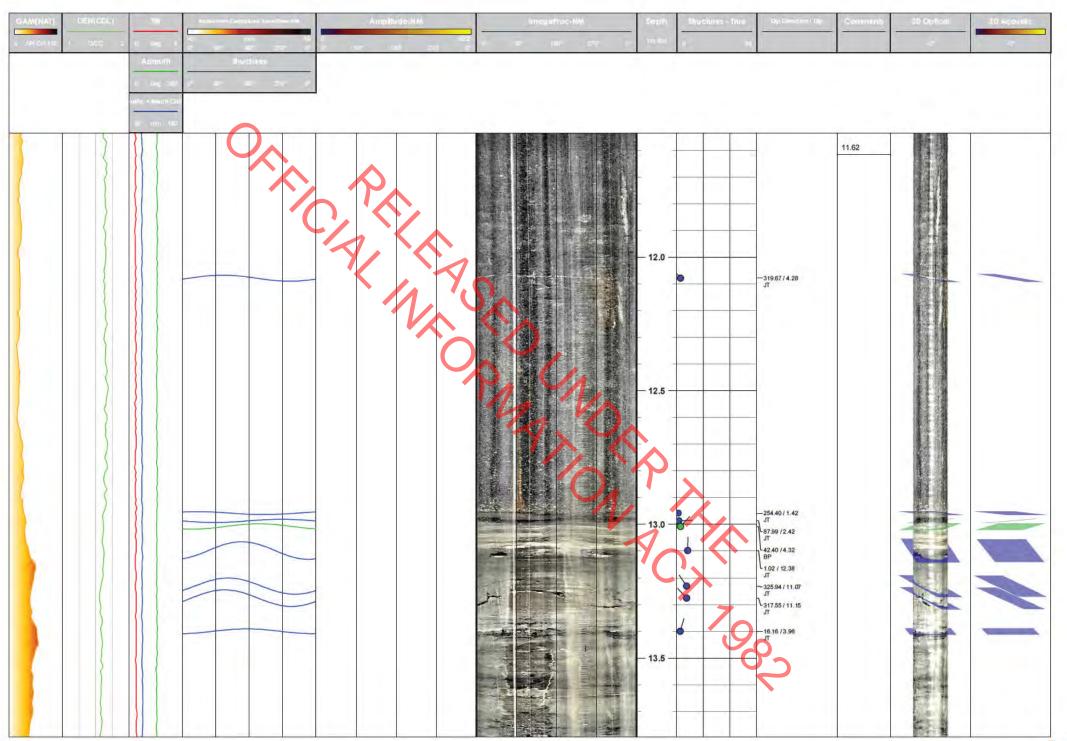
Depth: 2.50 m to 59.88 m

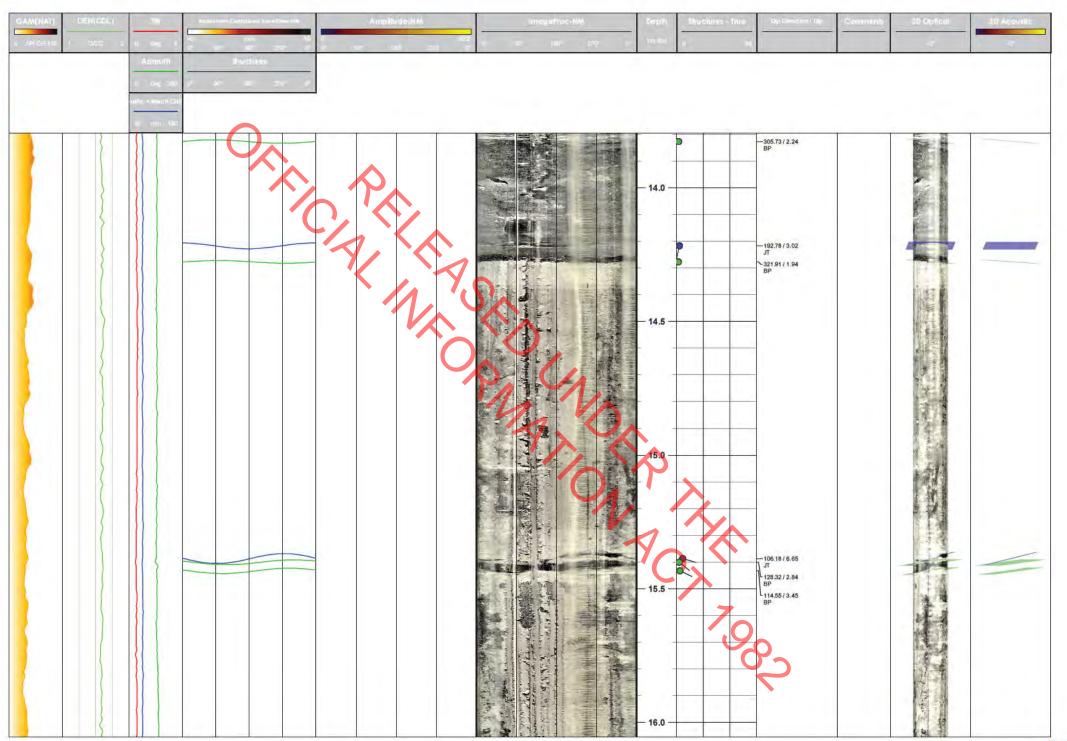


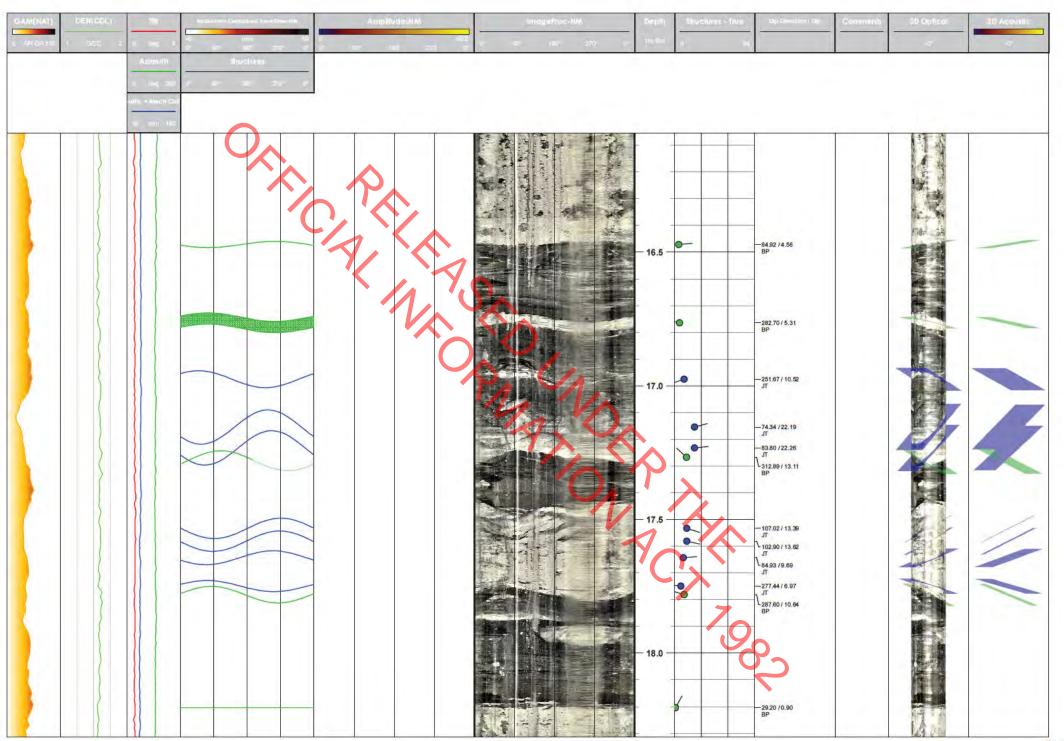


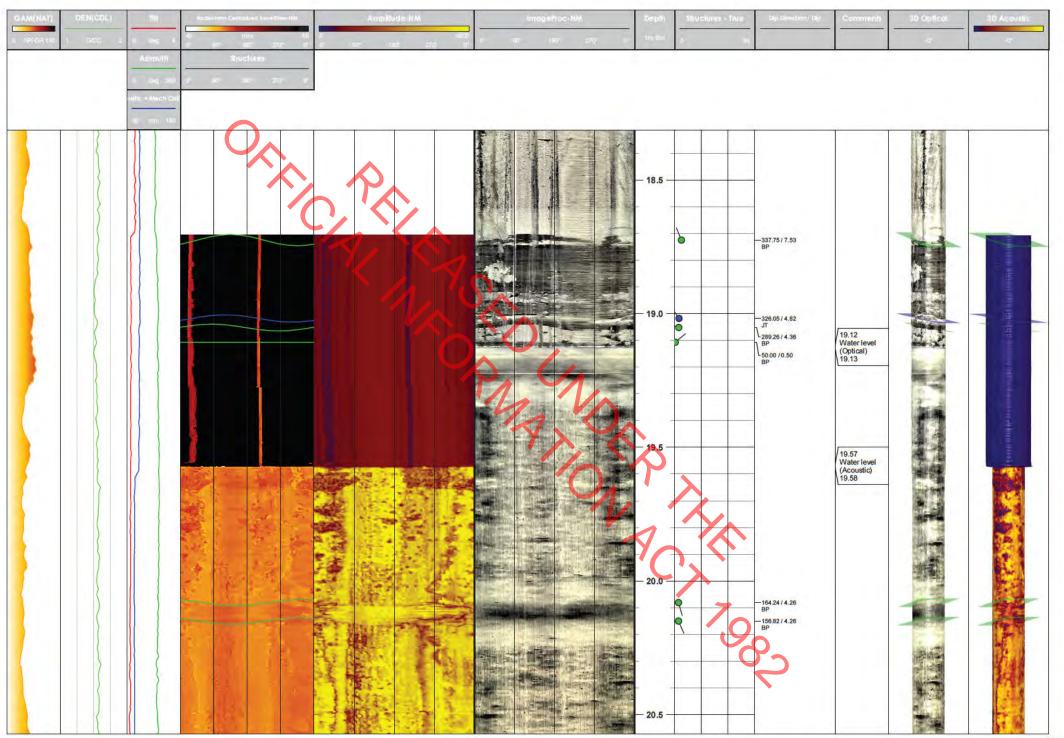


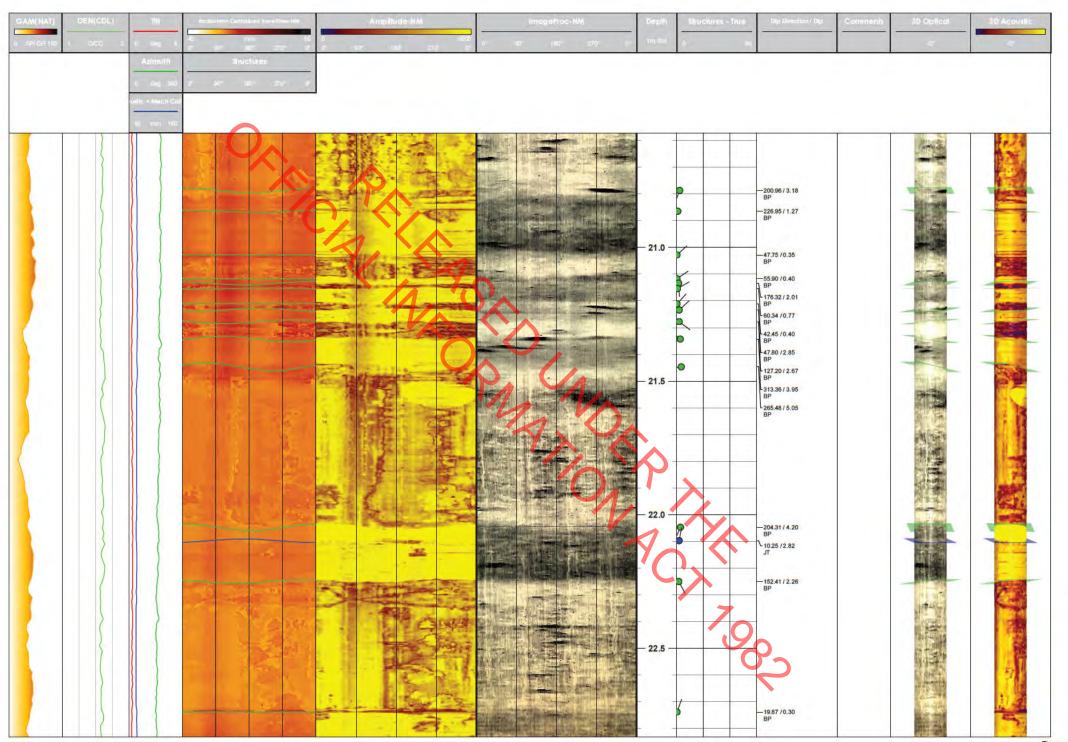


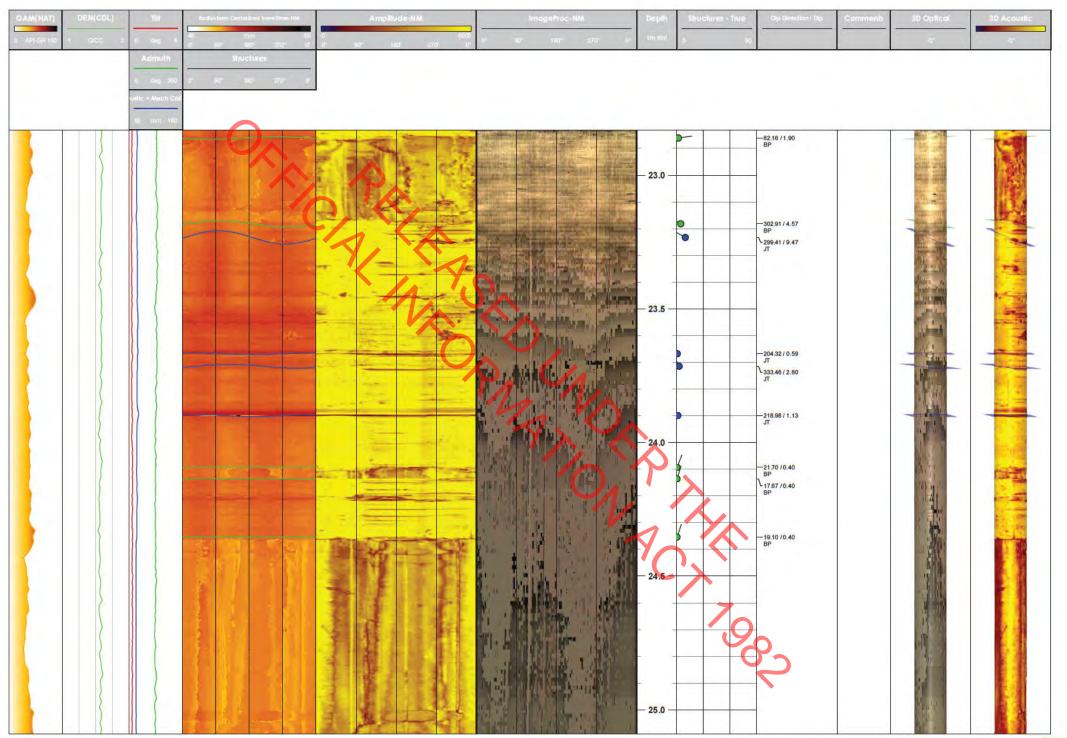


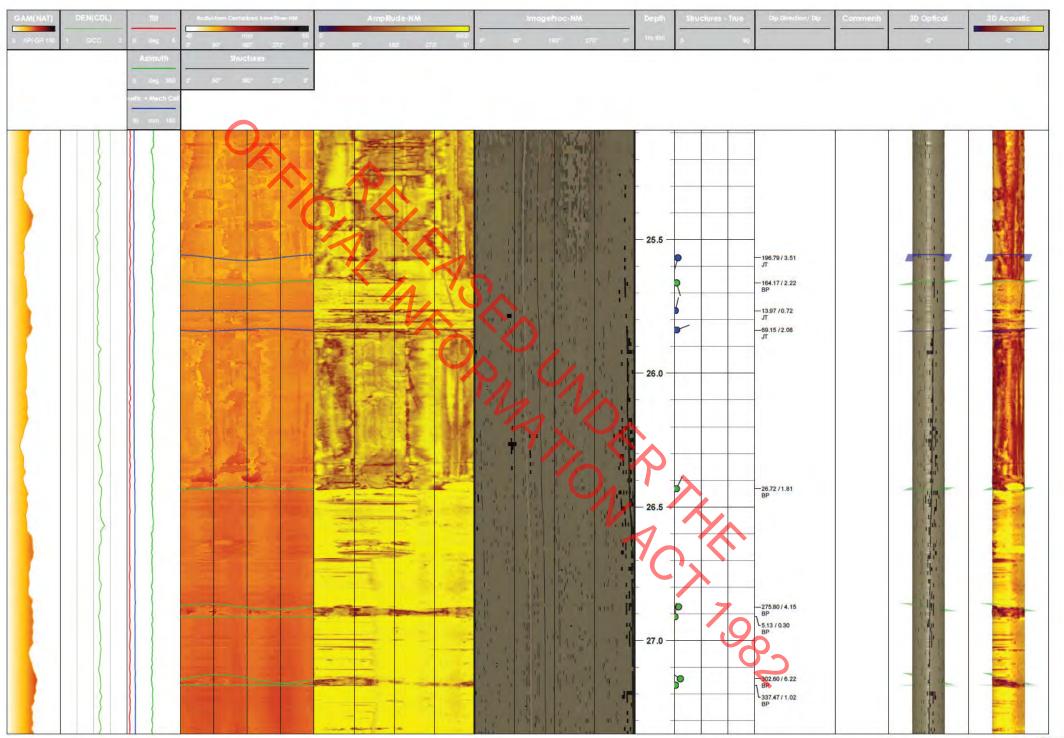


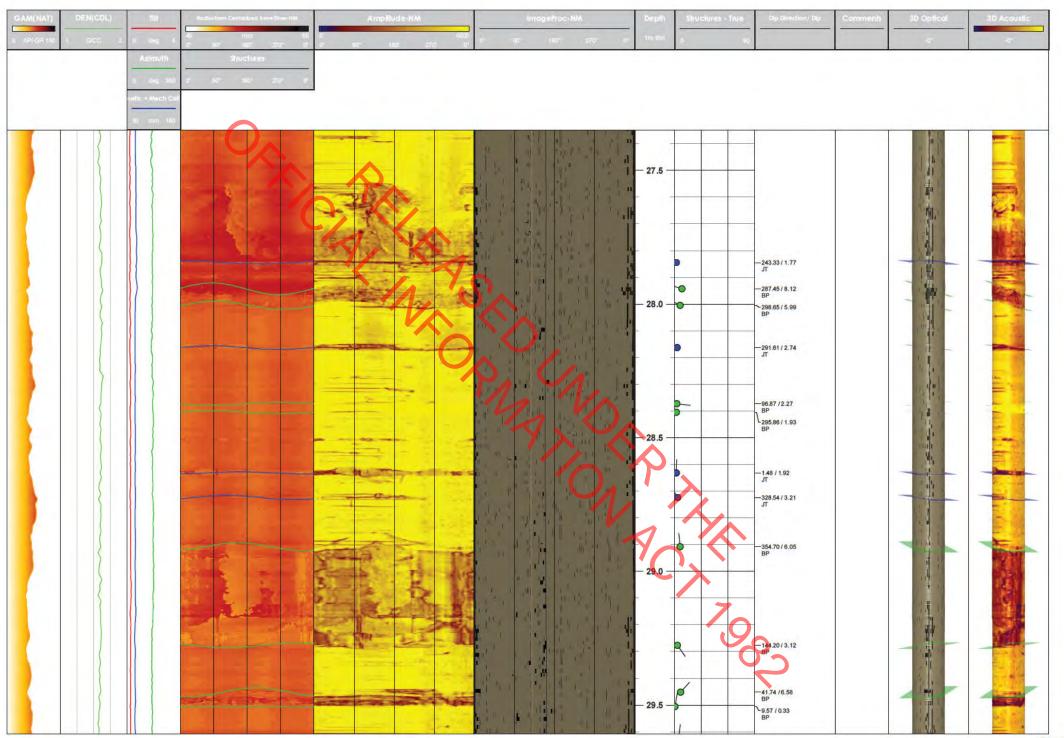


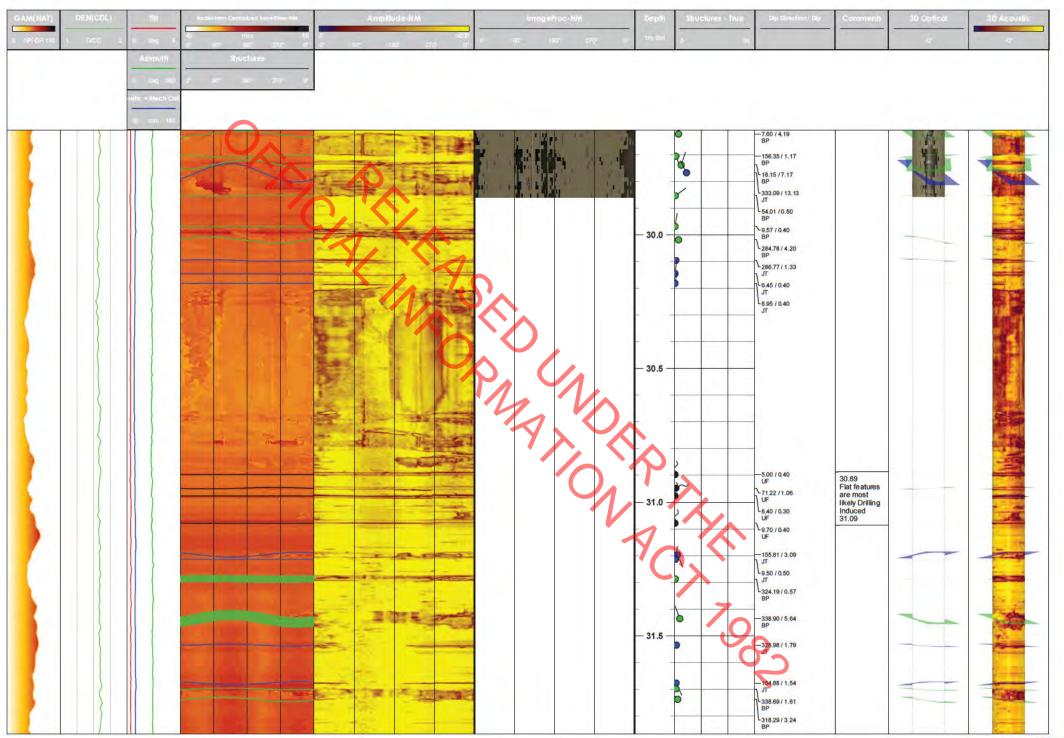


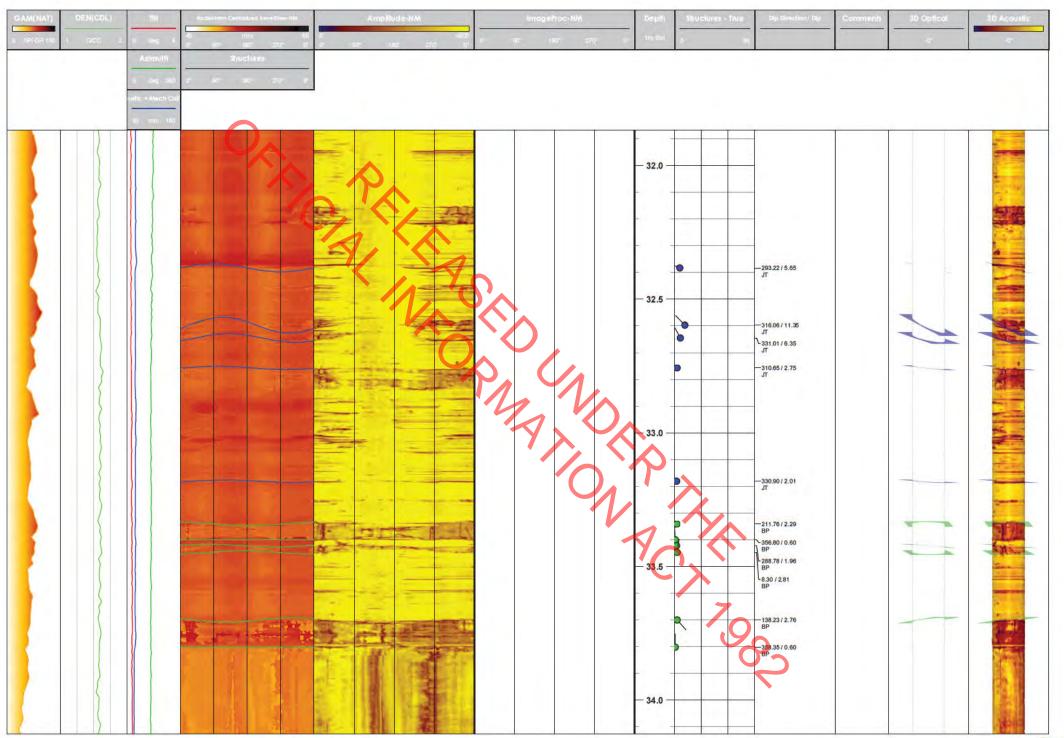


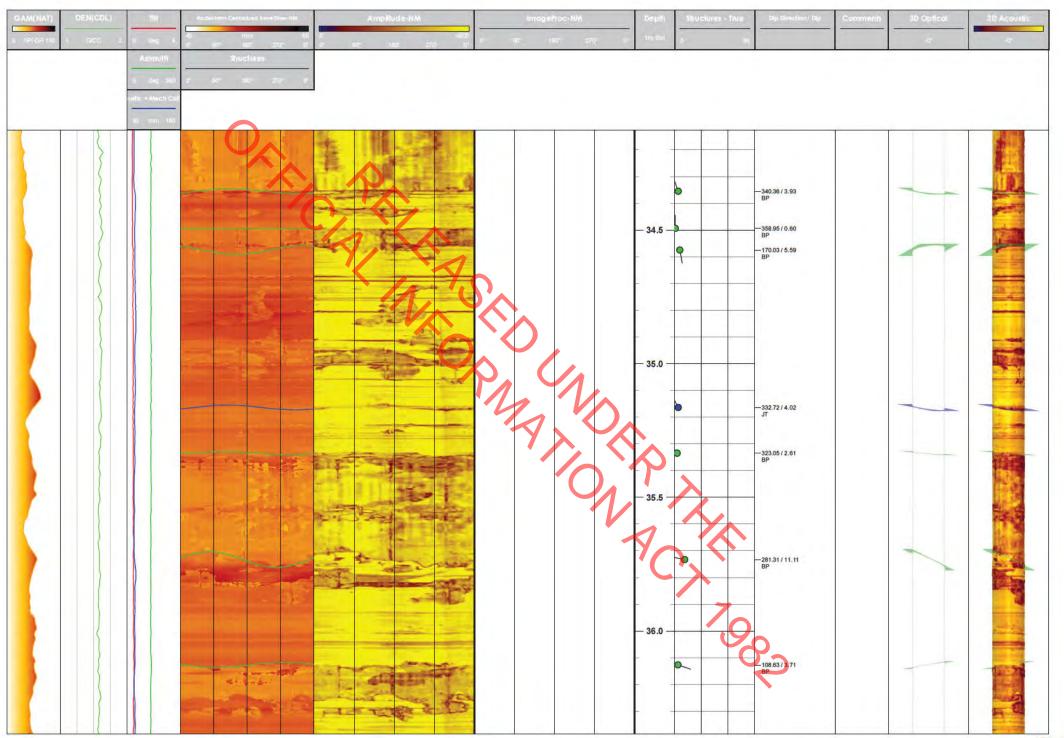


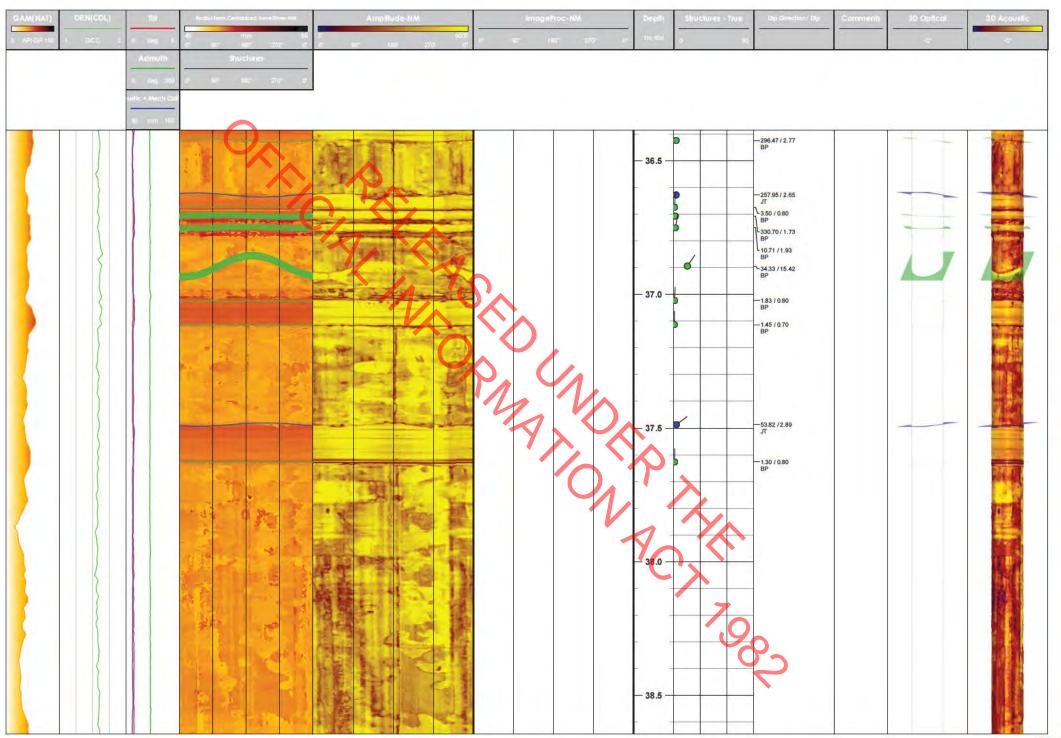


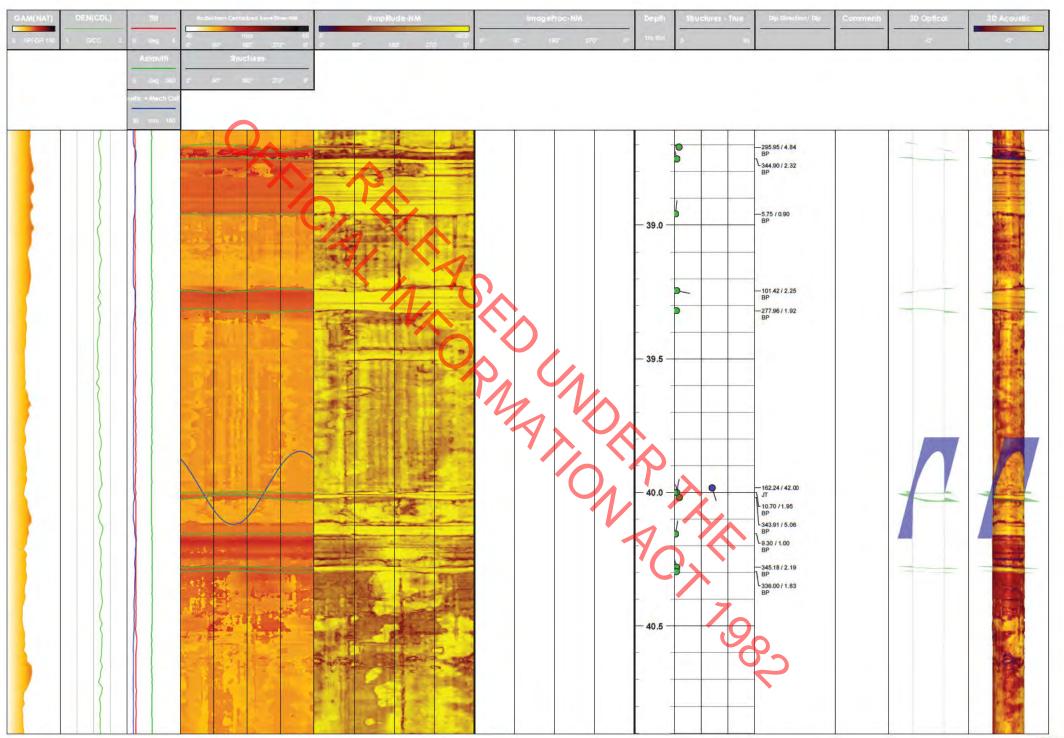


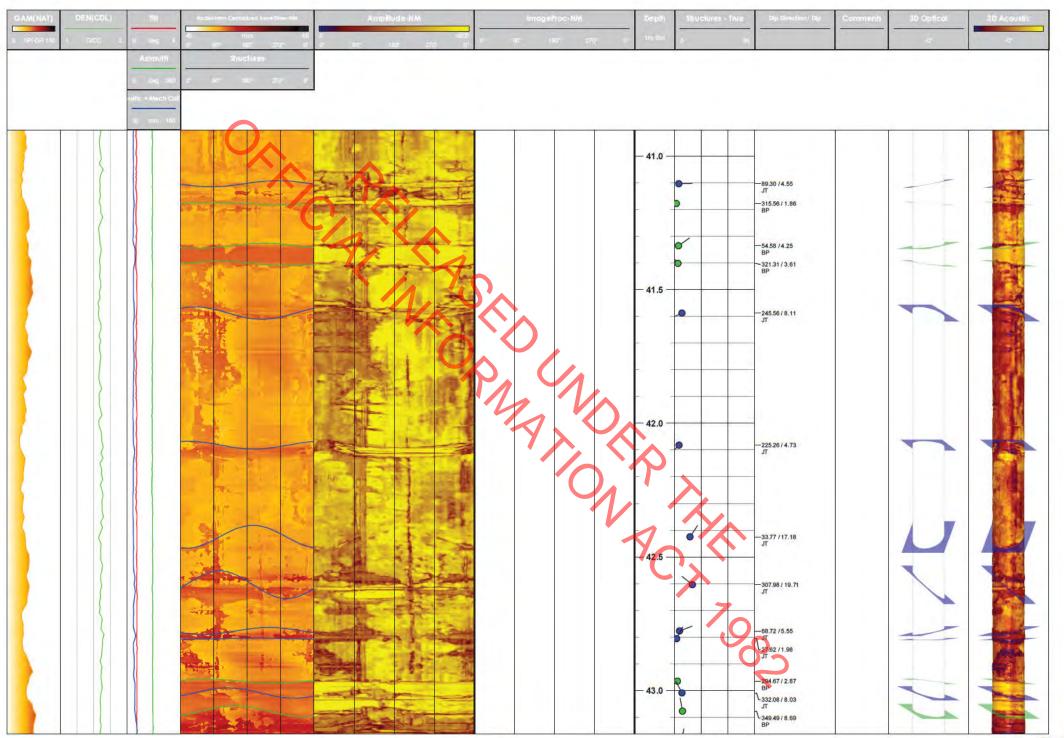


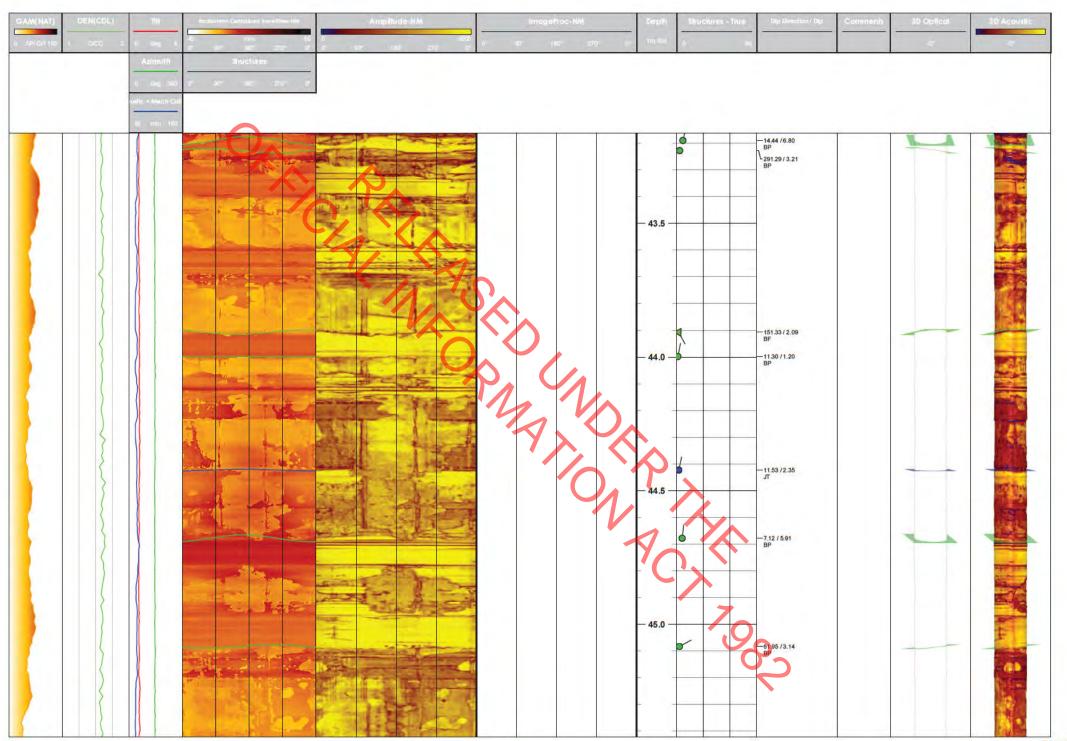


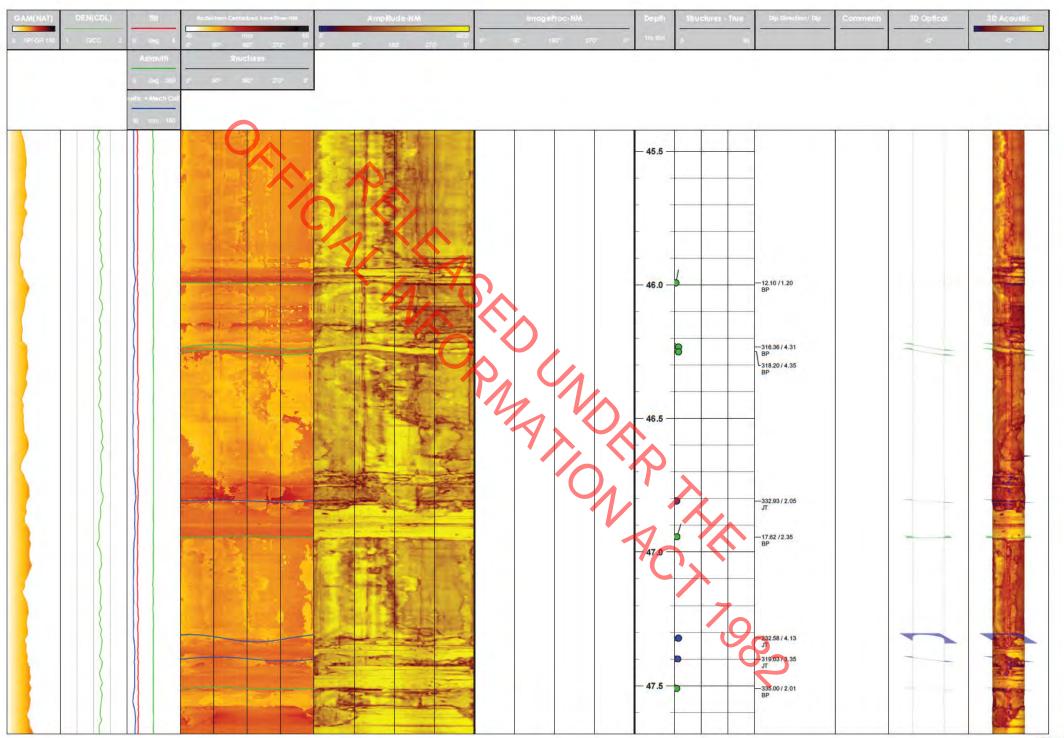


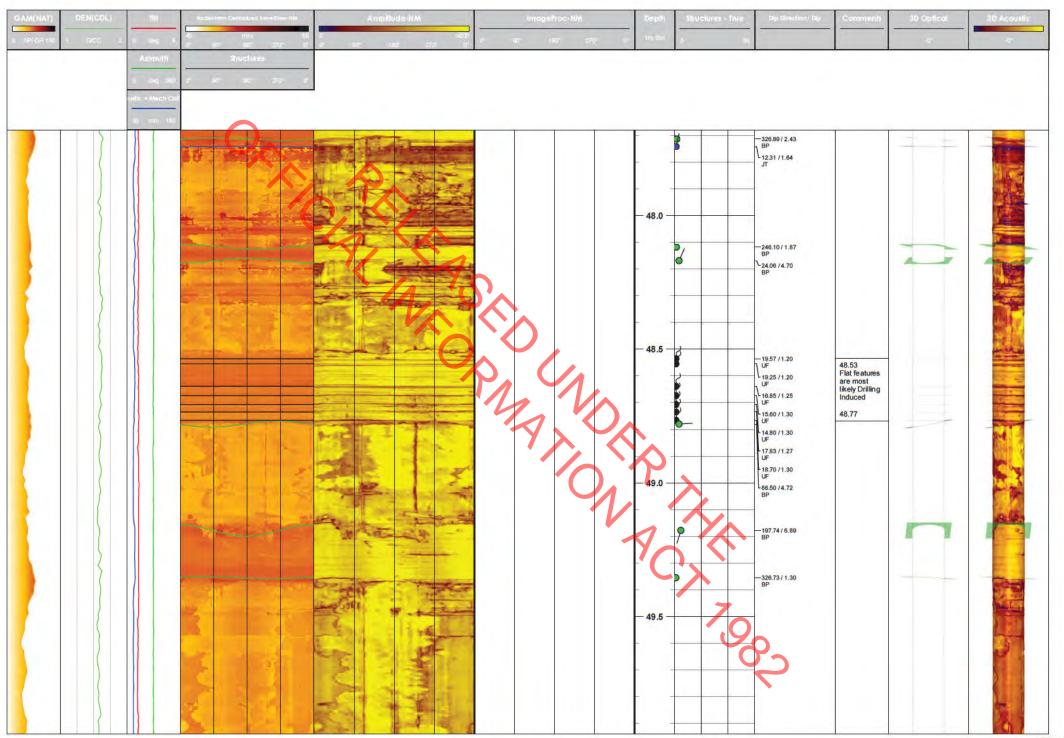


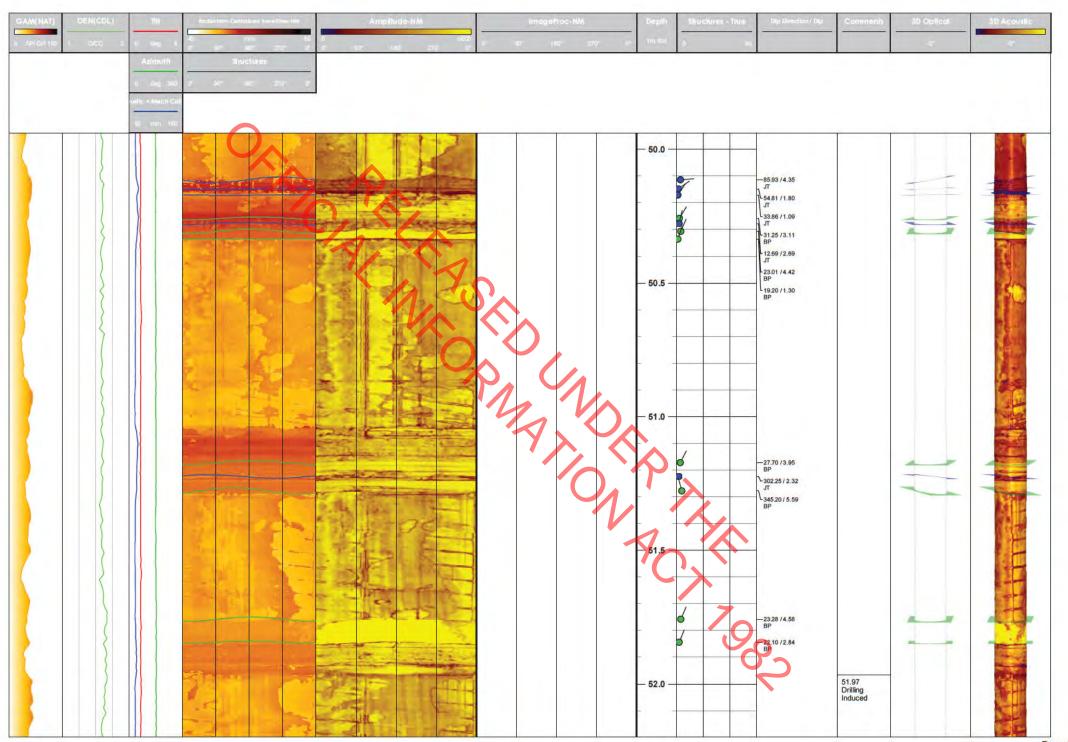


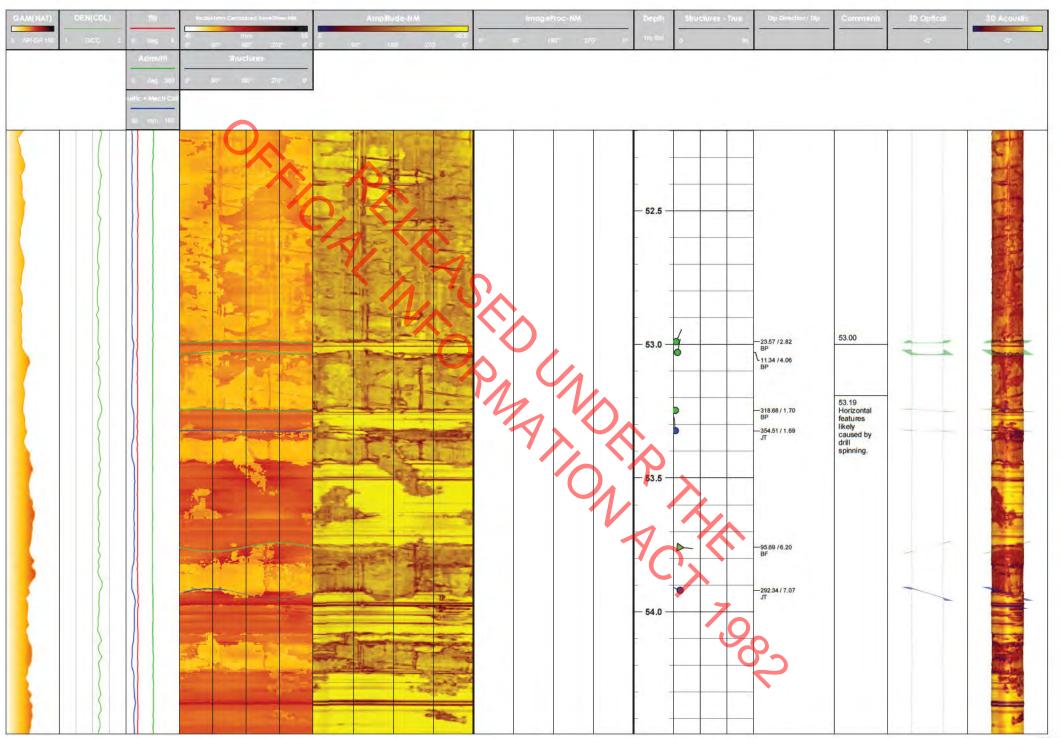


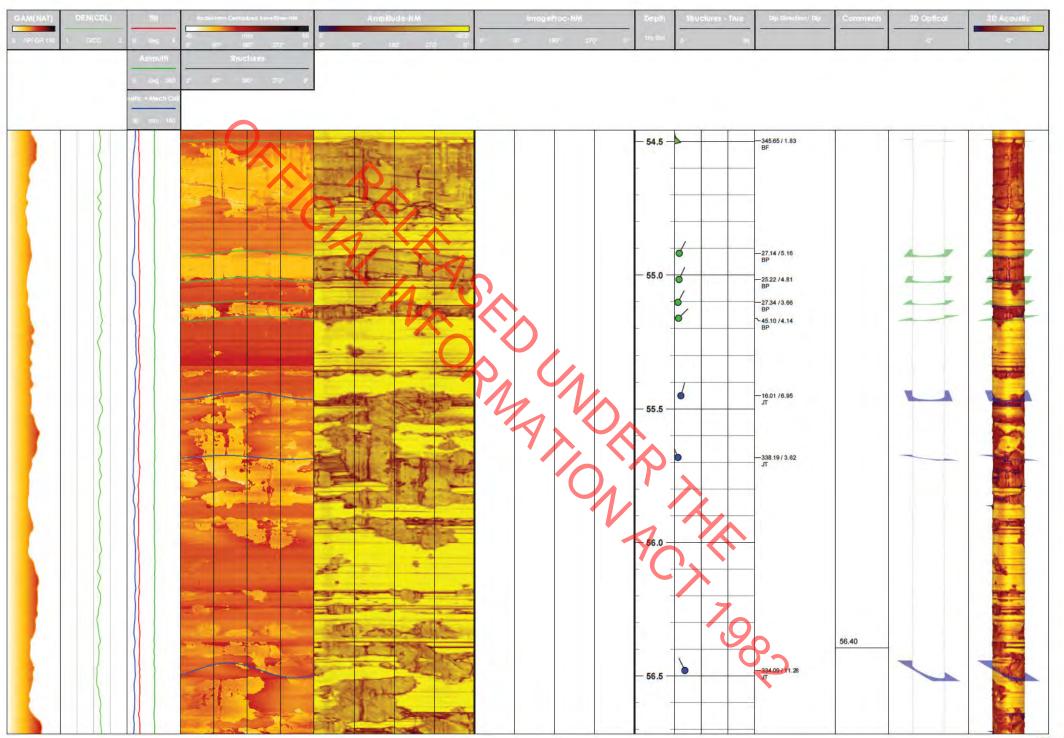


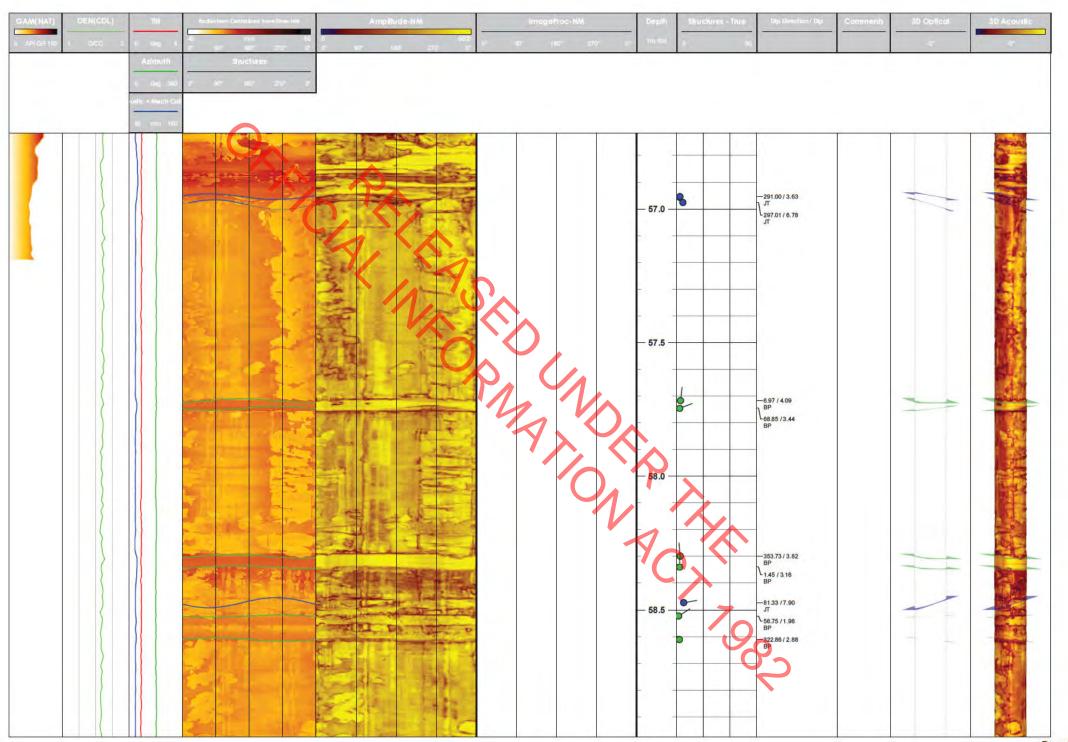


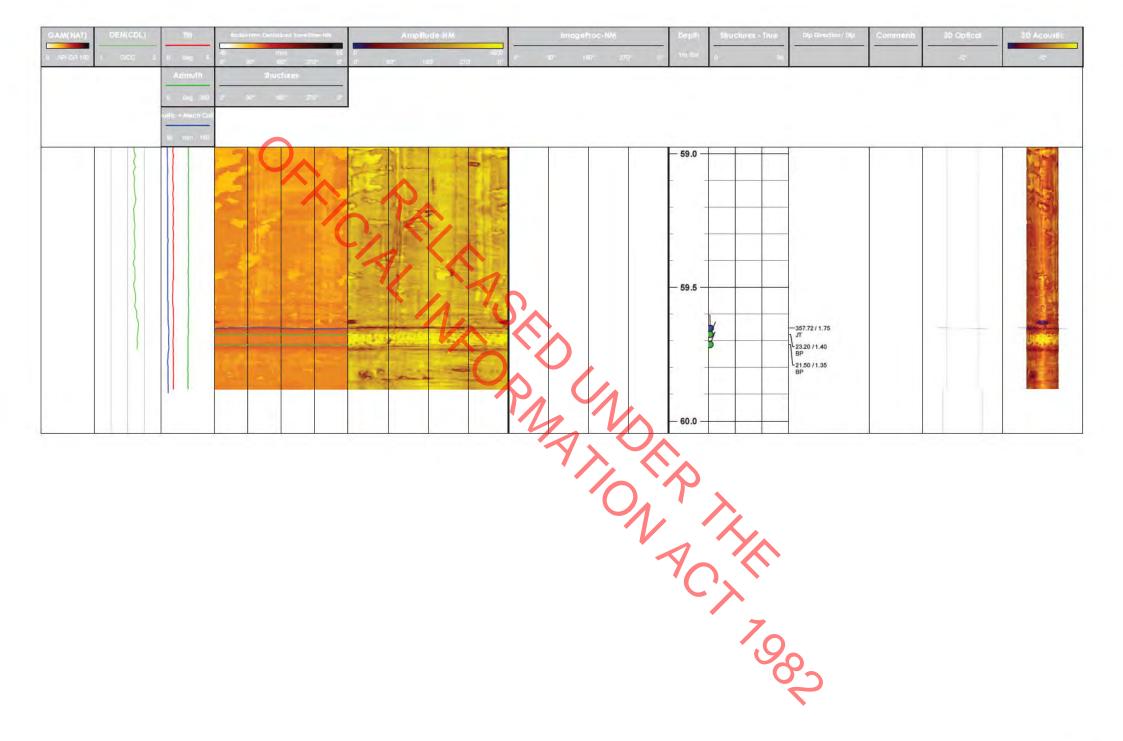














Level 1 182 Main Road Tawa 5028, Wellington New Zealand

Ph: +64 6 8771652 Fax: +64 6 8775015 Email: info@rdcl.co.nz

Basic Information:

Well Name: BH1109

McMillans Drilling (NI) Ltd Company:

Run No: 05 & 07 Tool Type(s):

QL40-FWSS Full Wave Form Sonic

Geovista P&S Logger

Service Company: RDCL

Operator: H Soma

Witness: Nil

Date Logged: 20/03/2023

Field: Auckland Light Rail

State / Province: Auckland

Country: New Zealand

**Location Description:** Opposite the Cordis Hotel.

Drillhole Information:

Bit Size:

Fluid Type:

Northing:

Elevation:

Hole Azimuth:

Casing Size:

Log interval from: 12.00 m

Depth Driller: 66.00 m Water

HQ

Log interval to:

Depth Logger.

Fluid Level:

65.8 (Calliper) 12.82 (Acoustic) 5919646.682

65.63

1757311.161 Easting: TBC

NZTM

Projection: Hole Inclination: <88.6°

Magnetic Inclination: 62° 49'

Casing Depth:

Printing Information: Print Type: Paginated

Vertical

HWT

Magnetic Declination: +20° 8' East

Log Version: Final

Scale Ratio: 1:25

Comments:

Depth Unit: Metres

1. No density run on this hole. Assumed density of 2.2 g/ccm is used for elastic moduli calculations.

2. Gaps left in P&S Logger Vs picks where data is noisy.

3. Hole coordinates taken from Google Earth and are approximate.

Log Notes:

The elastic moduli and engineering parameters were calculated from Full Wave Form Sonic Tool Vp and Vs measurements and assumed densities. As such the logs should be considered in-situ. small strain and bulk measurements. These measurements may differ from laboratory testing for these reasons.

Log Calculations:

SI unit calculations: Shear Modulus (G) = dVs<sup>2</sup>
Bulk Modulus (K) = 1/3\*(E/(1-2\*PR)) Young's Modulus (E) = 2G(1+PR) Poisson's Ratio (PR) = 2-(Vp/Vs)2/2-2(Vp/Vs)2

Vp = P-wave seismic velocity Vs = S-wave seismic velocity d = Density

Log Nomenclature:

Velocity Analysis = Output of semblance processing

S\_Slowness = Shear wave slowness from semblane

Vp = P-wave velocity

Vs = Shear wave velocity from S-Slowness

DEN(CDL) = Compensated Density

Shear Modulus = Shear Modulus (G0)

Bulk Modulus = Bulk Modulus (K)

Young's Modulus = Young's Modulus (E)

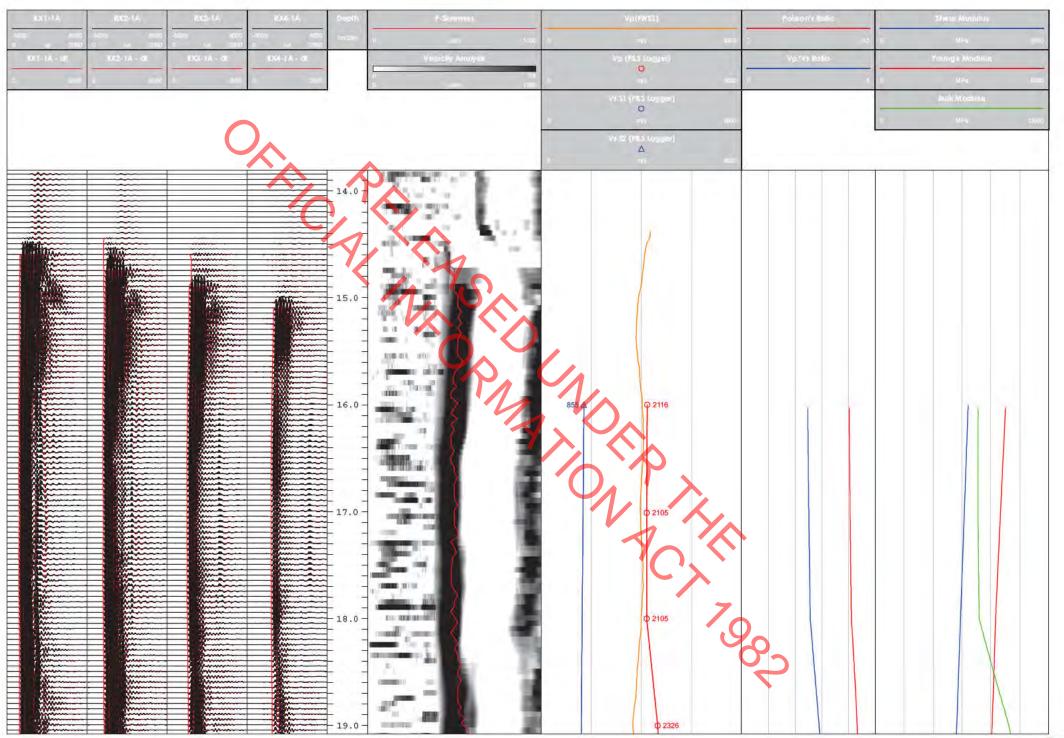
Poisson's Ratio = Poisson's Ratio (PR)

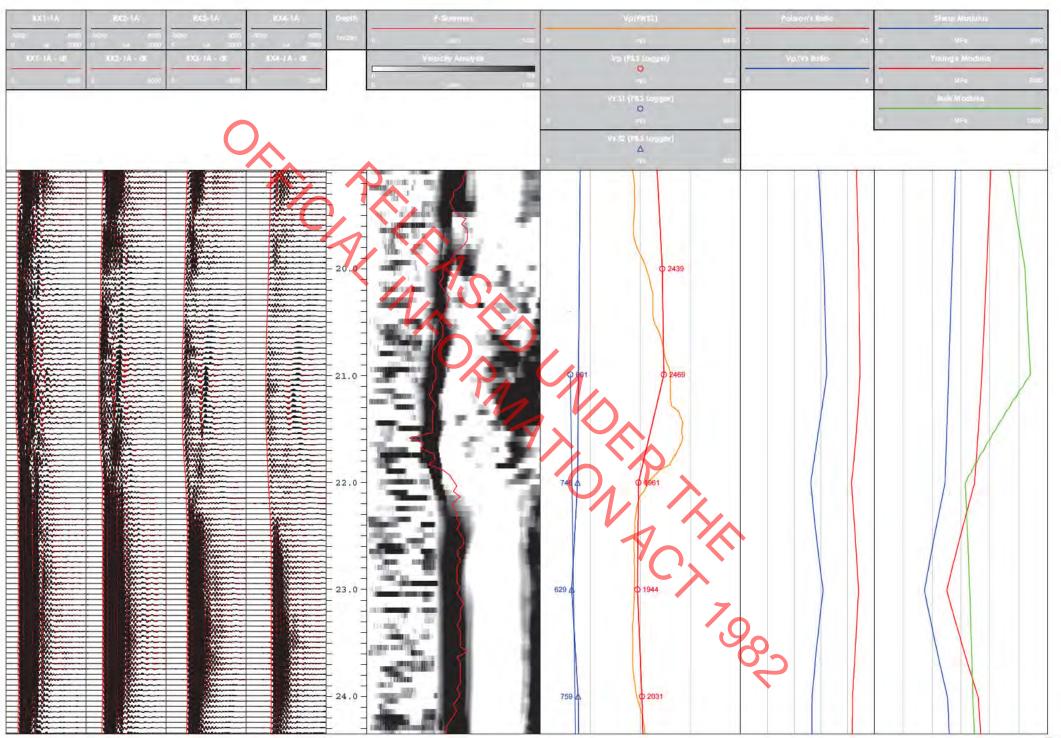
Vp/Vs = P-wave S-wave ratio

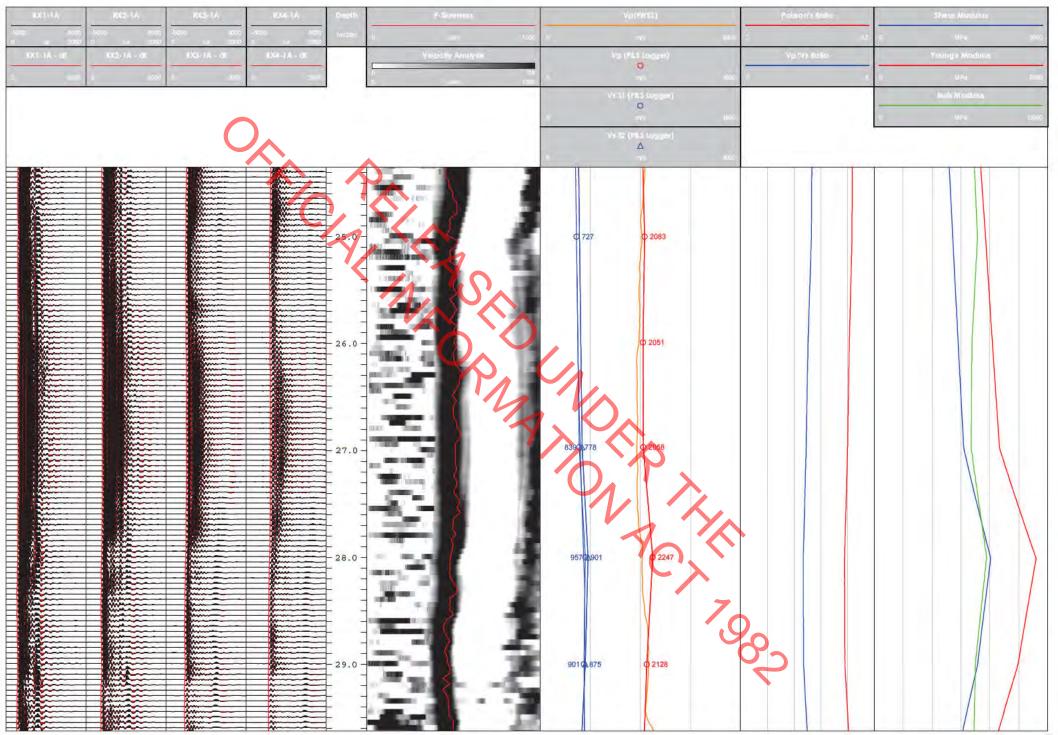
RX#-1A = Wiggle window of sensor #

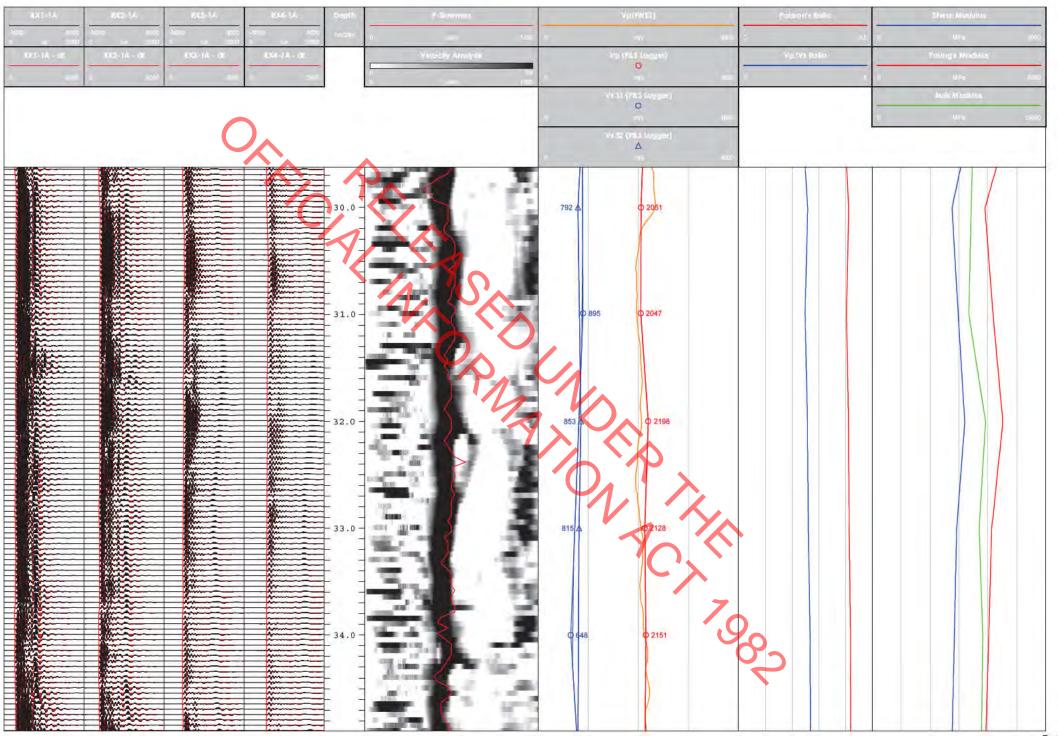
RX#-1A - dt = Picked first arrival time for sensor #

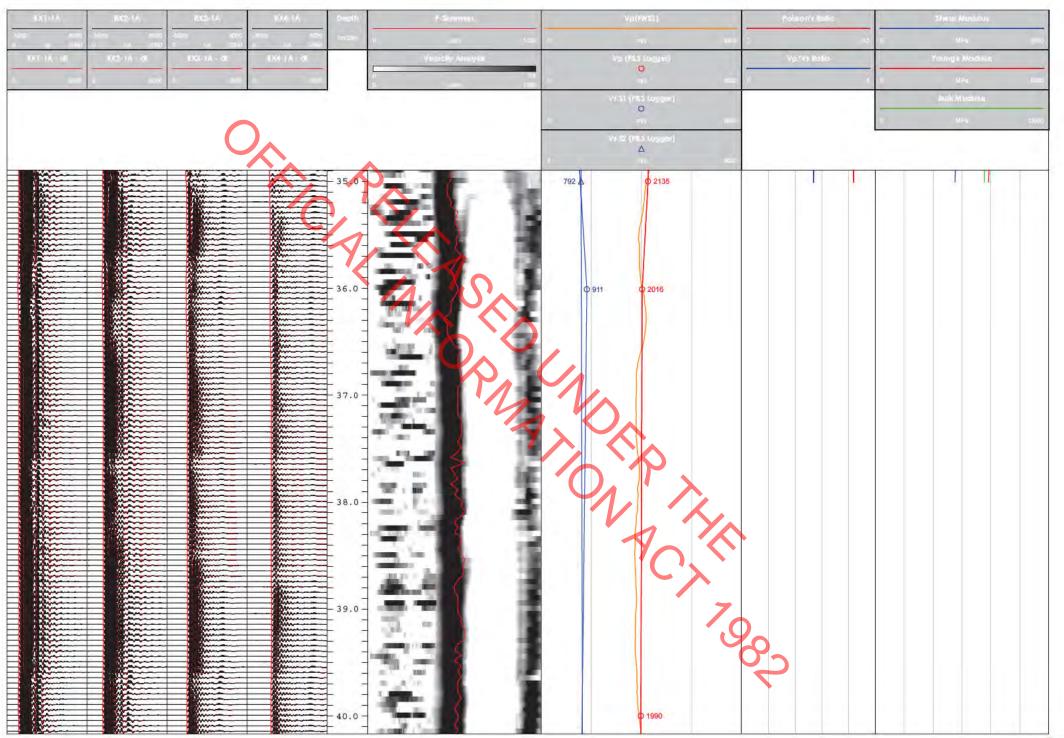
2X1-1A	10x2-1A		RX4-1A	Death	7-Sonness	(22WR)qV	Polsson's Rafic	Shelt: Modifies
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XT-TA - dlf.	0:2-14 - di	DG-14 - 0	IDX4-1A - dt.		VESSER Analysis	A control	Vp.Vs Rotes	Young's Modulin
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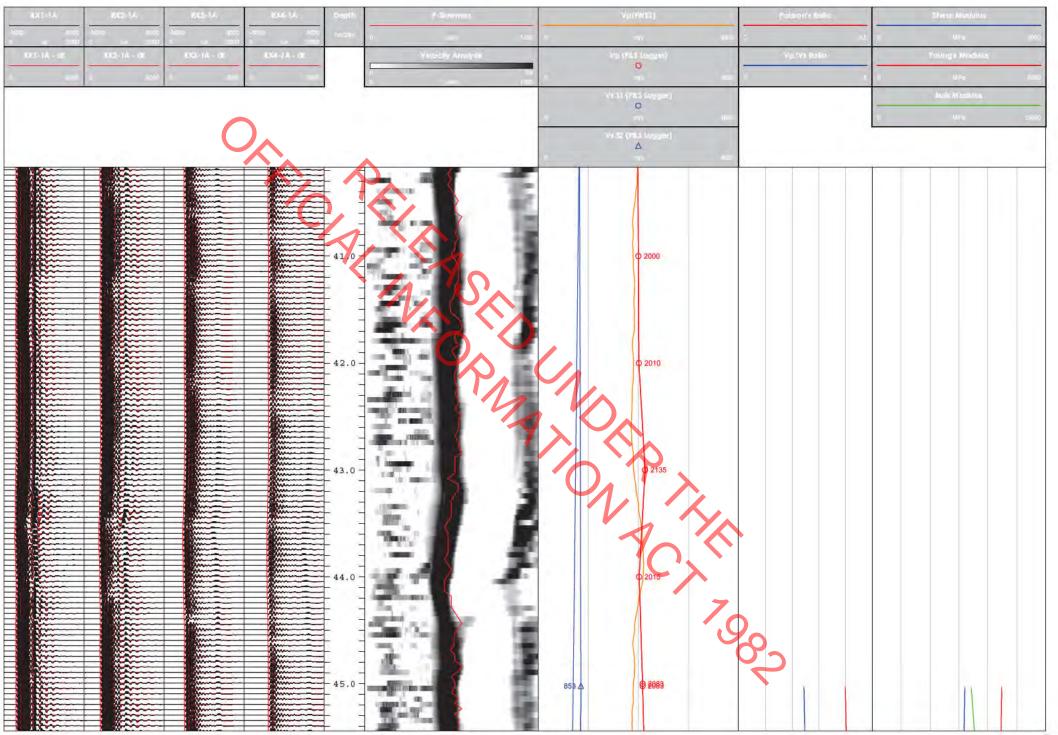


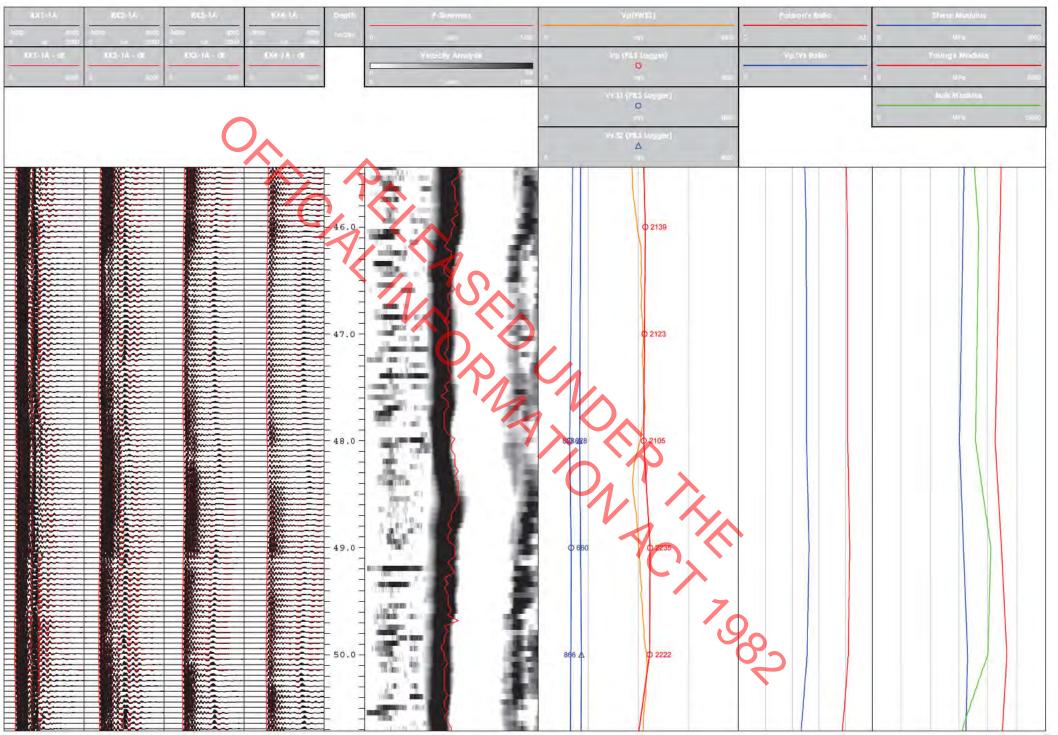


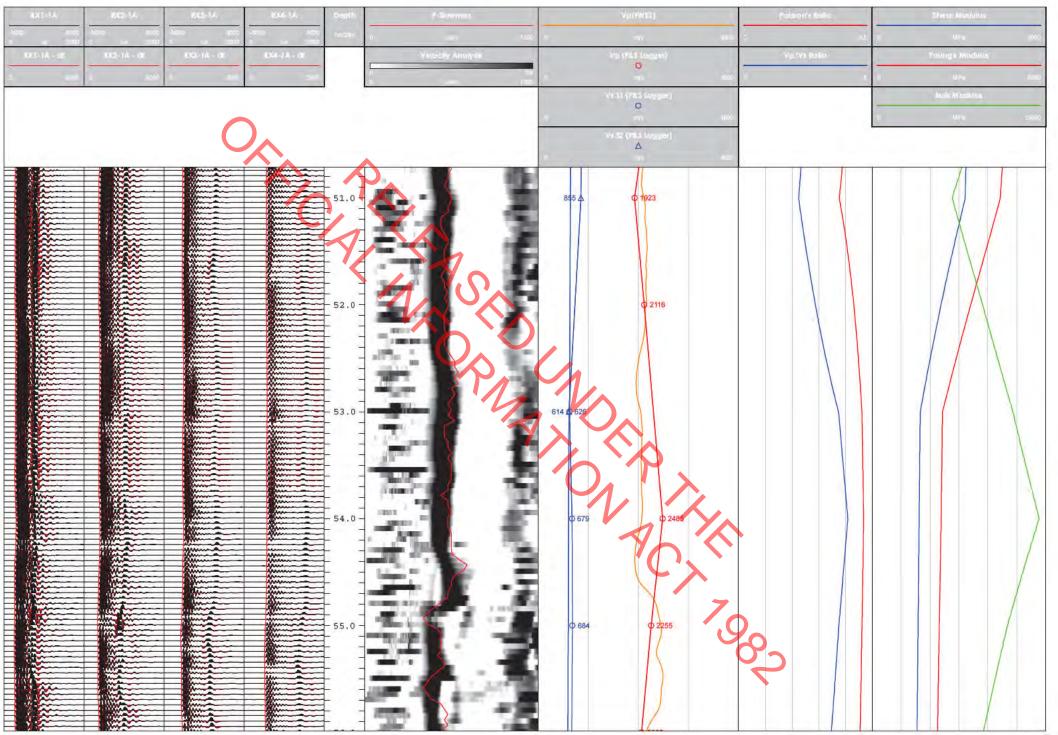


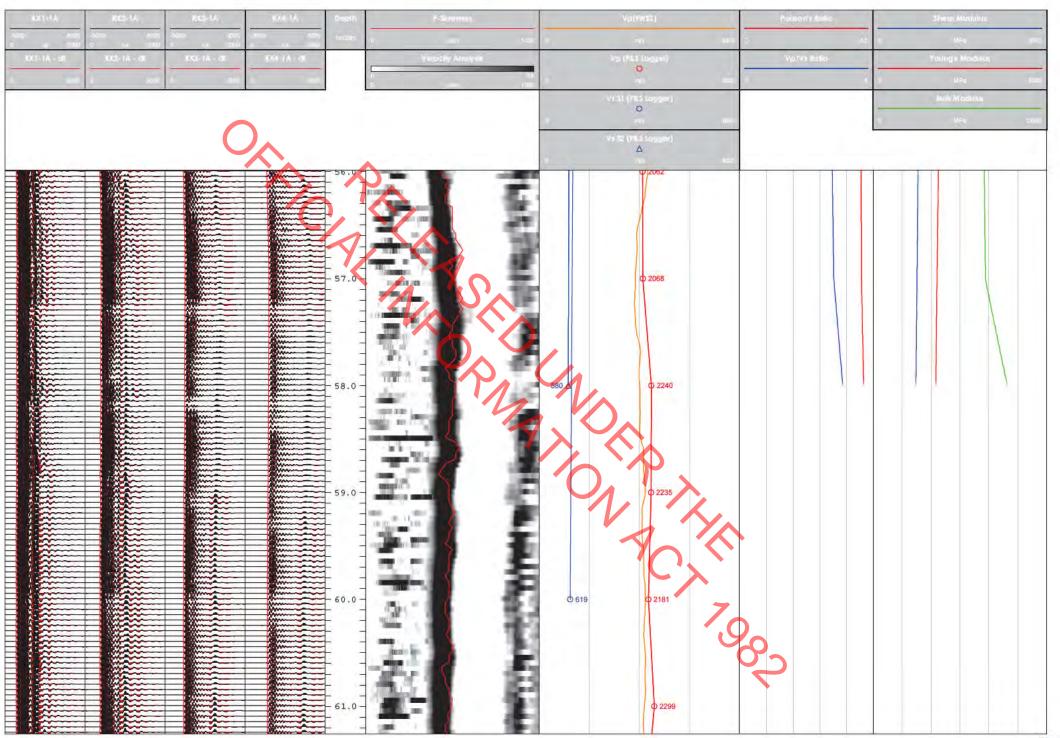












	St (ras (opper) O	P	Bulk Modunus MFs 1900
63.0	O 2n05		
63.0			



McMillans Drilling (NI) Ltd

ABI40-2G Acoustic Televiewe

OBI40-2G Optical Televiewer

QL40-CAL Mechanical Calliper

BH1109

**RDCL** 

H Soma

20/03/2023

Auckland

New Zealand

Auckland Light Rail

01, 02 & 03

**Basic Information:** 

Drill hole ID:

Run Number(s):

Service Company:

Operator:

Country:

Field:

Date Logged:

State / Province:

**Location Description:** 

Opposite the Cordis Hotel.

Tool Type(s):

Client:

Unit A3, 269a Mt Smart Road Onehunga Auckland, 1061 New Zealand Ph: +64 6 8771652 Fax: +64 6 8775015 Email: info@rdcl.co.nz www.rdcl.co.nz

#### Drillhole Information:

Log interval from (m): 0.84 Log interval to (m): 65.68 Depth Driller (m): 66.00 Depth Logger (m): 65.8 (Calliper) Fluid Type: Water Fluid Level (m): 12.82 (Acoustic) 5919646.682 1757311.161 Easting: Northing: NZTM Elevation: N/A Coord Ref System: <88.6° Hole Azimuth: Vertical Hole Inclination: +20° 8' East Magnetic Declination Magnetic Inclination: 62° 49'

Drill Company: McMillans Drilling (NI) Ltd

#### **Printing Information:**

Depth Unit: Metres Log Seale: 1:10 Log Version: Final Processed: J Connors Log Reviewer: O Gibson

# Bit Size Record:

				_		
Size (mm):	From (m):	To (m):	Type:	Size:	From (m):	To (m):
96 mm (HQ)	2.76	65 68	HWT	101.6	0.00	2.76
##.#	##.#	##.#	XX	##.#	##.#	##.#
##.#	##.#	## #	XX	##,#	##.#	##.#
##.#	##.#	## #	XX	##.#	##.#	##.#

Casing Record:

### Structural Legend:

- BP Bedding Plane
- ✓ BF Bedding Fracture
- JT Joint
- FR Fracture
- FZ Fractured Zone
- SH Shea
- CZ Crushed Zone

- UF Unidentified Feature

## Log Nomenclature:

Azimuth = Tool azimuth from magnetic north

Tilt = Inclination from vertical

Acoustic Calliper = 360° average from travel time

Calliper from Cent = Calliper derived from travel time

Image-NM = Optical image oriented to magnetic north

Amplitude-NM = Acoustic amplitude (magnetic north)

Structures = Apparent Structures oriented to hole

Structures - True = Structures Oriented to true north

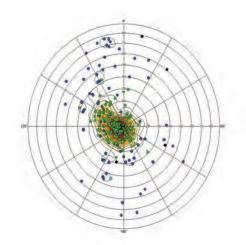
3D Optical = 3D representation of optical log

3D Acoustic = 3D representation of acoustic log

#### Comments:

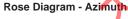
- Structures True are reported in dip direction and dip relative to grid north.
- 2. Optical data obscured below water line due to Turbid water conditions.
- 3. Coordinates are taken from Google Earth and are approximate.

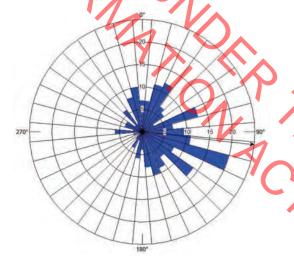
# Stereoplot - Polar Projection Dip



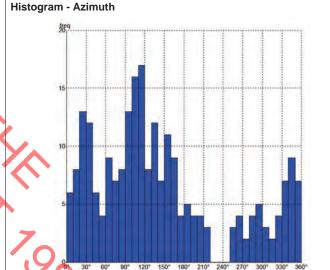
Schmidt Plot - Lower (Southern) Hemisphere - Structures - True

Depth: 0.84 m to 65.68 m

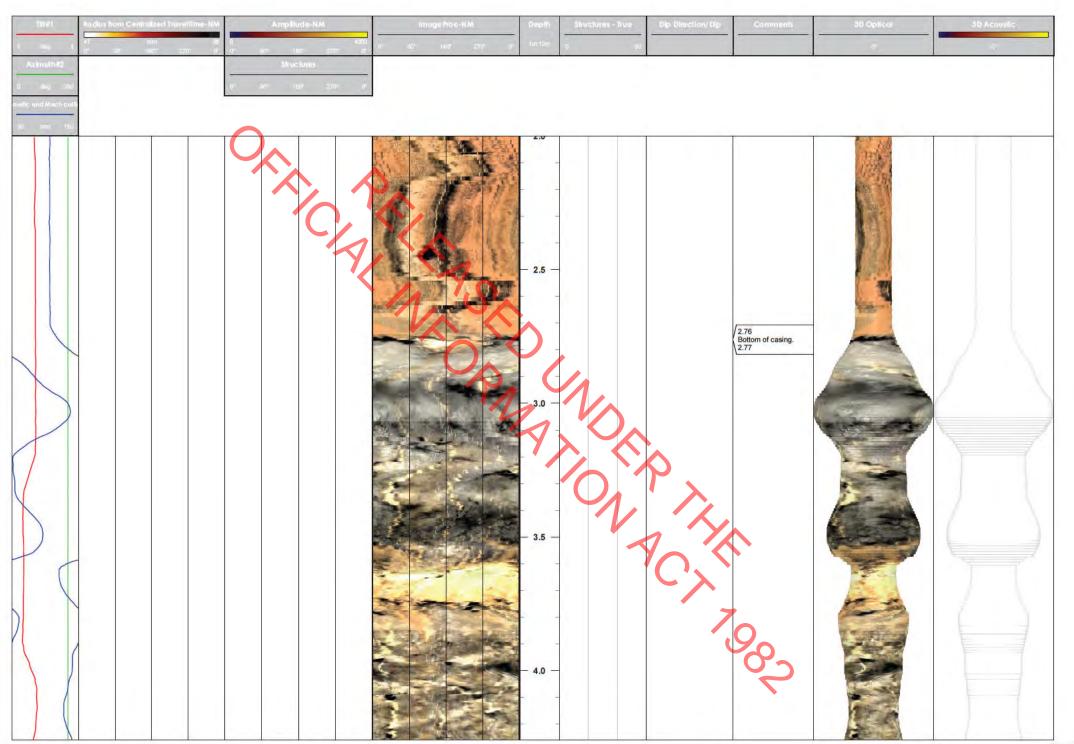


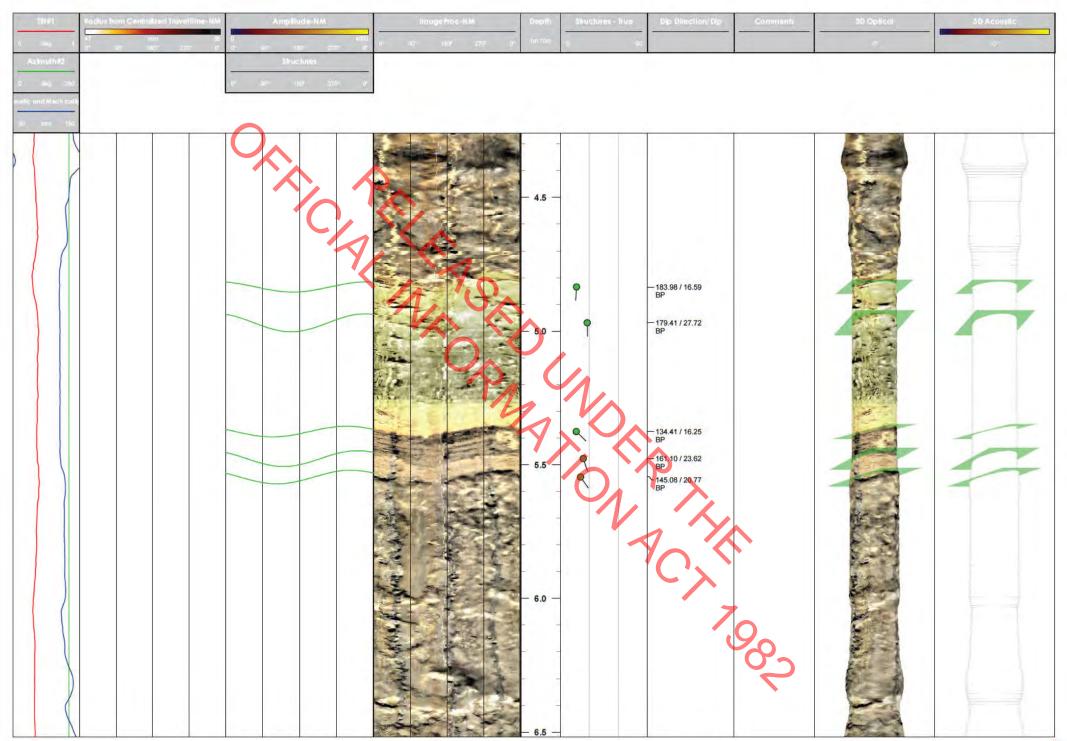


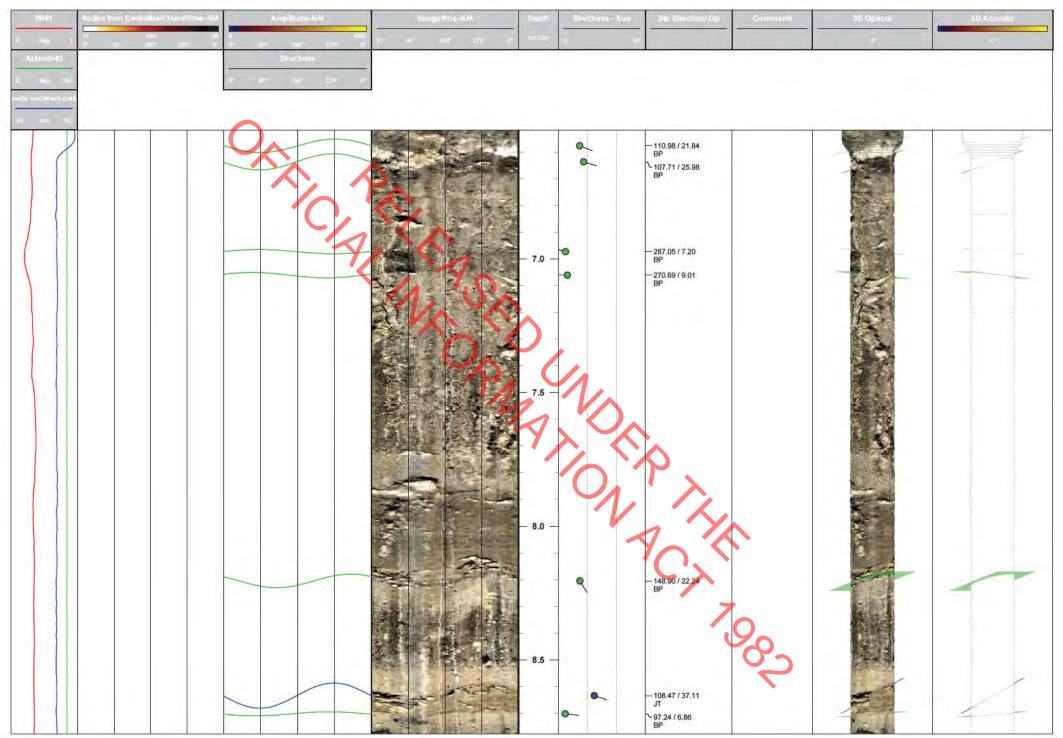
Depth: 0.84 m to 65.68 m

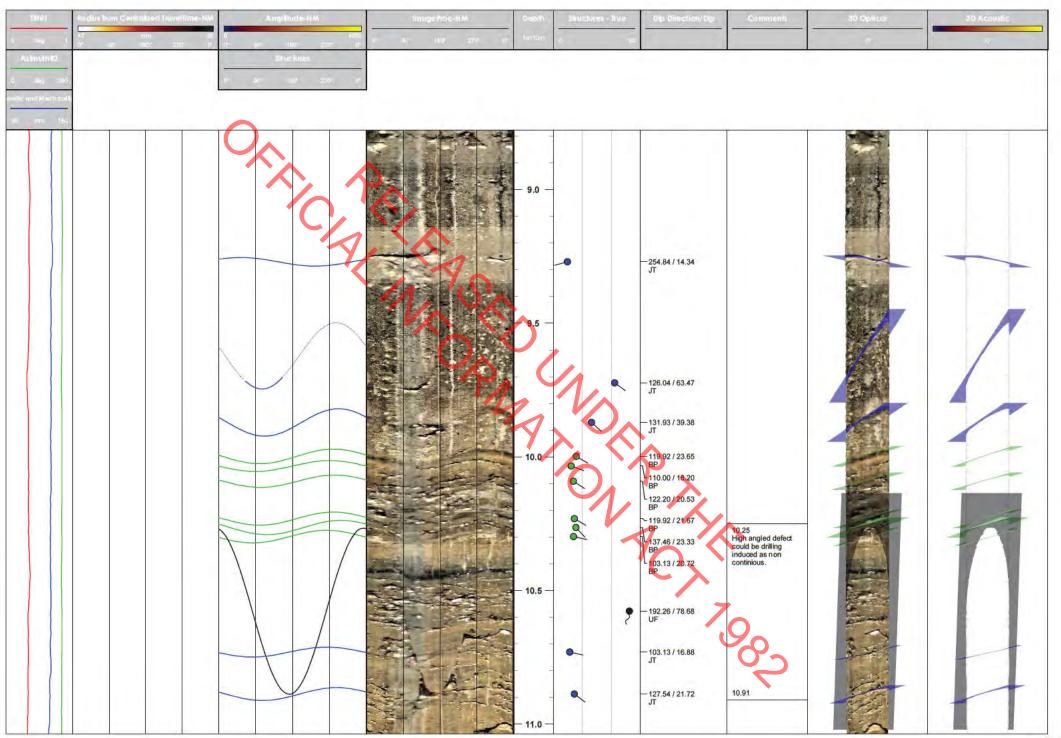


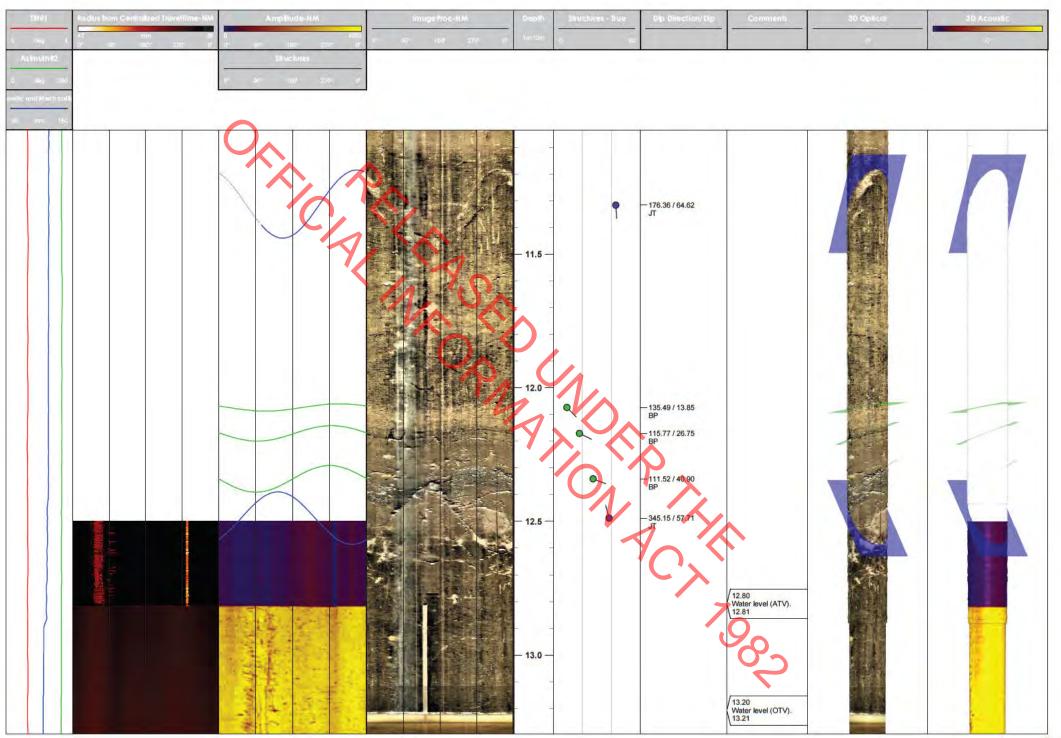
Depth: 0.84 m to 65.68 m

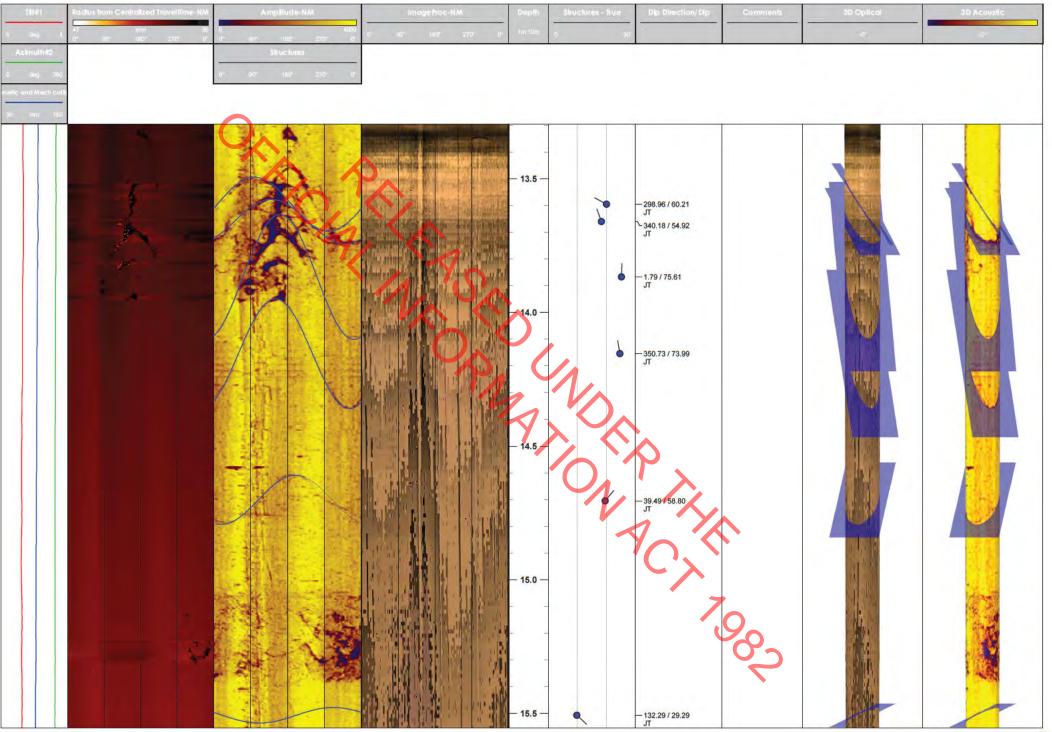


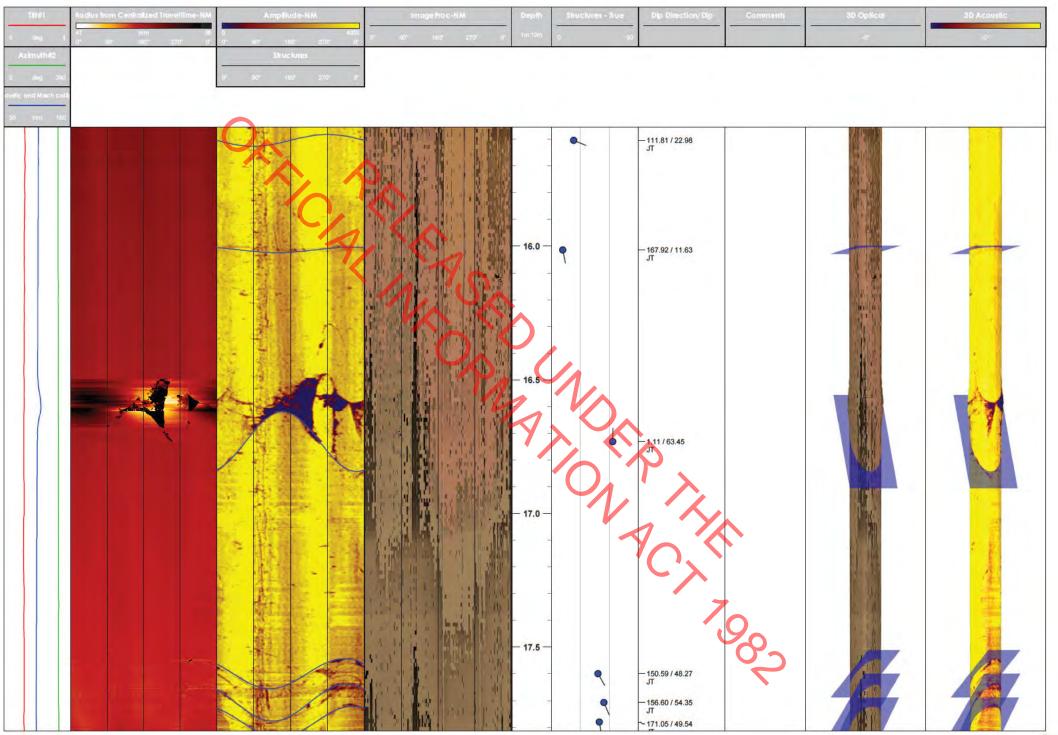


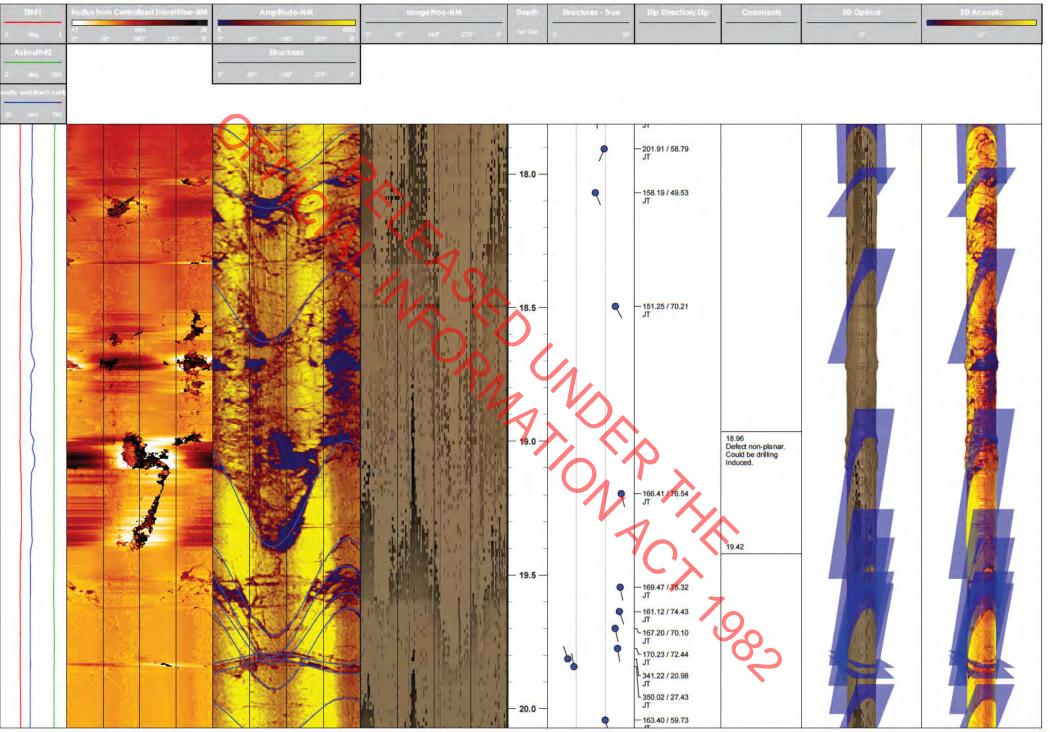


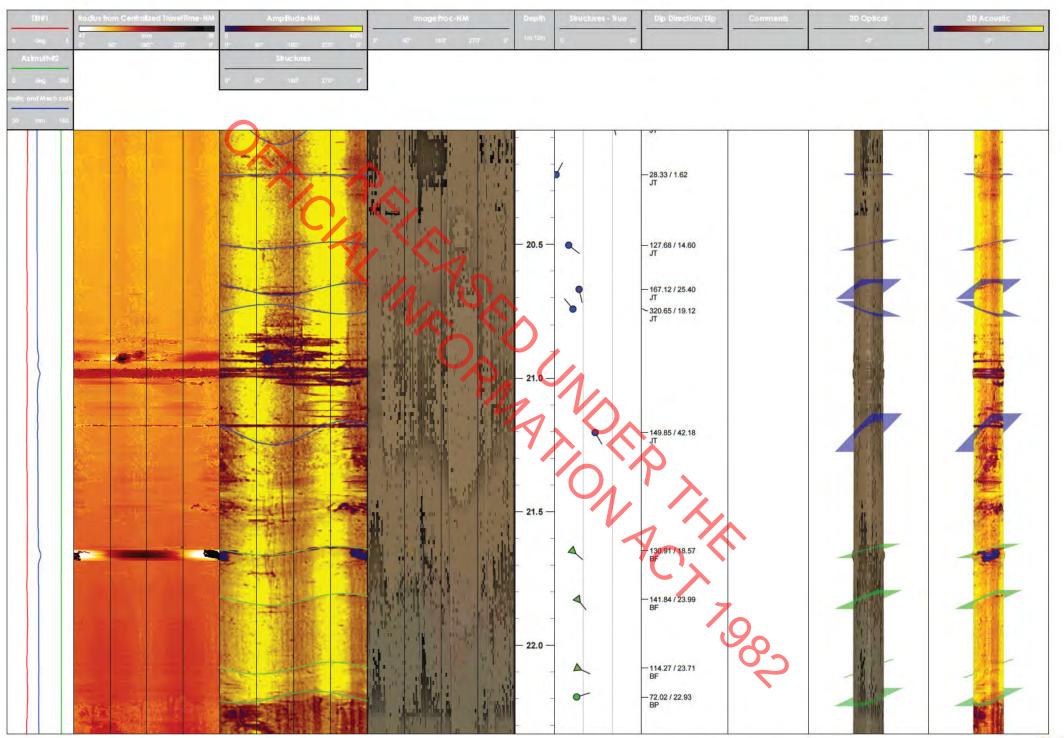


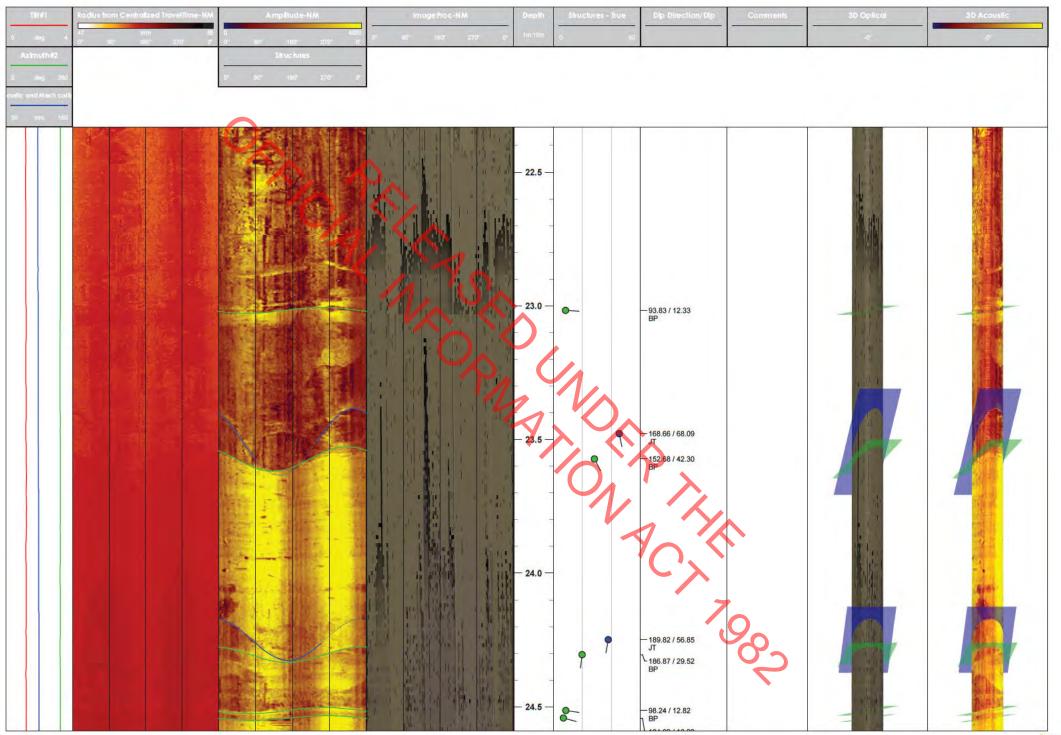


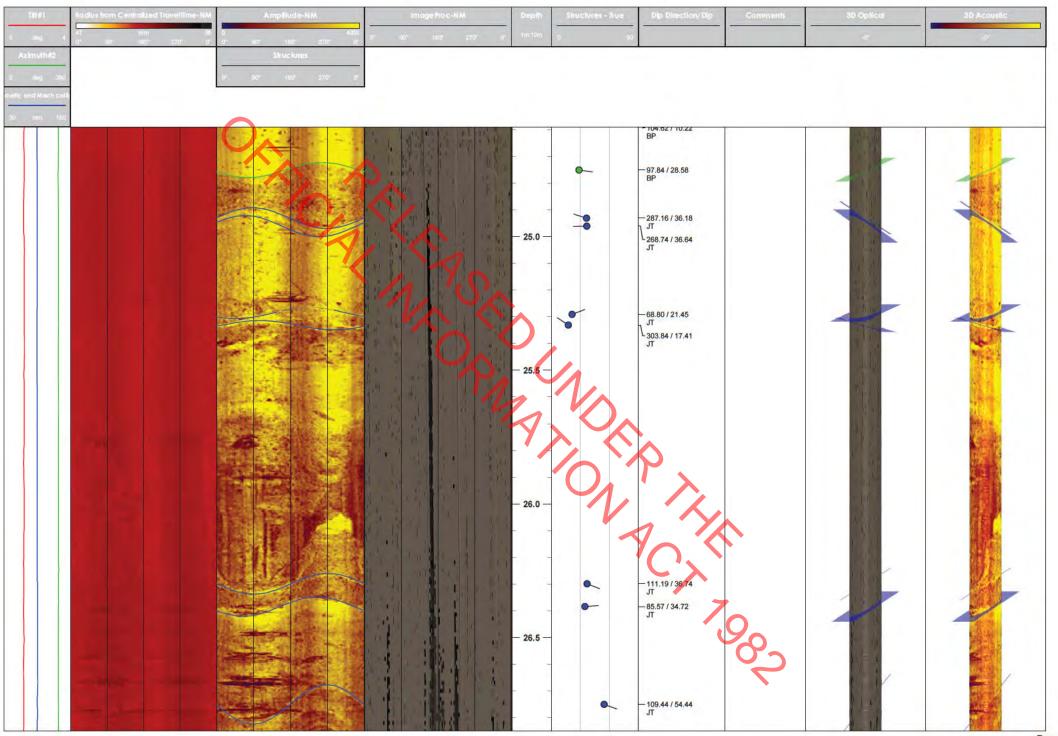


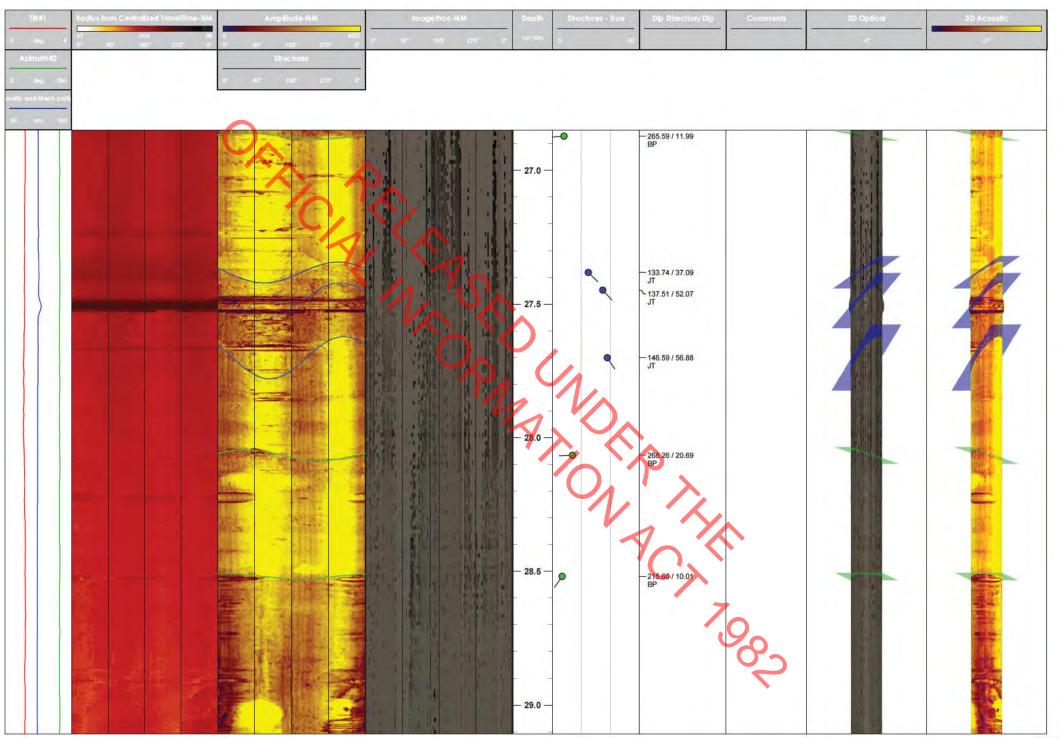


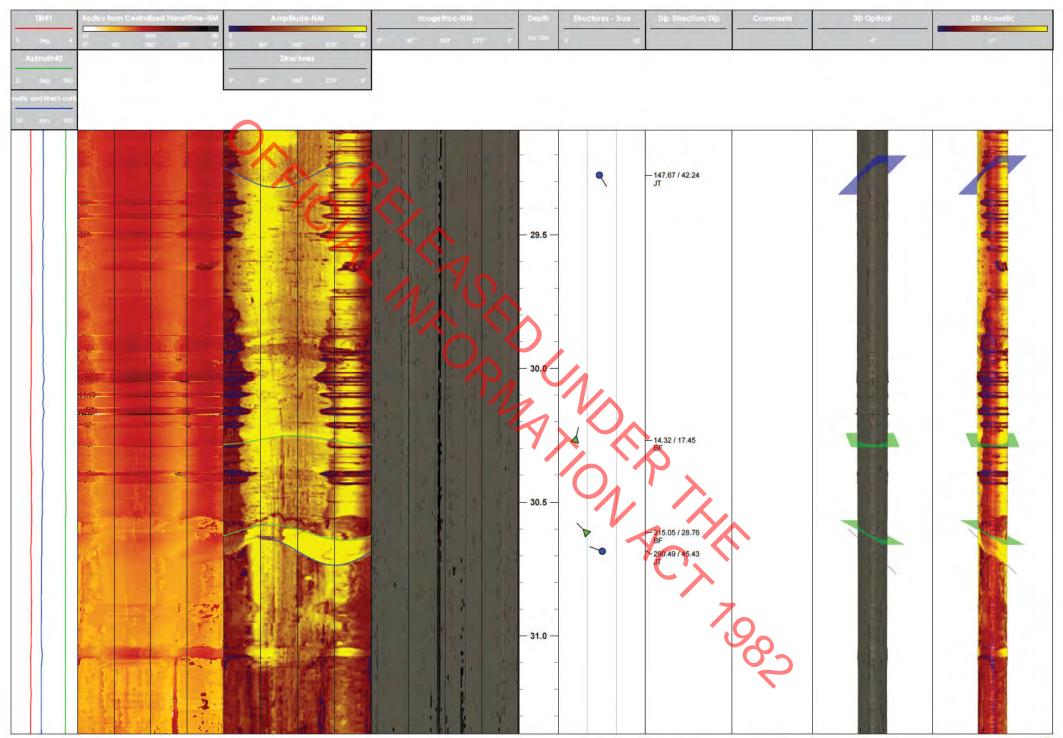


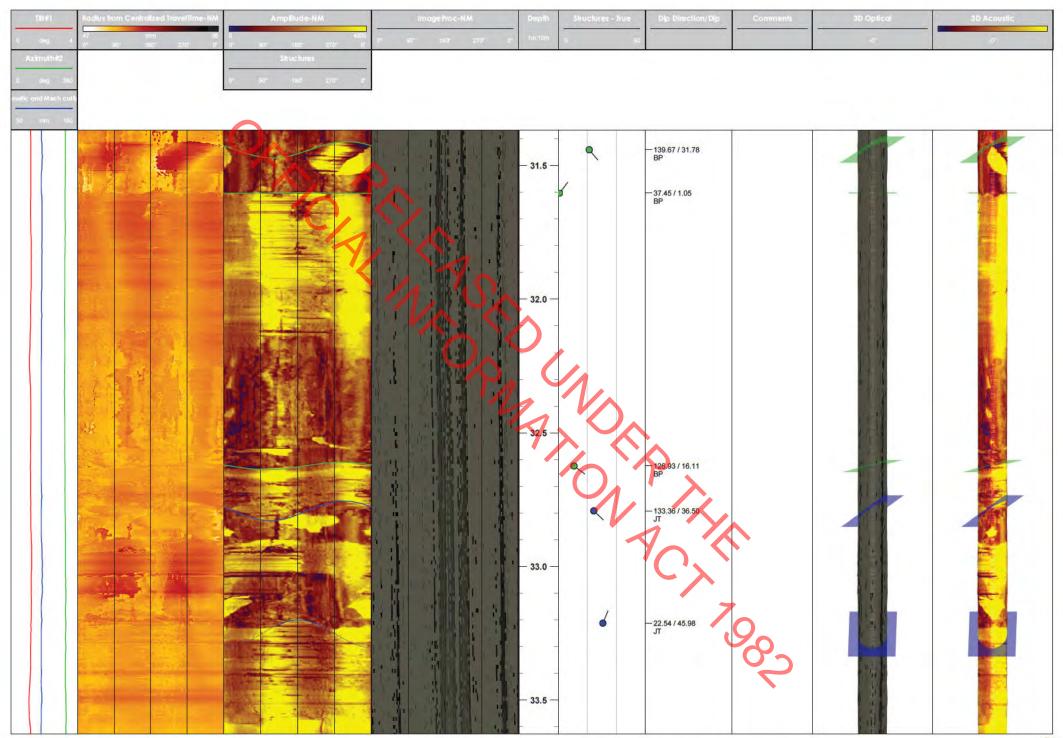


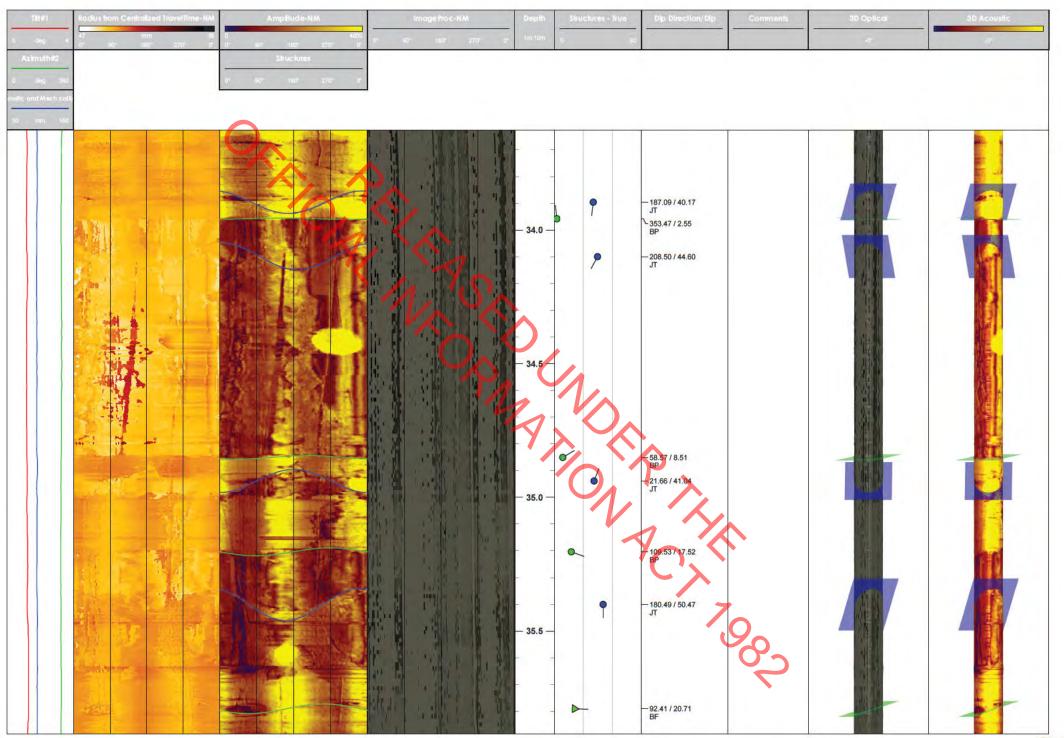


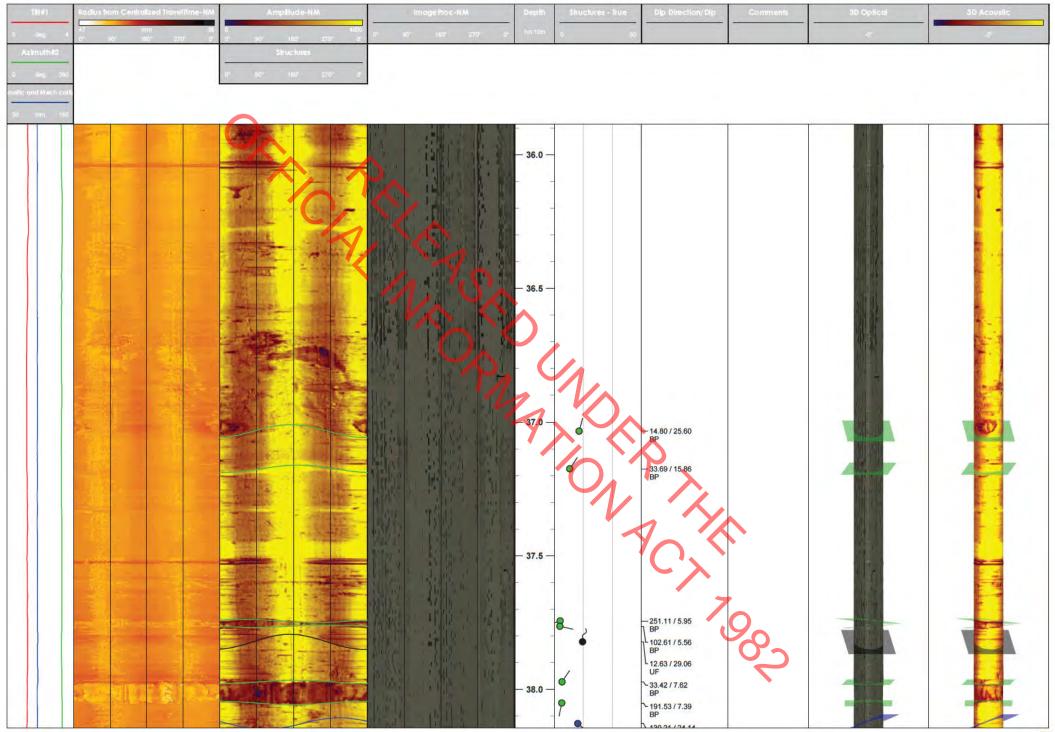


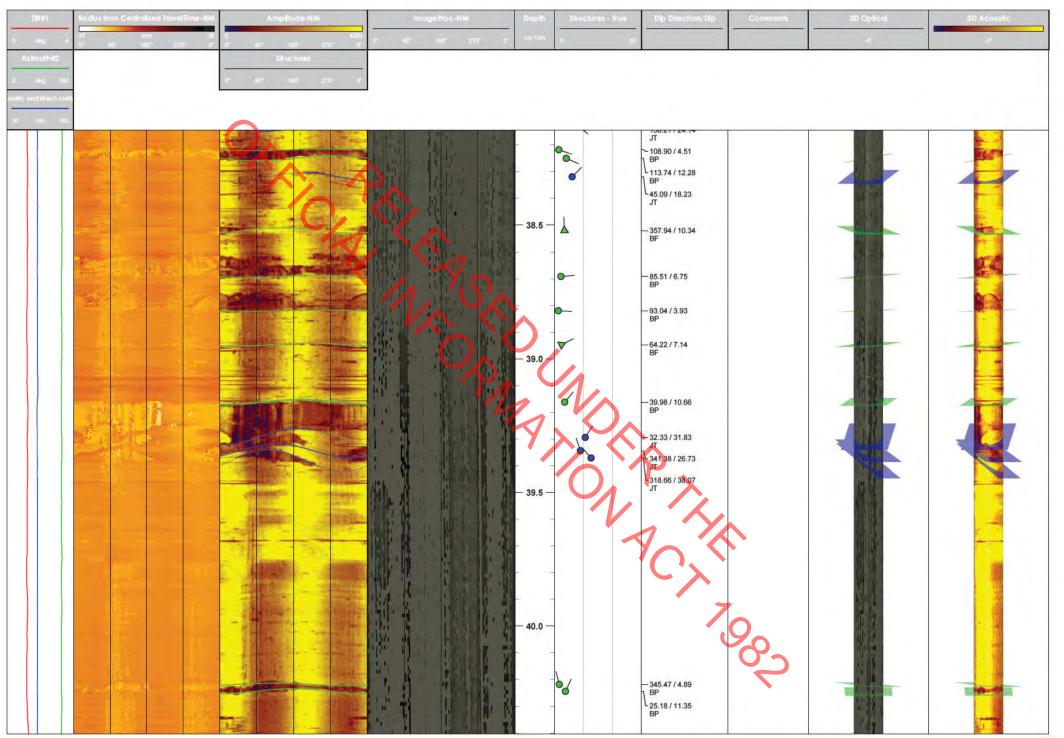


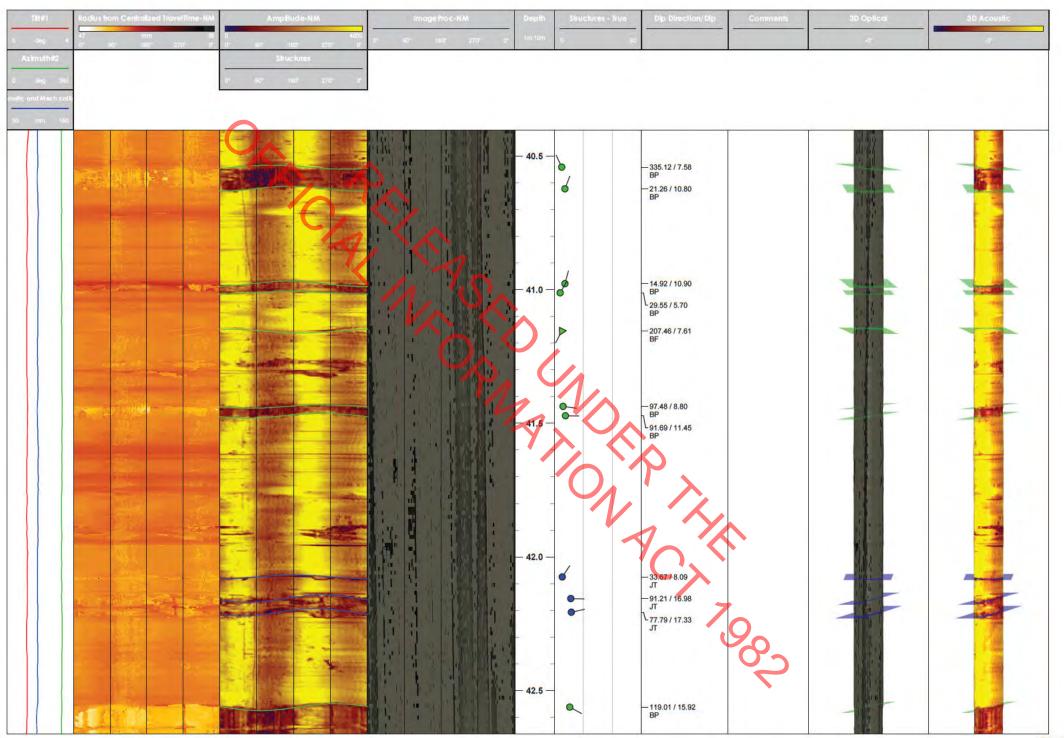


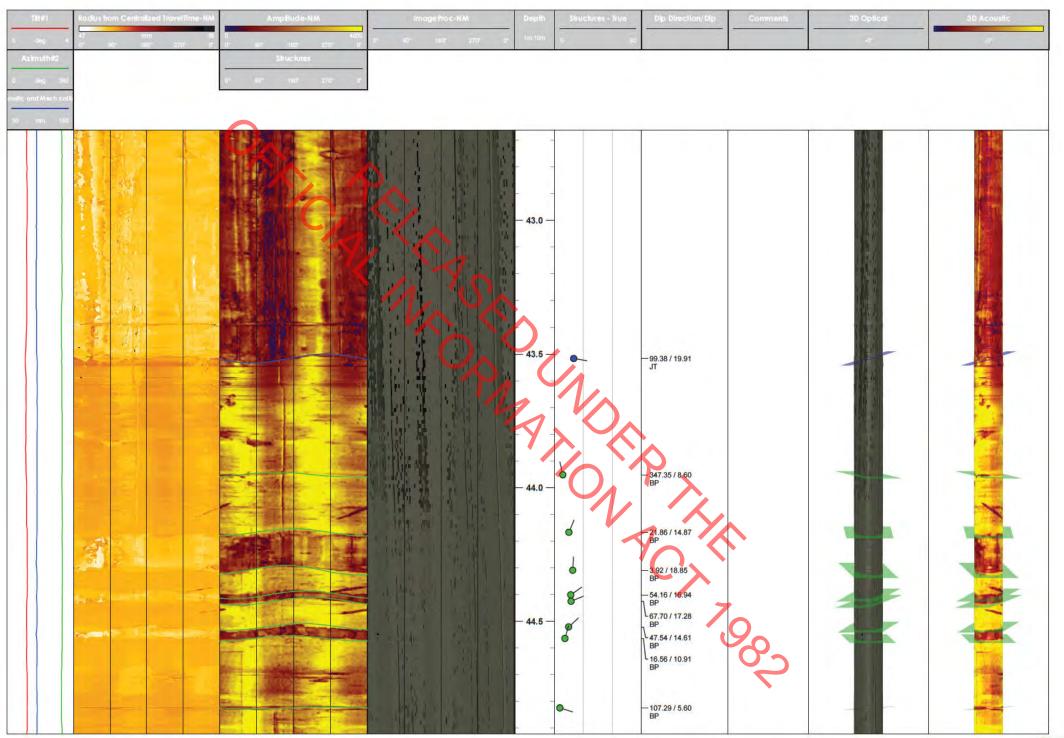


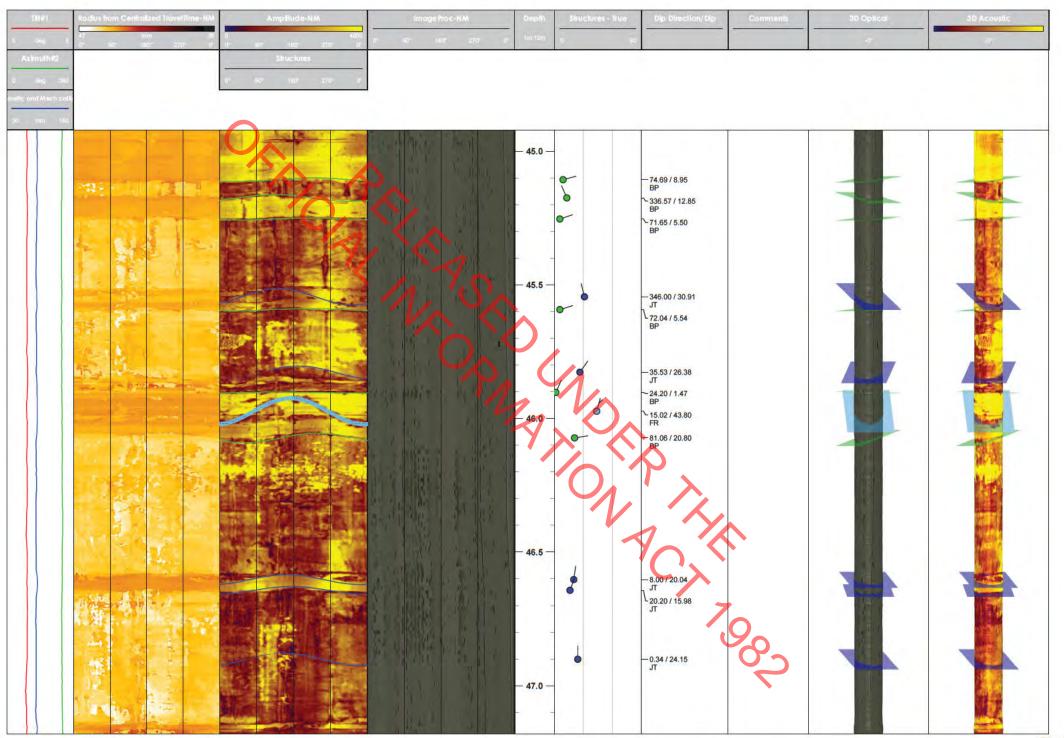


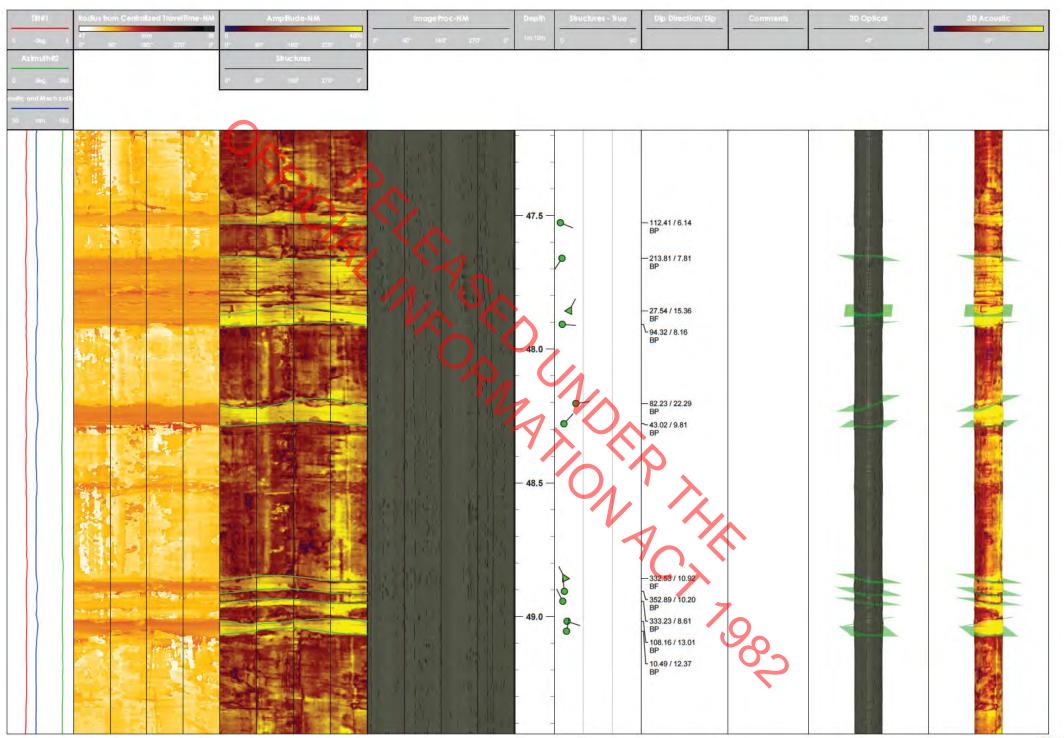


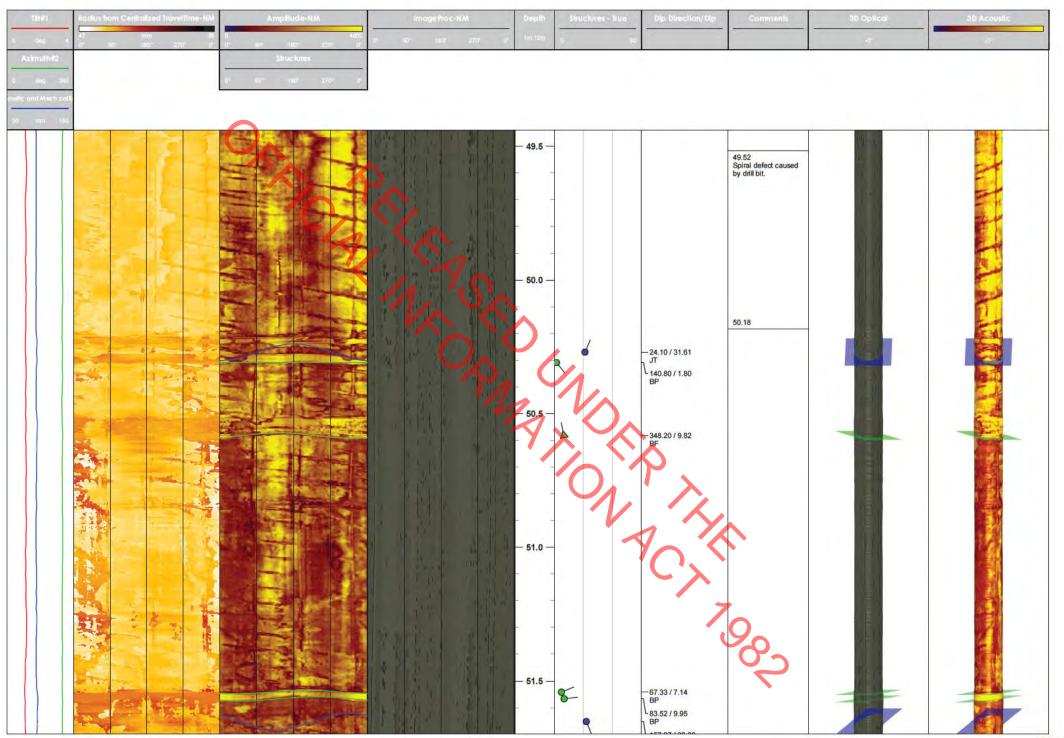


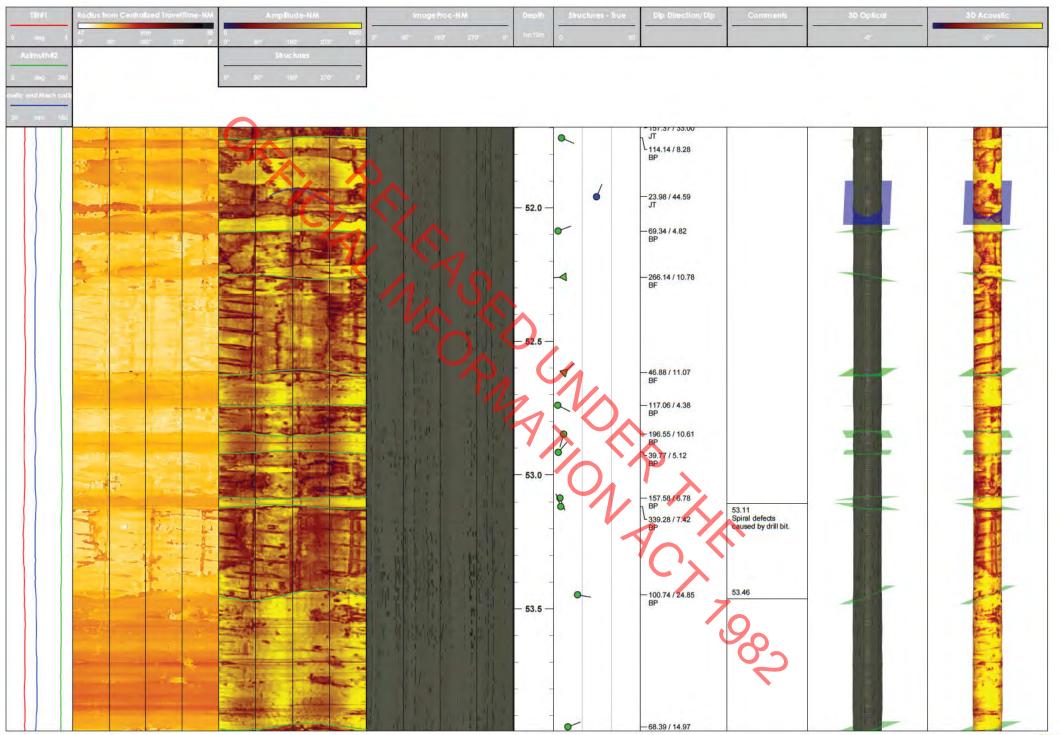


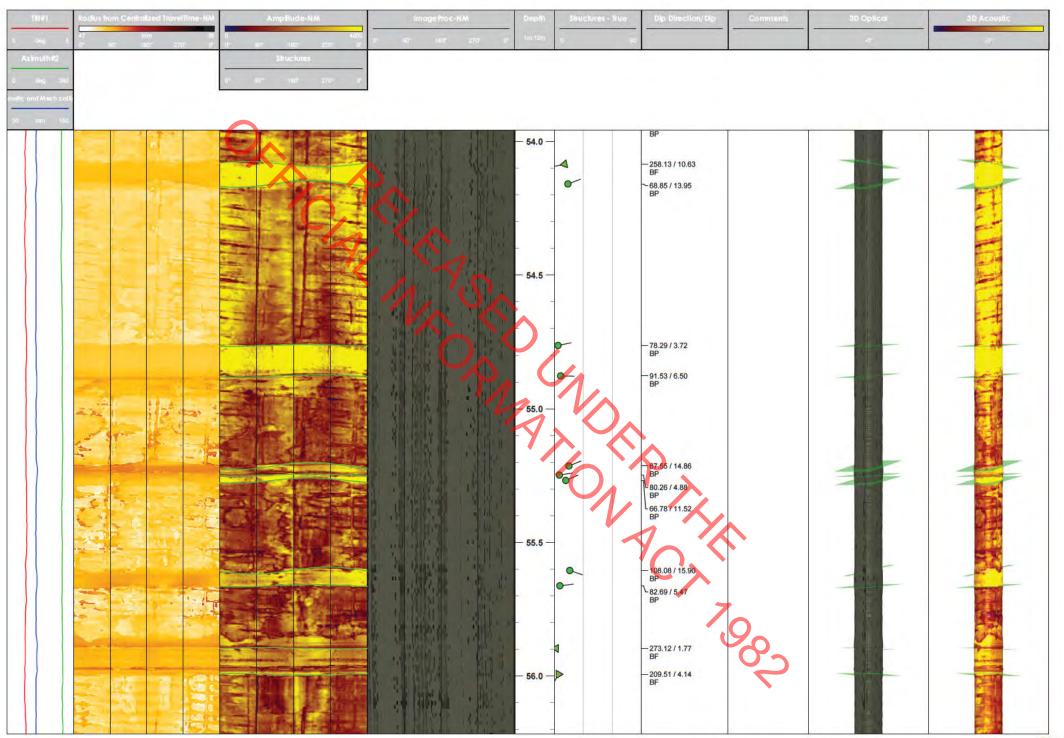


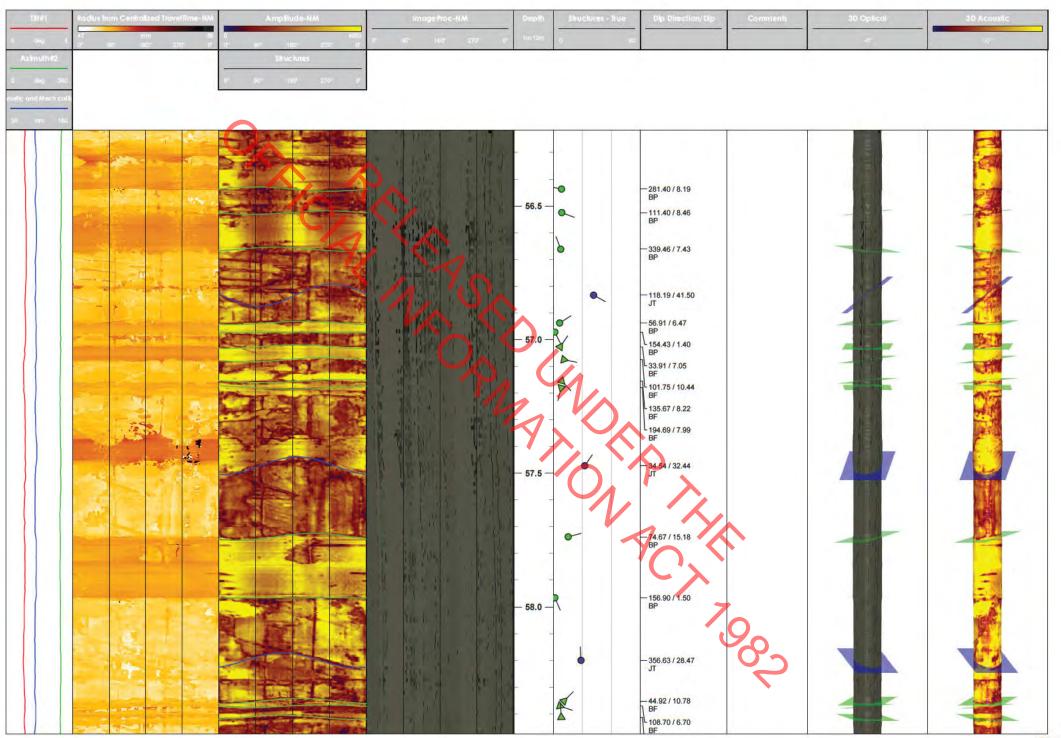


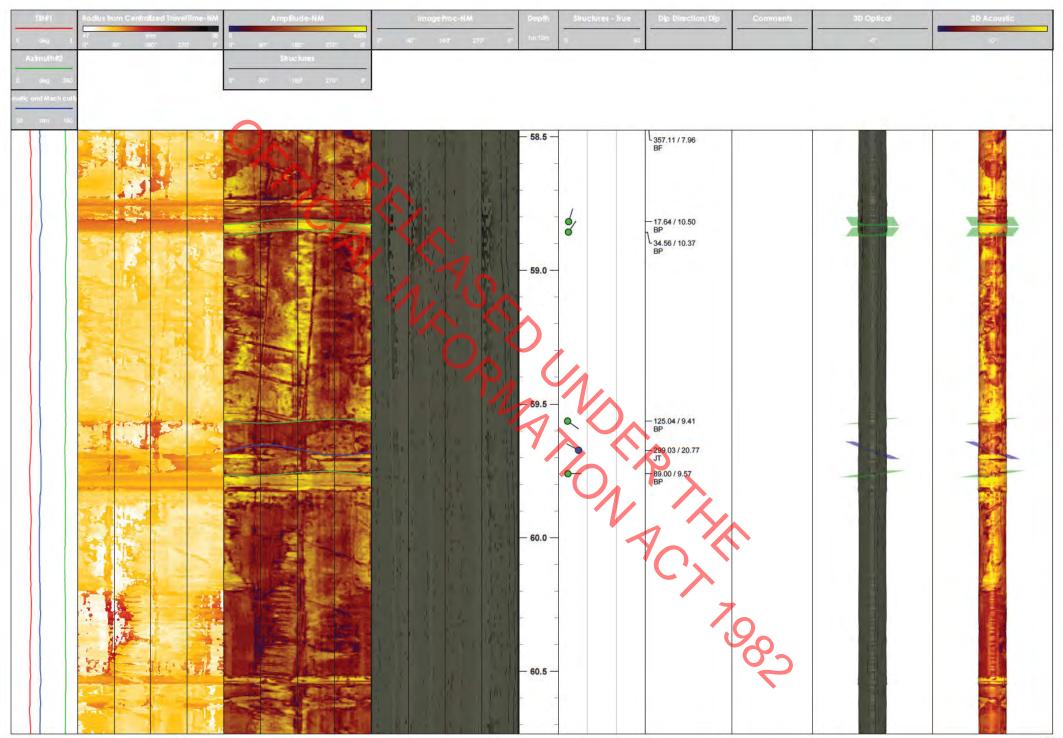


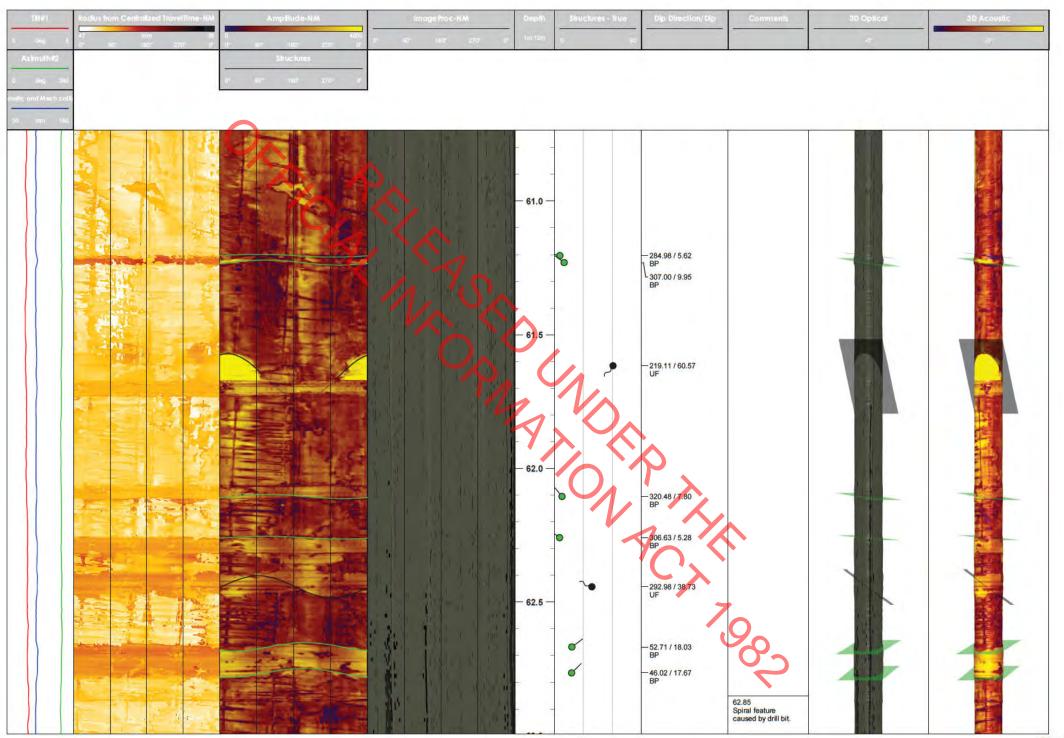


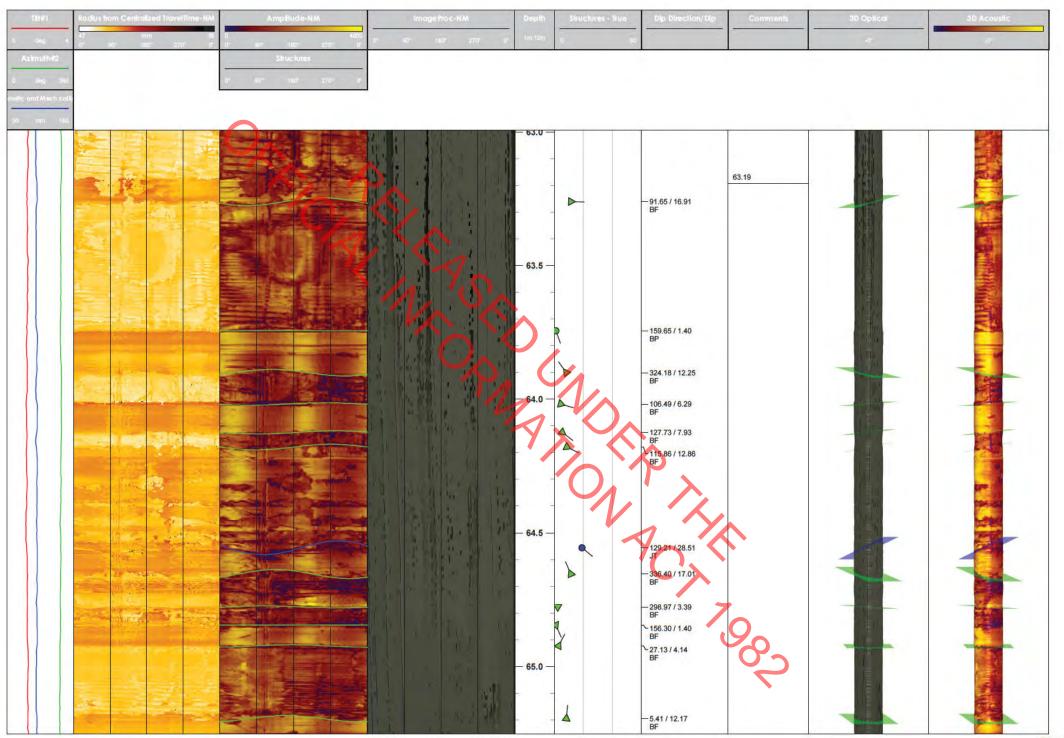


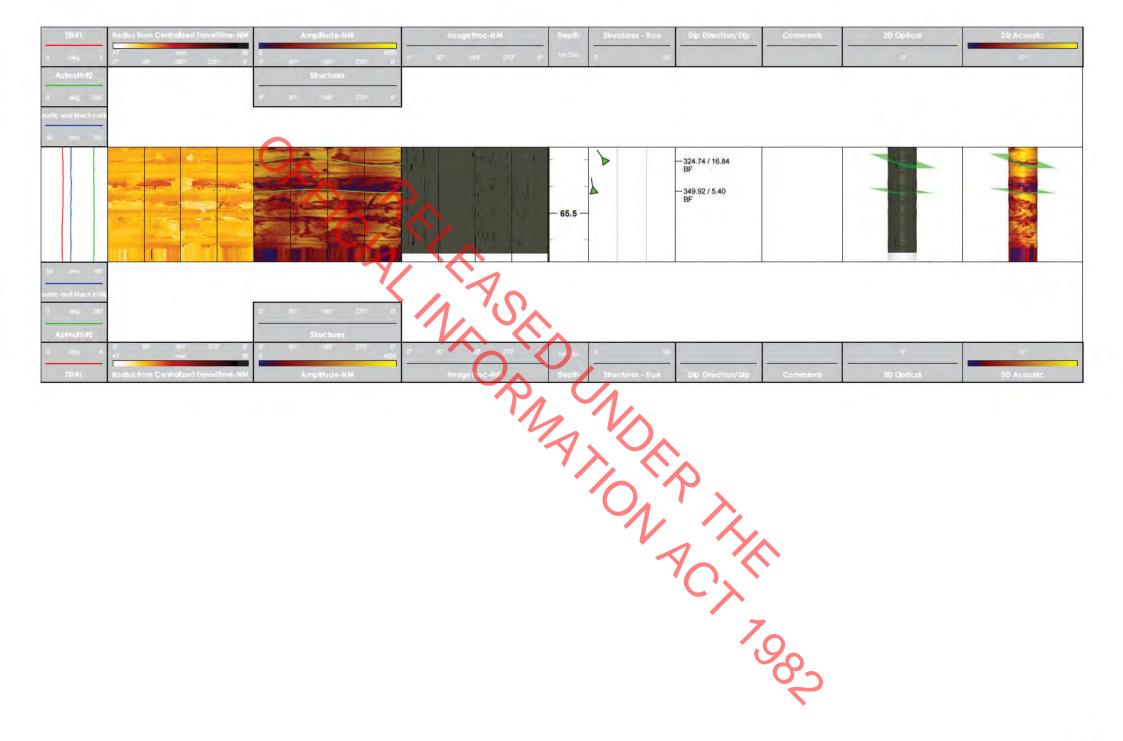














Level 1 182 Main Road Tawa 5028, Wellington New Zealand

Ph: +64 6 8771652 Fax: +64 6 8775015 Email: info@rdcl.co.nz

#### Log Notes:

The elastic moduli and engineering parameters were calculated from Full Wave Form Sonic Tool Vp and Vs measurements and CCS tool density measurements. As such the logs should be considered in-situ, small strain and bulk measurements. These measurements may differ from laboratory testing for these reasons.

#### Log Calculations:

SI unit calculations: Shear Modulus (G) =  $dVs^2$ Bulk Modulus (K) =  $1/3^*(E/(1-2^*PR))$ Young's Modulus (E) = 2G(1+PR)Poisson's Ratio (PR) =  $2-(Vp/Vs)^2/2-2(Vp/Vs)^2$ 

Vp = P-wave seismic velocity
Vs = S-wave seismic velocity
d = Density

### Log Nomenclature:

Velocity Analysis = Output of semblance processing S\_Slowness = Shear wave slowness from semblane

Vp = P-wave velocity

Vs = Shear wave velocity from S-Slowness

DEN(CDL) = Compensated Density

Shear Modulus = Shear Modulus (G0)

Bulk Modulus = Bulk Modulus (K)

Young's Modulus = Young's Modulus (E)

Poisson's Ratio = Poisson's Ratio (PR)

Vp/Vs = P-wave S-wave ratio

RX#-1A = Wiggle window of sensor #

RX#-1A - dt = Picked first arrival time for sensor #

Basic Information:

Tool Type(s):

Well Name: BH1111

Company: McMillans Drilling (NI) Ltd

Run No: 08, 09 & 10

QL40-FWSS Full Wave Form Sonic

Geovista P&S Logger

Service Company: RDCL

Operator: K Koria

Witness: R Hamlin

Date Logged: 05/04/2023

Field: Auckland Light Rail

State / Province: Auckland
Country: New Zealand

**Location Description:** 

332 New North Road, Kingsland, Auckland, 1021

**Drillhole Information:** 

Bit Size: PQ

Fluid Type:

Northing:

Elevation:

Hole Azimuth:

Casing Size:

Log interval from: 1.25 m

Water

TBC

PWI

Vertical

1756180.390

Depth Driller: 45 m

Depth Logger.

45.20 m (Calliper) 4.13 m (Acoustic)

44.29 m

Fluid Level:

Log interval to:

Easting: 5918428.243

Projection: NZTM

Hole Inclination: -89.06° (Mean)

Magnetic Inclination: 62° 50'

Casing Depth: 4.29 n

Printing Information:
Print Type: Paginated

Magnetic Declination: +20° 9'

Depth Unit: Metres

Log Version: Final

Comments:

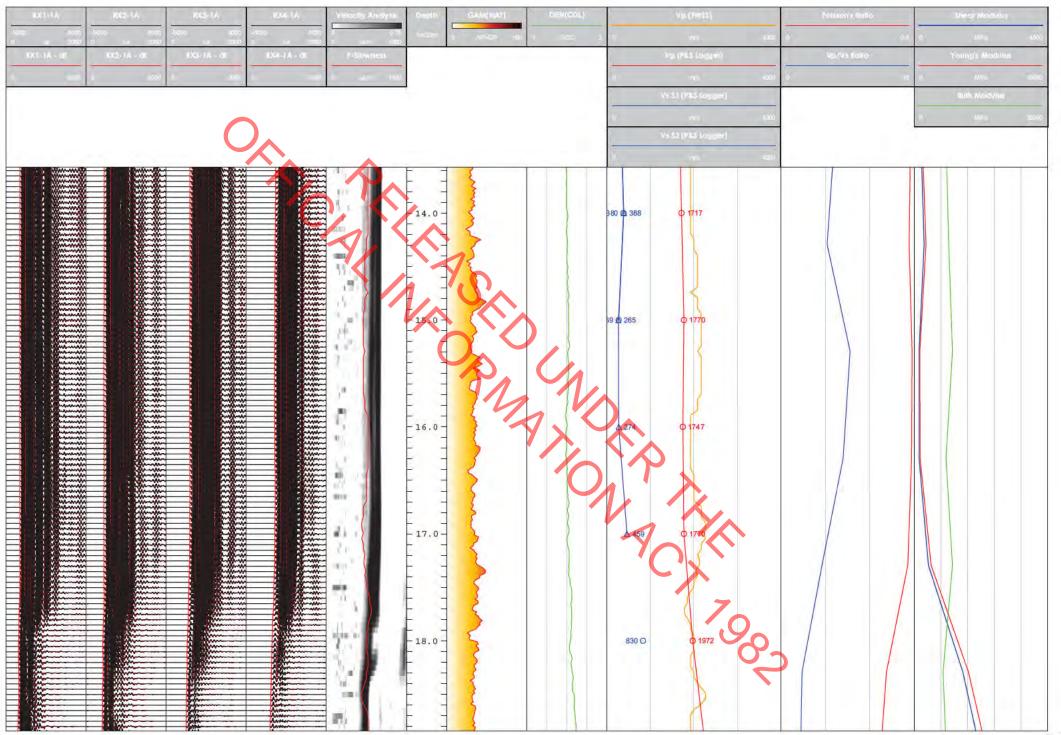
1. Gaps left in P&S Logger Vs picks where data is noisy.

2. Coordinates are taken from Google Earth and are approximate.

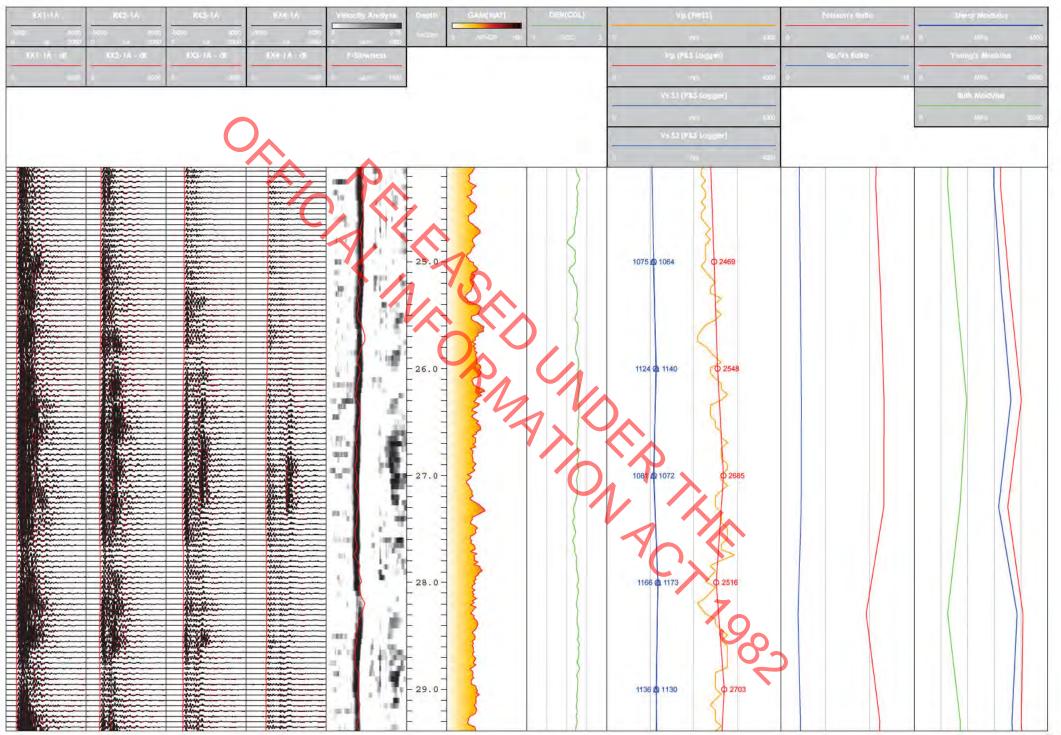
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				414			7		

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	Vs.5) (PSS topger)		anth Nexty(u)
	V 1910		P. 800
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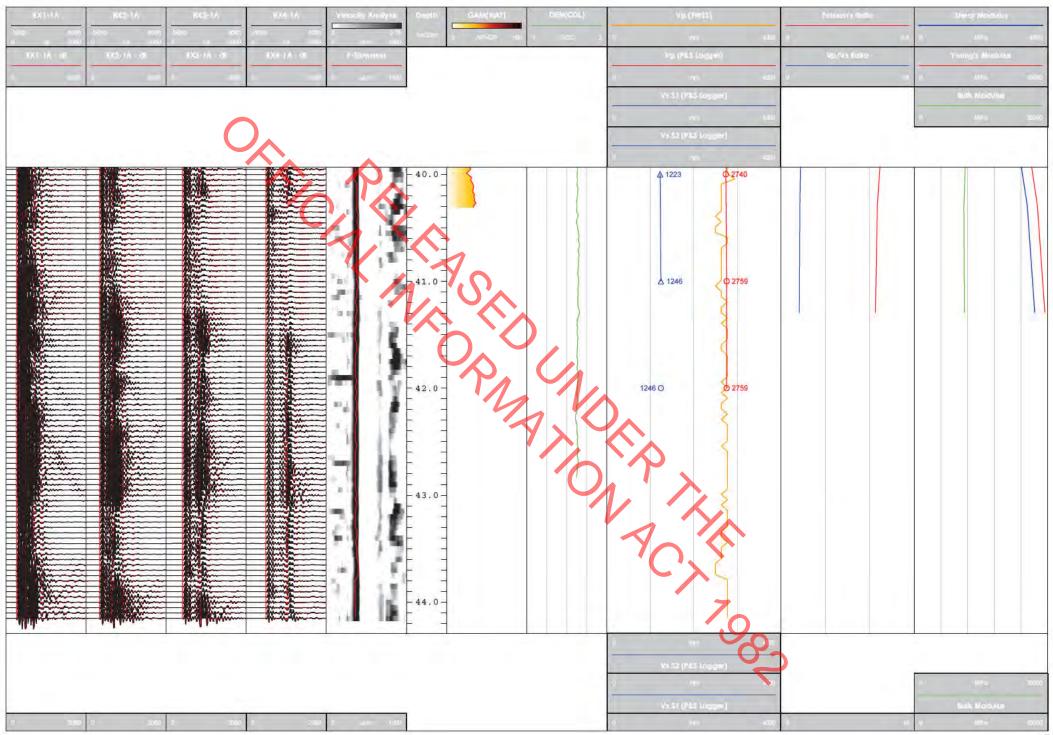


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	Vs 52 (PSS livyger)		
	o vy 4000		
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RX1-1A RX2-1A RX2-1A RX4-1A Venocity Analysis Death GAM(NAT) DEN(COL)	Vp.(Firth)	felicati tete	Veg Modnij
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	Valla (PAS logger)		
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1X1-1A - at	10X2-1A - 68	PX3-1A - dl	DX4-1A - BI	P-Slowness				Vp (P&S Logger)		Vp/Vs Wako	Young's Modulus	
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RX1-1A	RX2-1A	1045-1A	RX4-1A	Velocity Analysis	Depth	GAM(NAT)	DEN(COL)	Vp (/W\$\$)		Poisson's Rulló	Stie ar Modulus	

ORAL PRICIAL MASED UNDER THE TOOS



Unit A3, 269a Mt Smart Road Onehunga Auckland, 1061 New Zealand

3.50

5918428.243

+20° 9' East

McMillans Drilling (NI) Ltd

45

Water

N/A

Vertical

**Drillhole Information:** 

Log interval from (m):

Depth Driller (m):

Fluid Type:

Easting:

Elevation:

Hole Azimuth:

Drill Company:

Processed:

Size (mm):

PQ (122.6)

##.#

##.#

Magnetic Declination:

Bit Size Record:

Printing Information: Depth Unit: Metres

O Gibson

From (m):

0.00

Ph: +64 6 8771652 Fax: +64 6 8775015 Email: info@rdcl.co.nz www.rdcl.co.nz

Log interval to (m):

Depth Logger (m):

Coord Ref System:

Magnetic Inclination:

Hole Inclination:

Log Reviewer:

Casing Record:

Size:

127.0

Fluid Level (m):

Northing:

1:10

44.88

4.14 (ATV)

1756180.390

-89.06° (Mean)

62° 50'

NZTM

Log Version: Final

K Koria

From (m):

0.00

###

###

###

To (m):

4.31

###

##.#

###

45.20 (Calliper)

# Structural Legend:

BP - Bedding Plane

BF - Bedding Fracture

JT - Joint

FR - Fracture

FZ - Fractured Zone

CZ - Crushed Zone

IF - Infilled Zone

DZ - Decomposed Zone

UF - Unidentified Feature

# Acoustic Calliper = 360° average from travel time Calliper from Cent = Calliper derived from travel time Image-NM = Optical image oriented to magnetic north Amplitude-NM = Acoustic amplitude (magnetic north) Structures = Apparent Structures oriented to hole Structures - True =Structures Oriented to true north 3D Optical = 3D representation of optical log 3D Acoustic = 3D representation of acoustic log DEN(CDL) = Compensated Density in g/ccm

Log Nomenclature:

Tilt = Inclination from vertical

Azimuth = Tool azimuth from magnetic north

#### Comments:

- 1. Structures True are reported in dip direction and dip relative to grid north.
- 2. Hole oblate and blown out to 17.5 m bgl.

GAM(NAT) = Natural Gamma

3. Coordinates are taken from Google Earth and are approximate.

#### Basic Information:

Drill hole ID:

BH1111

Client: McMillans Drilling (NI) Ltd

Run Number(s):

06 & 07

Tool Type(s):

ABI40-2G Acoustic Televiewe OBI40-2G Optical Televiewer QL40-CAL Mechanical Calliper

RDCL Service Company: Operator: H Soma Date Logged: 05/04/2023

Field: Auckland Light Rail

State / Province: Auckland Country: New Zealand

#### Location Description:

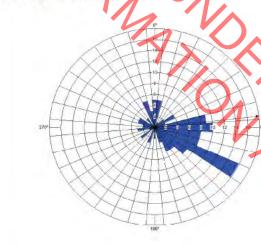
332 New North Road, Kingsland, Auckland 1021.

#### ##.# ##.# ##.# ##.# XX ##.# ##.#

To (m):

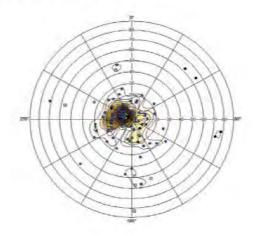
45.2

# Rose Diagram - Azimuth

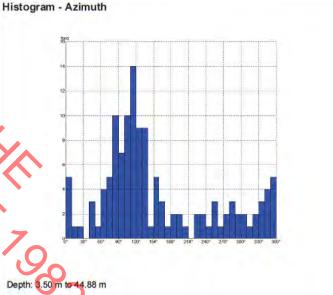


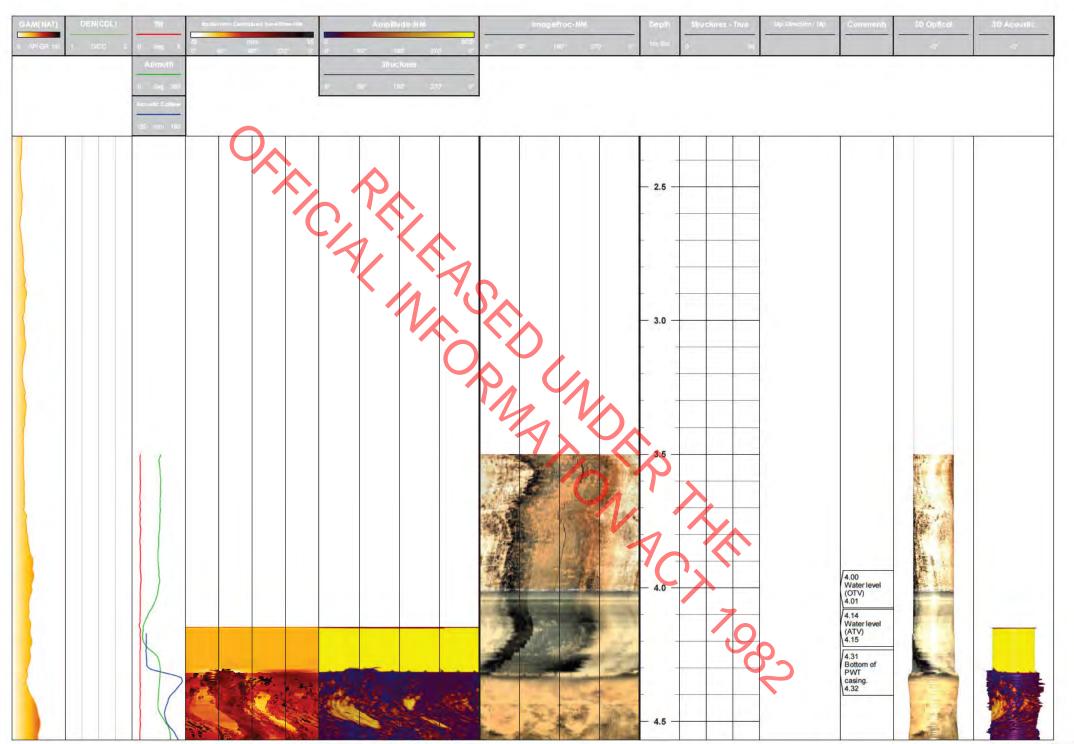
Depth: 3.50 m to 44.88 m

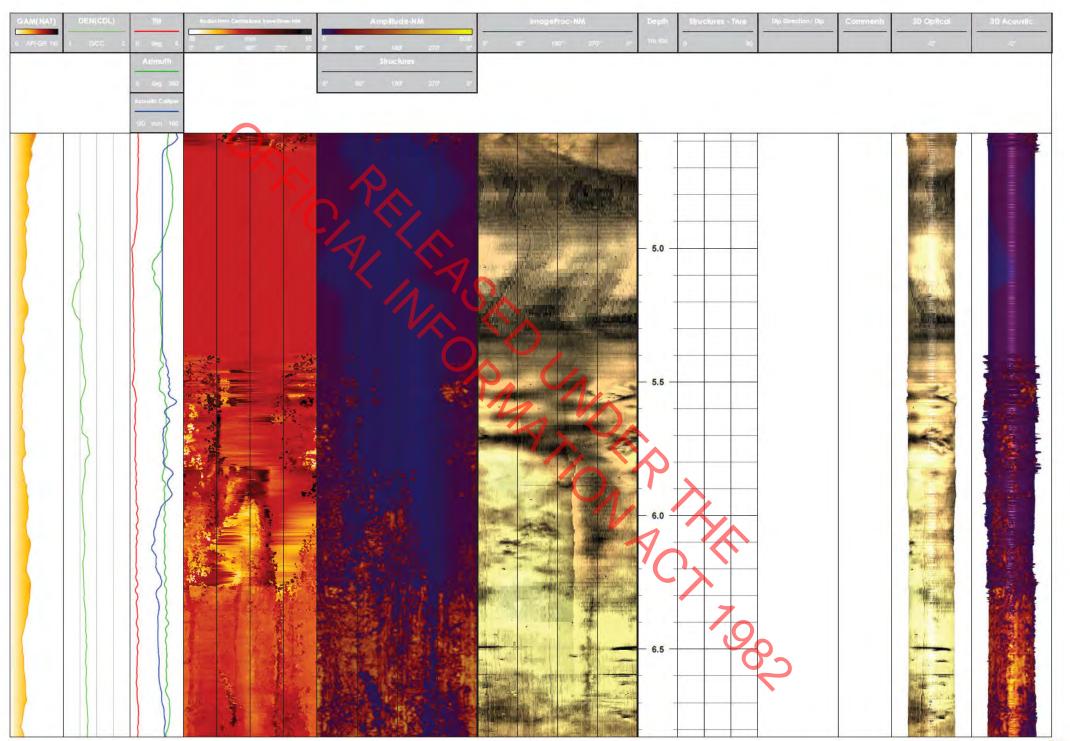
## Stereoplot - Polar Projection Dip

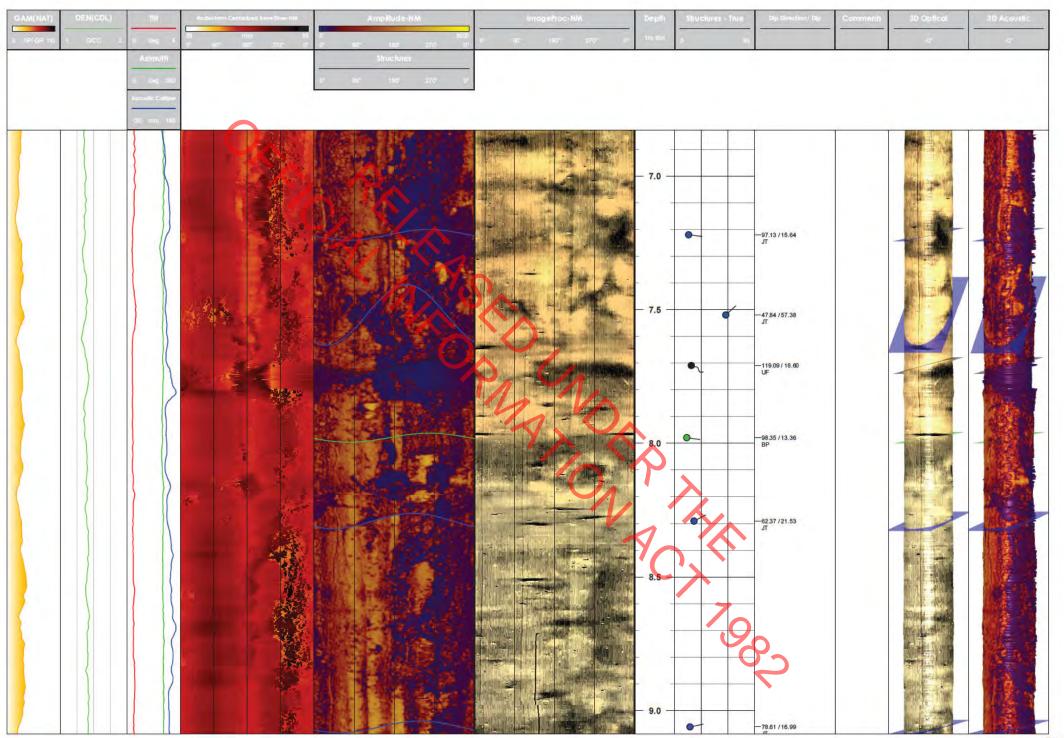


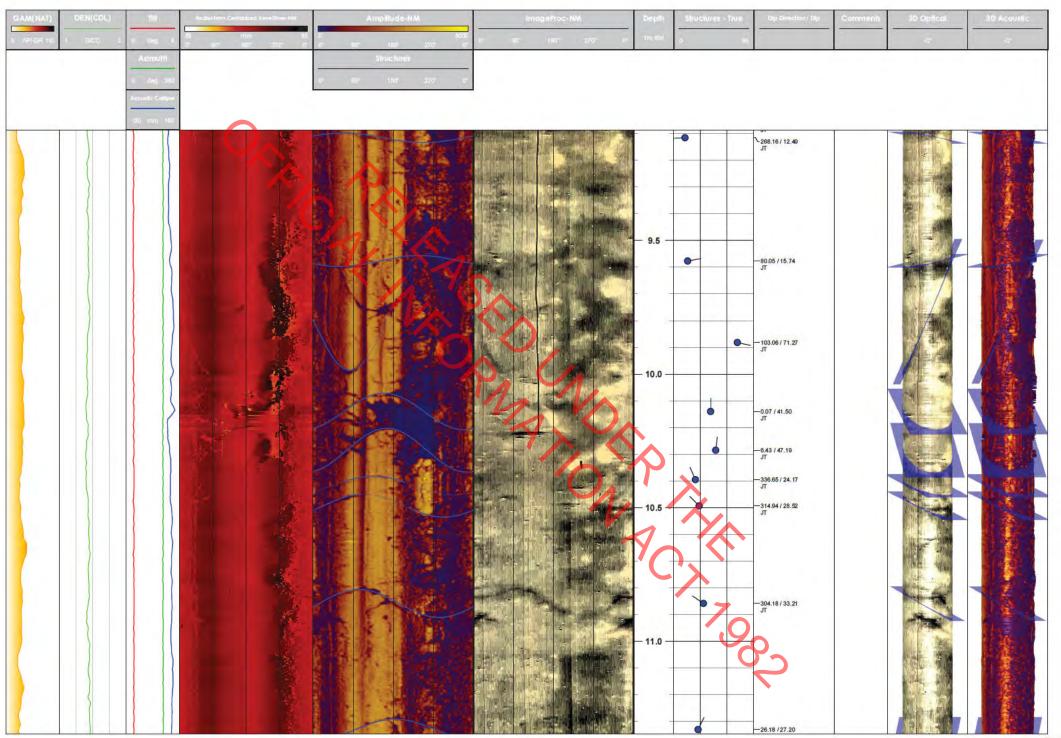
Schmidt Plot - Lower (Southern) Hemisphere - Structures - True Depth: 3.50 m to 44.88 m

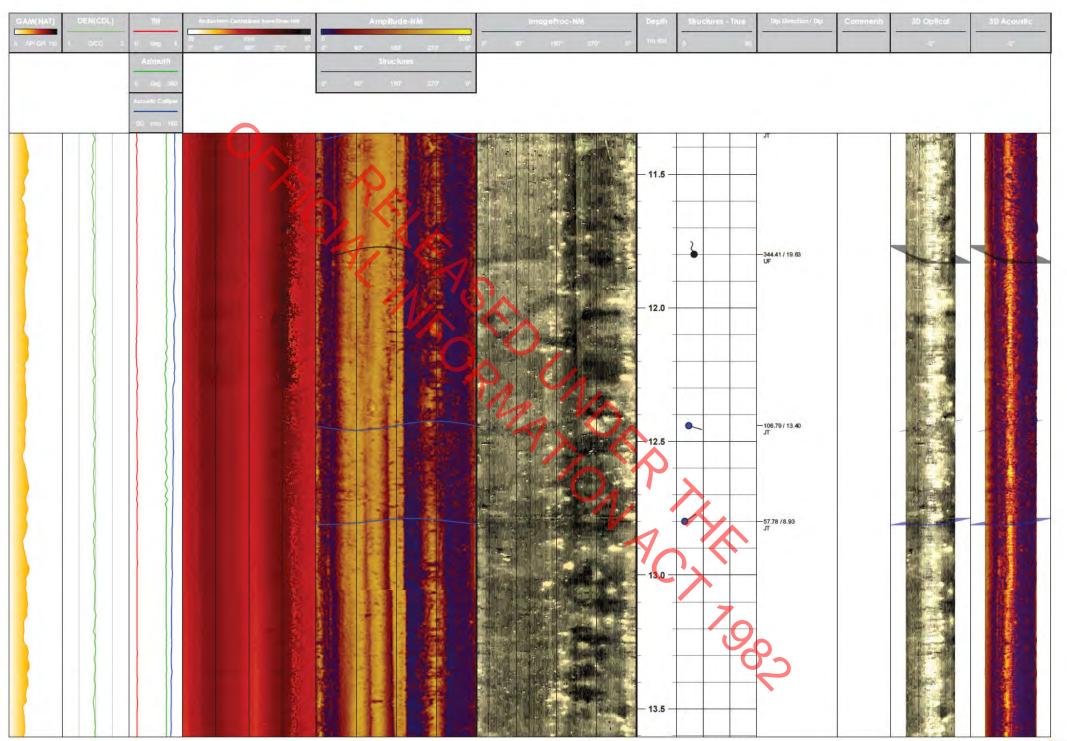


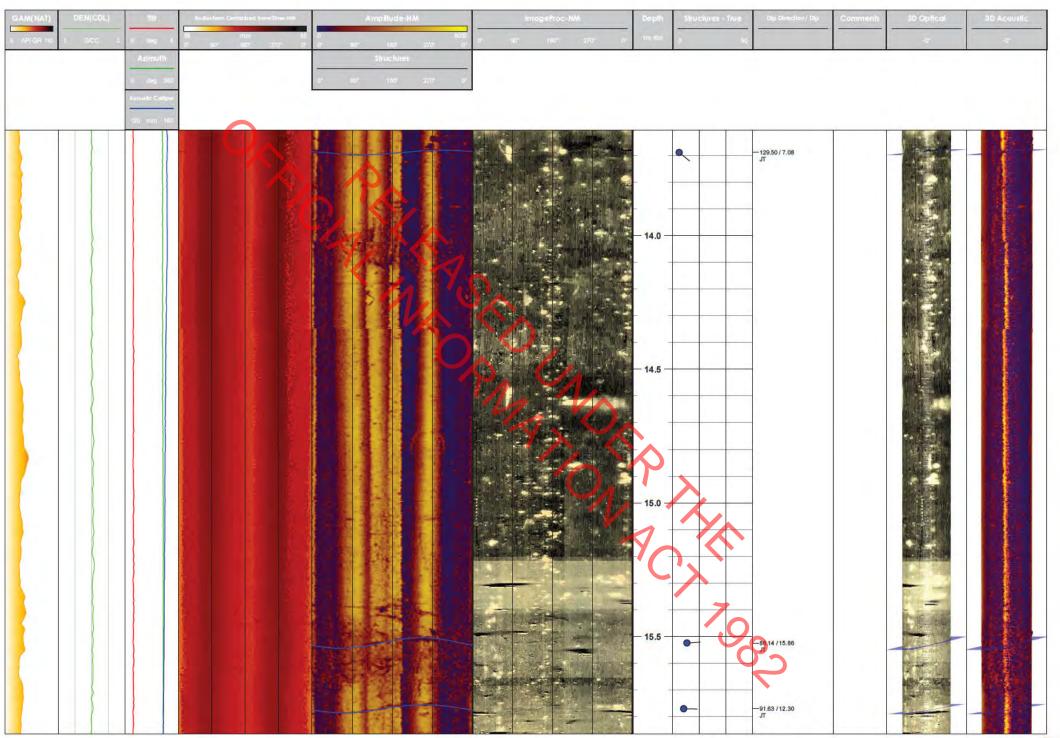


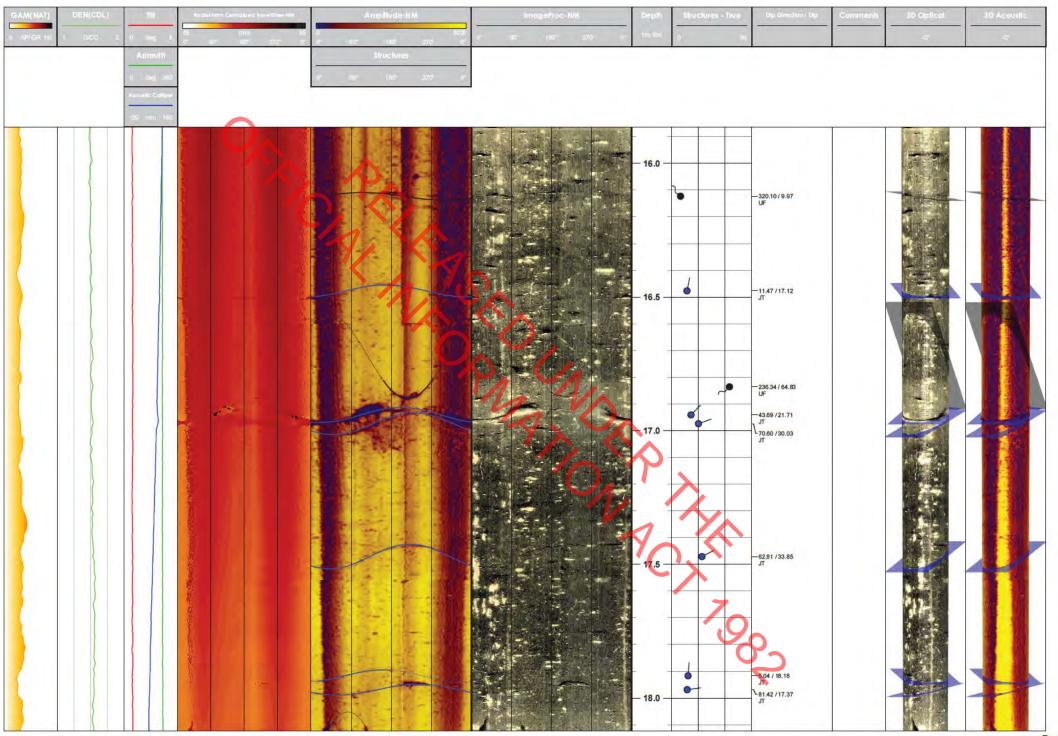


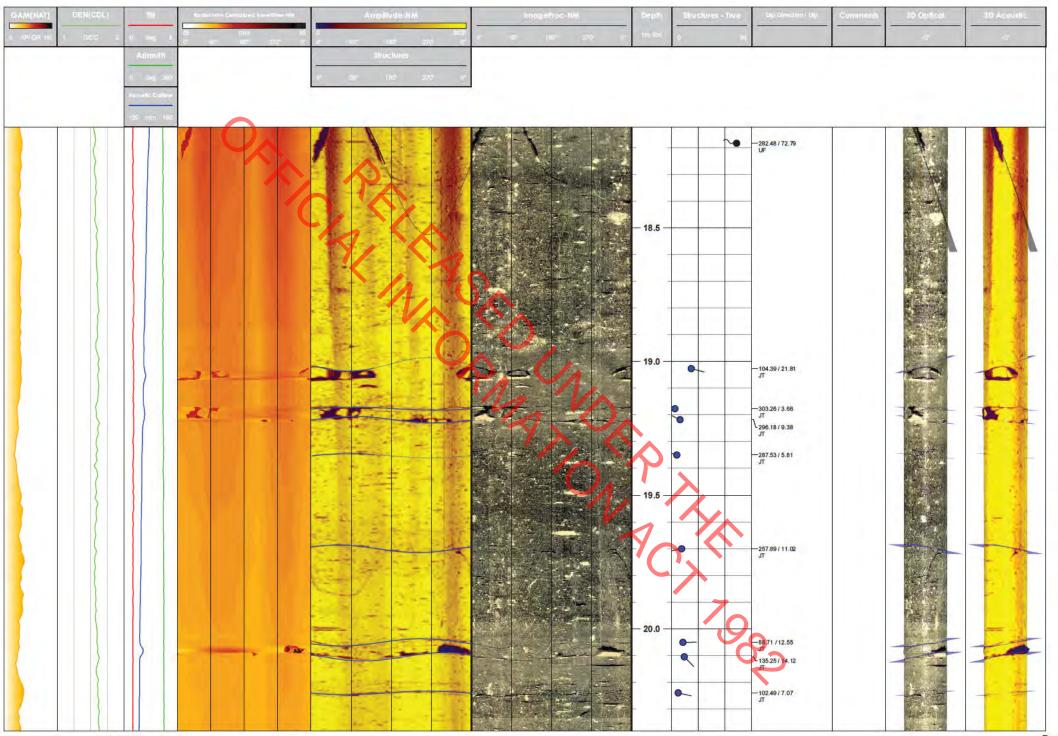


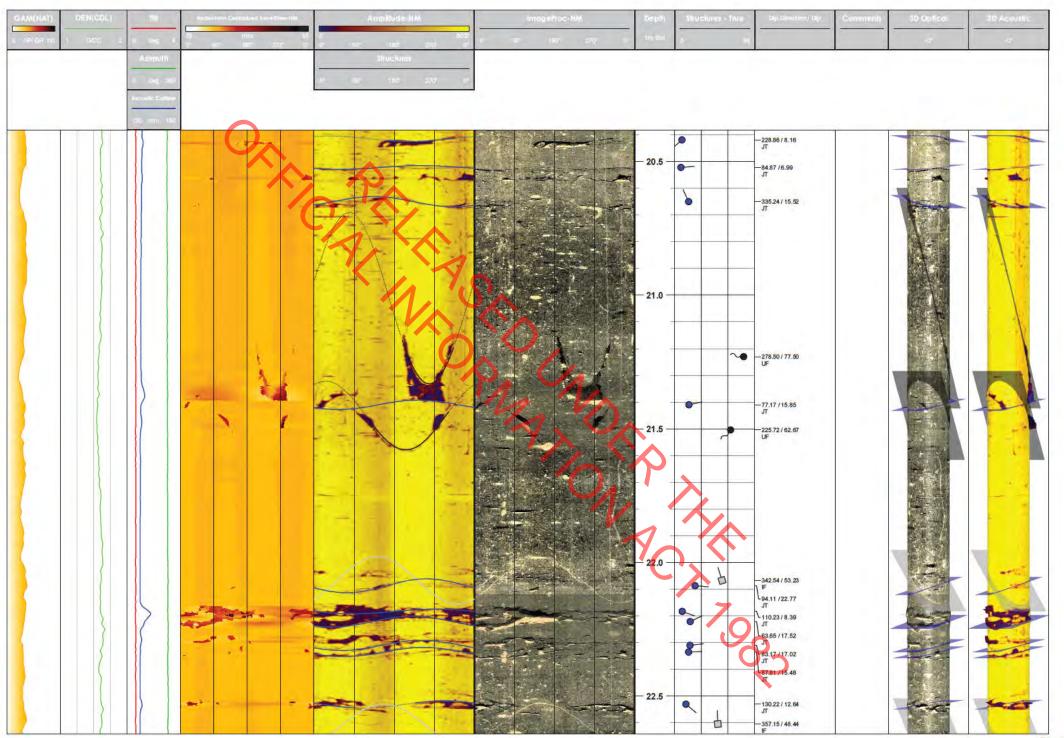


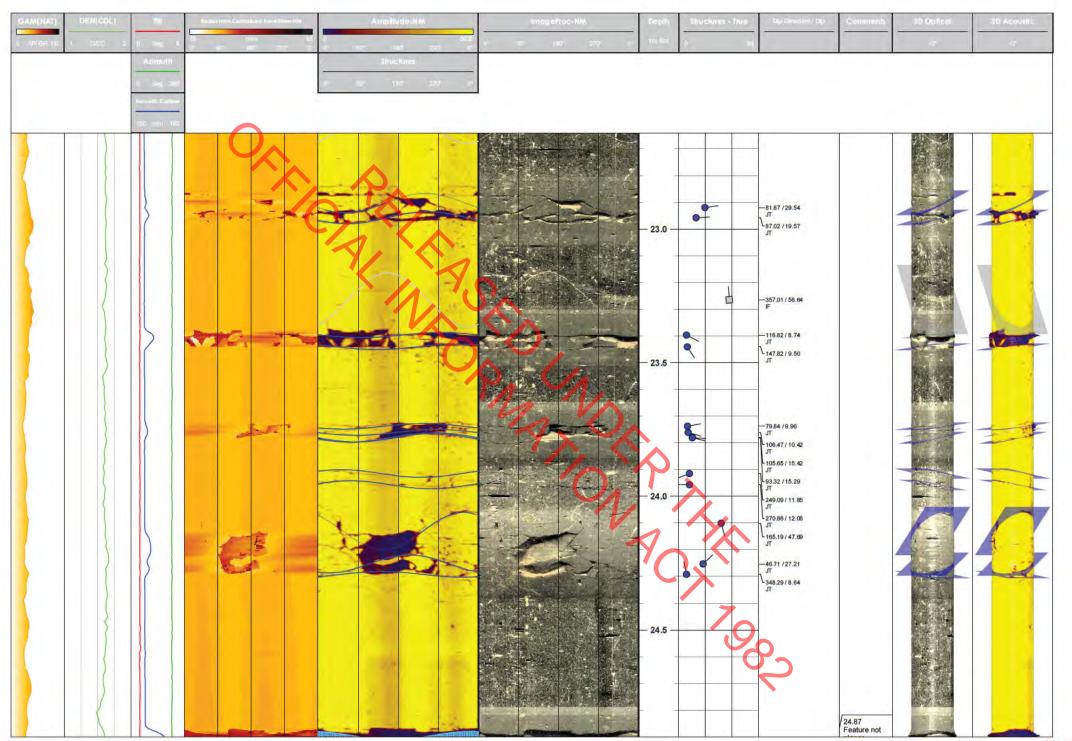


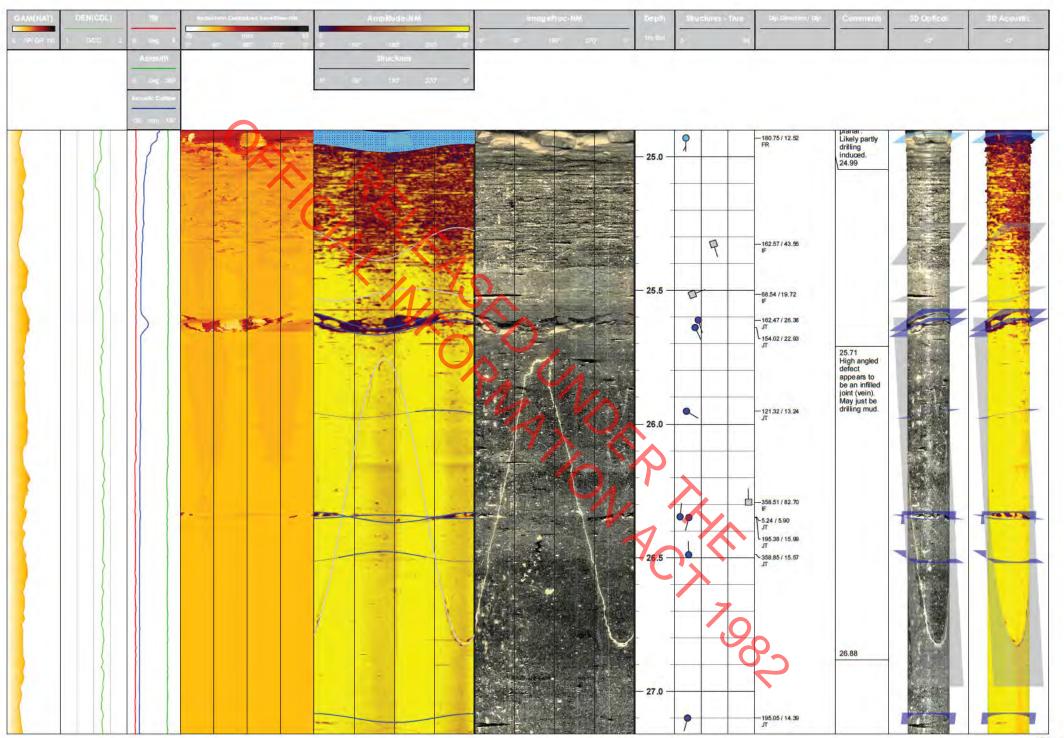


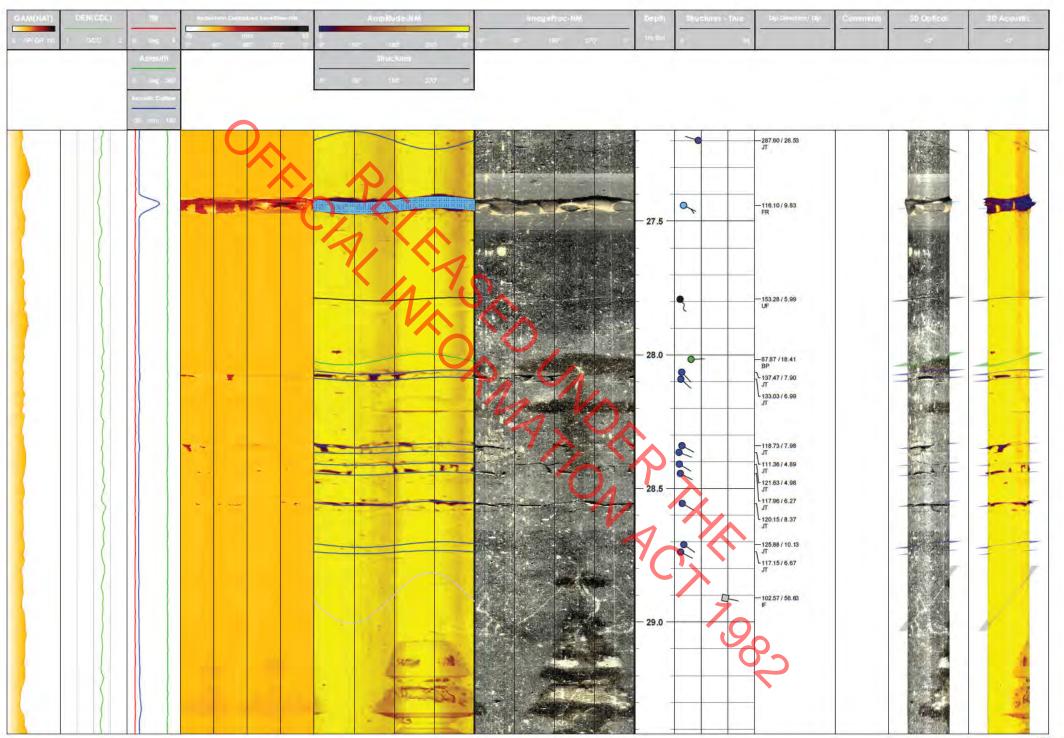


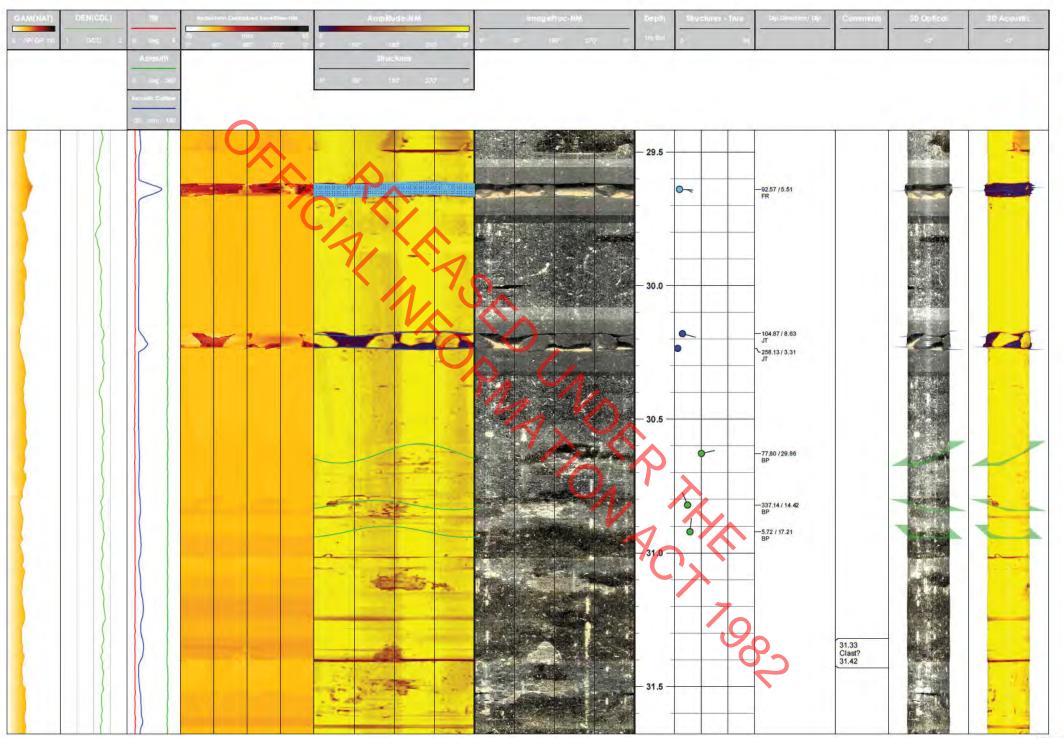


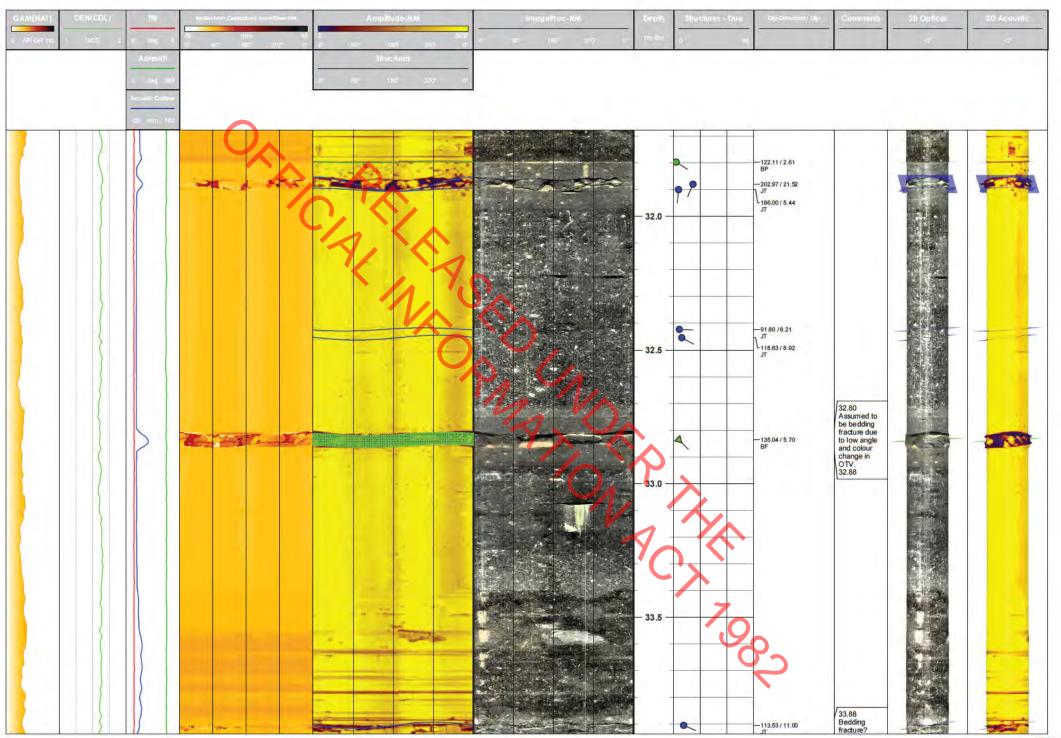


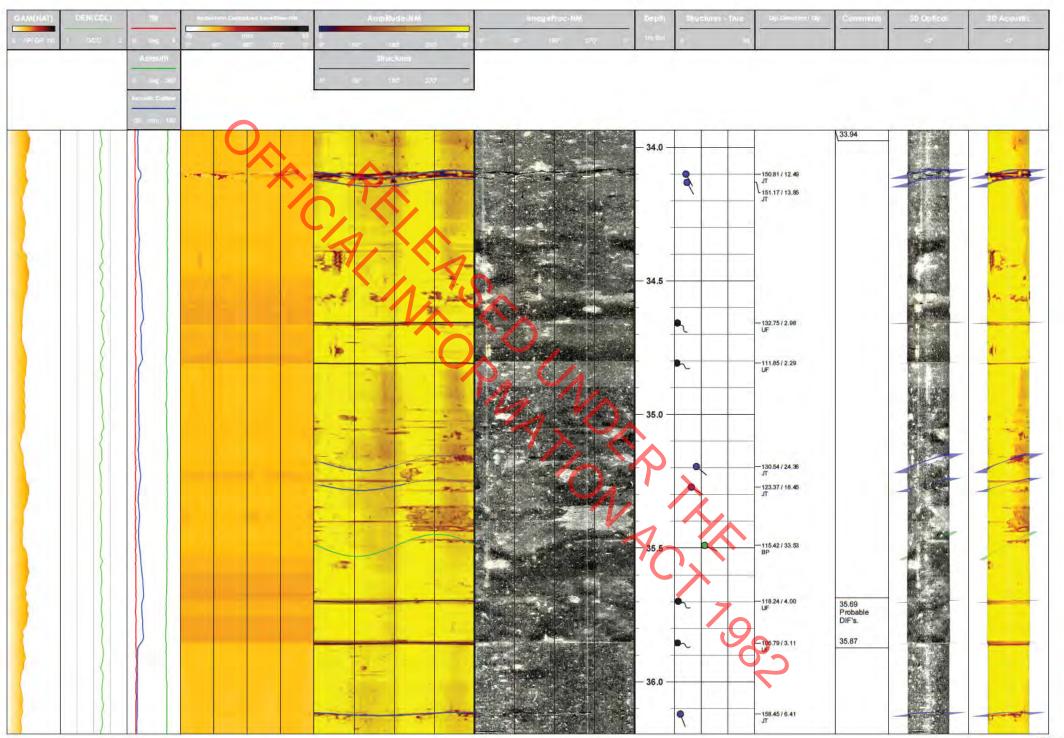


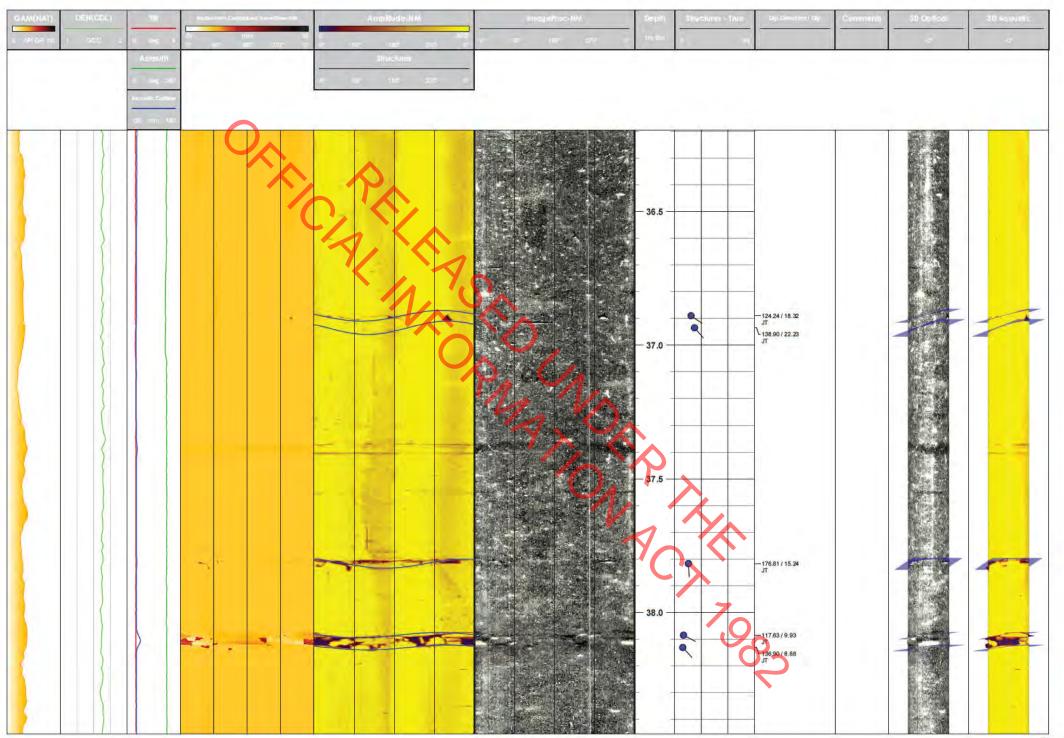


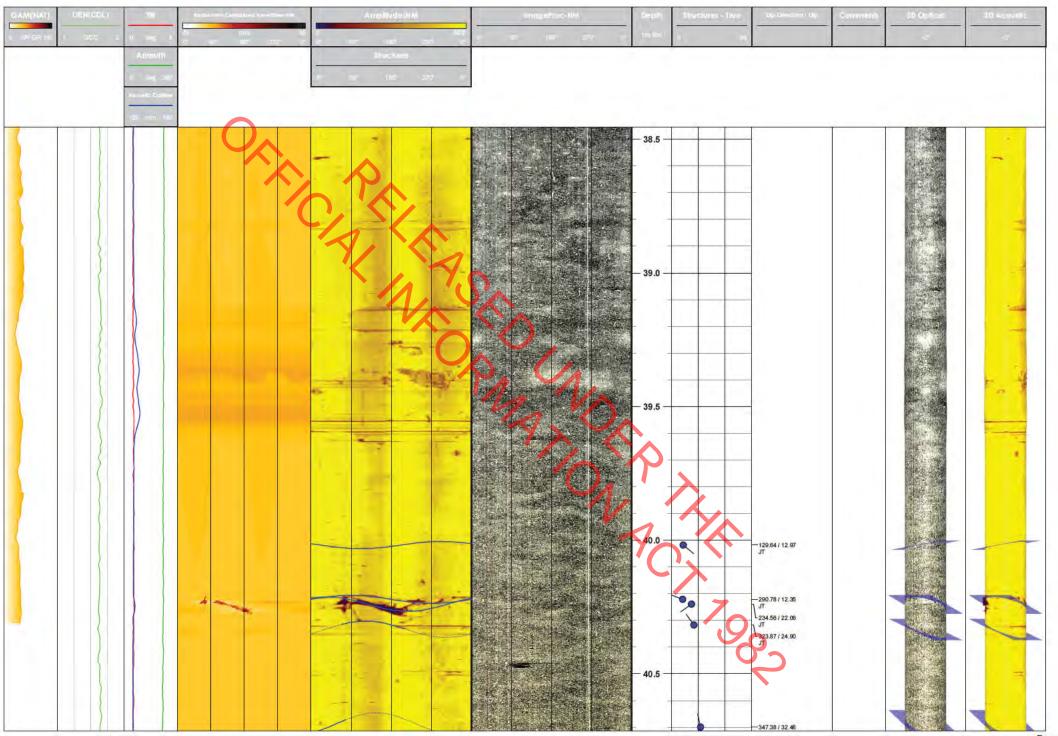


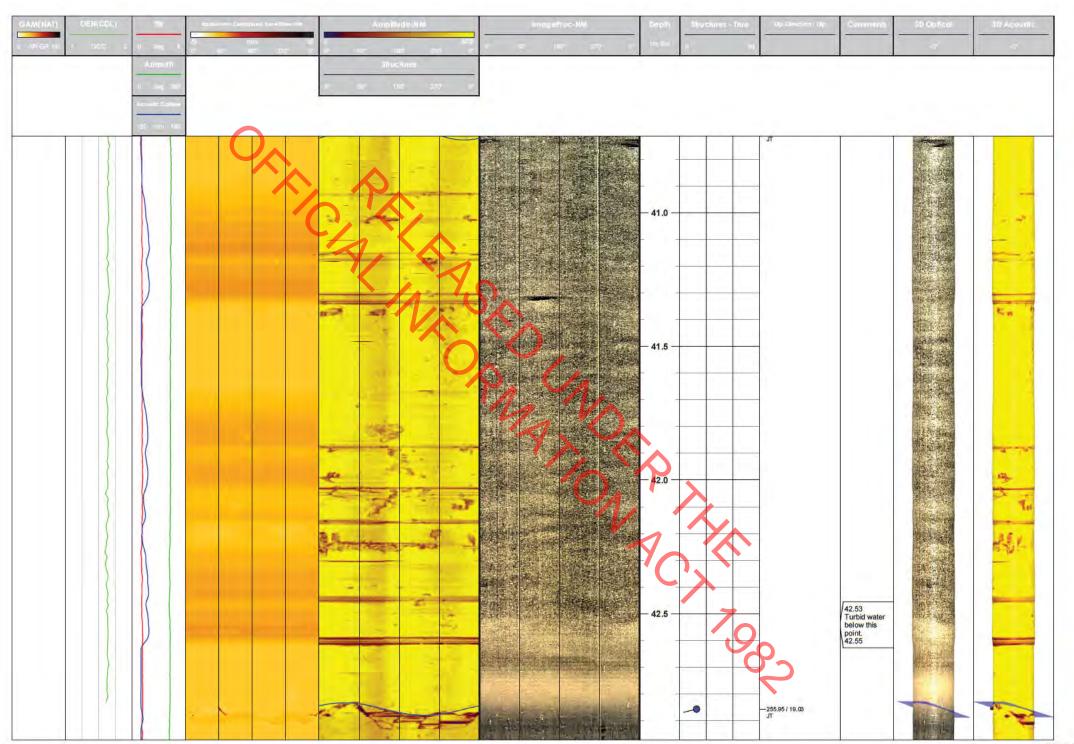


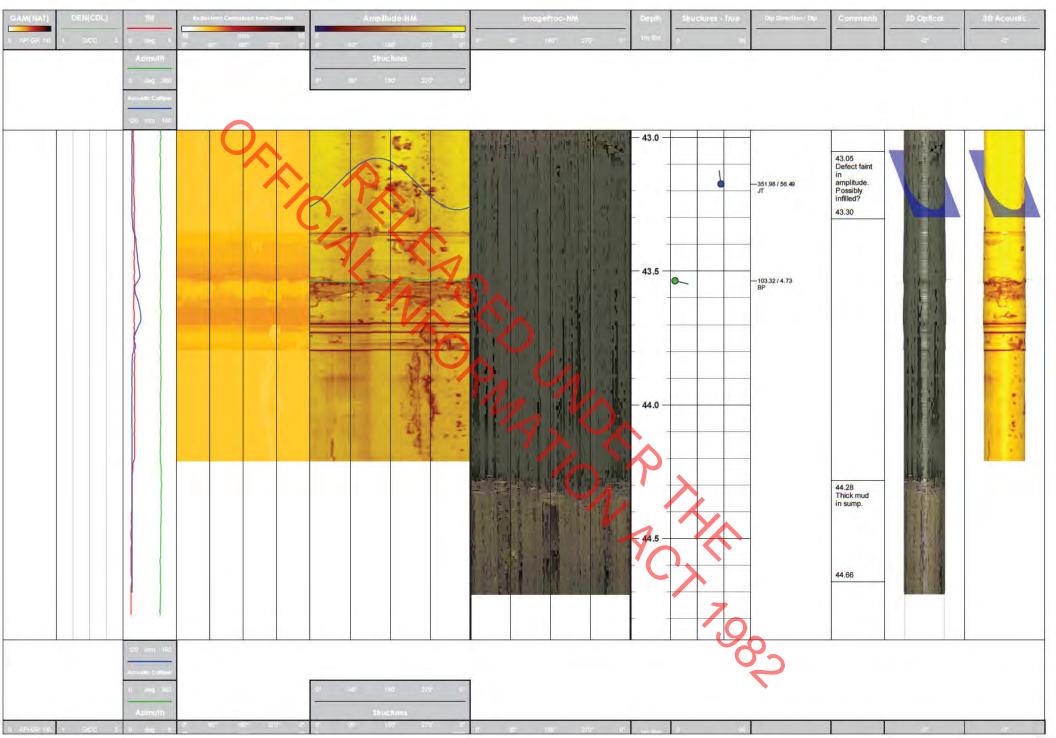












OFFICIAL WEST OF THE TOP TO THE TO THE TOP T



PO Box 28057 308 Queen's Street East Hastings 4122 New Zealand

PQ

50.00

Water

Ph: +64 6 8771652 Fax: +64 6 8775015 Email: info@rdcl.co.nz

47.12

NZTM

No Casing

49.81 (Calliper)

3.03 (Acoustic)

5917026.950

#### Log Notes:

Velocity Analysis = Output of semblance processing S\_Slowness = Shear wave slowness from semblane Vp = P-wave velocity Vs = Shear wave velocity from S-Slowness

Log Nomenclature:

DEN(CDL) = Compensated Density

Shear Modulus = Shear Modulus (G0)

Bulk Modulus = Bulk Modulus (K)

Young's Modulus = Young's Modulus (E)

Poisson's Ratio = Poisson's Ratio (PR)

Vp/Vs = P-wave S-wave ratio

RX#-1A = Wiggle window of sensor #

RX#-1A - dt = Picked first arrival time for sensor #

Basic Information:

Well Name: BH1206

Company: McMillans Drilling (NI) Ltd

Run No: 05, 06 & 07

QL40-FWSS Full Wave Form Sonic Tool Type(s): 9239 Compensated Density

Geovista PS Suspension Logger

RDCL Service Company:

Operator: K Koria

Witness: H Soma

Date Logged: Field:

Auckland Light Rail

State / Province:

-----

Auckland

New Zealand Country:

Location Description: Gribblehirst Park

01/03/2023

Printing Information:

Depth Unit: Metres

Print Type: Paginated

Casing Size:

Hole Azimuth: Vertical Magnetic Declination: +20° 8' East

**Drillhole Information:** 

Log interval from: 1.26

Bit Size:

Depth Driller:

Fluid Type:

Northing:

Elevation:

No Casing

1755023.476

Casing Depth:

Log interval to:

Depth Logger.

Fluid Level:

Projection:

Easting:

Log Version: Final for review

Hole Inclination: >-89.2°

Magnetic Inclination: -62°

Scale Ratio: 1:25

Comments:

2. No Vs picks from suspension logger between 8.0 - 15.0 m due to noisy data.

above this depth.

2.0

1. Coordinates taken from Google Earth and are approximate.

3. Density run stopped at 15.42 m due to tool hang up. Assumed density values used

4. PS Suspension Logger started from 43,00 m due to length of tool.

SI unit calculations: Shear Modulus (G) = dVs2 Bulk Modulus (K) = 1/3\*(E/(1-2\*PR)) Young's Modulus (E) = 2G(1+PR) Poisson's Ratio (PR) = 2-(Vp/Vs)2/2-2(Vp/Vs)2

Log Calculations:

The elastic moduli and engineering parameters

were calculated from Full Wave Form Sonic and PS Suspension Logger Tools Vp and Vs

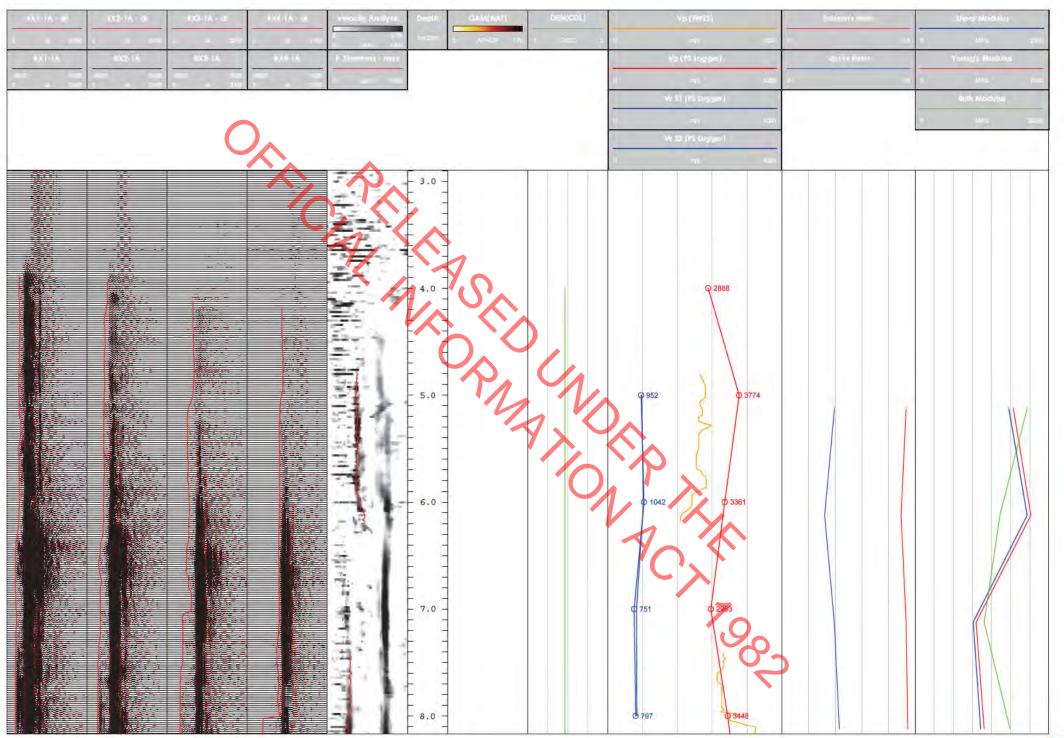
measurements. These measurements may differ from laboratory testing for these reasons.

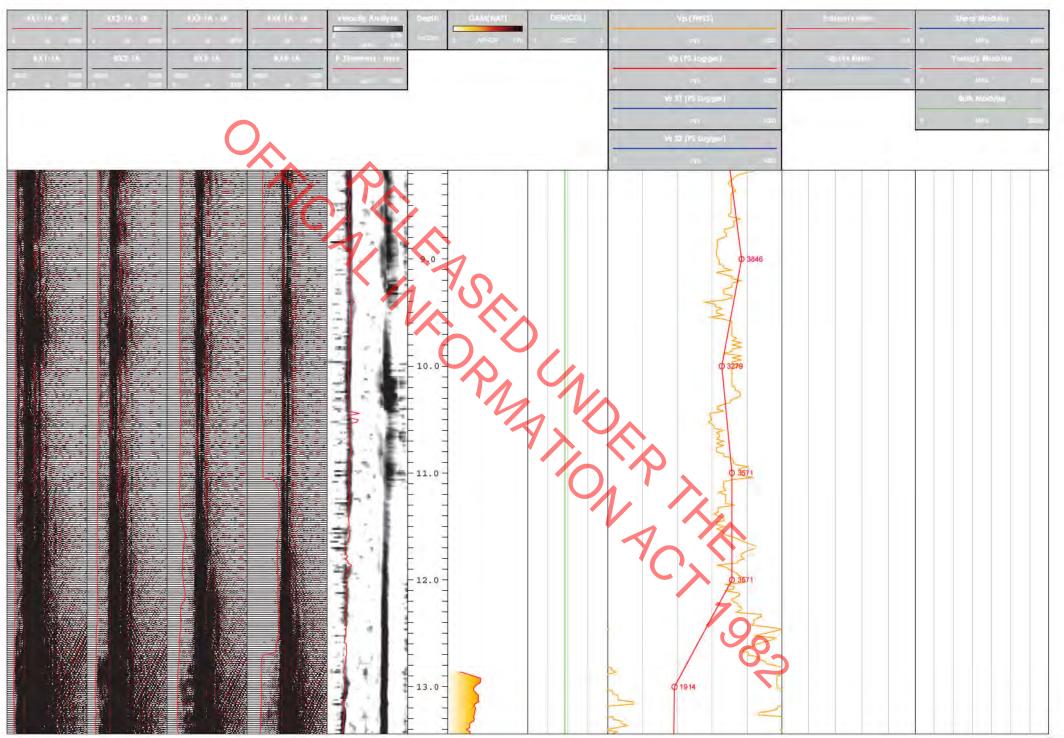
measurements and CCS tool density

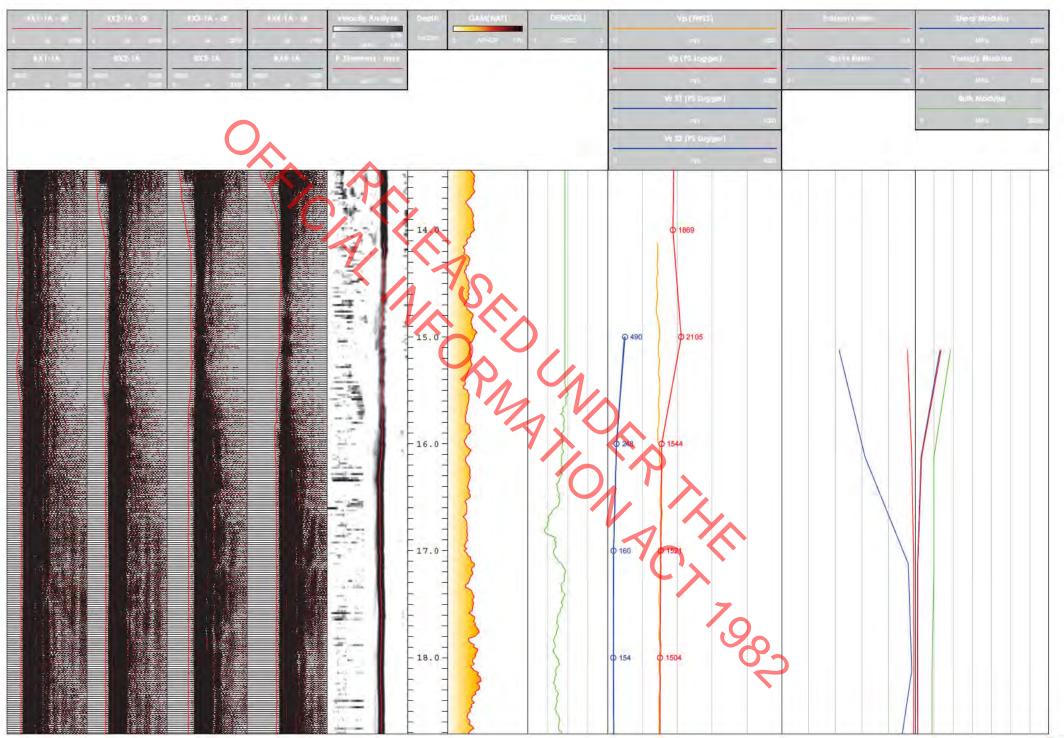
measurements. As such the logs should be considered in-situ, small strain and bulk

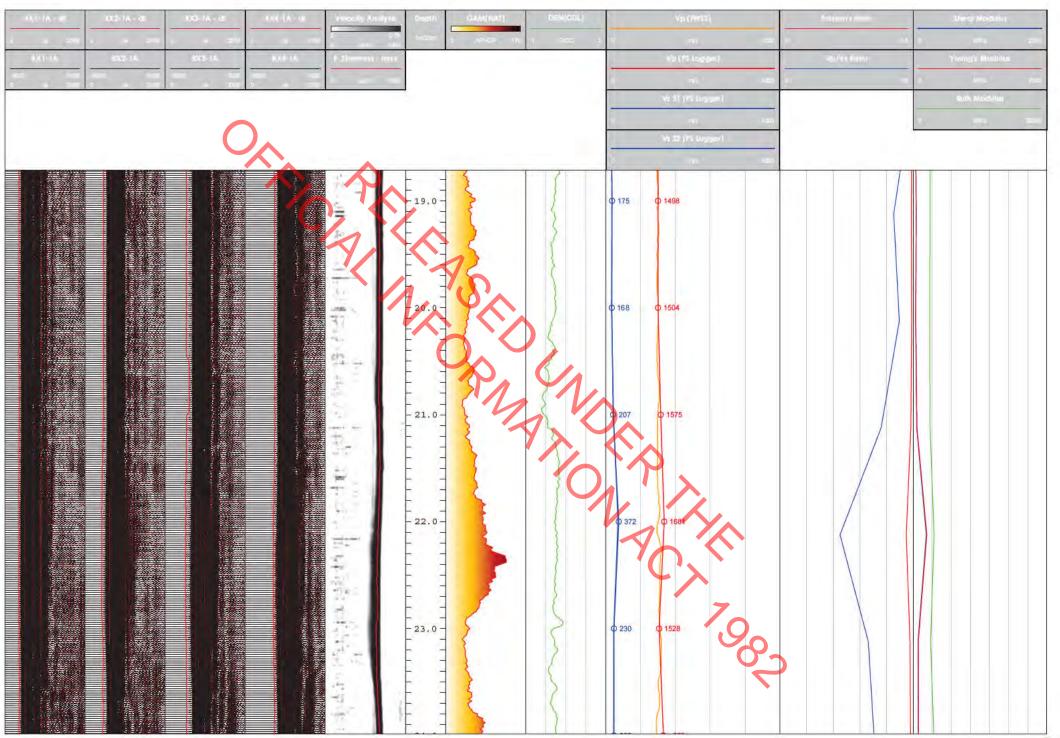
Where: Vp = P-wave seismic velocity Vs = S-wave seismic velocity d = Density

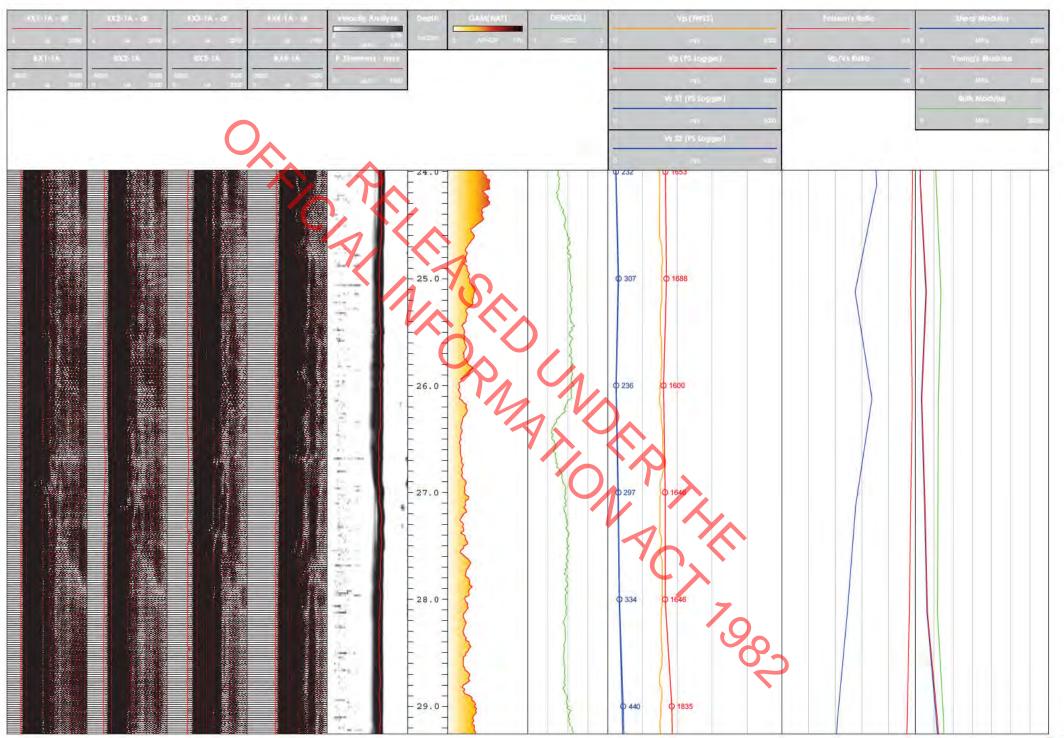
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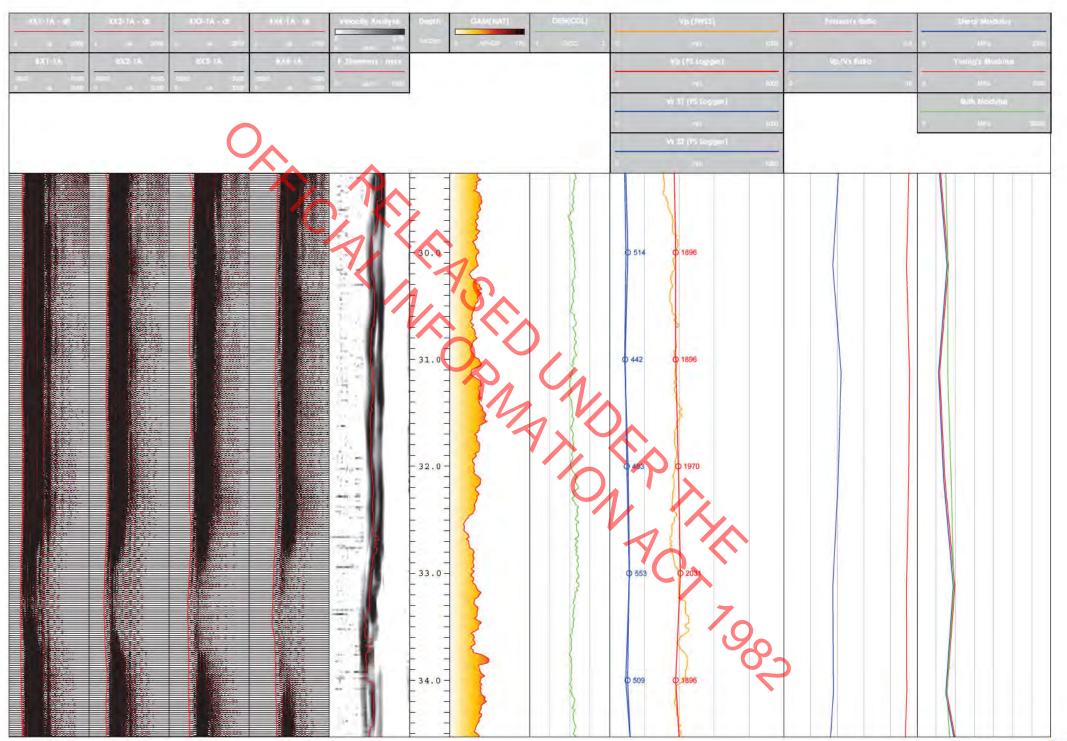


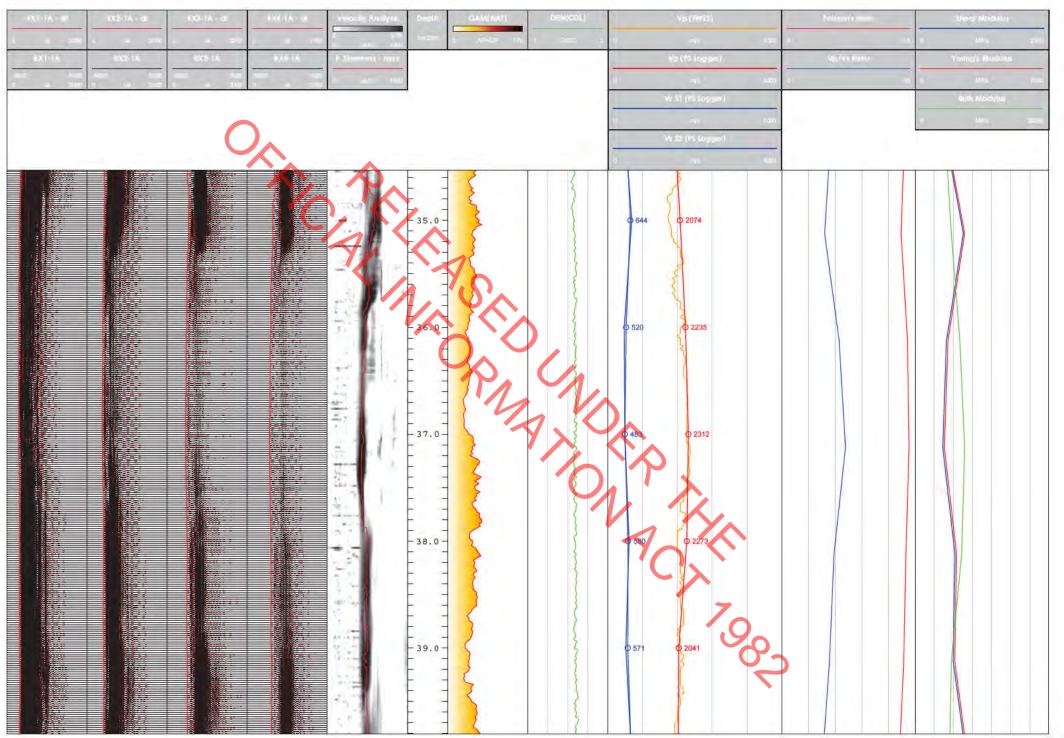




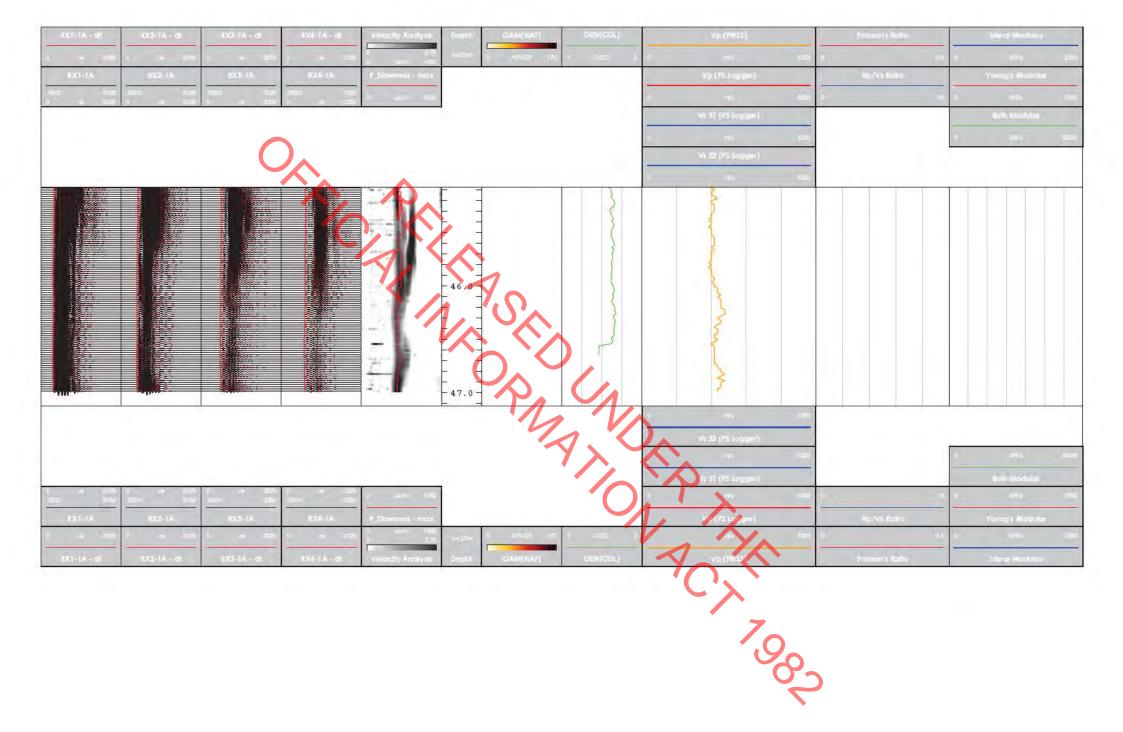








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McMillans Drilling (NI) Ltd

ABI40-2G-VLB Acoustic Televiews

OBI40-2G Optical Televiewer

BH1206

1,3&6

RDCL

H Soma

Unit A3, 269a Mt Smart Road Onehunga Auckland, 1061 New Zealand

Ph: +64 6 8771652 Fax: +64 6 8775015 Email: info@rdcl.co.nz www.rdcl.co.nz

Drillhole Information: Log interval from (m): 0.40 49.34 Log interval to (m): Depth Driller (m): 50.00 Depth Logger (m): 49.81 (Calliper)

Fluid Type: Water Fluid Level (m): 3.03 (Acoustic) Easting: 5917026.950 1755023.476 Northing: TBC

Elevation: N/A Coord Ref System: QL40-CAL Mechanical Calliper 9239 Compensated Density Sonde Vertical >-89.2° Hole Azimuth: Hole Inclination: Magnetic Declination: +20° 8' East Magnetic Inclination: 62° 49'

> Drill Company: McMillans Drilling (NI) Ltd

Depth Unit: Metres 01-02/03/2023 1:10 Auckland Light Rail

State / Province: Auckland Country: New Zealand

#### Location Description:

Basic Information:

Drill hole ID:

Run Number(s):

Service Company:

Operator:

Field:

Date Logged:

Tool Type(s):

Client:

Gribblehirst Park

## Printing Information:

Log Version: Final Processed: H Soma Log Reviewer: K Koria

Bit Size Record:			Casing Record:			
Size (mm):	From (m):	To (m):	Type:	Size:	From (m):	To (m):
##.#	##.#	##.#	XX	##.#	##.#	##.#
##.#	##.#	##.#	XX	##.#	##.#	##.#
##.#	##.#	##.#	XX	##.#	##.#	##.#
##.#	##.#	##.#	XX	##.#	##.#	##.#

#### Structural Legend:

BP - Bedding Plane

BF - Bedding Fracture

JT - Joint

FR - Fracture

FZ - Fractured Zone

CZ - Crushed Zone

IF - Infilled Zone

DZ - Decomposed Zone

UF - Unidentified Feature

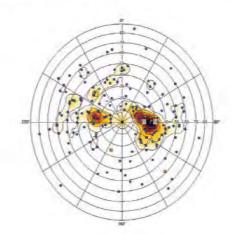
# Log Nomenclature:

Azimuth = Tool azimuth from magnetic north Tilt = Inclination from vertical Acoustic Calliper = 360° average from travel time Calliper from Cent = Calliper derived from travel time Image-NM = Optical image oriented to magnetic north Amplitude-NM = Acoustic amplitude (magnetic north) Structures = Apparent Structures oriented to hole Structures - True =Structures Oriented to true north 3D Optical = 3D representation of optical log 3D Acoustic = 3D representation of acoustic log DEN(CDL) = Compensated Density in g/ccm GAM(NAT) = Natural Gamma

#### Comments:

- 1. Water quality turbid, obscuring optical data below water level.
- 2. Hole was logged without casing.
- 3. Coordinates taken from Google Earth and are approximate.

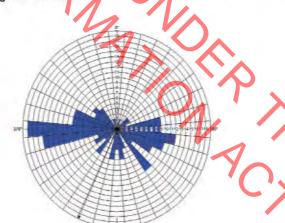
### Stereoplot - Polar Projection Dip



Schmidt Plot - Lower (Southern) Hemisphere - Structures - True

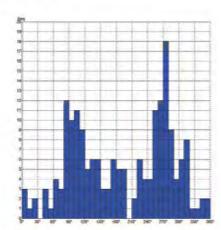
Depth: 0.40 m to 49.34 m





Depth: 0.40 m to 49.34 m

### Histogram - Azimuth



Depth: 0.40 m to 49.34 m

