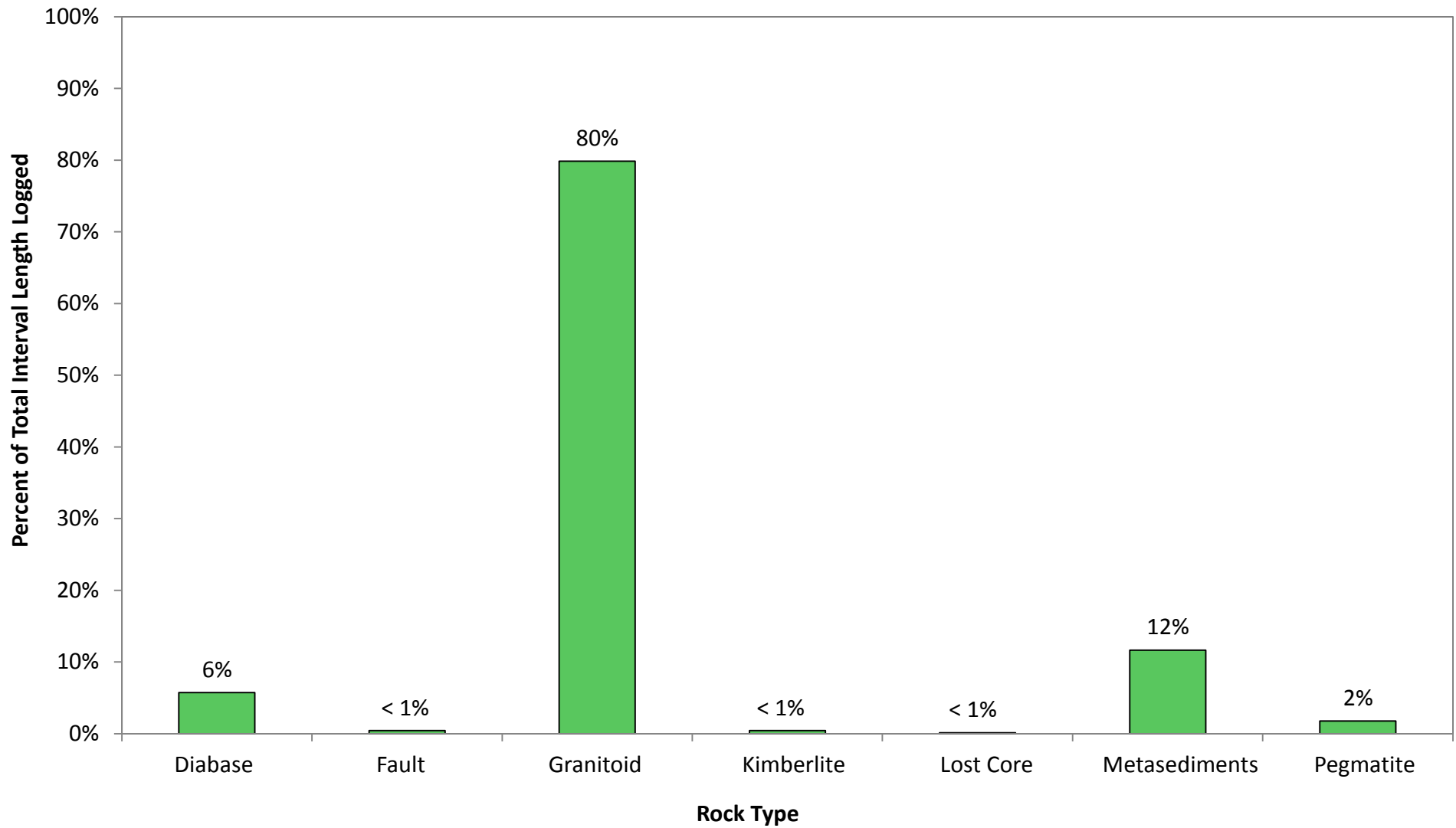




APPENDIX C

Geotechnical Interval Data Histograms



CLIENT
DOMINION DIAMOND

CONSULTANT



YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	SD
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

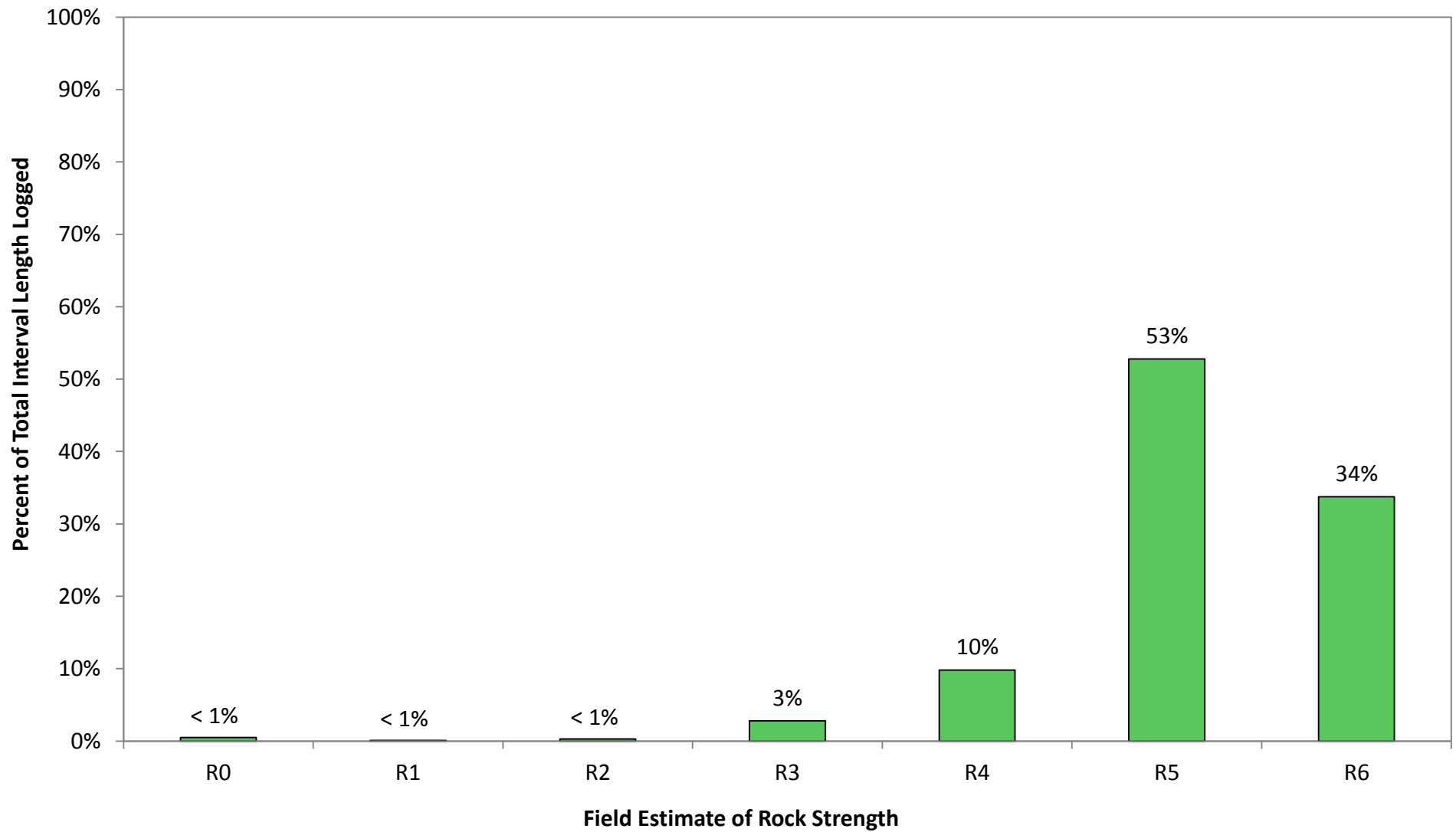
TITLE
**HISTOGRAM SHOWING DISTRIBUTION OF
ROCK TYPES IN JGT-01 TO JGT-07**

PROJECT No.
13-1328-0041

Phase.
2010

Rev.
0

Fig.
C - 1



CLIENT
DOMINION DIAMOND

CONSULTANT



YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	SD
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

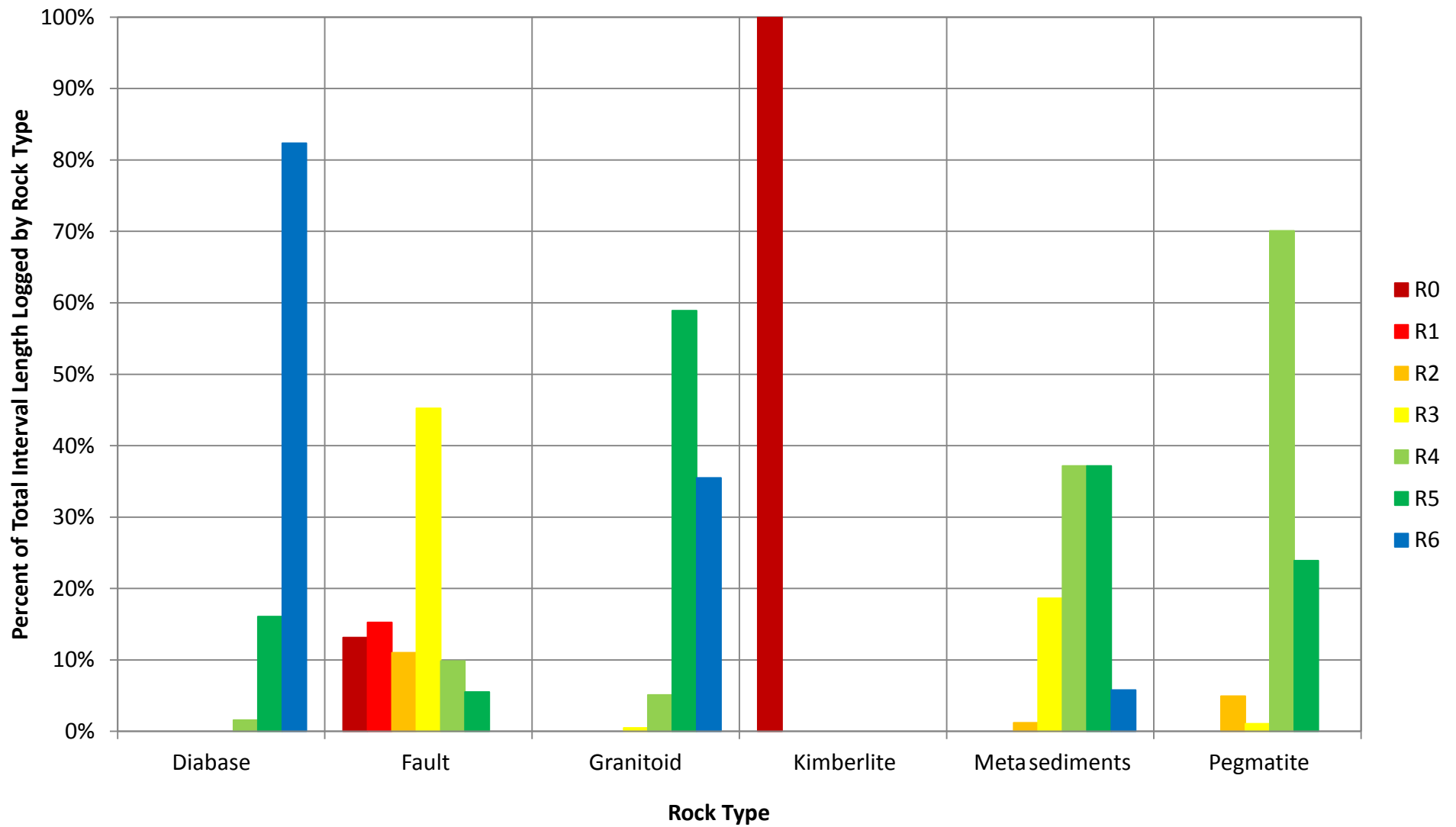
TITLE
**HISTOGRAM SHOWING DISTRIBUTION OF FIELD
ESTIMATES OF ROCK STRENGTH**

PROJECT No.
13-1328-0041

Phase.
2010

Rev.
0

Fig.
C - 2



CLIENT
DOMINION DIAMOND

CONSULTANT



YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	SD
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

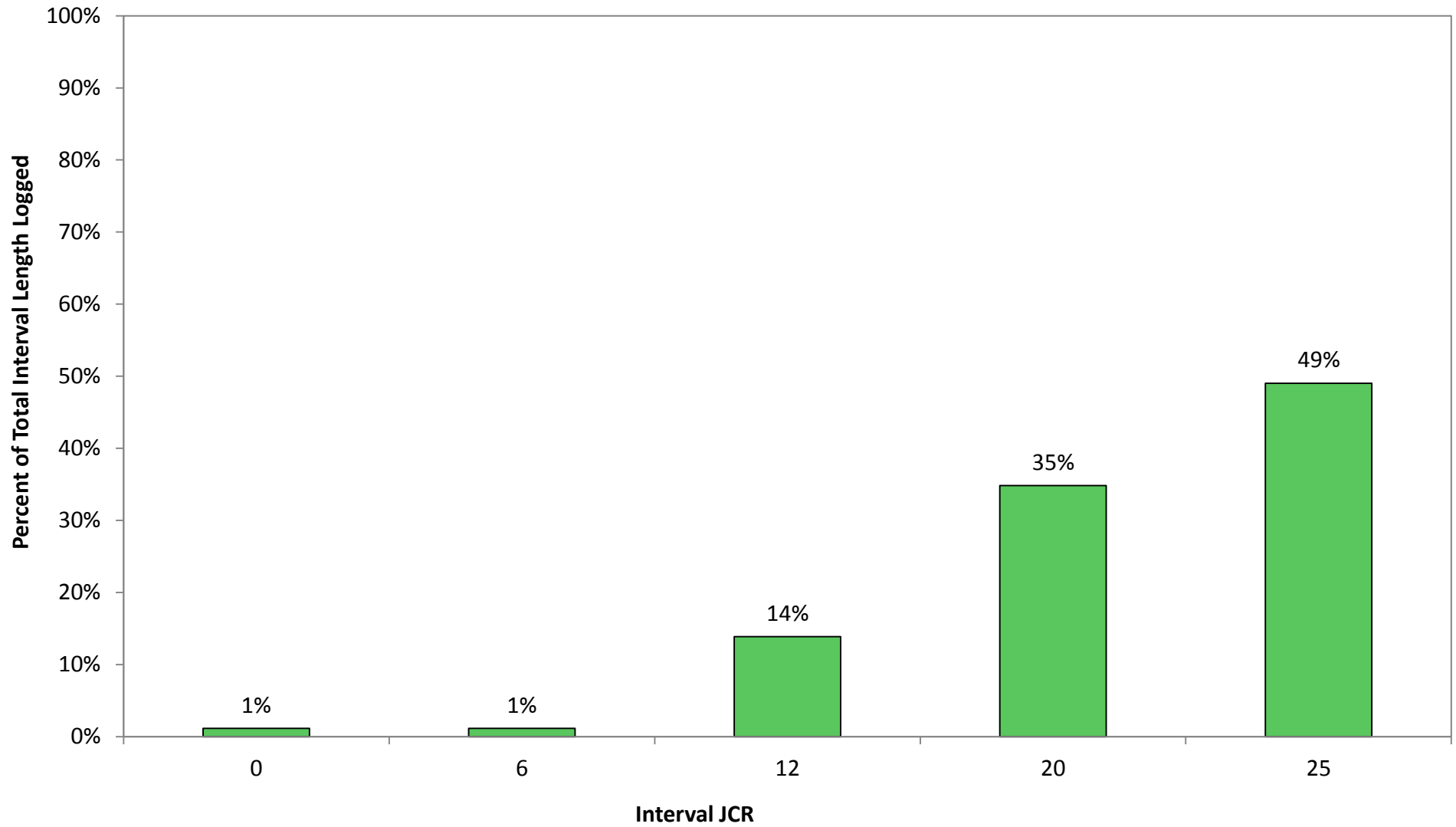
TITLE
**HISTOGRAM SHOWING DISTRIBUTION OF
FIELD ESTIMATES OF ROCK STRENGTH
CLASSIFIED BY ROCK TYPE**

PROJECT No.
13-1328-0041

Phase.
2010

Rev.
0

Fig.
C - 3



CLIENT
DOMINION DIAMOND

CONSULTANT



YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	SD
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

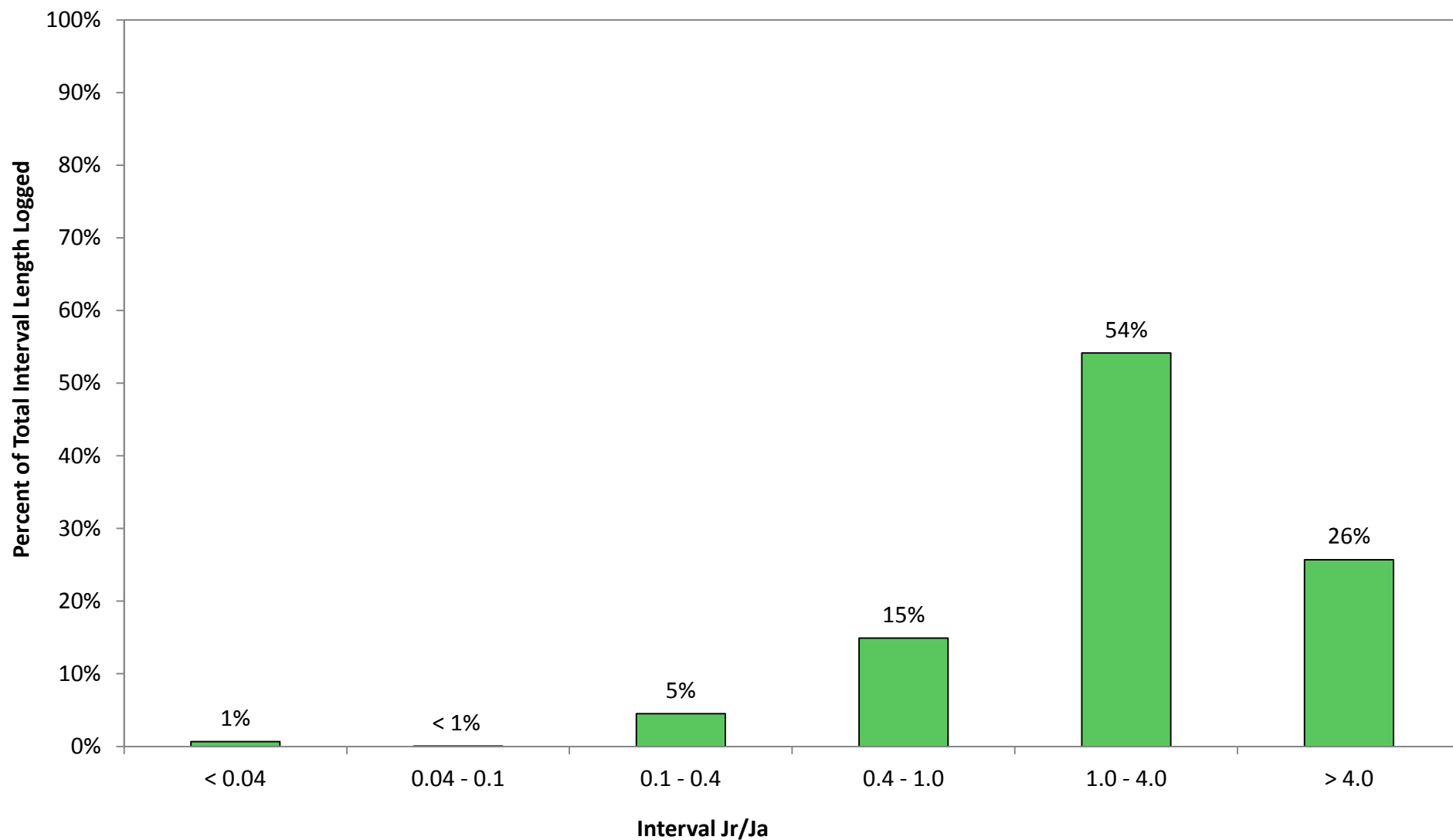
TITLE
**HISTOGRAM SHOWING DISTRIBUTION OF
INTERVAL JCR**

PROJECT No.
13-1328-0041

Phase.
2010

Rev.
0

Fig.
C - 4



CLIENT
DOMINION DIAMOND

CONSULTANT



YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	SD
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
**HISTOGRAM SHOWING DISTRIBUTION OF
INTERVAL J_r/J_a RATIO**

PROJECT No.
13-1328-0041

Phase.
2010

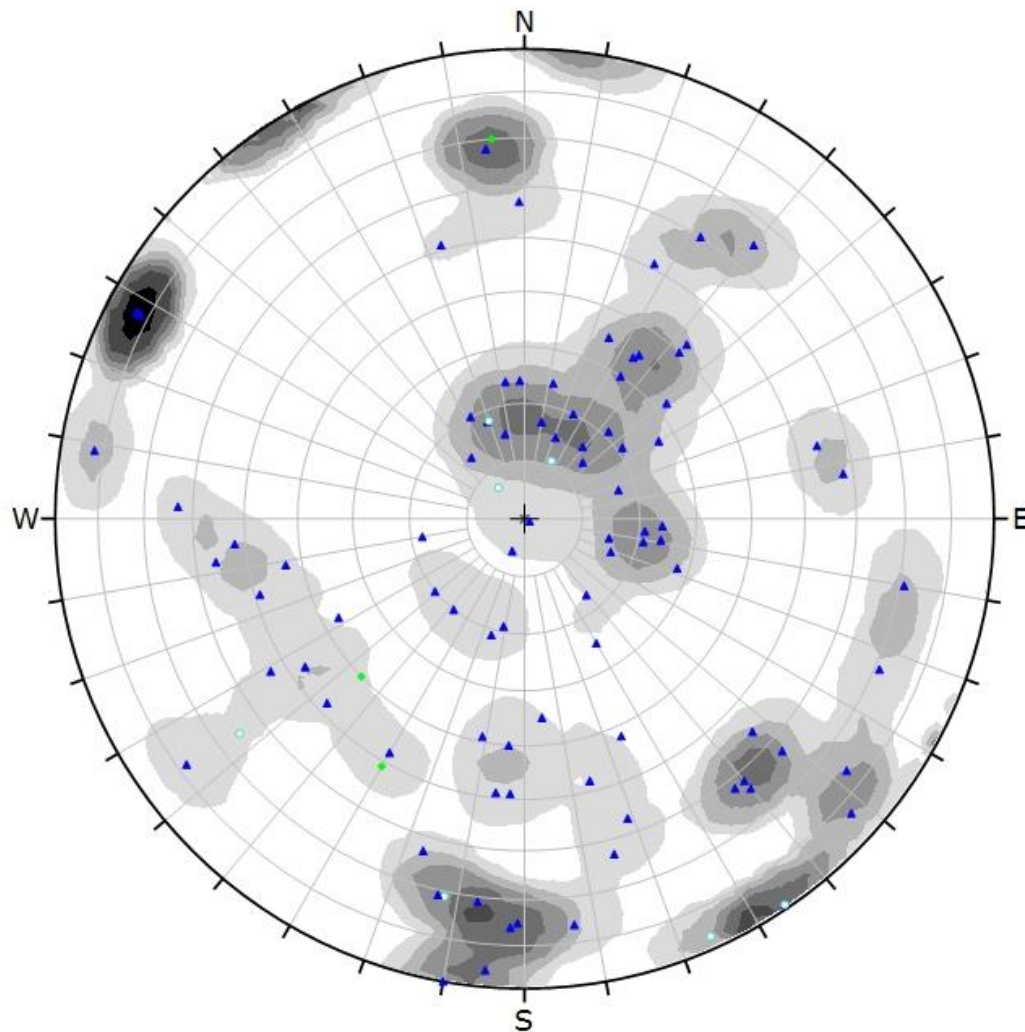
Rev.
0

Fig.
C - 5



APPENDIX D

Structural Orientation Data



Symbol	FEATURE TYPE	Quantity
○	CLF	7
●	FOL	3
▲	JN	89

Color	Density Concentrations
	0.00 - 1.00
	1.00 - 2.00
	2.00 - 3.00
	3.00 - 4.00
	4.00 - 5.00
	5.00 - 6.00
	6.00 - 7.00

Maximum Density	6.37%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Plot Mode	Pole Vectors
Vector Count	99 (99 Entries)
Terzaghi Weighting	Minimum Bias Angle 15°
Hemisphere	Lower
Projection	Equal Area

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
DOMINION DIAMOND

CONSULTANT

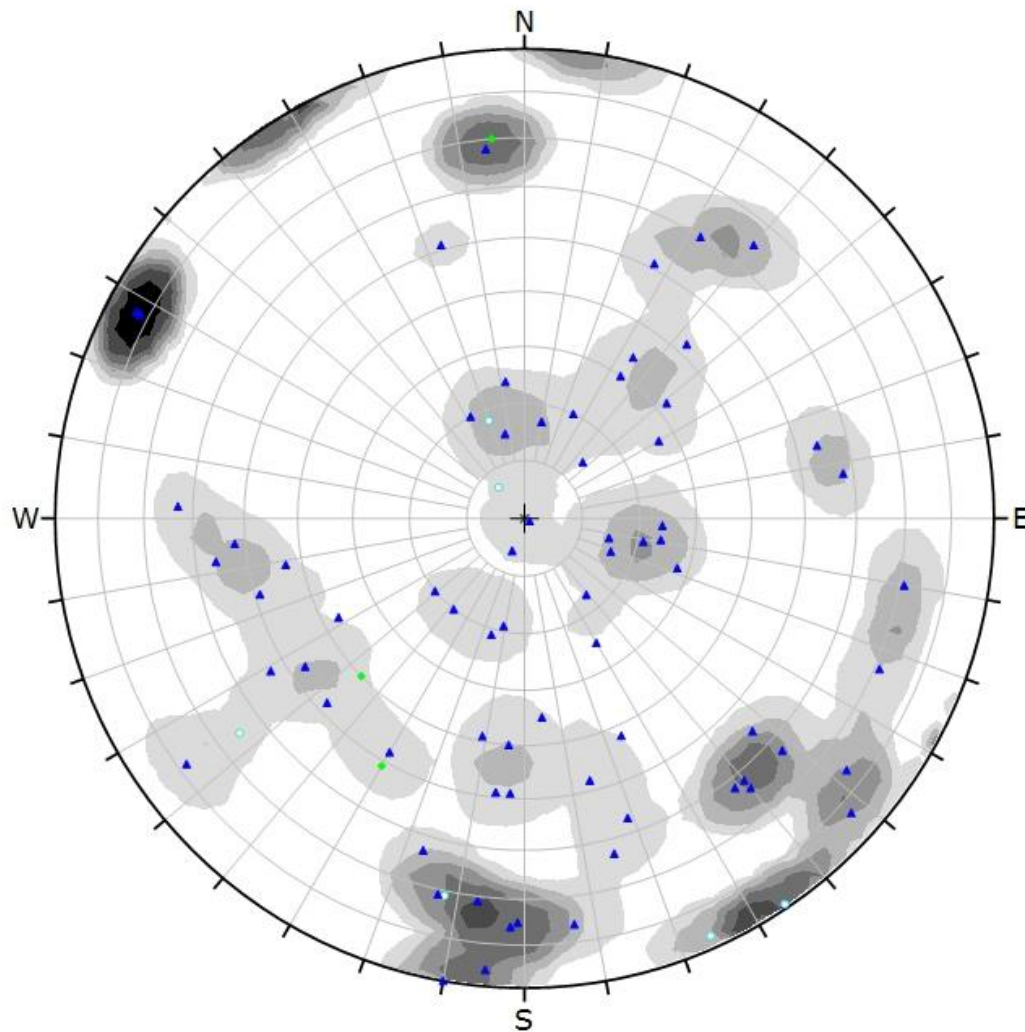


YYYY-MM-DD 2014-05-30
PREPARED MV
DESIGN MV
REVIEW SD
APPROVED JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
ALL STRUCTURAL ORIENTATION DATA
JGT-01

PROJECT No. 13-1328-0041	Phase. 2010	Rev. 0	Fig. D - 1
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Symbol	FEATURE TYPE	Quantity
○	CLF	6
●	FOL	3
▲	JN	73

Color	Density Concentrations
	0.00 - 1.10
	1.10 - 2.20
	2.20 - 3.30
	3.30 - 4.40
	4.40 - 5.50
	5.50 - 6.60
	6.60 - 7.70
Maximum Density	7.34%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Plot Mode	Pole Vectors
Vector Count	82 (82 Entries)
Terzaghi Weighting	Minimum Bias Angle 15°
Hemisphere	Lower
Projection	Equal Area

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
DOMINION DIAMOND

CONSULTANT



YYYY-MM-DD 2014-05-30
PREPARED MV
DESIGN MV
REVIEW SD
APPROVED JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

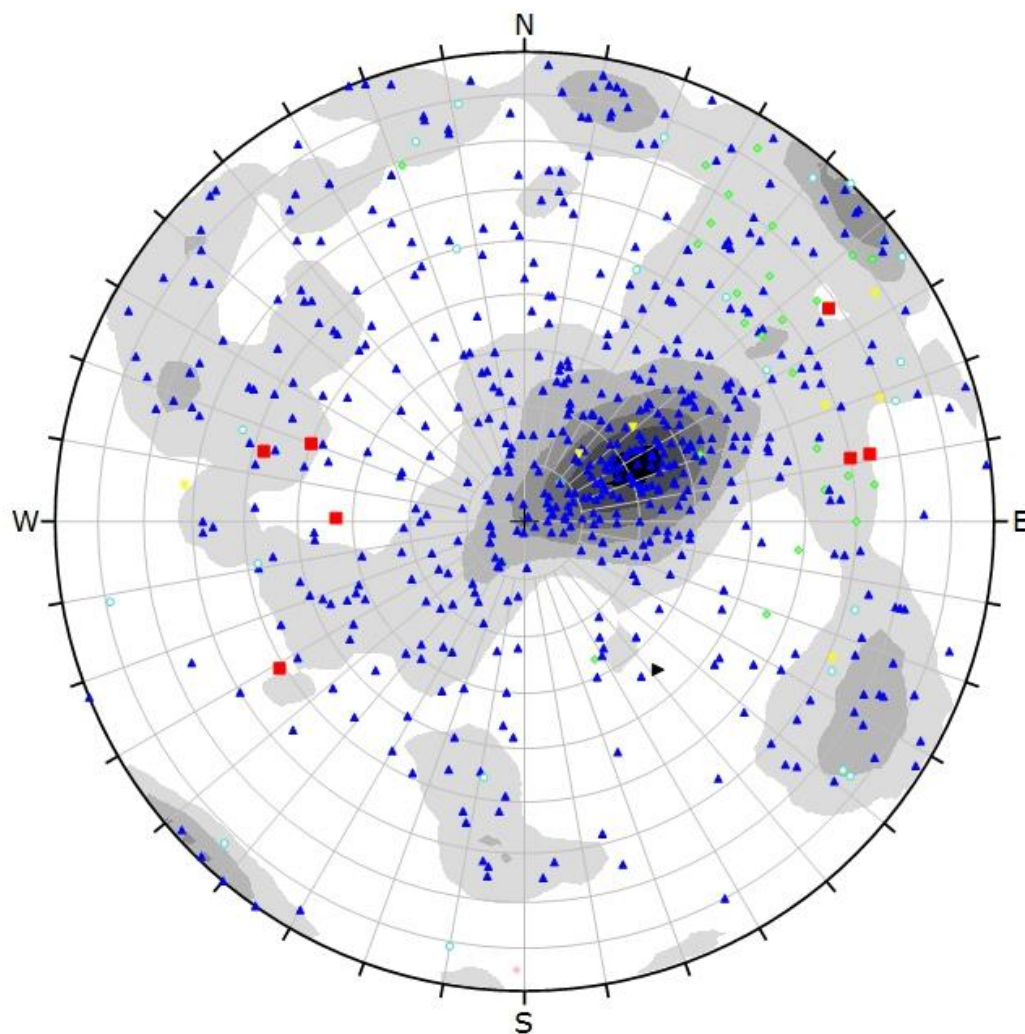
TITLE
**HIGH RELIABILITY STRUCTURAL ORIENTATION DATA
JGT-01**

PROJECT No.
13-1328-0041

Phase.
2010

Rev.
0

Fig.
D - 2



Symbol	FEATURE TYPE	Quantity
▶	BC	1
○	CLF	24
○	CONO	1
■	FLT	7
●	FOL	26
▲	JN	543
●	VNO	7

Color	Density Concentrations
	0.00 - 0.90
	0.90 - 1.80
	1.80 - 2.70
	2.70 - 3.60
	3.60 - 4.50
	4.50 - 5.40
	5.40 - 6.30
Maximum Density 5.76%	
Contour Data Pole Vectors	
Contour Distribution Fisher	
Counting Circle Size 1.0%	
Plot Mode Pole Vectors	
Vector Count 609 (609 Entries)	
Terzaghi Weighting Minimum Bias Angle 15°	
Hemisphere Lower	
Projection Equal Area	

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.



CLIENT
DOMINION DIAMOND

CONSULTANT

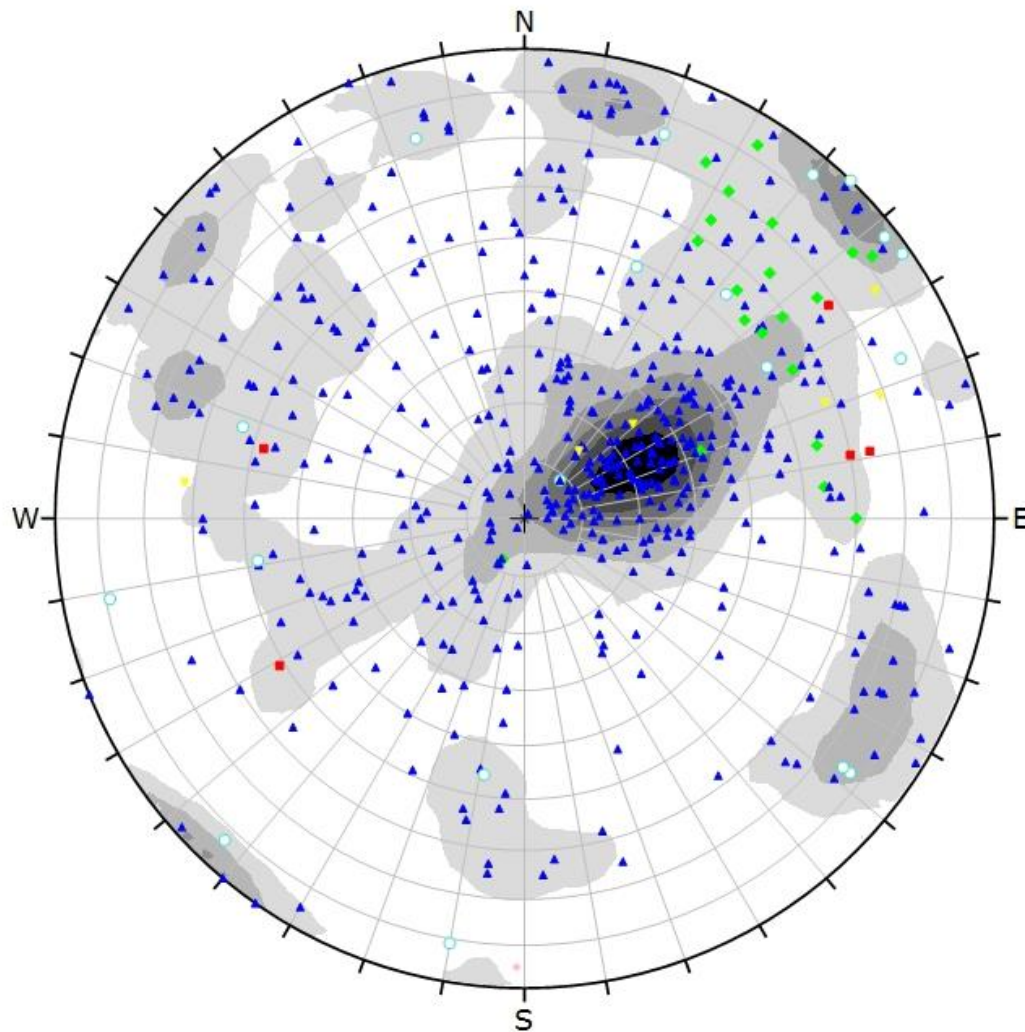


YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	SD
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
ALL STRUCTURAL ORIENTATION DATA
JGT-02

PROJECT No.	Phase.	Rev.	Fig.
13-1328-0041	2010	0	D - 3



Symbol	FEATURE TYPE	Quantity
	CLF	19
	CONO	1
	FLT	5
	FOL	20
	JN	468
	VNO	6

Color	Density Concentrations
	0.00 - 0.90
	0.90 - 1.80
	1.80 - 2.70
	2.70 - 3.60
	3.60 - 4.50
	4.50 - 5.40
	5.40 - 6.30

Maximum Density	6.19%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Plot Mode	Pole Vectors
Vector Count	519 (519 Entries)
Terzaghi Weighting	Minimum Bias Angle 15°
Hemisphere	Lower
Projection	Equal Area

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
 DOMINION DIAMOND

CONSULTANT

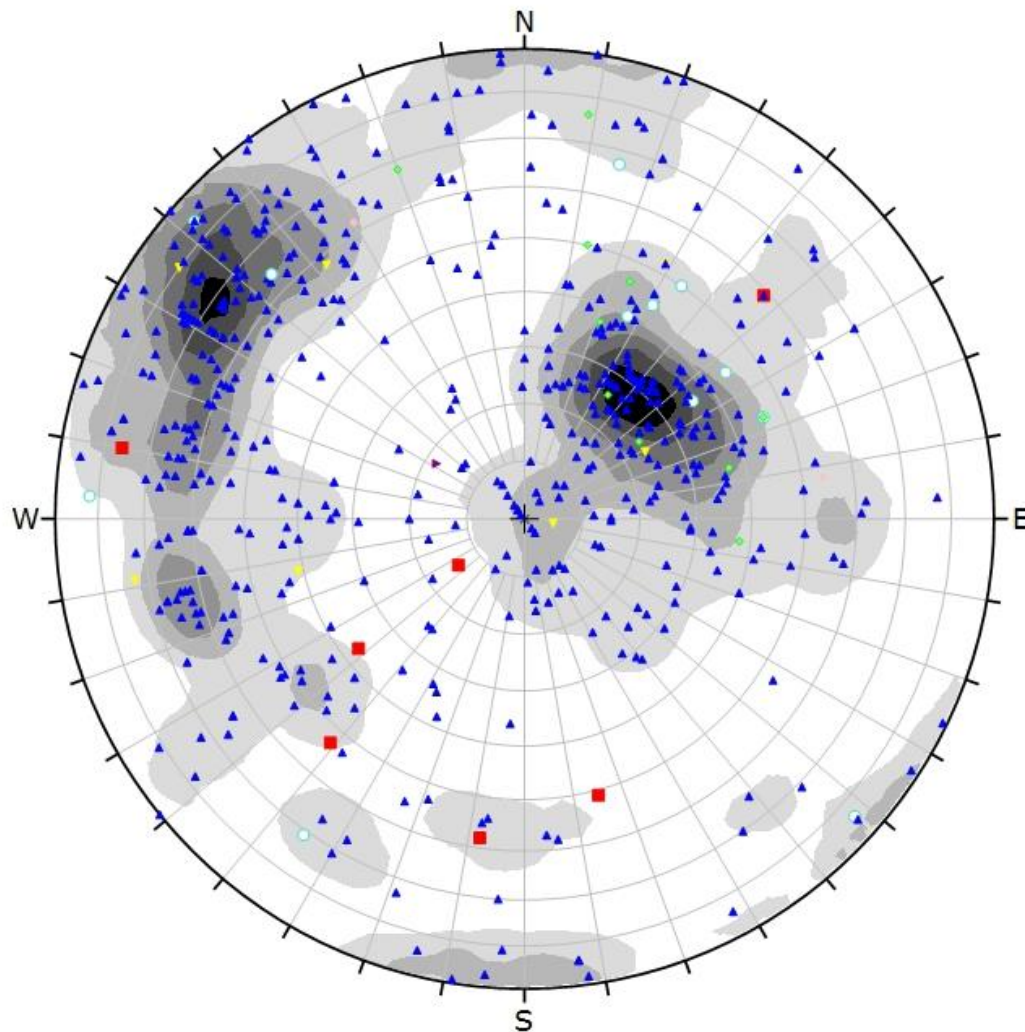


YYYY-MM-DD 2014-05-30
PREPARED MV
DESIGN MV
REVIEW SD
APPROVED JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
HIGH RELIABILITY STRUCTURAL ORIENTATION DATA
JGT-02

PROJECT No.	Phase.	Rev.	Fig.
13-1328-0041	2010	0	D - 4



Symbol	FEATURE TYPE	Quantity
○	CLF	12
◀	CON	1
◊	CONO	2
■	FLT	7
●	FOL	10
▲	JN	484
◆	VNO	7

Color	Density Concentrations
	0.00 - 0.80
	0.80 - 1.60
	1.60 - 2.40
	2.40 - 3.20
	3.20 - 4.00
	4.00 - 4.80
	4.80 - 5.60
Maximum Density 5.54%	
Contour Data Pole Vectors	
Contour Distribution Fisher	
Counting Circle Size 1.0%	
Plot Mode Pole Vectors	
Vector Count 523 (523 Entries)	
Terzaghi Weighting Minimum Bias Angle 15°	
Hemisphere Lower	
Projection Equal Area	

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
DOMINION DIAMOND

CONSULTANT

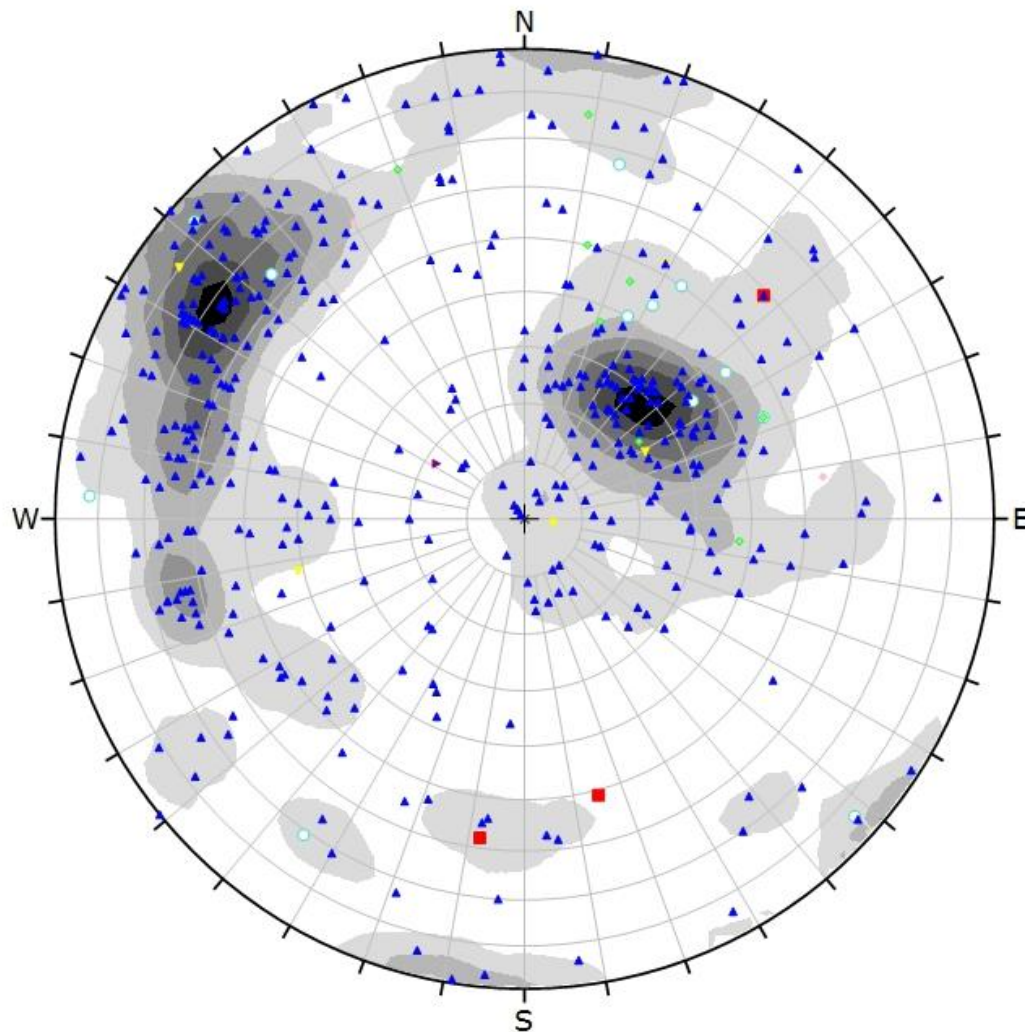


YYYY-MM-DD 2014-05-30
PREPARED MV
DESIGN MV
REVIEW SD
APPROVED JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
ALL STRUCTURAL ORIENTATION DATA
JGT-03

PROJECT No. 13-1328-0041	Phase. 2010	Rev. 0	Fig. D - 5
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Symbol	FEATURE TYPE	Quantity
○	CLF	12
◀	CON	1
◊	CONO	2
■	FLT	3
●	FOL	8
▲	JN	408
●	VNO	5

Color	Density Concentrations
	0.00 - 0.90
	0.90 - 1.80
	1.80 - 2.70
	2.70 - 3.60
	3.60 - 4.50
	4.50 - 5.40
	5.40 - 6.30
Maximum Density 5.90%	
Contour Data Pole Vectors	
Contour Distribution Fisher	
Counting Circle Size 1.0%	
Plot Mode Pole Vectors	
Vector Count 439 (439 Entries)	
Terzaghi Weighting Minimum Bias Angle 15°	
Hemisphere Lower	
Projection Equal Area	

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
DOMINION DIAMOND

CONSULTANT

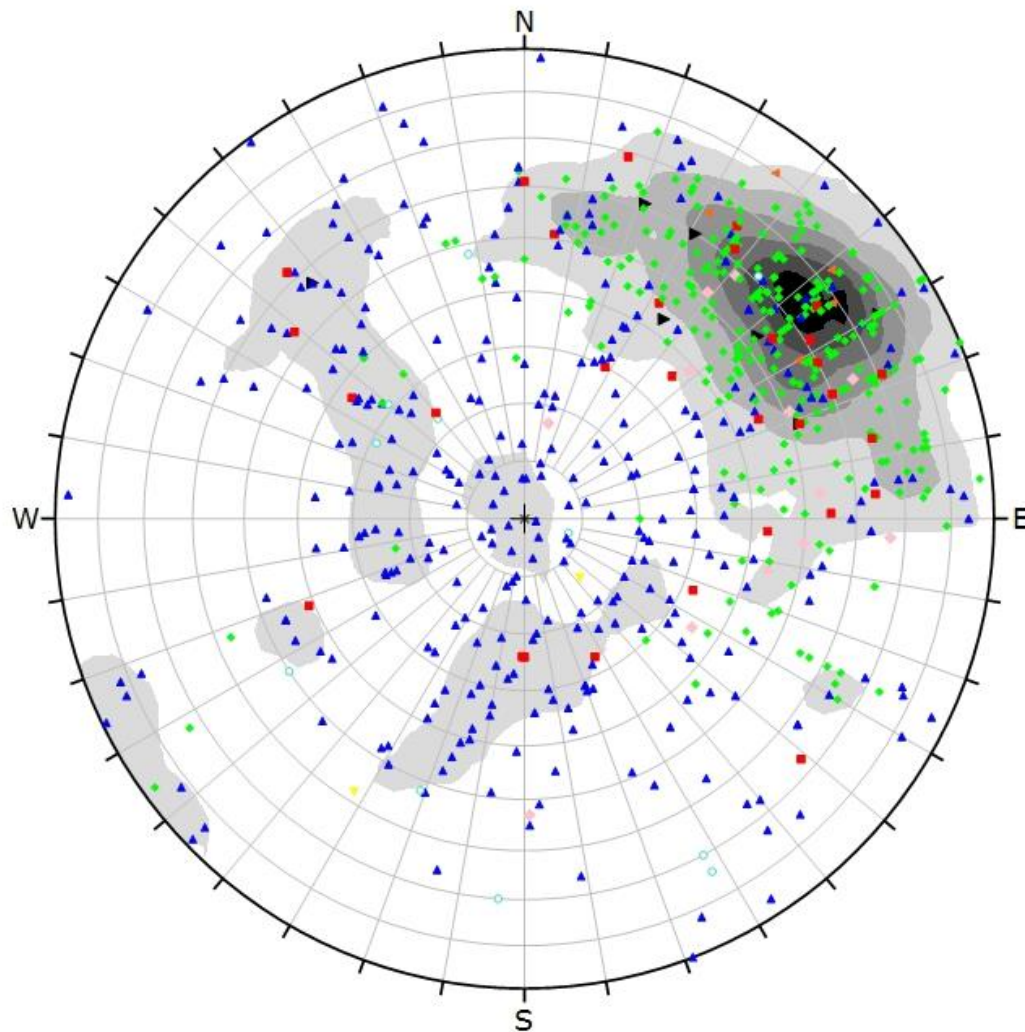


YYYY-MM-DD 2014-05-30
PREPARED MV
DESIGN MV
REVIEW SD
APPROVED JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
**HIGH RELIABILITY STRUCTURAL ORIENTATION DATA
JGT-03**

PROJECT No. 13-1328-0041	Phase. 2010	Rev. 0	Fig. D - 6
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Symbol	FEATURE TYPE	Quantity
▶	BC	7
◀	BD	6
○	CLF	11
●	CONO	12
■	FLT	30
●	FOL	279
▲	JN	322
●	VNO	2

Color	Density Concentrations
	0.00 - 1.10
	1.10 - 2.20
	2.20 - 3.30
	3.30 - 4.40
	4.40 - 5.50
	5.50 - 6.60
	6.60 - 7.70
Maximum Density	7.24%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Plot Mode	Pole Vectors
Vector Count	669 (669 Entries)
Terzaghi Weighting	Minimum Bias Angle 15°
Hemisphere	Lower
Projection	Equal Area

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
DOMINION DIAMOND

CONSULTANT

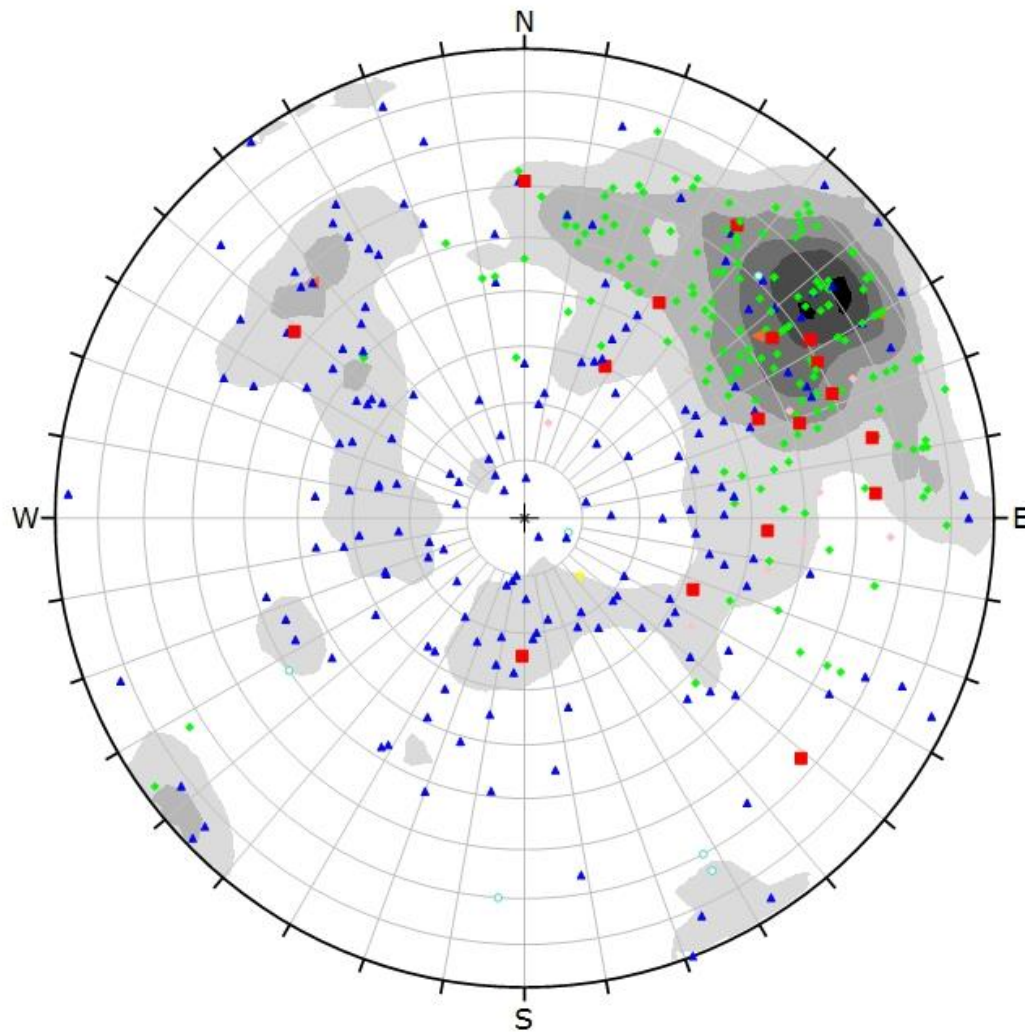


YYYY-MM-DD 2014-05-30
PREPARED MV
DESIGN MV
REVIEW SD
APPROVED JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
ALL STRUCTURAL ORIENTATION DATA
JGT-04

PROJECT No. 13-1328-0041	Phase. 2010	Rev. 0	Fig. D - 7
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Symbol	FEATURE TYPE	Quantity
BC	BROKEN CORE	3
CLF	CLOSED FEATURE	6
CONO	OPEN CONTACT	9
FLT	FAULT	17
FOL	FOLIATION	166
JN	JOINT	177
VNO	OPEN VEIN	1

Color	Density Concentrations
	0.00 - 1.10
	1.10 - 2.20
	2.20 - 3.30
	3.30 - 4.40
	4.40 - 5.50
	5.50 - 6.60
	6.60 - 7.70

Maximum Density	7.06%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Plot Mode	Pole Vectors
Vector Count	379 (379 Entries)
Terzaghi Weighting	Minimum Bias Angle 15°
Hemisphere	Lower
Projection	Equal Area

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
DOMINION DIAMOND

CONSULTANT

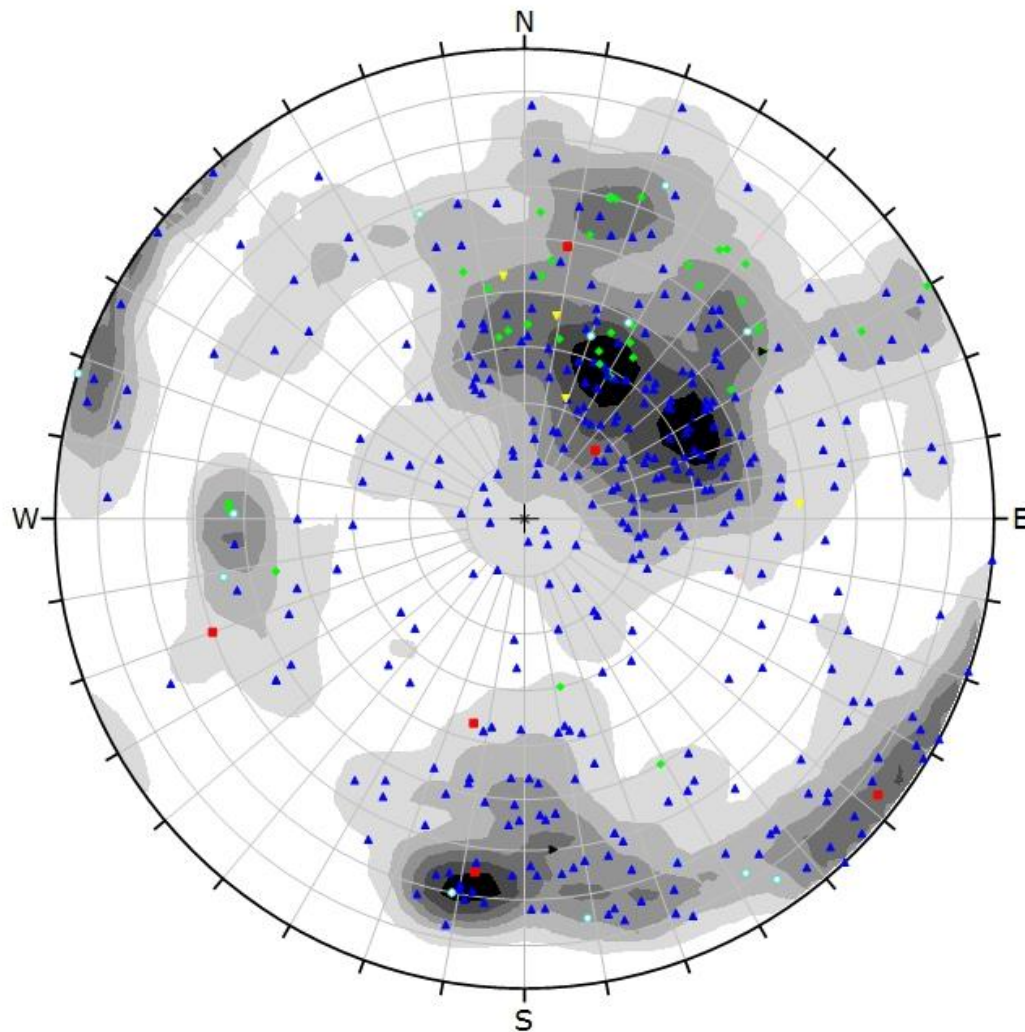


YYYY-MM-DD 2014-05-30
PREPARED MV
DESIGN MV
REVIEW SD
APPROVED JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
**HIGH RELIABILITY STRUCTURAL ORIENTATION DATA
JGT-04**

PROJECT No. 13-1328-0041	Phase. 2010	Rev. 0	Fig. D - 8
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Symbol	FEATURE TYPE	Quantity
▶	BC	3
◊	CLF	15
◊	CONO	2
■	FLT	6
●	FOL	37
▲	JN	340
●	VNO	4

Color	Density Concentrations
	0.00 - 0.60
	0.60 - 1.20
	1.20 - 1.80
	1.80 - 2.40
	2.40 - 3.00
	3.00 - 3.60
	3.60 - 4.20

Maximum Density	4.06%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Plot Mode	Pole Vectors
Vector Count	407 (407 Entries)
Terzaghi Weighting	Minimum Bias Angle 15°
Hemisphere	Lower
Projection	Equal Area

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
DOMINION DIAMOND

CONSULTANT

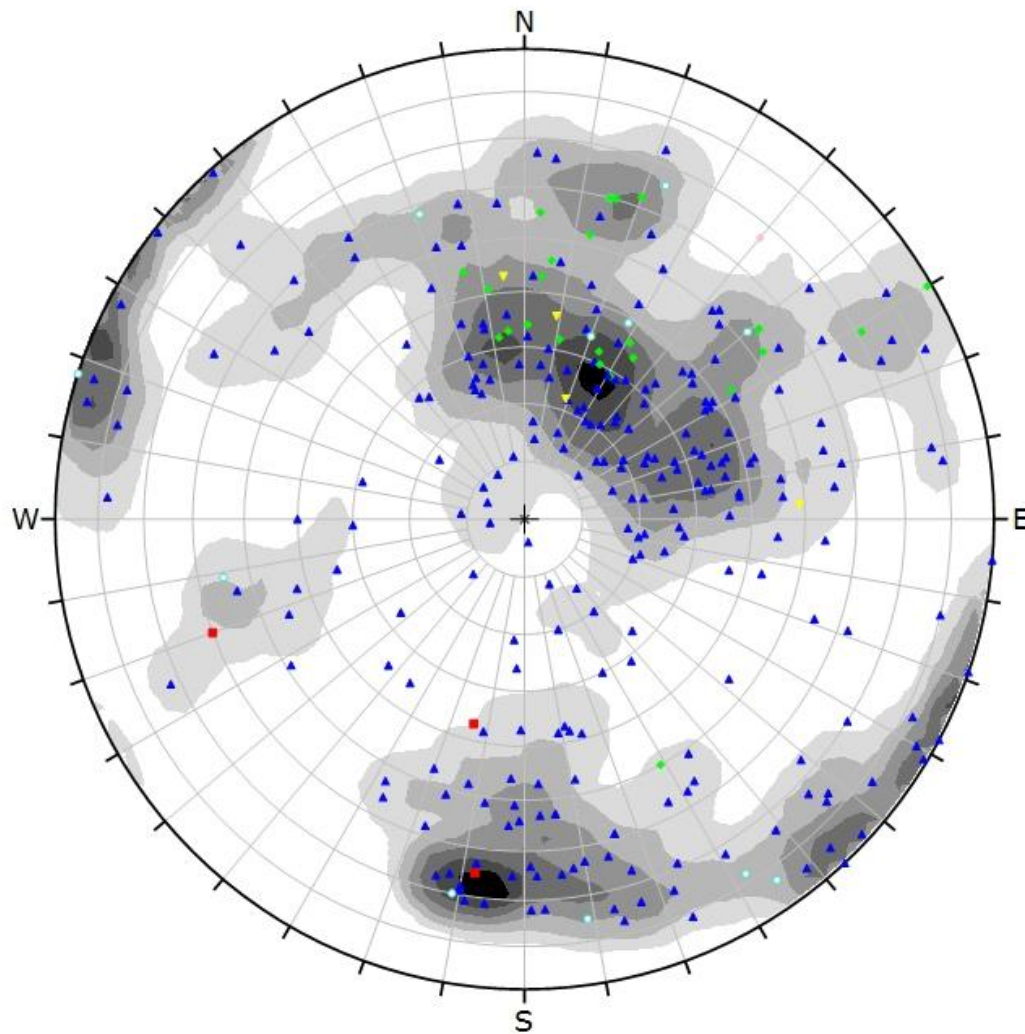


YYYY-MM-DD 2014-05-30
PREPARED MV
DESIGN MV
REVIEW SD
APPROVED JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
ALL STRUCTURAL ORIENTATION DATA
JGT-05

PROJECT No.	Phase.	Rev.	Fig.
13-1328-0041	2010	0	D - 9



Symbol	FEATURE TYPE	Quantity
○	CLF	12
○	CONO	1
■	FLT	3
●	FOL	25
▲	JN	249
●	VNO	4

Color	Density Concentrations
	0.00 - 0.70
	0.70 - 1.40
	1.40 - 2.10
	2.10 - 2.80
	2.80 - 3.50
	3.50 - 4.20
	4.20 - 4.90

Maximum Density	4.57%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Plot Mode	Pole Vectors
Vector Count	294 (294 Entries)
Terzaghi Weighting	Minimum Bias Angle 15°
Hemisphere	Lower
Projection	Equal Area

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
DOMINION DIAMOND

CONSULTANT

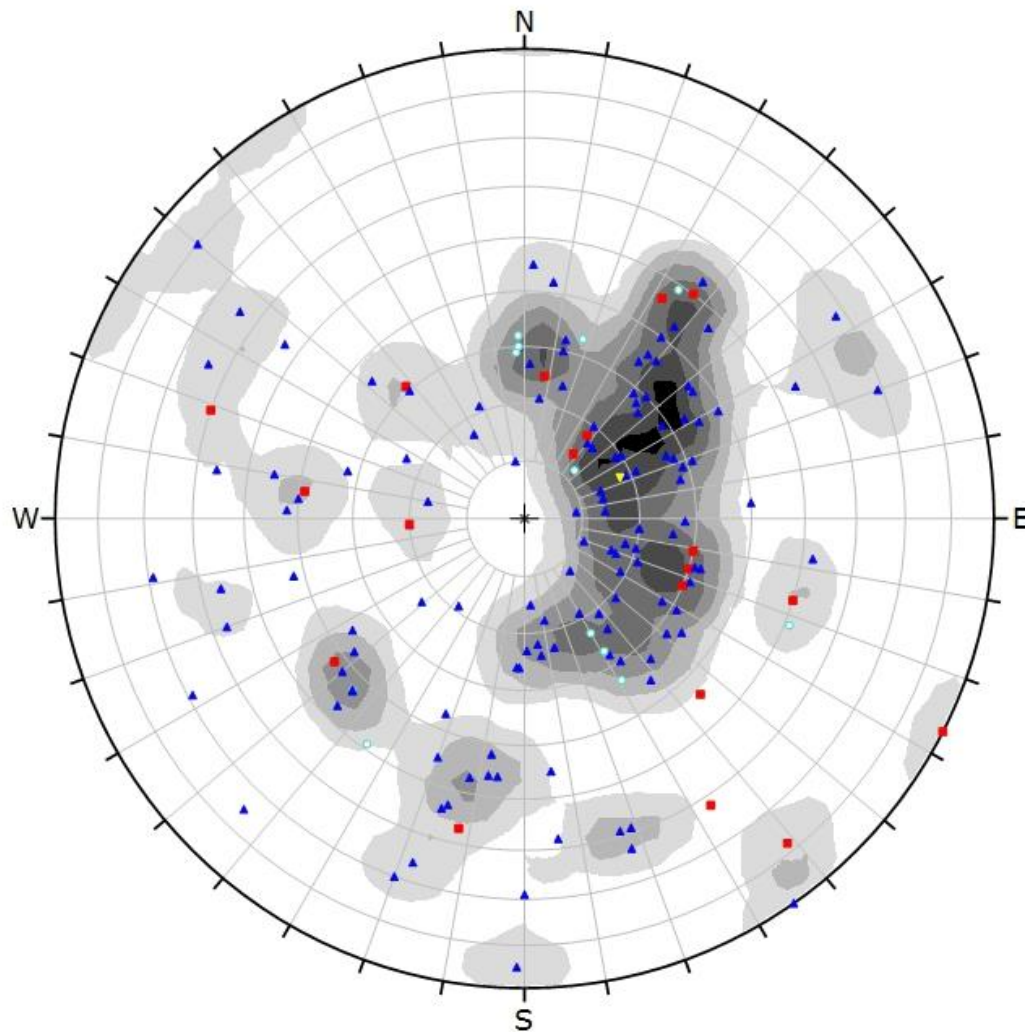


YYYY-MM-DD 2014-05-30
PREPARED MV
DESIGN MV
REVIEW SD
APPROVED JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
**HIGH RELIABILITY STRUCTURAL ORIENTATION DATA
JGT-05**

PROJECT No. 13-1328-0041	Phase. 2010	Rev. 0	Fig. D - 10
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Symbol	FEATURE TYPE	Quantity
○	CLF	12
■	FLT	19
▲	JN	130
◆	VNO	1

Color	Density Concentrations
	0.00 - 1.00
	1.00 - 2.00
	2.00 - 3.00
	3.00 - 4.00
	4.00 - 5.00
	5.00 - 6.00
	6.00 - 7.00

Maximum Density	6.37%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Plot Mode	Pole Vectors
Vector Count	162 (162 Entries)
Terzaghi Weighting	Minimum Bias Angle 15°
Hemisphere	Lower
Projection	Equal Area

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
DOMINION DIAMOND

CONSULTANT

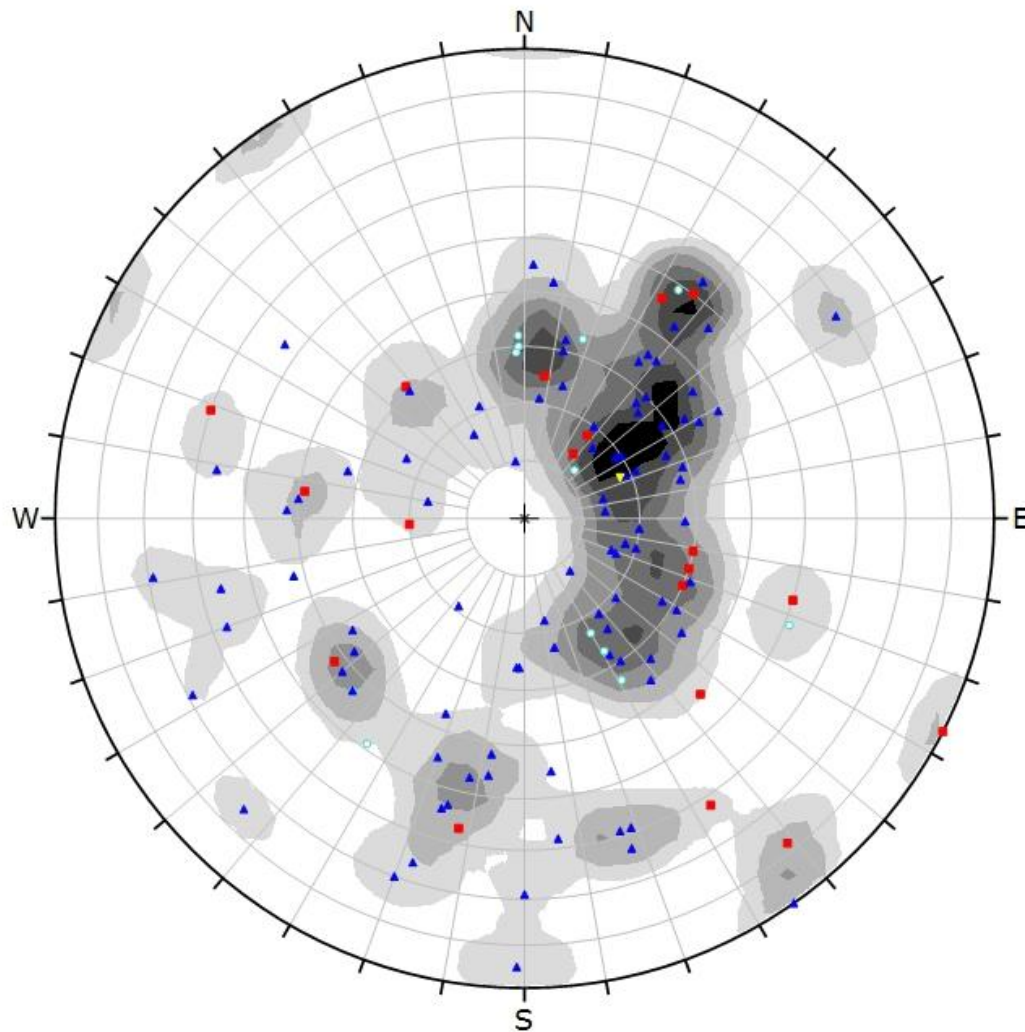


YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	SD
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
ALL STRUCTURAL ORIENTATION DATA
JGT-06

PROJECT No.	Phase.	Rev.	Fig.
13-1328-0041	2010	0	D - 11



Symbol	FEATURE TYPE	Quantity
○	CLF	12
■	FLT	19
▲	JN	95
◆	VNO	1

Color	Density Concentrations
	0.00 - 1.00
	1.00 - 2.00
	2.00 - 3.00
	3.00 - 4.00
	4.00 - 5.00
	5.00 - 6.00
	6.00 - 7.00

Maximum Density	6.93%
Contour Data	Pole Vectors
Contour Distribution	Fisher
Counting Circle Size	1.0%

Plot Mode	Pole Vectors
Vector Count	127 (127 Entries)
Terzaghi Weighting	Minimum Bias Angle 15°
Hemisphere	Lower
Projection	Equal Area

LEGEND

BC	BROKEN CORE
BD	BEDDING
CLF	CLOSED FEATURE
CON	CLOSED CONTACT
CONO	OPEN CONTACT
FLT	FAULT
FOL	FOLIATION
JN	JOINT
VNO	OPEN VEIN

NOTE: DATA ARE WITH RESPECT TO TRUE NORTH.

CLIENT
DOMINION DIAMOND

CONSULTANT



YYYY-MM-DD 2014-05-30
PREPARED MV
DESIGN MV
REVIEW SD
APPROVED JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
HIGH RELIABILITY STRUCTURAL ORIENTATION DATA
JGT-06

PROJECT No.	Phase.	Rev.	Fig.
13-1328-0041	2010	0	D - 12



APPENDIX E

Point Load Testing Data

Table E-1: Diametral Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08				
Company		Dominion Diamond Corporation								Date tested			01 March - 23 April 2014	
Project		Jay Project								Project #			13-1328-0041	
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID			BUR023942, BUR142647	
Location		Ekati, Northwest Territories												
Diametral Test														
Test #	Borehole	Depth	D	L	Gauge Reading	Load P	$D_p^2 = D^2$	$I_s = P/D_p^2$	$F = (D_p/50)^{0.45}$	$I_{s(50)}$	Rock Type	Structure	Valid/Invalid Test	
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa				
1	JGT-01	65.25	61.1	125.0	32.26	0.03226	3733	8.64	1.09	9.46	Granitoid	Massive	Valid - Intact Rock	
2	JGT-01	241.48	61.1	118.0	24.82	0.02482	3733	6.65	1.09	7.28	Granitoid	Massive	Valid - Intact Rock	
3	JGT-01	65.38	61.1	90.0	22.56	0.02256	3733	6.04	1.09	6.61	Granitoid	Massive	Invalid - chipping	
4	JGT-01	68.65	61.1	100.0	34.54	0.03454	3733	9.25	1.09	10.13	Granitoid	Massive	Valid - Intact Rock	
5	JGT-01	68.74	61.1	80.0	28.02	0.02802	3733	7.51	1.09	8.21	Granitoid	Massive	Valid - Intact Rock	
6	JGT-01	74.06	61.1	110.0	28.64	0.02864	3733	7.67	1.09	8.40	Granitoid	Massive	Invalid - chipping	
7	JGT-01	77.00	61.1	80.0	15.00	0.01500	3733	4.02	1.09	4.40	Granitoid	Massive	Valid - Intact Rock	
8	JGT-01	78.78	61.1	62.0	23.94	0.02394	3733	6.41	1.09	7.02	Granitoid	Massive	Invalid - chipping	
9	JGT-01	78.50	61.1	62.0	14.64	0.01464	3733	3.92	1.09	4.29	Granitoid	Massive	Valid - Foliation	
10	JGT-01	82.89	61.1	70.0	29.12	0.02912	3733	7.80	1.09	8.54	Granitoid	Massive	Invalid - chipping	
11	JGT-01	82.93	61.1	100.0	30.14	0.03014	3733	8.07	1.09	8.84	Granitoid	Massive	Valid - Intact Rock	
12	JGT-01	116.89	61.1	100.0	22.00	0.02200	3733	5.89	1.09	6.45	Granitoid	Massive	Valid - Microdefect	
13	JGT-01	122.00	61.1	110.0	30.68	0.03068	3733	8.22	1.09	8.99	Granitoid	Massive	Valid - Intact Rock	
14	JGT-01	126.20	61.1	220.0	31.98	0.03198	3733	8.57	1.09	9.38	Granitoid	Massive	Invalid	
15	JGT-01	134.25	61.1	115.0	17.58	0.01758	3733	4.71	1.09	5.15	Granitoid	Massive	Valid - Intact Rock	
16	JGT-01	137.13	61.1	85.0	35.84	0.03584	3733	9.60	1.09	10.51	Granitoid	Massive	Valid - Intact Rock	
17	JGT-01	137.04	61.1	80.0	22.34	0.02234	3733	5.98	1.09	6.55	Granitoid	Massive	Valid - Intact Rock	
18	JGT-01	142.68	61.1	80.0	24.88	0.02488	3733	6.66	1.09	7.29	Granitoid	Massive	Invalid - chipping	
19	JGT-01	148.50	61.1	75.0	19.62	0.01962	3733	5.26	1.09	5.75	Granitoid	Massive	Invalid - chipping	
20	JGT-01	151.95	61.1	76.0	15.18	0.01518	3733	4.07	1.09	4.45	Granitoid	Massive	Invalid - chipping	
21	JGT-01	152.09	61.1	167.0	33.20	0.03320	3733	8.89	1.09	9.73	Granitoid	Massive	Valid - Intact Rock	
22	JGT-01	160.85	61.1	85.0	23.36	0.02336	3733	6.26	1.09	6.85	Granitoid	Massive	Valid - Intact Rock	
23	JGT-01	168.09	61.1	105.0	33.82	0.03382	3733	9.06	1.09	9.91	Granitoid	Massive	Valid - Intact Rock	
24	JGT-01	168.20	61.1	105.0	31.00	0.03100	3733	8.30	1.09	9.09	Granitoid	Massive	Valid - Intact Rock	
25	JGT-01	178.25	61.1	100.0	33.98	0.03398	3733	9.10	1.09	9.96	Granitoid	Massive	Valid - Intact Rock	
26	JGT-01	178.35	61.1	96.0	24.58	0.02458	3733	6.58	1.09	7.21	Granitoid	Massive	Valid - Intact Rock	
27	JGT-01	187.94	61.1	74.0	34.28	0.03428	3733	9.18	1.09	10.05	Granitoid	Massive	Valid - Intact Rock	
28	JGT-01	188.00	61.1	80.0	35.00	0.03500	3733	9.38	1.09	10.26	Granitoid	Massive	Valid - Intact Rock	
29	JGT-01	198.25	61.1	112.0	31.18	0.03118	3733	8.35	1.09	9.14	Granitoid	Massive	Valid - Intact Rock	

 $I_{s(50)}$ = Size Corrected Point Load Strength

$$I_{s(50)} = F I_s$$

 I_s = Uncorrected Point Load Strength

$$I_s = P/D_e^2$$

F = Size Correction Factor

$$F = (D_e/50)^{0.45}$$

 D_e = equivalent core diameter (mm)

$$D_e^2 = D^2 = (\text{mm}^2)$$

Diametral Test

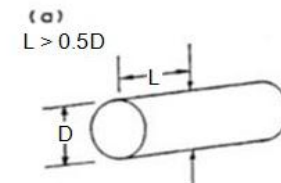


Table E-1: Diametral Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08				
Company		Dominion Diamond Corporation								Date tested			01 March - 23 April 2014	
Project		Jay Project								Project #			13-1328-0041	
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID			BUR023942, BUR142647	
Location		Ekati, Northwest Territories												
Diametral Test														
Test #	Borehole	Depth	D	L	Gauge Reading	Load P	D _e ² = D ²	I _s = P/D _e ²	F = (D _e /50) ^{0.45}	I _{s(50)}	Rock Type	Structure	Valid/Invalid Test	
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa				
30	JGT-01	198.37	61.1	101.0	34.88	0.03488	3733	9.34	1.09	10.23	Granitoid	Massive	Valid - Intact Rock	
31	JGT-01	208.11	61.1	131.0	25.68	0.02568	3733	6.88	1.09	7.53	Granitoid	Massive	Valid - Intact Rock	
32	JGT-01	208.24	61.1	101.0	30.40	0.03040	3733	8.14	1.09	8.91	Granitoid	Massive	Valid - Intact Rock	
33	JGT-01	217.65	61.1	130.0	27.26	0.02726	3733	7.30	1.09	7.99	Granitoid	Massive	Valid - Intact Rock	
34	JGT-01	217.94	61.1	139.0	37.78	0.03778	3733	10.12	1.09	11.08	Granitoid	Massive	Valid - Intact Rock	
35	JGT-01	226.68	61.1	150.0	29.08	0.02908	3733	7.79	1.09	8.52	Granitoid	Massive	Valid - Intact Rock	
36	JGT-01	236.10	61.1	119.0	33.20	0.03320	3733	8.89	1.09	9.73	Granitoid	Massive	Valid - Intact Rock	
37	JGT-02	27.76	61.1	105.0	25.30	0.02530	3733	6.78	1.09	7.42	Granitoid	Massive	Valid - Intact Rock	
38	JGT-02	107.59	61.1	84.0	18.34	0.01834	3733	4.91	1.09	5.38	Granitoid	Massive	Valid - Intact Rock	
39	JGT-02	37.78	61.1	140.0	18.90	0.01890	3733	5.06	1.09	5.54	Granitoid	Foliated	Valid - Intact Rock	
40	JGT-02	48.28	61.1	135.0	17.14	0.01714	3733	4.59	1.09	5.02	Granitoid	Foliated	Valid - Intact Rock	
41	JGT-02	60.45	61.1	144.0	9.34	0.00934	3733	2.50	1.09	2.74	Granitoid	Foliated	Valid - Intact Rock	
42	JGT-02	70.74	61.1	125.0	12.82	0.01282	3733	3.43	1.09	3.76	Granitoid	Massive	Valid - Intact Rock	
43	JGT-02	75.34	61.1	118.0	19.90	0.01990	3733	5.33	1.09	5.83	Granitoid	Foliated	Valid - Intact Rock	
44	JGT-02	80.21	61.1	75.0	17.52	0.01752	3733	4.69	1.09	5.14	Granitoid	Massive	Valid - Intact Rock	
45	JGT-02	91.04	61.1	96.0	16.30	0.01630	3733	4.37	1.09	4.78	Granitoid	Massive	Valid - Intact Rock	
46	JGT-02	155.48	61.1	90.0	12.26	0.01226	3733	3.28	1.09	3.59	Granitoid	Foliated	Valid - Intact Rock	
47	JGT-02	148.09	61.1	123.0	30.34	0.03034	3733	8.13	1.09	8.89	Granitoid	Foliated	Valid - Foliation	
48	JGT-02	127.98	61.1	132.0	26.08	0.02608	3733	6.99	1.09	7.65	Granitoid	Foliated	Invalid - chipping	
49	JGT-02	139.62	61.1	110.0	8.54	0.00854	3733	2.29	1.09	2.50	Granitoid	Foliated	Valid - Microdefect	
50	JGT-02	119.63	61.1	134.0	9.50	0.00950	3733	2.54	1.09	2.78	Granitoid	Foliated	Valid - Microdefect	
51	JGT-02	161.52	61.1	74.0	25.08	0.02508	3733	6.72	1.09	7.35	Granitoid	Massive	Invalid - chipping	
52	JGT-02	157.92	61.1	89.0	21.46	0.02146	3733	5.75	1.09	6.29	Granitoid	Foliated	Invalid - chipping	
53	JGT-02	169.62	61.1	66.0	27.16	0.02716	3733	7.28	1.09	7.96	Granitoid	Massive	Valid - Intact Rock	
54	JGT-02	175.62	61.1	135.0	36.70	0.03670	3733	9.83	1.09	10.76	Granitoid	Massive	Valid - Intact Rock	
55	JGT-02	182.60	61.1	136.0	33.68	0.03368	3733	9.02	1.09	9.87	Granitoid	Foliated	Rock strength exceeds PLT gauge range	
56	JGT-02	200.55	61.1	102.0	35.32	0.03532	3733	9.46	1.09	10.35	Granitoid	Foliated	Rock strength exceeds PLT gauge range	
57	JGT-02	211.59	61.1	75.0	35.90	0.03590	3733	9.62	1.09	10.52	Granitoid	Massive	Valid - Intact Rock	
58	JGT-02	218.59	61.1	78.0	24.74	0.02474	3733	6.63	1.09	7.25	Granitoid	Foliated	Valid - Intact Rock	
59	JGT-02	228.13	61.1	130.0	34.28	0.03428	3733	9.18	1.09	10.05	Granitoid	Massive	Valid - Intact Rock	
60	JGT-02	234.07	61.1	140.0	28.94	0.02894	3733	7.75	1.09	8.48	Granitoid	Foliated	Valid - Intact Rock	
61	JGT-02	244.76	61.1	92.0	40.76	0.04076	3733	10.92	1.09	11.95	Granitoid	Foliated	Valid - Intact Rock	

 $I_{s(50)}$ = Size Corrected Point Load Strength

$$I_{s(50)} = F I_s$$

 I_s = Uncorrected Point Load Strength

$$I_s = P/D_e^2$$

F = Size Correction Factor

$$F = (D_e/50)^{0.45}$$

 D_e = equivalent core diameter (mm)

$$D_e^2 = D^2 = (\text{mm}^2)$$

Diametral Test

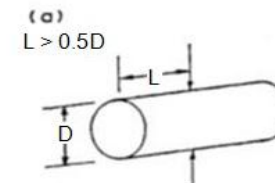


Table E-1: Diametral Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08			
Company		Dominion Diamond Corporation								Date tested		01 March - 23 April 2014	
Project		Jay Project								Project #		13-1328-0041	
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID		BUR023942, BUR142647	
Location		Ekati, Northwest Territories											
Diametral Test													
Test #	Borehole	Depth	D	L	Gauge Reading	Load P	$D_p^2 = D^2$	$I_s = P/D_p^2$	$F = (D_p/50)^{0.45}$	$I_{s(50)}$	Rock Type	Structure	Valid/Invalid Test
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa			
62	JGT-02	255.96	61.1	105.0	41.14	0.04114	3733	11.02	1.09	12.06	Granitoid	Foliated	Valid - Intact Rock
63	JGT-02	264.49	61.1	101.0	35.24	0.03524	3733	9.44	1.09	10.33	Granitoid	Foliated	Valid - Intact Rock
64	JGT-02	275.44	61.1	98.0	35.54	0.03554	3733	9.52	1.09	10.42	Granitoid	Massive	Rock strength exceeds PLT gauge range
65	JGT-02	286.02	61.1	90.0	35.66	0.03566	3733	9.55	1.09	10.45	Granitoid	Foliated	Valid - Intact Rock
66	JGT-02	296.75	61.1	80.0	37.54	0.03754	3733	10.06	1.09	11.01	Granitoid	Massive	Valid - Intact Rock
67	JGT-02	311.69	61.1	96.0	31.88	0.03188	3733	8.54	1.09	9.35	Granitoid	Foliated	Valid - Intact Rock
68	JGT-02	335.18	61.1	92.0	37.90	0.03790	3733	10.15	1.09	11.11	Granitoid	Foliated	Valid - Intact Rock
69	JGT-02	336.75	61.1	92.0	36.18	0.03618	3733	9.69	1.09	10.61	Granitoid	Foliated	Rock strength exceeds PLT gauge range
70	JGT-02	345.25	61.1	123.0	37.08	0.03708	3733	9.93	1.09	10.87	Granitoid	Foliated	Valid - Intact Rock
71	JGT-02	354.04	61.1	106.0	40.62	0.04062	3733	10.88	1.09	11.91	Granitoid	Massive	Valid - Intact Rock
72	JGT-02	366.80	61.1	72.0	34.66	0.03466	3733	9.28	1.09	10.16	Granitoid	Massive	Valid - Intact Rock
73	JGT-02	376.46	61.1	82.0	32.14	0.03214	3733	8.61	1.09	9.42	Granitoid	Massive	Valid - Intact Rock
74	JGT-02	392.60	61.1	94.0	41.80	0.04180	3733	11.20	1.09	12.25	Granitoid	Massive	Valid - Intact Rock
75	JGT-02	401.64	61.1	169.0	25.22	0.02522	3733	6.76	1.09	7.39	Diabase	Massive	Invalid - chipping
76	JGT-02	401.48	61.1	140.0	49.61	0.04961	3733	13.29	1.09	14.54	Diabase	Massive	Valid - Intact Rock
77	JGT-02	410.24	61.1	75.0	49.93	0.04993	3733	13.37	1.09	14.64	Diabase	Massive	Rock strength exceeds PLT gauge range
78	JGT-02	421.86	61.1	80.0	52.26	0.05226	3733	14.00	1.09	15.32	Diabase	Massive	Rock strength exceeds PLT gauge range
79	JGT-02	428.61	61.1	82.0	37.31	0.03731	3733	9.99	1.09	10.94	Diabase	Massive	Invalid - chipping
80	JGT-03	49.74	61.1	220.0	38.80	0.03880	3733	10.39	1.09	11.37	Diabase	Massive	Rock strength exceeds PLT gauge range
81	JGT-03	57.94	61.1	170.0	34.14	0.03414	3733	9.14	1.09	10.01	Diabase	Massive	Invalid - chipping
82	JGT-03	55.44	61.1	110.0	31.60	0.03160	3733	8.46	1.09	9.26	Diabase	Massive	Rock strength exceeds PLT gauge range
83	JGT-03	84.80	61.1	140.0	12.16	0.01216	3733	3.26	1.09	3.56	Granitoid	Foliated	Valid - Intact Rock
84	JGT-03	86.01	61.1	110.0	25.76	0.02576	3733	6.90	1.09	7.55	Granitoid	Foliated	Valid - Intact Rock
85	JGT-03	96.85	61.1	89.0	10.96	0.01096	3733	2.94	1.09	3.21	Granitoid	Foliated	Valid - Foliation
86	JGT-03	97.39	61.1	102.0	33.00	0.03300	3733	8.84	1.09	9.67	Granitoid	Foliated	Valid - Foliation
87	JGT-03	104.98	61.1	105.0	35.30	0.03530	3733	9.46	1.09	10.35	Granitoid	Foliated	Valid - Intact Rock
88	JGT-03	114.55	61.1	95.0	26.36	0.02636	3733	7.06	1.09	7.73	Granitoid	Foliated	Valid - Intact Rock
89	JGT-03	127.82	61.1	75.0	37.72	0.03772	3733	10.10	1.09	11.06	Granitoid	Massive	Valid - Intact Rock
90	JGT-03	117.87	61.1	85.0	21.36	0.02136	3733	5.72	1.09	6.26	Granitoid	Foliated	Invalid - slipping
91	JGT-03	122.72	61.1	80.0	28.08	0.02808	3733	7.52	1.09	8.23	Granitoid	Massive	Invalid - slipping
92	JGT-03	129.02	61.1	75.0	30.76	0.03076	3733	8.24	1.09	9.02	Granitoid	Massive	Valid - Intact Rock
93	JGT-03	129.50	61.1	80.0	18.68	0.01868	3733	5.00	1.09	5.48	Granitoid	Massive	Valid - Intact Rock

 $I_{s(50)}$ = Size Corrected Point Load Strength

$$I_{s(50)} = F I_s$$

 I_s = Uncorrected Point Load Strength

$$I_s = P/D_e^2$$

F = Size Correction Factor

$$F = (D_e/50)^{0.45}$$

 D_e = equivalent core diameter (mm)

$$D_e^2 = D^2 = (\text{mm}^2)$$

Diametral Test

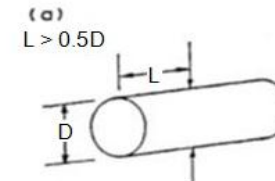


Table E-1: Diametral Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08			
Company		Dominion Diamond Corporation								Date tested		01 March - 23 April 2014	
Project		Jay Project								Project #		13-1328-0041	
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID		BUR023942, BUR142647	
Location		Ekati, Northwest Territories											
Diametral Test													
Test #	Borehole	Depth	D	L	Gauge Reading	Load P	$D_e^2 = D^2$	$I_s = P/D_e^2$	$F = (D_e/50)^{0.45}$	$I_{s(50)}$	Rock Type	Structure	Valid/Invalid Test
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa			
94	JGT-03	132.12	61.1	80.0	35.50	0.03550	3733	9.51	1.09	10.41	Granitoid	Massive	Rock strength exceeds PLT gauge range
95	JGT-03	138.62	61.1	140.0	25.24	0.02524	3733	6.76	1.09	7.40	Granitoid	Massive	Valid - Intact Rock
96	JGT-03	148.00	61.1	85.0	30.58	0.03058	3733	8.19	1.09	8.96	Granitoid	Massive	Valid - Intact Rock
97	JGT-03	153.13	61.1	90.0	31.00	0.03100	3733	8.30	1.09	9.09	Granitoid	Massive	Invalid - chipping
98	JGT-03	155.67	61.1	70.0	34.80	0.03480	3733	9.32	1.09	10.20	Granitoid	Massive	Valid - Intact Rock
99	JGT-03	161.60	61.1	100.0	25.92	0.02592	3733	6.94	1.09	7.60	Granitoid	Massive	Valid - Intact Rock
100	JGT-03	163.09	61.1	90.0	28.50	0.02850	3733	7.63	1.09	8.35	Granitoid	Massive	Invalid - chipping
101	JGT-03	167.35	61.1	100.0	35.14	0.03514	3733	9.41	1.09	10.30	Granitoid	Massive	Valid - Intact Rock
102	JGT-03	170.15	61.1	115.0	28.32	0.02832	3733	7.59	1.09	8.30	Granitoid	Massive	Valid - Intact Rock
103	JGT-03	176.14	61.1	80.0	29.04	0.02904	3733	7.78	1.09	8.51	Granitoid	Massive	Valid - Intact Rock
104	JGT-03	180.78	61.1	85.0	25.20	0.02520	3733	6.75	1.09	7.39	Granitoid	Massive	Valid - Intact Rock
105	JGT-03	191.15	61.1	166.0	22.52	0.02252	3733	6.03	1.09	6.60	Granitoid	Foliated	Valid - Intact Rock
106	JGT-03	195.67	61.1	123.0	32.14	0.03214	3733	8.61	1.09	9.42	Granitoid	Foliated	Valid - Intact Rock
107	JGT-03	204.12	61.1	132.0	18.86	0.01886	3733	5.05	1.09	5.53	Granitoid	Foliated	Valid - Intact Rock
108	JGT-03	218.17	61.1	95.0	30.44	0.03044	3733	8.15	1.09	8.92	Granitoid	Foliated	Valid - Intact Rock
109	JGT-03	232.46	61.1	120.0	17.08	0.01708	3733	4.58	1.09	5.01	Granitoid	Massive	Valid -CementedJoint
110	JGT-03	233.29	61.1	80.0	31.42	0.03142	3733	8.42	1.09	9.21	Granitoid	Massive	Valid - Intact Rock
111	JGT-03	235.28	61.1	85.0	37.62	0.03762	3733	10.08	1.09	11.03	Granitoid	Massive	Valid - Intact Rock
112	JGT-03	236.64	61.1	80.0	28.80	0.02880	3733	7.71	1.09	8.44	Granitoid	Massive	Invalid - slipping
113	JGT-03	251.50	61.1	142.0	34.52	0.03452	3733	9.25	1.09	10.12	Granitoid	Massive	Rock strength exceeds PLT gauge range
114	JGT-03	270.70	61.1	123.0	32.26	0.03226	3733	8.64	1.09	9.46	Granitoid	Foliated	Valid - Intact Rock
115	JGT-03	283.36	61.1	71.0	30.14	0.03014	3733	8.07	1.09	8.84	Granitoid	Foliated	Valid - Intact Rock
116	JGT-03	298.62	61.1	93.0	37.46	0.03746	3733	10.03	1.09	10.98	Granitoid	Massive	Valid - Intact Rock
117	JGT-03	333.74	61.1	130.0	32.56	0.03256	3733	8.72	1.09	9.55	Granitoid	Massive	Valid - Intact Rock
118	JGT-03	345.61	61.1	70.0	19.90	0.01990	3733	5.33	1.09	5.83	Granitoid	Massive	Invalid - slipping
119	JGT-03	349.79	61.1	90.0	35.45	0.03545	3733	9.50	1.09	10.39	Diabase	Massive	Invalid - chipping
120	JGT-03	355.60	61.1	120.0	36.50	0.03650	3733	9.78	1.09	10.70	Diabase	Massive	Rock strength exceeds PLT gauge range
121	JGT-03	357.73	61.1	150.0	36.24	0.03624	3733	9.71	1.09	10.62	Diabase	Massive	Rock strength exceeds PLT gauge range
122	JGT-03	368.71	61.1	64.0	35.04	0.03504	3733	9.39	1.09	10.27	Diabase	Massive	Rock strength exceeds PLT gauge range
123	JGT-03	377.38	61.1	90.0	37.30	0.03730	3733	9.99	1.09	10.93	Diabase	Massive	Rock strength exceeds PLT gauge range
124	JGT-03	377.48	61.1	95.0	11.16	0.01116	3733	2.99	1.09	3.27	Diabase	Massive	Valid - Microdefect
125	JGT-03	383.24	61.1	90.0	37.74	0.03774	3733	10.11	1.09	11.06	Diabase	Massive	Rock strength exceeds PLT gauge range

 $I_{s(50)}$ = Size Corrected Point Load Strength

$$I_{s(50)} = F I_s$$

 I_s = Uncorrected Point Load Strength

$$I_s = P/D_e^2$$

F = Size Correction Factor

$$F = (D_e/50)^{0.45}$$

 D_e = equivalent core diameter (mm)

$$D_e^2 = D^2 = (\text{mm}^2)$$

Diametral Test

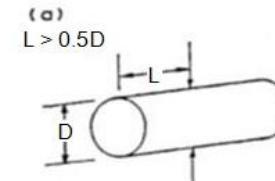


Table E-1: Diametral Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08			
Company		Dominion Diamond Corporation								Date tested		01 March - 23 April 2014	
Project		Jay Project								Project #		13-1328-0041	
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID		BUR023942, BUR142647	
Location		Ekati, Northwest Territories											
Diametral Test													
Test #	Borehole	Depth	D	L	Gauge Reading	Load P	D _e ² = D ²	I _s = P/D _e ²	F = (D _e /50) ^{0.45}	I _{s(50)}	Rock Type	Structure	Valid/Invalid Test
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa			
126	JGT-03	387.67	61.1	120.0	37.80	0.03780	3733	10.13	1.09	11.08	Diabase	Massive	Rock strength exceeds PLT gauge range
127	JGT-03	397.40	61.1	120.0	9.06	0.00906	3733	2.43	1.09	2.66	Diabase	Massive	Valid - Microdefect
128	JGT-03	401.25	61.1	165.0	31.46	0.03146	3733	8.43	1.09	9.22	Granitoid	Massive	Valid - Intact Rock
129	JGT-03	406.12	61.1	100.0	34.24	0.03424	3733	9.17	1.09	10.04	Granitoid	Massive	Valid - Intact Rock
130	JGT-03	407.68	61.1	90.0	31.72	0.03172	3733	8.50	1.09	9.30	Granitoid	Massive	Valid - Intact Rock
131	JGT-03	418.05	61.1	100.0	35.14	0.03514	3733	9.41	1.09	10.30	Granitoid	Massive	Rock strength exceeds PLT gauge range
132	JGT-03	423.24	61.1	91.0	32.80	0.03280	3733	8.79	1.09	9.62	Granitoid	Massive	Valid - Intact Rock
133	JGT-03	431.40	61.1	73.0	30.68	0.03068	3733	8.22	1.09	8.99	Granitoid	Massive	Valid - Intact Rock
134	JGT-03	439.30	61.1	95.0	38.32	0.03832	3733	10.26	1.09	11.23	Granitoid	Massive	Rock strength exceeds PLT gauge range
135	JGT-04	39.12	61.1	68.0	4.54	0.00454	3733	1.22	1.09	1.33	Metasediments	Foliated	Valid - Foliation
136	JGT-04	58.45	61.1	95.0	12.34	0.01234	3733	3.31	1.09	3.62	Pegmatite	Massive	Valid - Intact Rock
137	JGT-04	63.45	61.1	110.0	16.38	0.01638	3733	4.39	1.09	4.80	Pegmatite	Massive	Valid - Intact Rock
138	JGT-04	68.69	61.1	150.0	13.92	0.01392	3733	3.73	1.09	4.08	Pegmatite	Massive	Valid - Intact Rock
139	JGT-04	74.82	61.1	110.0	2.90	0.00290	3733	0.78	1.09	0.85	Metasediments	Foliated	Valid - Foliation
140	JGT-04	91.95	61.1	100.0	11.32	0.01132	3733	3.03	1.09	3.32	Metasediments	Foliated	Valid - Foliation
141	JGT-04	104.58	61.1	105.0	24.32	0.02432	3733	6.51	1.09	7.13	Metasediments	Foliated	Valid - Foliation
142	JGT-04	110.16	61.1	90.0	10.42	0.01042	3733	2.79	1.09	3.05	Metasediments	Foliated	Valid - Foliation
143	JGT-04	116.75	61.1	93.0	5.74	0.00574	3733	1.54	1.09	1.68	Metasediments	Foliated	Valid - Foliation
144	JGT-04	111.61	61.1	70.0	17.68	0.01768	3733	4.74	1.09	5.18	Metasediments	Foliated	Valid - Foliation
145	JGT-04	111.67	61.1	80.0	29.56	0.02956	3733	7.92	1.09	8.67	Metasediments	Foliated	Invalid - chipping
146	JGT-04	142.44	61.1	90.0	11.74	0.01174	3733	3.14	1.09	3.44	Metasediments	Foliated	Valid - Foliation
147	JGT-04	148.19	61.1	90.0	5.70	0.00570	3733	1.53	1.09	1.67	Metasediments	Foliated	Valid - Foliation
148	JGT-04	155.88	61.1	140.0	5.60	0.00560	3733	1.50	1.09	1.64	Metasediments	Foliated	Valid - Foliation
149	JGT-04	157.86	61.1	85.0	3.36	0.00336	3733	0.90	1.09	0.99	Metasediments	Foliated	Valid - Foliation
150	JGT-04	159.19	61.1	80.0	6.66	0.00666	3733	1.78	1.09	1.95	Metasediments	Foliated	Valid - Foliation
151	JGT-04	163.75	61.1	95.0	9.96	0.00996	3733	2.67	1.09	2.92	Metasediments	Foliated	Valid - Foliation
152	JGT-04	168.90	61.1	130.0	30.50	0.03050	3733	8.17	1.09	8.94	Metasediments	Foliated	Valid - Intact Rock
153	JGT-04	174.44	61.1	90.0	32.76	0.03276	3733	8.78	1.09	9.60	Metasediments	Massive	Valid - Intact Rock
154	JGT-04	182.31	61.1	90.0	2.26	0.00226	3733	0.61	1.09	0.66	Metasediments	Foliated	Valid - Foliation
155	JGT-04	193.03	61.1	96.0	10.34	0.01034	3733	2.77	1.09	3.03	Metasediments	Foliated	Valid - Foliation
156	JGT-04	196.95	61.1	96.0	3.52	0.00352	3733	0.94	1.09	1.03	Metasediments	Foliated	Valid - Foliation
157	JGT-04	211.73	61.1	82.0	32.54	0.03254	3733	8.72	1.09	9.54	Metasediments	Foliated	Valid - Foliation

 $I_{s(50)}$ = Size Corrected Point Load Strength

$$I_{s(50)} = F I_s$$

 I_s = Uncorrected Point Load Strength

$$I_s = P/D_e^2$$

F = Size Correction Factor

$$F = (D_e/50)^{0.45}$$

 D_e = equivalent core diameter (mm)

$$D_e^2 = D^2 = (\text{mm}^2)$$

Diametral Test

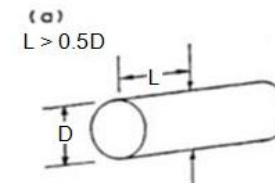


Table E-1: Diametral Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08					
Company		Dominion Diamond Corporation								Date tested			01 March - 23 April 2014		
Project		Jay Project								Project #			13-1328-0041		
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID			BUR023942, BUR142647		
Location		Ekati, Northwest Territories													
Diametral Test															
Test #	Borehole	Depth	D	L	Gauge Reading	Load P	D _e ² = D ²	I _s = P/D _e ²	F = (D _e /50) ^{0.45}	I _{s(50)}	Rock Type	Structure	Valid/Invalid Test		
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa					
158	JGT-04	213.96	61.1	92.0	33.74	0.03374	3733	9.04	1.09	9.89	Granitoid	Massive	Valid - Intact Rock		
159	JGT-04	218.32	61.1	100.0	31.30	0.03130	3733	8.38	1.09	9.18	Granitoid	Foliated	Valid - Intact Rock		
160	JGT-04	234.50	61.1	110.0	18.04	0.01804	3733	4.83	1.09	5.29	Metasediments	Foliated	Valid - Foliation		
161	JGT-04	241.00	61.1	140.0	34.00	0.03400	3733	9.11	1.09	9.97	Metasediments	Massive	Valid - Intact Rock		
162	JGT-04	254.06	61.1	85.0	36.38	0.03638	3733	9.74	1.09	10.67	Pegmatite	Massive	Valid - Intact Rock		
163	JGT-04	259.20	61.1	90.0	23.84	0.02384	3733	6.39	1.09	6.99	Metasediments	Foliated	Valid - Foliation		
164	JGT-04	267.04	61.1	120.0	9.68	0.00968	3733	2.59	1.09	2.84	Metasediments	Foliated	Valid - Foliation		
165	JGT-04	272.64	61.1	120.0	29.20	0.02920	3733	7.82	1.09	8.56	Granitoid	Massive	Valid - Intact Rock		
166	JGT-04	279.57	61.1	90.0	17.60	0.01760	3733	4.71	1.09	5.16	Granitoid	Massive	Valid - Microdefect		
167	JGT-04	290.55	61.1	120.0	31.56	0.03156	3733	8.45	1.09	9.25	Granitoid	Foliated	Valid - Intact Rock		
168	JGT-04	300.00	61.1	85.0	42.04	0.04204	3733	11.26	1.09	12.32	Granitoid	Foliated	Rock strength exceeds PLT gauge range		
169	JGT-04	311.09	61.1	85.0	36.60	0.03660	3733	9.80	1.09	10.73	Granitoid	Foliated	Valid - Intact Rock		
170	JGT-04	318.71	61.1	78.0	17.06	0.01706	3733	4.57	1.09	5.00	Granitoid	Foliated	Valid - Intact Rock		
171	JGT-04	328.00	61.1	78.0	32.54	0.03254	3733	8.72	1.09	9.54	Granitoid	Foliated	Valid - Intact Rock		
172	JGT-04	338.32	61.1	110.0	37.88	0.03788	3733	10.15	1.09	11.10	Granitoid	Foliated	Valid - Intact Rock		
173	JGT-04	349.18	61.1	110.0	36.00	0.03600	3733	9.64	1.09	10.55	Granitoid	Foliated	Rock strength exceeds PLT gauge range		
174	JGT-05	14.59	61.1	130.0	16.64	0.01664	3733	4.46	1.09	4.88	Pegmatite	Massive	Valid - Intact Rock		
175	JGT-05	29.58	61.1	89.0	28.86	0.02886	3733	7.73	1.09	8.46	Granitoid	Foliated	Valid - Intact Rock		
176	JGT-05	13.68	61.1	190.0	28.80	0.02880	3733	7.71	1.09	8.44	Pegmatite	Massive	Valid - Intact Rock		
177	JGT-05	39.94	61.1	66.0	34.38	0.03438	3733	9.21	1.09	10.08	Granitoid	Massive	Valid - Intact Rock		
178	JGT-05	46.35	61.1	160.0	25.74	0.02574	3733	6.89	1.09	7.55	Granitoid	Massive	Valid - Intact Rock		
179	JGT-05	50.58	61.1	98.0	28.08	0.02808	3733	7.52	1.09	8.23	Granitoid	Massive	Invalid - chipping		
180	JGT-05	68.83	61.1	91.0	23.84	0.02384	3733	6.39	1.09	6.99	Granitoid	Massive	Valid - Intact Rock		
181	JGT-05	77.30	61.1	93.0	34.42	0.03442	3733	9.22	1.09	10.09	Granitoid	Foliated	Valid - Intact Rock		
182	JGT-05	77.40	61.1	91.0	34.60	0.03460	3733	9.27	1.09	10.14	Granitoid	Foliated	Valid - Intact Rock		
183	JGT-05	87.75	61.1	75.0	27.18	0.02718	3733	7.28	1.09	7.97	Granitoid	Massive	Valid - Intact Rock		
184	JGT-05	87.83	61.1	93.0	32.56	0.03256	3733	8.72	1.09	9.55	Granitoid	Massive	Valid - Intact Rock		
185	JGT-05	98.82	61.1	68.0	35.86	0.03586	3733	9.61	1.09	10.51	Granitoid	Massive	Valid - Intact Rock		
186	JGT-05	110.00	61.1	135.0	35.74	0.03574	3733	9.57	1.09	10.48	Granitoid	Massive	Valid - Intact Rock		
187	JGT-05	110.13	61.1	96.0	34.10	0.03410	3733	9.13	1.09	10.00	Granitoid	Massive	Valid - Intact Rock		
188	JGT-05	123.95	61.1	115.0	36.84	0.03684	3733	9.87	1.09	10.80	Granitoid	Massive	Valid - Intact Rock		
189	JGT-05	124.05	61.1	87.0	36.54	0.03654	3733	9.79	1.09	10.71	Granitoid	Massive	Valid - Intact Rock		

 $I_{s(50)}$ = Size Corrected Point Load Strength

$$I_{s(50)} = F I_s$$

 I_s = Uncorrected Point Load Strength

$$I_s = P/D_e^2$$

F = Size Correction Factor

$$F = (D_e/50)^{0.45}$$

 D_e = equivalent core diameter (mm)

$$D_e^2 = D^2 = (\text{mm}^2)$$

Diametral Test

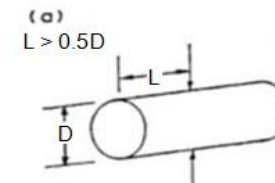


Table E-1: Diametral Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08			
Company		Dominion Diamond Corporation								Date tested	01 March - 23 April 2014		
Project		Jay Project								Project #			
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID			
Location		Ekati, Northwest Territories											
Diametral Test													
Test #	Borehole	Depth	D	L	Gauge Reading	Load P	D _e ² = D ²	I _s = P/D _e ²	F = (D _e /50) ^{0.45}	I _{s(50)}	Rock Type	Structure	Valid/Invalid Test
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa			
190	JGT-05	135.55	61.1	120.0	28.56	0.02856	3733	7.65	1.09	8.37	Granitoid	Foliated	Invalid - chipping
191	JGT-05	150.07	61.1	97.0	38.54	0.03854	3733	10.32	1.09	11.30	Granitoid	Massive	Valid - Intact Rock
192	JGT-05	158.77	61.1	116.0	32.68	0.03268	3733	8.75	1.09	9.58	Pegmatite	Massive	Valid - Intact Rock
193	JGT-05	158.89	61.1	116.0	24.06	0.02406	3733	6.44	1.09	7.05	Pegmatite	Massive	Valid - Intact Rock
194	JGT-05	170.59	61.1	100.0	35.88	0.03588	3733	9.61	1.09	10.52	Granitoid	Foliated	Valid - Intact Rock
195	JGT-05	185.73	61.1	133.0	38.60	0.03860	3733	10.34	1.09	11.32	Granitoid	Massive	Valid - Intact Rock
196	JGT-05	217.80	61.1	71.0	28.90	0.02890	3733	7.74	1.09	8.47	Granitoid	Massive	Valid - Intact Rock
197	JGT-05	218.66	61.1	85.0	29.68	0.02968	3733	7.95	1.09	8.70	Granitoid	Massive	Invalid - punching
198	JGT-05	227.48	61.1	115.0	36.92	0.03692	3733	9.89	1.09	10.82	Granitoid	Massive	Valid - Intact Rock
199	JGT-05	236.73	61.1	86.0	26.34	0.02634	3733	7.06	1.09	7.72	Granitoid	Massive	Valid - Intact Rock
200	JGT-05	254.75	61.1	69.0	24.14	0.02414	3733	6.47	1.09	7.08	Granitoid	Massive	Valid - Intact Rock
201	JGT-05	257.61	61.1	86.0	28.72	0.02872	3733	7.69	1.09	8.42	Granitoid	Massive	Valid - Intact Rock
202	JGT-05	269.95	61.1	63.0	26.44	0.02644	3733	7.08	1.09	7.75	Granitoid	Massive	Valid - Intact Rock
203	JGT-05	285.11	61.1	120.0	23.96	0.02396	3733	6.42	1.09	7.02	Metasediments	Foliated	Invalid - slipping
204	JGT-05	287.86	61.1	80.0	19.36	0.01936	3733	5.19	1.09	5.68	Metasediments	Foliated	Valid - Intact Rock
205	JGT-05	285.23	61.1	110.0	25.76	0.02576	3733	6.90	1.09	7.55	Metasediments	Foliated	Valid - Intact Rock
206	JGT-05	290.60	61.1	110.0	14.48	0.01448	3733	3.88	1.09	4.24	Metasediments	Foliated	Valid - Foliation
207	JGT-05	293.44	61.1	150.0	26.50	0.02650	3733	7.10	1.09	7.77	Granitoid	Foliated	Valid - Intact Rock
208	JGT-05	300.34	61.1	600.0	19.60	0.01960	3733	5.25	1.09	5.75	Metasediments	Foliated	Invalid - slipping
209	JGT-05	302.62	61.1	90.0	18.00	0.01800	3733	4.82	1.09	5.28	Metasediments	Foliated	Valid - Microdefect
210	JGT-05	311.34	61.1	420.0	13.02	0.01302	3733	3.49	1.09	3.82	Granitoid	Foliated	Invalid - chipping
211	JGT-05	311.16	61.1	240.0	23.98	0.02398	3733	6.42	1.09	7.03	Granitoid	Foliated	Valid - Intact Rock
212	JGT-05	311.10	61.1	62.0	9.00	0.00900	3733	2.41	1.09	2.64	Granitoid	Foliated	Valid - Foliation
213	JGT-05	311.43	61.1	160.0	11.02	0.01102	3733	2.95	1.09	3.23	Granitoid	Foliated	Invalid - punching
214	JGT-05	311.51	61.1	120.0	23.94	0.02394	3733	6.41	1.09	7.02	Granitoid	Foliated	Valid - Intact Rock
215	JGT-05	315.53	61.1	90.0	17.58	0.01758	3733	4.71	1.09	5.15	Granitoid	Foliated	Valid - Foliation
216	JGT-05	323.88	61.1	80.0	27.34	0.02734	3733	7.32	1.09	8.01	Granitoid	Massive	Valid - Intact Rock
217	JGT-05	319.66	61.1	70.0	12.76	0.01276	3733	3.42	1.09	3.74	Granitoid	Massive	Valid - Intact Rock
218	JGT-05	325.35	61.1	70.0	23.40	0.02340	3733	6.27	1.09	6.86	Granitoid	Massive	Valid - Intact Rock
219	JGT-05	335.64	61.1	75.0	26.90	0.02690	3733	7.21	1.09	7.89	Granitoid	Massive	Valid - Intact Rock
220	JGT-05	335.83	61.1	105.0	23.14	0.02314	3733	6.20	1.09	6.78	Metasediments	Massive	Valid - Intact Rock
221	JGT-05	338.62	61.1	70.0	23.34	0.02334	3733	6.25	1.09	6.84	Metasediments	Massive	Valid - Foliation

 $I_{s(50)}$ = Size Corrected Point Load Strength

$$I_{s(50)} = F I_s$$

 I_s = Uncorrected Point Load Strength

$$I_s = P/D_e^2$$

F = Size Correction Factor

$$F = (D_e/50)^{0.45}$$

 D_e = equivalent core diameter (mm)

$$D_e^2 = D^2 = (\text{mm}^2)$$

Diametral Test

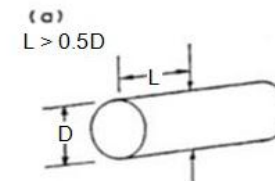


Table E-1: Diametral Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08			
Company		Dominion Diamond Corporation								Date tested		01 March - 23 April 2014	
Project		Jay Project								Project #		13-1328-0041	
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID		BUR023942, BUR142647	
Location		Ekati, Northwest Territories											
Diametral Test													
Test #	Borehole	Depth	D	L	Gauge Reading	Load P	$D_p^2 = D^2$	$I_s = P/D_p^2$	$F = (D_p/50)^{0.45}$	$I_{s(50)}$	Rock Type	Structure	Valid/Invalid Test
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa			
222	JGT-05	342.09	61.1	76.0	21.16	0.02116	3733	5.67	1.09	6.20	Metasediments	Massive	Valid - Intact Rock
223	JGT-05	342.15	61.1	74.0	27.42	0.02742	3733	7.34	1.09	8.04	Metasediments	Massive	Valid - Intact Rock
224	JGT-05	351.54	61.1	130.0	20.74	0.02074	3733	5.56	1.09	6.08	Metasediments	Massive	Valid - Intact Rock
225	JGT-05	358.67	61.1	105.0	17.26	0.01726	3733	4.62	1.09	5.06	Granitoid	Massive	Valid - Intact Rock
226	JGT-05	362.95	61.1	100.0	17.38	0.01738	3733	4.66	1.09	5.10	Granitoid	Massive	Invalid - punching
227	JGT-05	363.05	61.1	90.0	17.96	0.01796	3733	4.81	1.09	5.27	Granitoid	Massive	Invalid - punching
228	JGT-05	365.71	61.1	100.0	27.68	0.02768	3733	7.41	1.09	8.11	Granitoid	Massive	Valid - Intact Rock
229	JGT-05	373.62	61.1	110.0	30.72	0.03072	3733	8.23	1.09	9.01	Granitoid	Massive	Valid - Intact Rock
230	JGT-05	381.19	61.1	150.0	25.38	0.02538	3733	6.80	1.09	7.44	Granitoid	Massive	Valid - Intact Rock
231	JGT-05	381.63	61.1	80.0	33.24	0.03324	3733	8.90	1.09	9.74	Granitoid	Massive	Valid - Intact Rock
232	JGT-05	389.96	61.1	100.0	24.42	0.02442	3733	6.54	1.09	7.16	Granitoid	Massive	Valid - Intact Rock
233	JGT-05	397.19	61.1	150.0	30.18	0.03018	3733	8.08	1.09	8.85	Granitoid	Massive	Valid - Intact Rock
234	JGT-05	400.77	61.1	90.0	37.36	0.03736	3733	10.01	1.09	10.95	Granitoid	Massive	Valid - Intact Rock
235	JGT-05	403.19	61.1	90.0	32.30	0.03230	3733	8.65	1.09	9.47	Granitoid	Massive	Valid - Intact Rock
236	JGT-05	413.17	61.1	130.0	36.38	0.03638	3733	9.74	1.09	10.67	Granitoid	Massive	Valid - Intact Rock
237	JGT-05	421.22	61.1	75.0	33.18	0.03318	3733	8.89	1.09	9.73	Granitoid	Massive	Valid - Intact Rock
238	JGT-05	422.90	61.1	70.0	6.88	0.00688	3733	1.84	1.09	2.02	Granitoid	Massive	Valid - CementedJoint
239	JGT-05	423.99	61.1	70.0	37.82	0.03782	3733	10.13	1.09	11.09	Granitoid	Massive	Valid - Intact Rock
240	JGT-05	436.30	61.1	110.0	33.90	0.03390	3733	9.08	1.09	9.94	Granitoid	Massive	Valid - Intact Rock
241	JGT-06	269.25	61.1	100.0	38.00	0.03800	3733	10.18	1.09	11.14	Granitoid	Massive	Rock strength exceeds PLT gauge range
242	JGT-06	386.27	61.1	68.0	37.58	0.03758	3733	10.07	1.09	11.02	Granitoid	Massive	Valid - Intact Rock
243	JGT-06	403.99	61.1	76.0	27.98	0.02798	3733	7.49	1.09	8.20	Granitoid	Massive	Valid - Intact Rock
244	JGT-06	389.32	61.1	85.0	19.34	0.01934	3733	5.18	1.09	5.67	Granitoid	Massive	Invalid - chipping
245	JGT-06	389.24	61.1	80.0	27.30	0.02730	3733	7.31	1.09	8.00	Granitoid	Massive	Valid - Intact Rock
246	JGT-06	395.40	61.1	69.0	42.78	0.04278	3733	11.46	1.09	12.54	Granitoid	Massive	Invalid - chipping
247	JGT-06	398.12	61.1	72.0	35.04	0.03504	3733	9.39	1.09	10.27	Granitoid	Massive	Rock strength exceeds PLT gauge range
248	JGT-06	408.57	61.1	100.0	41.82	0.04182	3733	11.20	1.09	12.26	Granitoid	Massive	Valid - Intact Rock
249	JGT-06	414.16	61.1	75.0	37.58	0.03758	3733	10.07	1.09	11.02	Granitoid	Massive	Invalid - chipping
250	JGT-06	423.14	61.1	82.0	36.84	0.03684	3733	9.87	1.09	10.80	Granitoid	Massive	Valid - Intact Rock
251	JGT-06	423.22	61.1	80.0	34.80	0.03480	3733	9.32	1.09	10.20	Granitoid	Massive	Invalid - chipping
252	JGT-06	428.74	61.1	97.0	19.70	0.01970	3733	5.28	1.09	5.78	Granitoid	Massive	Valid - Intact Rock
253	JGT-06	443.34	61.1	96.0	22.66	0.02266	3733	6.07	1.09	6.64	Granitoid	Massive	Invalid - slipping

 $I_{s(50)}$ = Size Corrected Point Load Strength

F = Size Correction Factor

$$I_{s(50)} = F I_s$$

$$F = (D_e/50)^{0.45}$$

 I_s = Uncorrected Point Load Strength D_e = equivalent core diameter (mm)

$$I_s = P/D_e^2$$

$$D_e^2 = D^2 = (\text{mm}^2)$$

Diametral Test

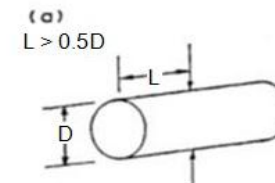


Table E-1: Diametral Point Load Testing Results

 POINT LOAD STRENGTH INDEX TEST								Reference ASTM D5731 - 08					
Company		Dominion Diamond Corporation						Date tested		01 March - 23 April 2014			
Project		Jay Project						Project #		13-1328-0041			
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06						Machine ID		BUR023942, BUR142647			
Location		Ekati, Northwest Territories											
Diametral Test													
Test #	Borehole	Depth	D	L	Gauge Reading	Load P	$D_p^2 = D^2$	$I_s = P/D_p^2$	$F = (D_p/50)^{0.45}$	$I_{s(50)}$	Rock Type	Structure	Valid/Invalid Test
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa			
254	JGT-06	447.33	61.1	94.0	28.70	0.02870	3733	7.69	1.09	8.41	Granitoid	Massive	Valid - Intact Rock
255	JGT-06	455.97	61.1	80.0	28.06	0.02806	3733	7.52	1.09	8.23	Granitoid	Massive	Valid - Intact Rock
256	JGT-06	456.06	61.1	85.0	22.16	0.02216	3733	5.94	1.09	6.50	Granitoid	Massive	Valid - Intact Rock

 $I_{s(50)}$ = Size Corrected Point Load Strength

$$I_{s(50)} = F I_s$$

 I_s = Uncorrected Point Load Strength

$$I_s = P/D_e^2$$

F = Size Correction Factor

$$F = (D_e/50)^{0.45}$$

 D_e = equivalent core diameter (mm)

$$D_e^2 = D^2 = (\text{mm}^2)$$

Diametral Test

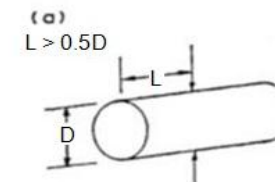


Table E-2: Axial Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08				
Company	Dominion Diamond Corporation								Date tested			01 March - 23 April 2014		
Project	Jay Project								Project #			13-1328-0041		
Drillhole	JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID			BUR023942, BUR142647		
Location	Ekati, Northwest Territories													
Axial Test														
Test #	Borehole	Depth	D	W	Gauge Reading	Load P	$D_p^2=4WD/\pi$	$I_s = P/D_p^2$	$F = (D_p/50)^{0.45}$	$I_{s(50)}$	Rock Type	Structure	Valid/Invalid Test	
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa				
1	JGT-01	65.35	55.0	61.1	28.04	0.02804	4279	6.55	1.13	7.40	Granitoid	Massive	Valid - Intact Rock	
2	JGT-01	69.13	60.0	61.1	26.78	0.02678	4668	5.74	1.15	6.60	Granitoid	Massive	Valid - Intact Rock	
3	JGT-01	92.01	50.0	61.1	14.82	0.01482	3890	3.81	1.10	4.21	Granitoid	Massive	Valid - Intact Rock	
4	JGT-01	115.95	40.0	61.1	14.88	0.01488	3112	4.78	1.05	5.02	Granitoid	Massive	Valid - Intact Rock	
5	JGT-01	122.06	50.0	61.1	25.72	0.02572	3890	6.61	1.10	7.30	Granitoid	Massive	Invalid - slipping	
6	JGT-01	137.02	44.0	61.1	14.62	0.01462	3423	4.27	1.07	4.58	Granitoid	Massive	Valid - Intact Rock	
7	JGT-01	142.72	61.0	61.1	16.10	0.01610	4745	3.39	1.16	3.92	Granitoid	Massive	Valid - Microdefect	
8	JGT-01	154.88	58.0	61.1	6.00	0.00600	4512	1.33	1.14	1.52	Granitoid	Massive	Invalid - slipping	
9	JGT-01	168.15	47.0	61.1	18.76	0.01876	3656	5.13	1.09	5.59	Granitoid	Massive	Valid - Intact Rock	
10	JGT-01	168.20	45.0	61.1	20.58	0.02058	3501	5.88	1.08	6.34	Granitoid	Massive	Valid - Intact Rock	
11	JGT-01	168.35	55.0	61.1	19.50	0.01950	4279	4.56	1.13	5.14	Granitoid	Massive	Valid - Intact Rock	
12	JGT-01	178.30	50.0	61.1	24.20	0.02420	3890	6.22	1.10	6.87	Granitoid	Massive	Valid - Intact Rock	
13	JGT-01	178.26	46.0	61.1	7.38	0.00738	3579	2.06	1.08	2.24	Granitoid	Massive	Valid - Microdefect	
14	JGT-01	198.36	50.0	61.1	25.98	0.02598	3890	6.68	1.10	7.38	Granitoid	Massive	Valid - Intact Rock	
15	JGT-01	208.30	44.0	61.1	12.12	0.01212	3423	3.54	1.07	3.80	Granitoid	Massive	Valid - Intact Rock	
16	JGT-01	236.10	57.0	61.1	25.36	0.02536	4434	5.72	1.14	6.51	Granitoid	Massive	Valid - Intact Rock	
17	JGT-02	48.30	57.0	61.1	19.38	0.01938	4434	4.37	1.14	4.97	Granitoid	Foliated	Valid - Intact Rock	
18	JGT-02	48.37	61.0	61.1	24.86	0.02486	4745	5.24	1.16	6.05	Granitoid	Foliated	Valid - Intact Rock	
19	JGT-02	60.39	36.0	61.1	6.10	0.00610	2801	2.18	1.03	2.23	Granitoid	Foliated	Valid - Intact Rock	
20	JGT-02	70.75	45.0	61.1	13.20	0.01320	3501	3.77	1.08	4.07	Granitoid	Massive	Invalid	
21	JGT-02	97.95	59.0	61.1	19.32	0.01932	4590	4.21	1.15	4.83	Granitoid	Massive	Valid - Intact Rock	
22	JGT-02	155.48	40.0	61.1	21.32	0.02132	3112	6.85	1.05	7.20	Granitoid	Foliated	Valid - Intact Rock	
23	JGT-02	128.12	55.0	61.1	10.10	0.01010	4279	2.36	1.13	2.66	Granitoid	Foliated	Invalid - chipping	
24	JGT-02	127.95	53.0	61.1	27.56	0.02756	4123	6.68	1.12	7.48	Granitoid	Foliated	Valid - Intact Rock	
25	JGT-02	119.63	58.0	61.1	29.42	0.02942	4512	6.52	1.14	7.45	Granitoid	Foliated	Valid - Intact Rock	
26	JGT-02	161.64	51.0	61.1	26.36	0.02636	3968	6.64	1.11	7.37	Granitoid	Foliated	Valid - Intact Rock	
27	JGT-02	191.67	56.0	61.1	25.70	0.02570	4357	5.90	1.13	6.68	Granitoid	Foliated	Valid - Intact Rock	

$I_{s(50)}$ $I_{s(50)} = \text{Size Corrected Point Load Strength}$

$I_{s(50)}$ $I_{s(50)} = F I_s$

$I_s = I$ $I_s = \text{Uncorrected Point Load Strength}$

$I_s = I$ $I_s = P/D_e^2$

$F = \text{Size Correction Factor}$

$F = (D_e/50)^{0.45}$

$D_e = \text{equivalent core diameter (mm)}$

$D_e^2 = 4/\pi * D * W = (\text{mm}^2)$

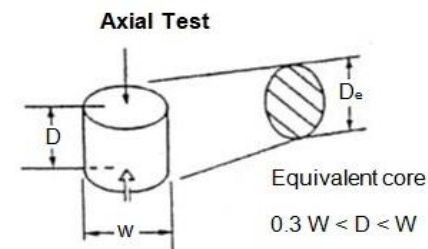


Table E-2: Axial Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08					
Company		Dominion Diamond Corporation								Date tested			01 March - 23 April 2014		
Project		Jay Project								Project #			13-1328-0041		
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID			BUR023942, BUR142647		
Location		Ekati, Northwest Territories													
Axial Test															
Test #	Borehole	Depth	D	W	Gauge Reading	Load P	$D_p^2=4WD/\pi$	$I_s = P/D_p^2$	$F = (D_p/50)^{0.45}$	$I_{s(50)}$	Rock Type	Structure	Valid/Invalid Test		
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa					
28	JGT-02	244.80	42.0	61.1	29.34	0.02934	3267	8.98	1.06	9.54	Granitoid	Foliated	Valid - Intact Rock		
29	JGT-02	264.50	31.0	61.1	23.90	0.02390	2412	9.91	0.99	9.83	Granitoid	Foliated	Valid - Intact Rock		
30	JGT-02	286.67	42.0	61.1	30.68	0.03068	3267	9.39	1.06	9.97	Granitoid	Foliated	Valid - Intact Rock		
31	JGT-02	296.73	27.0	61.1	19.22	0.01922	2100	9.15	0.96	8.80	Granitoid	Massive	Valid - Intact Rock		
32	JGT-02	323.43	58.0	61.1	33.64	0.03364	4512	7.46	1.14	8.51	Granitoid	Massive	Valid - Intact Rock		
33	JGT-02	338.59	23.0	61.1	16.62	0.01662	1789	9.29	0.93	8.62	Granitoid	Foliated	Valid - Intact Rock		
34	JGT-02	354.02	54.0	61.1	34.60	0.03460	4201	8.24	1.12	9.26	Granitoid	Massive	Valid - Intact Rock		
35	JGT-02	438.01	45.0	61.1	49.54	0.04954	3501	14.15	1.08	15.26	Diabase	Massive	Valid - Intact Rock		
36	JGT-03	84.08	35.0	61.1	20.56	0.02056	2723	7.55	1.02	7.70	Granitoid	Foliated	Valid - Intact Rock		
37	JGT-03	96.52	40.0	61.1	16.88	0.01688	3112	5.42	1.05	5.70	Granitoid	Foliated	Valid - Intact Rock		
38	JGT-03	114.66	38.0	61.1	27.28	0.02728	2956	9.23	1.04	9.58	Granitoid	Foliated	Valid - Intact Rock		
39	JGT-03	138.73	59.0	61.1	23.28	0.02328	4590	5.07	1.15	5.81	Granitoid	Massive	Valid - Foliation		
40	JGT-03	148.05	40.0	61.1	27.52	0.02752	3112	8.84	1.05	9.29	Granitoid	Massive	Valid - Intact Rock		
41	JGT-03	167.36	55.0	61.1	29.50	0.02950	4279	6.89	1.13	7.78	Granitoid	Massive	Valid - Intact Rock		
42	JGT-03	212.51	60.0	61.1	26.50	0.02650	4668	5.68	1.15	6.53	Granitoid	Foliated	Valid - Intact Rock		
43	JGT-03	260.46	40.0	61.1	27.80	0.02780	3112	8.93	1.05	9.38	Granitoid	Massive	Valid - Intact Rock		
44	JGT-03	298.65	32.0	61.1	29.08	0.02908	2489	11.68	1.00	11.67	Granitoid	Massive	Valid - Intact Rock		
45	JGT-03	340.06	50.0	61.1	28.32	0.02832	3890	7.28	1.10	8.04	Granitoid	Massive	Valid - Intact Rock		
46	JGT-03	383.19	55.0	61.1	36.00	0.03600	4279	8.41	1.13	9.50	Diabase	Massive	Rock strength exceeds PLT gauge range		
47	JGT-03	407.69	50.0	61.1	7.14	0.00714	3890	1.84	1.10	2.03	Granitoid	Massive	Valid - Intact Rock		
48	JGT-03	442.12	28.0	61.1	19.90	0.01990	2178	9.14	0.97	8.86	Granitoid	Massive	Valid - Intact Rock		
49	JGT-04	38.64	57.0	61.1	17.54	0.01754	4434	3.96	1.14	4.50	Metasediments	Foliated	Invalid - chipping		
50	JGT-04	92.04	51.0	61.1	17.52	0.01752	3968	4.42	1.11	4.90	Metasediments	Foliated	Valid - Intact Rock		
51	JGT-04	104.59	39.0	61.1	32.12	0.03212	3034	10.59	1.04	11.06	Metasediments	Foliated	Valid - Intact Rock		
52	JGT-04	183.33	42.0	61.1	21.72	0.02172	3267	6.65	1.06	7.06	Metasediments	Foliated	Valid - Intact Rock		
53	JGT-04	193.07	49.0	61.1	10.78	0.01078	3812	2.83	1.10	3.11	Metasediments	Foliated	Invalid - chipping		
54	JGT-04	196.95	50.0	61.1	21.94	0.02194	3890	5.64	1.10	6.23	Metasediments	Foliated	Invalid - chipping		
55	JGT-04	196.95	46.0	61.1	15.08	0.01508	3579	4.21	1.08	4.57	Metasediments	Foliated	Valid - Intact Rock		
56	JGT-04	214.06	56.0	61.1	28.00	0.02800	4357	6.43	1.13	7.28	Granitoid	Massive	Invalid - slipping		

$I_{s(50)}$ $I_{s(50)} = \text{Size Corrected Point Load Strength}$

$I_{s(50)}$ $I_{s(50)} = F I_s$

$I_s = I$ $I_s = \text{Uncorrected Point Load Strength}$

$I_s = I$ $I_s = P/D_e^2$

$F = \text{Size Correction Factor}$

$F = (D_e/50)^{0.45}$

$D_e = \text{equivalent core diameter (mm)}$

$D_e^2 = 4/\pi * D * W = (\text{mm}^2)$

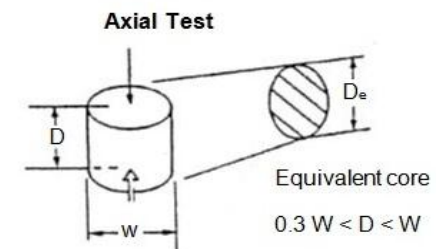


Table E-2: Axial Point Load Testing Results

POINT LOAD STRENGTH INDEX TEST										Reference ASTM D5731 - 08					
Company		Dominion Diamond Corporation								Date tested				01 March - 23 April 2014	
Project		Jay Project								Project #				13-1328-0041	
Drillhole		JGT-01, JGT-02, JGT-03, JGT-04, JGT-05, JGT-06								Machine ID				BUR023942, BUR142647	
Location		Ekati, Northwest Territories													
Axial Test															
Test #	Borehole	Depth	D	W	Gauge Reading	Load P	$D_e^2=4WD/\pi$	$I_s = P/D_e^2$	$F = (D_e/50)^{0.45}$	$I_{s(50)}$	Rock Type	Structure	Valid/Invalid Test		
	No.	m	mm	mm	kN	MN	mm ²	MPa		MPa					
57	JGT-04	227.19	58.0	61.1	15.08	0.01508	4512	3.34	1.14	3.82	Metasediments	Foliated	Valid - Intact Rock		
58	JGT-04	227.27	51.0	61.1	18.66	0.01866	3968	4.70	1.11	5.22	Metasediments	Foliated	Invalid - chipping		
59	JGT-04	234.53	50.0	61.1	30.68	0.03068	3890	7.89	1.10	8.71	Metasediments	Foliated	Invalid - chipping		
60	JGT-04	259.50	59.0	61.1	27.42	0.02742	4590	5.97	1.15	6.85	Metasediments	Foliated	Valid - Intact Rock		
61	JGT-04	267.14	42.0	61.1	16.28	0.01628	3267	4.98	1.06	5.29	Metasediments	Foliated	Invalid - chipping		
62	JGT-04	267.18	45.0	61.1	24.68	0.02468	3501	7.05	1.08	7.60	Metasediments	Foliated	Valid - Intact Rock		
63	JGT-04	272.66	55.0	61.1	30.56	0.03056	4279	7.14	1.13	8.06	Granitoid	Massive	Valid - Intact Rock		
64	JGT-04	279.62	27.0	61.1	15.54	0.01554	2100	7.40	0.96	7.11	Granitoid	Massive	Valid - Intact Rock		
65	JGT-04	318.53	45.0	61.1	16.58	0.01658	3501	4.74	1.08	5.11	Granitoid	Foliated	Valid - Intact Rock		
66	JGT-04	349.29	19.0	61.1	14.86	0.01486	1478	10.05	0.89	8.93	Granitoid	Foliated	Valid - Intact Rock		
67	JGT-05	29.58	41.0	61.1	27.02	0.02702	3190	8.47	1.06	8.95	Granitoid	Foliated	Valid - Intact Rock		
68	JGT-05	50.55	52.0	61.1	22.80	0.02280	4045	5.64	1.11	6.28	Granitoid	Massive	Valid - Intact Rock		
69	JGT-05	62.60	46.0	61.1	25.92	0.02592	3579	7.24	1.08	7.85	Granitoid	Massive	Valid - Intact Rock		
70	JGT-05	77.36	42.0	61.1	31.70	0.03170	3267	9.70	1.06	10.30	Granitoid	Foliated	Valid - Intact Rock		
71	JGT-05	77.31	50.0	61.1	34.42	0.03442	3890	8.85	1.10	9.77	Granitoid	Foliated	Valid - Intact Rock		
72	JGT-05	87.74	32.0	61.1	20.98	0.02098	2489	8.43	1.00	8.42	Granitoid	Massive	Valid - Intact Rock		
73	JGT-05	124.11	31.0	61.1	20.76	0.02076	2412	8.61	0.99	8.54	Granitoid	Massive	Valid - Intact Rock		
74	JGT-05	135.81	60.0	61.1	22.98	0.02298	4668	4.92	1.15	5.67	Granitoid	Foliated	Invalid		
75	JGT-05	170.63	52.0	61.1	27.72	0.02772	4045	6.85	1.11	7.64	Granitoid	Foliated	Valid - Intact Rock		
76	JGT-05	194.76	60.0	61.1	39.90	0.03990	4668	8.55	1.15	9.84	Granitoid	Massive	Valid - Intact Rock		
77	JGT-05	212.77	36.0	61.1	22.18	0.02218	2801	7.92	1.03	8.12	Granitoid	Massive	Valid - Intact Rock		
78	JGT-05	227.52	47.0	61.1	17.80	0.01780	3656	4.87	1.09	5.30	Granitoid	Massive	Valid - Intact Rock		
79	JGT-05	300.29	55.0	61.1	17.70	0.01770	4279	4.14	1.13	4.67	Metasediments	Foliated	Valid - Intact Rock		
80	JGT-05	335.86	56.0	61.1	19.94	0.01994	4357	4.58	1.13	5.19	Metasediments	Massive	Valid - Intact Rock		
81	JGT-05	338.75	46.0	61.1	13.22	0.01322	3579	3.69	1.08	4.00	Metasediments	Massive	Valid - Intact Rock		
82	JGT-05	428.30	55.0	61.1	35.10	0.03510	4279	8.20	1.13	9.26	Granitoid	Massive	Rock strength exceeds PLT gauge range		
83	JGT-06	408.66	61.1	61.1	29.98	0.02998	4753	6.31	1.16	7.29	Granitoid	Massive	Valid - Intact Rock		
84	JGT-06	414.20	61.1	61.1	38.90	0.03890	4753	8.18	1.16	9.46	Granitoid	Massive	Invalid - chipping		
85	JGT-06	437.35	52.0	61.1	32.12	0.03212	4045	7.94	1.11	8.85	Granitoid	Massive	Valid - Intact Rock		

$I_{s(50)}$ $I_{s(50)} = \text{Size Corrected Point Load Strength}$

$I_{s(50)}$ $I_{s(50)} = F I_s$

$I_s = I$ $I_s = \text{Uncorrected Point Load Strength}$

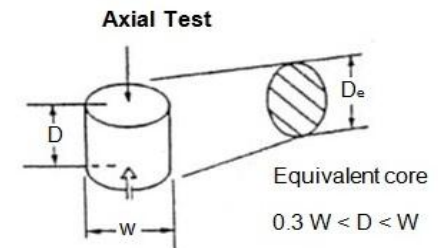
$I_s = I$ $I_s = P/D_e^2$

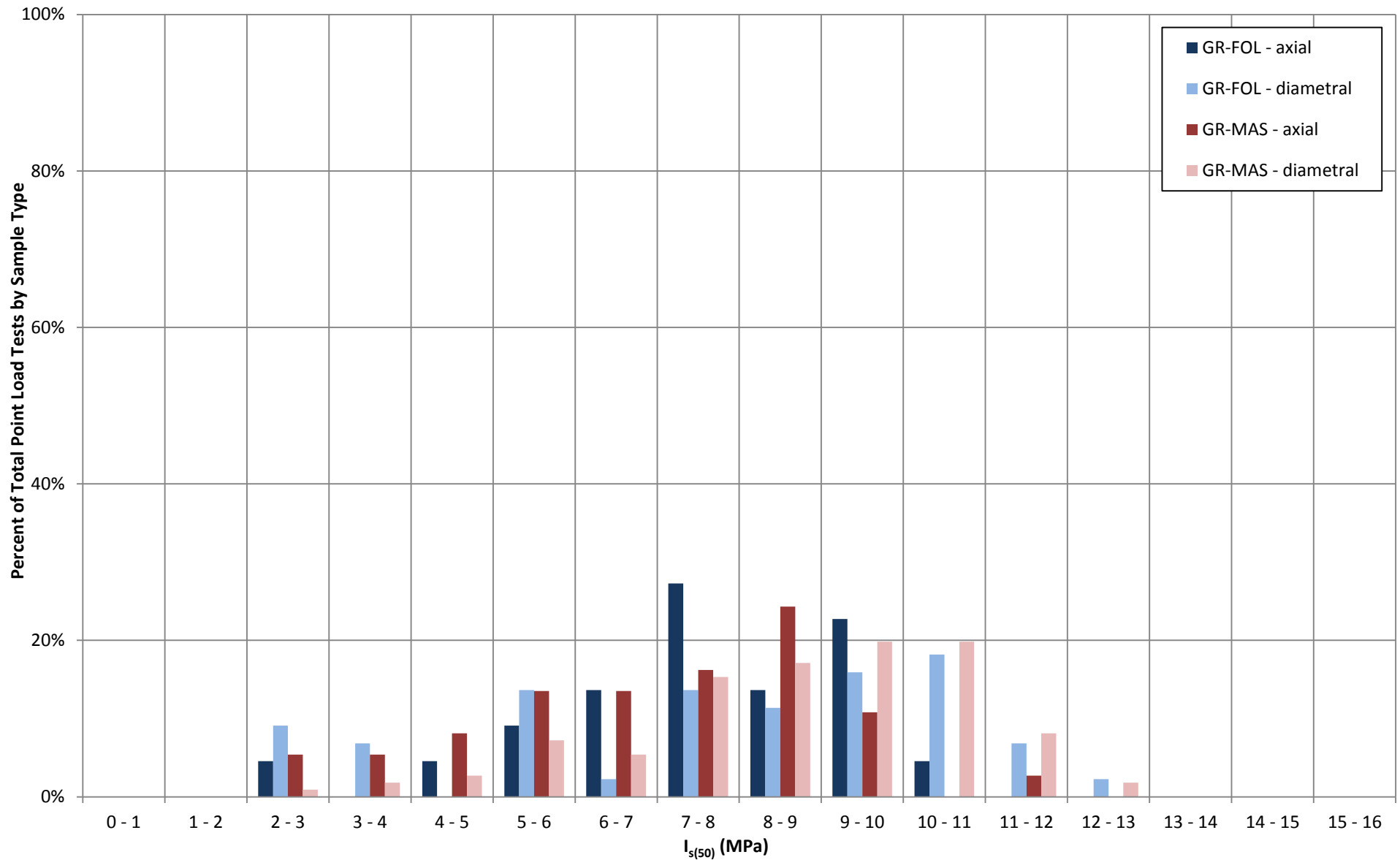
$F = \text{Size Correction Factor}$

$F = (D_e/50)^{0.45}$

$D_e = \text{equivalent core diameter (mm)}$

$D_e^2 = 4/\pi * D * W = (\text{mm}^2)$





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DOMINION DIAMOND

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YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	JJR
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

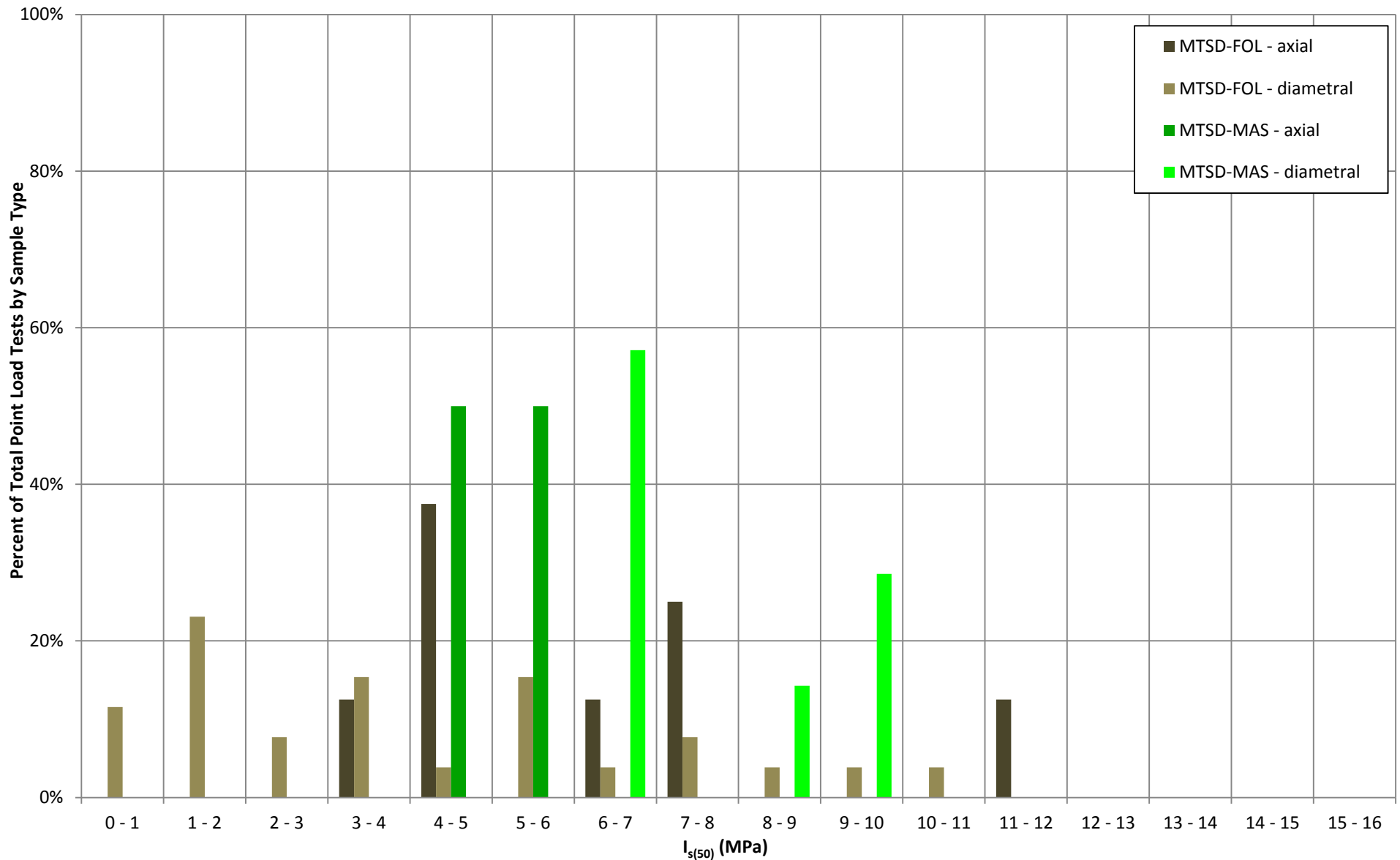
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POINT LOAD STRENGTH INDEX FOR
ALL VALID TESTS ON GRANITOID SAMPLES**

PROJECT No.
13-1328-0041

Phase.
2010

Rev.
0

Fig.
E - 1



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DESIGN	MV
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PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

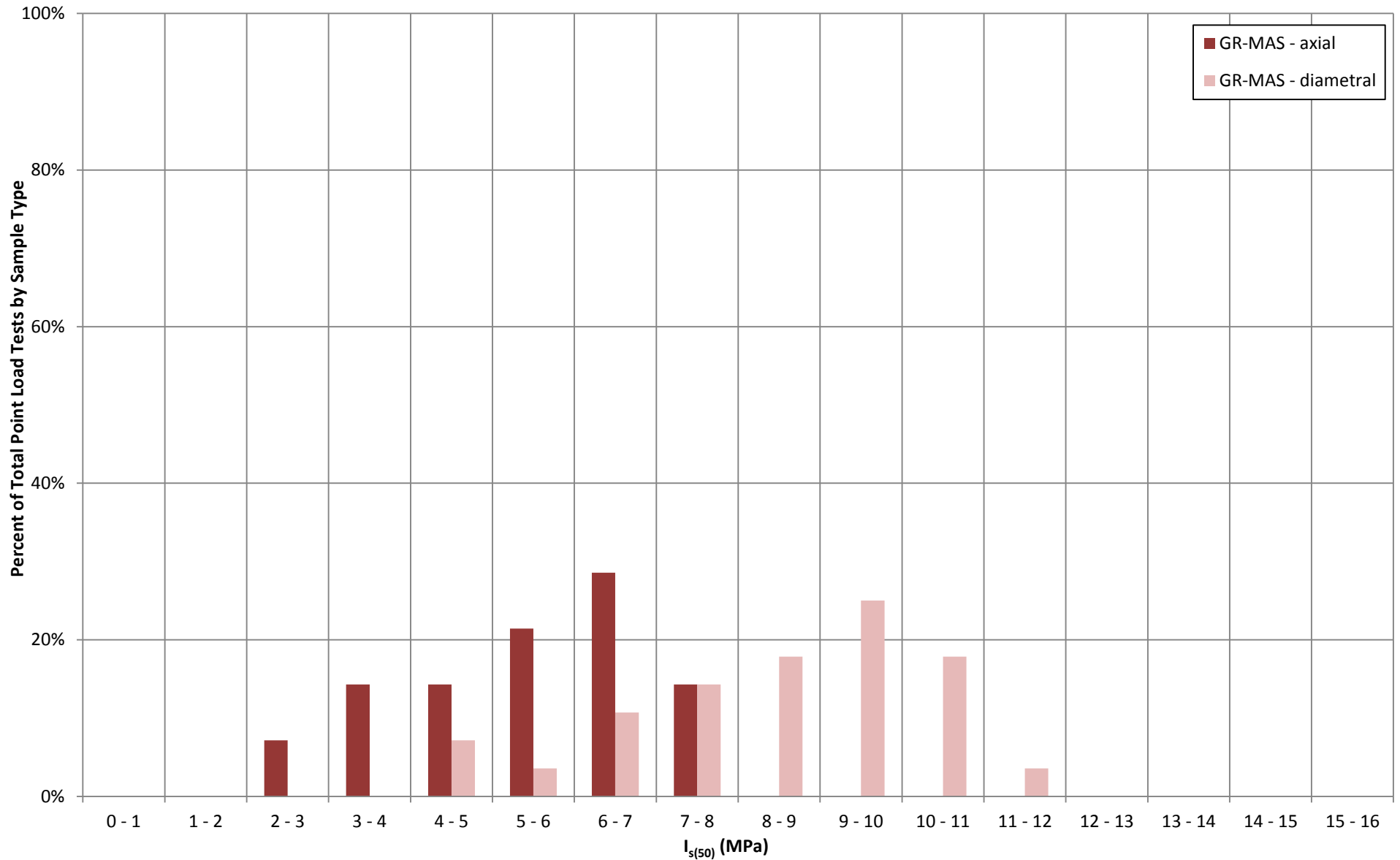
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POINT LOAD STRENGTH INDEX FOR
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PROJECT No.
13-1328-0041

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Fig.
E - 2



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DESIGN	MV
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JAY PROJECT
NORTHWEST TERRITORIES

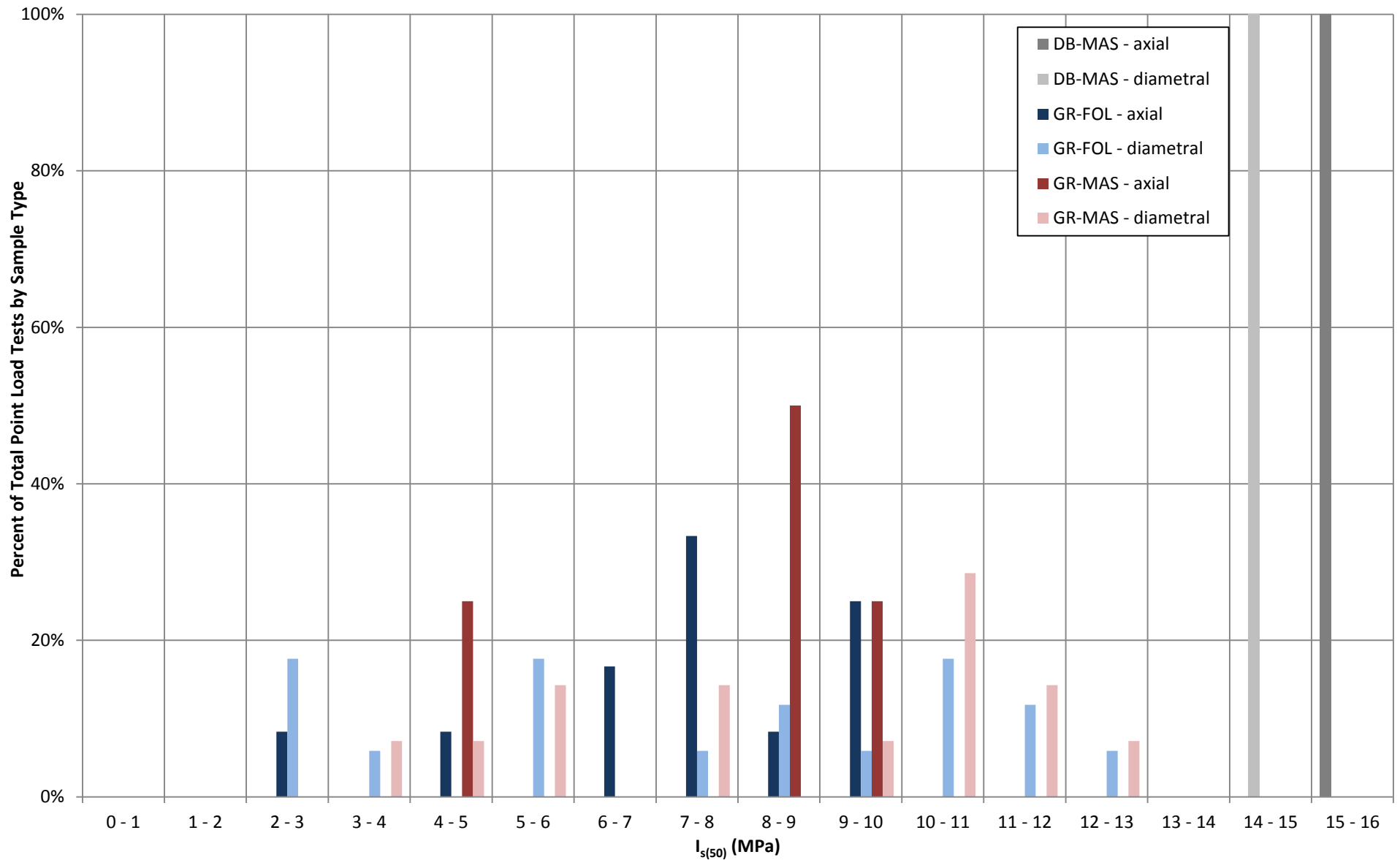
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PROJECT No.
13-1328-0041

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2010

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0

Fig.
E - 3



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PREPARED	MV
DESIGN	MV
REVIEW	JJR
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PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

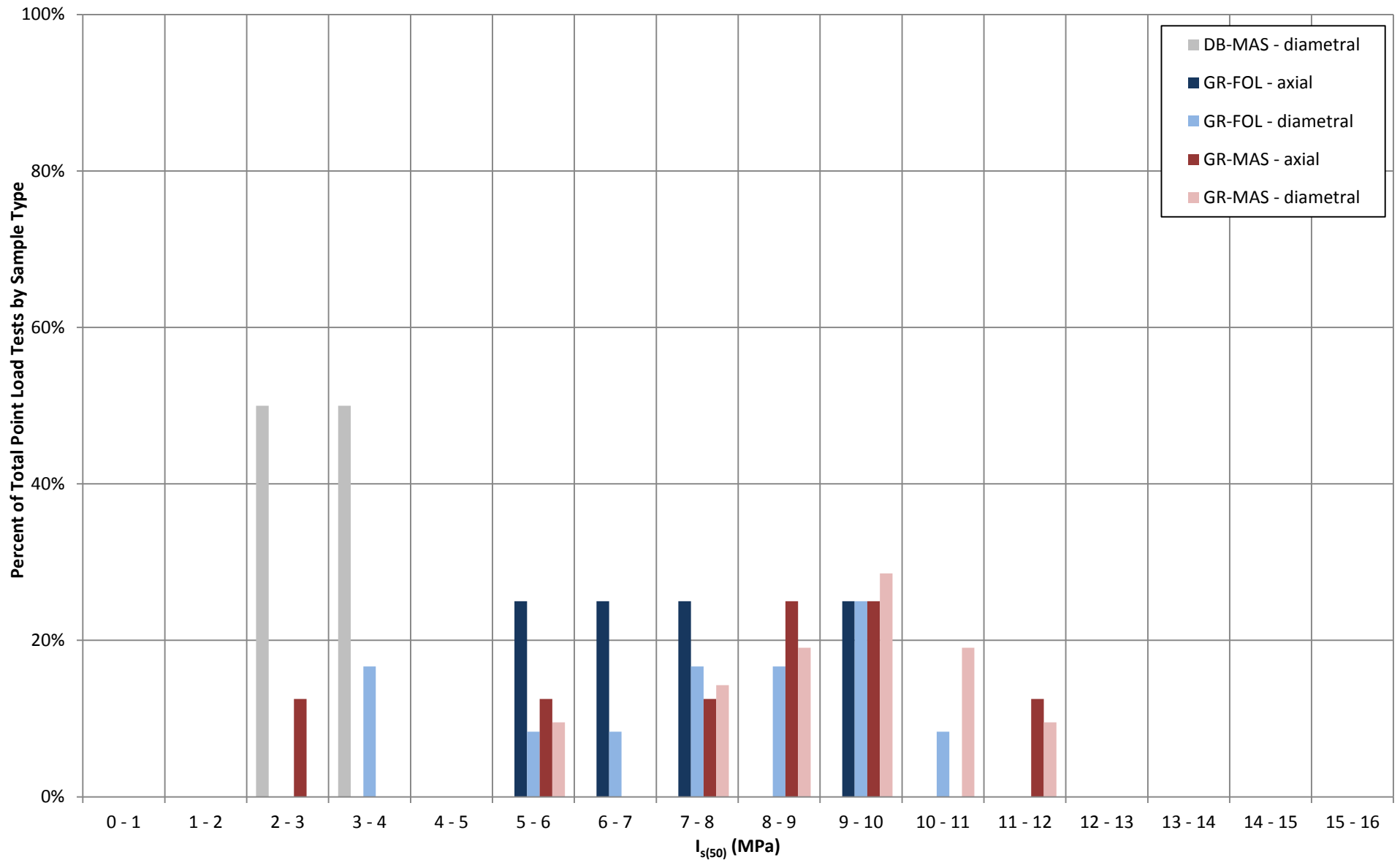
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PROJECT No.
13-1328-0041

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Fig.
E - 4



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YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	JJR
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

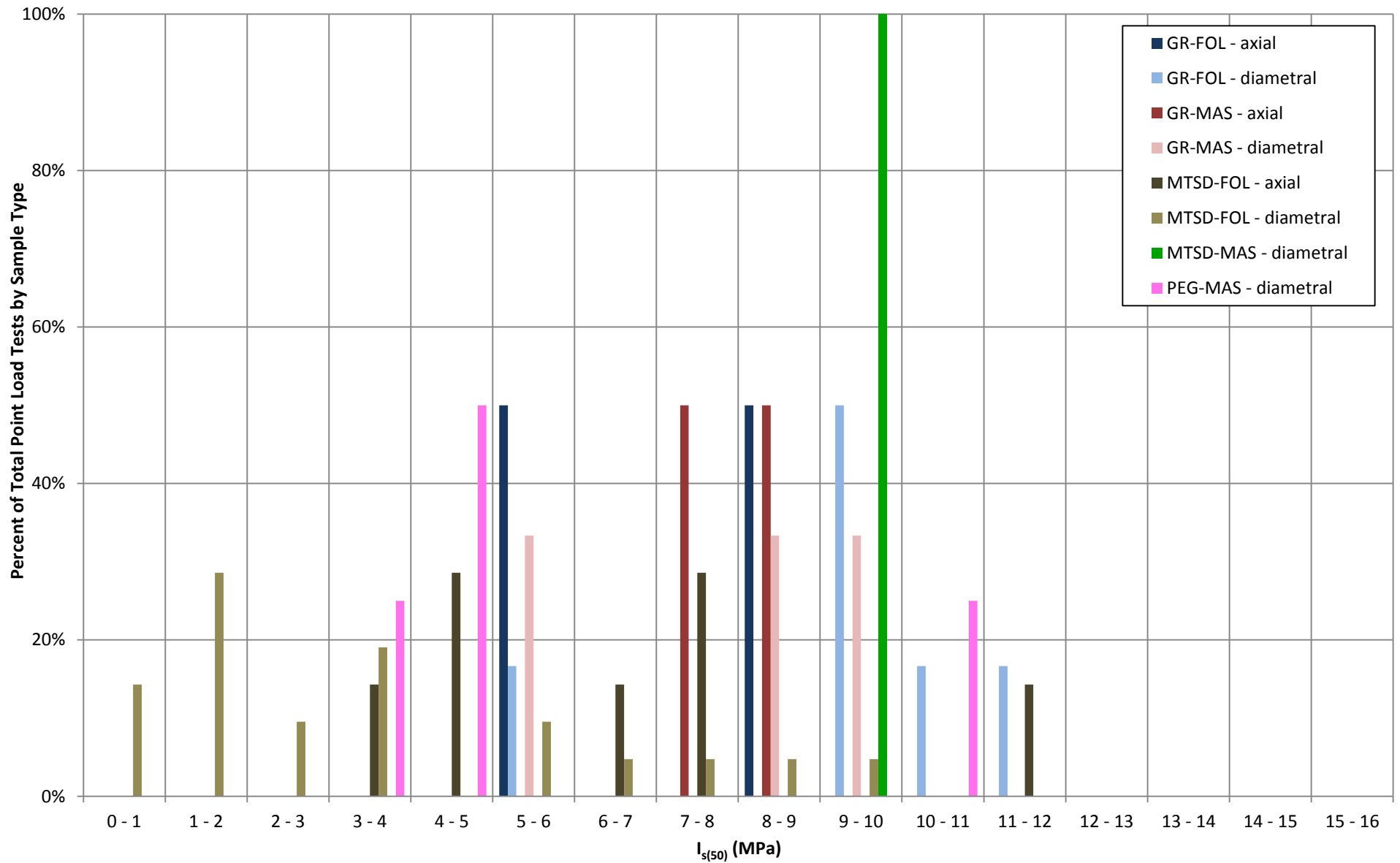
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PROJECT No.
13-1328-0041

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2010

Rev.
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Fig.
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YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	JJR
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

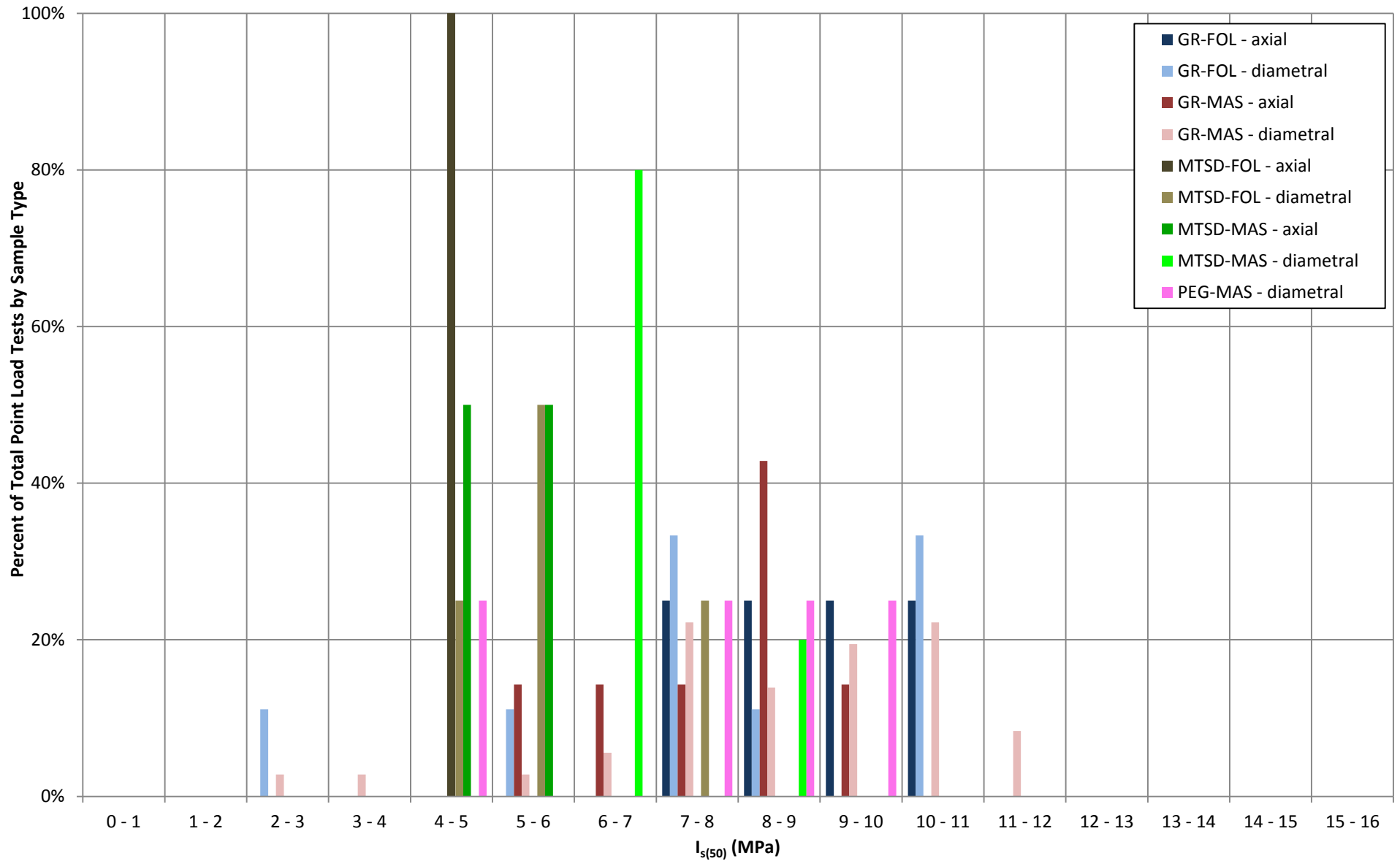
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ALL VALID TESTS ON JGT-04 SAMPLES**

PROJECT No.
13-1328-0041

Phase.
2010

Rev.
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Fig.
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DOMINION DIAMOND

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YYYY-MM-DD	2014-05-30
PREPARED	MV
DESIGN	MV
REVIEW	JJR
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

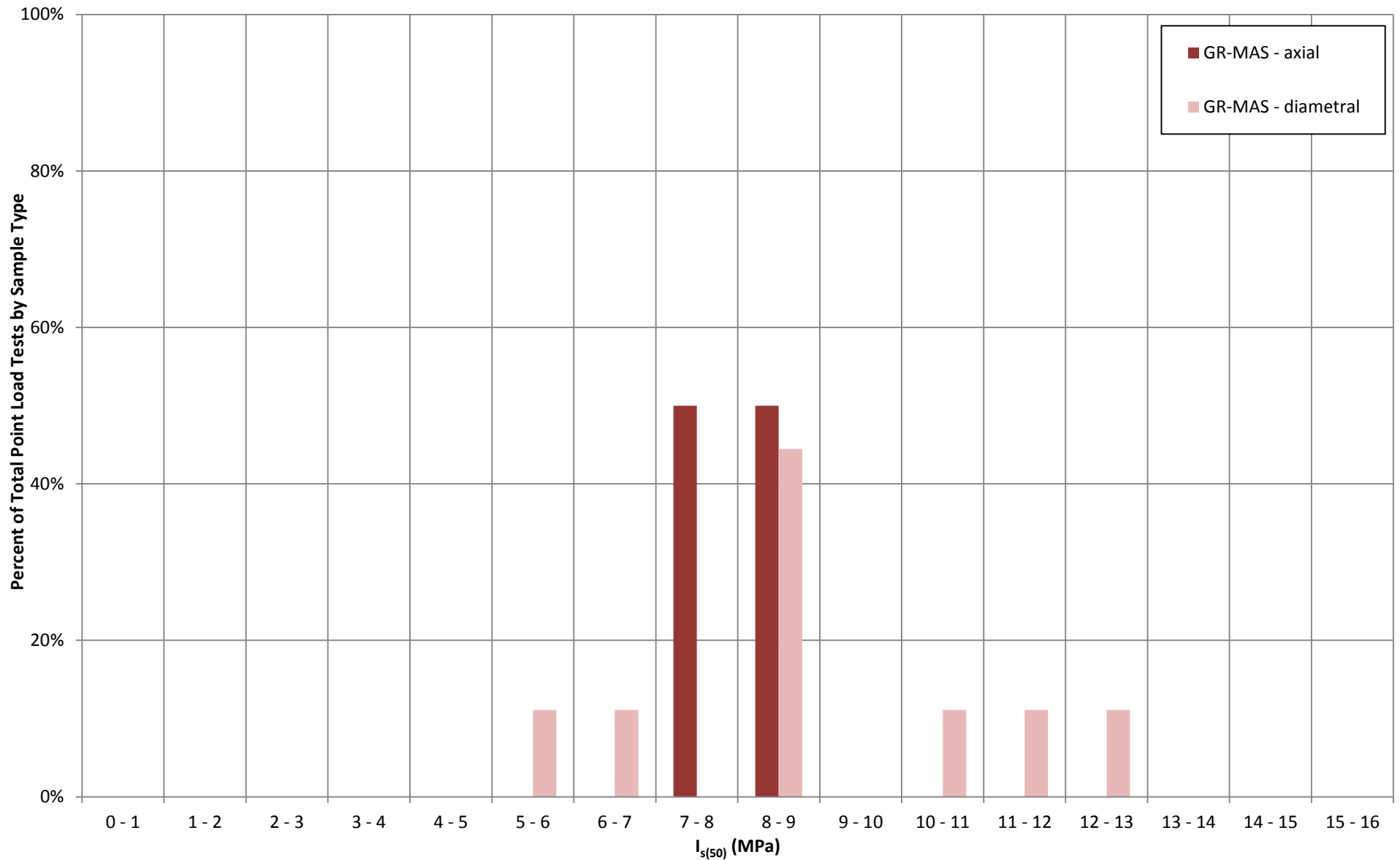
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POINT LOAD STRENGTH INDEX FOR
ALL VALID TESTS ON JGT-05 SAMPLES**

PROJECT No.
13-1328-0041

Phase.
2010

Rev.
0

Fig.
E - 7



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DESIGN	MV
REVIEW	JJR
APPROVED	JCC

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
**HISTOGRAM SHOWING DISTRIBUTION OF
POINT LOAD STRENGTH INDEX FOR
ALL VALID TESTS ON JGT-06 SAMPLES**

PROJECT No.
13-1328-0041

Phase.
2010

Rev.
0

Fig.
E - 8



APPENDIX F

Hydrogeological Data

DATE July 16, 2014**REFERENCE No.** 1313280041-E14040-TM-Rev0-2010**TO** Ermanno Rambelli
Golder Associates Ltd.**FROM** Denis Vachon and Mike Dobr**EMAIL** Denis_Vachon@golder.com;
Michal_Dobr@golder.com**FACTUAL MEMORANDUM ON 2014 HYDROGEOLOGICAL TESTING PROGRAM – JAY PROJECT****1.0 INTRODUCTION**

A hydrogeological testing program was conducted in the area of the proposed Jay open pit as part of the 2014 geotechnical and hydrogeological field investigations carried out in support of the Jay Project geotechnical design.

This technical memorandum provides a summary and interpretation of the hydrogeological data collected during the program.

2.0 HYDROGEOLOGICAL FIELD INVESTIGATIONS

Hydrogeological testing was undertaken over a period of March 11 to April 23, 2014, in six boreholes drilled by Major Drilling. All the boreholes were cored with a nominal diameter of 96 mm (HQ3). Detailed information on the selected test boreholes such as collar coordinates, borehole inclination, and depth is presented in Table 1.

Table 1: Test Borehole Details

Borehole ID	Easting (m) ^(a,b)	Northing (m) ^(a,b)	Elevation (masl)	Ice Thickness (mah)	Top of Sediments (mah)	Top of Bedrock (mah)	Total Drilled Length (mah)	Azimuth (deg) ^(c)	Inclination (deg) ^(d)
JGT-01	543,130.8	7,165,638.9	419.4	0.81	0.81	5.50	251.00	200	80
JGT-02	542,458.5	7,166,092.8	415.8	1.96	18.30	21.50	450.13	025	70
JGT-03	542,166.9	7,165,991.4	415.8	1.73	33.54	47.22	449.48	310	70
JGT-04	542,015.9	7,165,679.1	415.9	1.80	10.80	30.42	350.58	070	70
JGT-05	542,576.8	7,165,750.0	415.9	1.70	8.80	12.66	452.77	110	70
JGT-06	543,163.3	7,165,609.9	419.6	0.00	0.00	5.85	461.30	200	80

a) Collar coordinates are referenced to UTM NAD 83, Zone 12N.

b) Collar survey data provided by Dominion Diamond Corporation.

c) All azimuths are with respect to true north. All angles are in degrees.

d) Inclination is the angle below the horizontal; i.e., 90 degrees = a vertical hole.

m = metres; masl = metres above sea level; mah = metres along hole, relative to ground (or ice) surface; deg = degrees.



2.1 Testing Approach

Single-well pressure response tests were carried out in the selected boreholes to obtain information on the bulk hydraulic conductivity of the rock mass. Testing was conducted with a pneumatic packer tool in a wireline single-packer configuration. This tool consists of two packers connected by a seating cone that keeps one packer inside the core barrel with the second packer extending into the open hole below the core bit. A schematic diagram of the tool assembly is shown in Figure 1. To perform a test, the drill string was pulled up to expose a section of the borehole selected for testing, and the tool was lowered on a wireline through the drill string into the borehole. When the packers were seated, they were inflated with nitrogen gas isolating the section of the borehole between the lower packer and the bottom of the borehole at that time. After the test was completed, the packers were deflated and removed from the borehole.

To monitor the progress of the individual test sequences in real time, an RST Instruments vibrating wire piezometer connected to a datalogger was lowered in the drill rods below the water table and was programmed to collect data every five seconds. A LevelTROLL 700 memory gauge was also placed directly in the test interval to obtain more accurate pressure response data. The transducer/logger was programmed to collect data between one and five second intervals. The data from the LevelTROLL were used for the analysis. The calibration certificates for the RST Instruments vibrating wire piezometer and the LevelTROLL 700 memory gauge are provided in Attachment A.

Prior to testing, the core recovered from the boreholes was reviewed in detail to assess the borehole stability, and to identify suitable locations for placement of the testing equipment. The test intervals varied in length from 16.7 to 106.7 metres, and were selected to provide a continuous hydraulic conductivity profile along the saturated portion of each borehole. A summary of the tests carried out in the selected boreholes is presented in Table 2.

Table 2: Summary of Hydrogeological Tests

Borehole ID	Interval Tested (mah)	Number of Tests Conducted	Date Started	Date Ended
JGT-01	149.4 to 251.0	2	March 11, 2014	March 13, 2014
JGT-02	57.9 to 450.1	5	March 15, 2014	March 23, 2014
JGT-03	54.7 to 449.5	4	April 17, 2014	April 21, 2014
JGT-04	93.9 to 350.6	3	April 6, 2014	April 11, 2014
JGT-05	22.1 to 452.8	7	March 19, 2014	March 31, 2014
JGT-06	144.0 to 461.3	8	March 28, 2014	April 5, 2014

mah = metres along hole, relative to ground (or ice) surface.

2.2 Testing Methodology

The following methodology was used for the hydrogeological testing for the Jay Project:

- pressure static recovery (PSR) sequence;
- slug withdrawal (SW) sequence; and
- constant rate injection (RI) sequence.

The procedures and the order of the individual test sequences were adjusted for each hydrogeological test. Based on the actual conditions encountered in the individual test intervals, some of the sequences listed above were not carried out. The following provides detailed description of the individual test sequences.

2.2.1 Pressure Static Recovery

Following packer inflation at the desired depth, a pressure transducer was lowered inside the test rods below the water table to monitor the pressure response of the aquifer in real time. The pressure static recovery (PSR) sequence was carried out to allow the aquifer within the isolated interval to reach static conditions after packer inflation. This sequence lasted between 30 minutes and approximately 1 hour. After this time, the next test sequence was initiated, even if full hydrostatic conditions were not achieved in the test interval.

2.2.2 Slug Withdrawal Test

After the PSR sequence, a slug withdrawal (SW) test was carried out. This test sequence consists of removing an instantaneous slug of water out of the test rods. After the slug displacement, the water level inside the test rods was monitored until it recovered to the pre-test level. If the water level fully recovered within a 30 minute period, the slug test was followed by a constant rate injection (RI) test sequence. If full recovery was not reached within 30 minutes, the slug recovery monitoring continued for another 15 to 30 minutes. After this time, the test was terminated even if full recovery was not reached.

2.2.3 Constant Rate Injection

A constant rate injection (RI) test consists of injecting water into the test interval at a constant rate for a minimum of 30 minutes. A surface water injection assembly including a pump, flow control valves, flowmeter, pressure transducer, and a header that connects the water injection assembly to the top of the test rods is required to perform a constant rate injection test. Flow rate and injection pressure are recorded during the test with the surface monitoring equipment. Additional data are collected by a downhole memory gauge that is attached to the lower packer and records the pressure changes directly within the test interval during the test.

2.3 Test Analysis

2.3.1 Software

The test analyses were carried out with HydroBench[®] (Version 3.6.4.3), a Golder internally developed software package designed to analyze different types of hydrogeological tests. HydroBench is a pressure transient interpretation package using the Bourdet Derivative method (e.g., Gringarten 2008) coupled with a library of analytical reservoir models. Further information on the HydroBench software, including a detailed documentation of the verification of the software, is available on request.

2.3.2 Results

A summary of the transmissivity and hydraulic conductivity values calculated for the tested intervals is presented in Table 3. The hydraulic conductivity values were calculated by dividing the transmissivity value by the length of the corresponding test interval. The table shows the test sequences carried out in each interval such as PSR, SW, and RI. For each test interval, the test sequence with the most reliable pressure response data set was selected for analyses.

Table 3: Summary of Single-Well Test Results

Borehole ID	Test Number	Interval Top (mah)	Interval Bottom (mah)	Interval Length (m)	Test Sequences Conducted	Test Sequence Analyzed	Rock Type	Structural Feature	T (m ² /s)	K (m/s)
JGT-01	1	149.4	199.1	49.7	PSR, SW, RI	SW	GR	none	5E-08	1E-09
JGT-01	2	200.6	251.0	50.4	PSR, SW, RI	SW	GR	none	2E-07	5E-09
JGT-02	1	57.9	77.6	19.7	PSR, SW	SW	GR,	fault	1E-05	7E-07
JGT-02	2	75.9	173.6	97.7	PSR, SW	SW	GR	none	2E-05	2E-07
JGT-02	3	174.9	275.6	100.7	PSR, SW, RI	RI	GR	none	7E-06	7E-08
JGT-02	4	273.9	374.6	100.7	PSR, SW, RI	RI	GR, PEG	none	8E-06	7E-08
JGT-02	5	372.9	450.1	77.3	PSR, SW	SW	GR, DB	none	1E-06	2E-08
JGT-03	1	54.7	152.5	97.8	PSR, SW, RI	RI	DB, GR, PEG	none	9E-04	9E-06
JGT-03	2	147.7	251.5	103.8	PSR, SW	SW	GR	none	4E-07	3E-09
JGT-03	3	246.7	350.5	103.8	PSR, SW, RI	RI	GR, PEG	fault	3E-05	3E-07
JGT-03	4	348.7	449.5	100.8	PSR, SW, RI	RI	DB, GR	none	1E-04	1E-06
JGT-04	1	93.9	146.6	52.7	PSR, SW, RI	SW	MTSD	fault	5E-05	9E-07
JGT-04	2	144.9	251.6	106.7	PSR, SW, RI	SW	MTSD, GR,	fault	3E-05	3E-07
JGT-04	3	243.9	350.6	106.7	PSR, SW, RI	RI	MTSD, PEG, GR	none	2E-06	2E-08
JGT-05	1	22.1	47.8	25.7	PSR, SW, RI	SW	GR	none	1E-05	4E-07
JGT-05	2	49.1	101.8	52.7	PSR, SW, RI	SW	GR, MTSD	fault	2E-05	5E-07
JGT-05	3	103.1	152.8	49.7	PSR, SW, RI	SW	GR	none	9E-06	2E-07
JGT-05	4	151.1	200.8	49.7	PSR, SW	SW	GR, PEG	none	2E-06	5E-08
JGT-05	5	199.1	275.8	76.7	PSR, SW	SW	GR	none	8E-08	1E-09
JGT-05	6	274.1	326.8	52.7	PSR, SW	SW	GR, MTSD	none	5E-08	1E-09
JGT-05	7	436.1	452.8	16.7	PSR, SW, RI	RI	GR	none	8E-04	5E-05
JGT-06	1	144.0	195.4	51.4	PSR, SW	SW	GR	none	2.E-07	3E-09
JGT-06	2	198.0	251.3	53.3	PSR, SW	SW	GR	none	3.E-06	6E-08
JGT-06	3	246.0	299.3	53.3	PSR, SW	SW	GR	none	8.E-09	2E-10
JGT-06	4	297.0	350.3	53.3	PSR, SW	SW	GR	none	6.E-07	1E-08
JGT-06	5	348.0	380.3	32.3	PSR, SW, RI	SW	GR	fault	2.E-04	5E-06
JGT-06	6	345.0	398.3	53.3	PSR, SW, RI	SW	GR	fault	4.E-04	7E-06
JGT-06	7	396.0	461.3	65.3	PSR, SW	N/A	GR	fault	test not analyzed ^(a)	
JGT-06	8	396.0	461.3	65.3	PSR, SW, RI	RI	GR	fault	3.E-04	4E-06

a) Fast recovery during SW, test repeated (JGT-06 Test 8).

mah = metres along hole, relative to ground (or ice) surface; m = metres; m/s = metres per second; m²/s = square metres per second; T = Transmissivity; K = Hydraulic conductivity; PSR = pressure static recovery sequence; SW = slug withdrawal sequence (rising head test); RI = constant rate injection sequence; GR = Granitoid; PEG = Pegmatite; DB = Diabase; MTSD = Metasediments; N/A = not applicable.

The hydraulic conductivity values derived from the single-well pressure response tests conducted during the program varied between 2×10^{-10} m/s and 5×10^{-5} m/s. The results of the individual tests are presented along with the depth of the corresponding test interval (below ground surface along the hole) in Figure 2. Detailed analytical test reports are presented in Attachment B. These reports are computer generated protocols, and some values in these documents might differ from values discussed within the text section of this document.

3.0 CONCLUSION

We trust that the information provided above satisfies your current project requirements. If you have any questions or concerns, please do not hesitate to contact us at your convenience.

GOLDER ASSOCIATES LTD.

ORIGINAL SIGNED

Denis Vachon, P.Eng.
Geological Engineer

DV/MD/kp/it

Attachments: Figures 1 and 2
Attachment A: Transducer Calibration Certificates
Attachment B: *HydroBench*® Analysis Reports

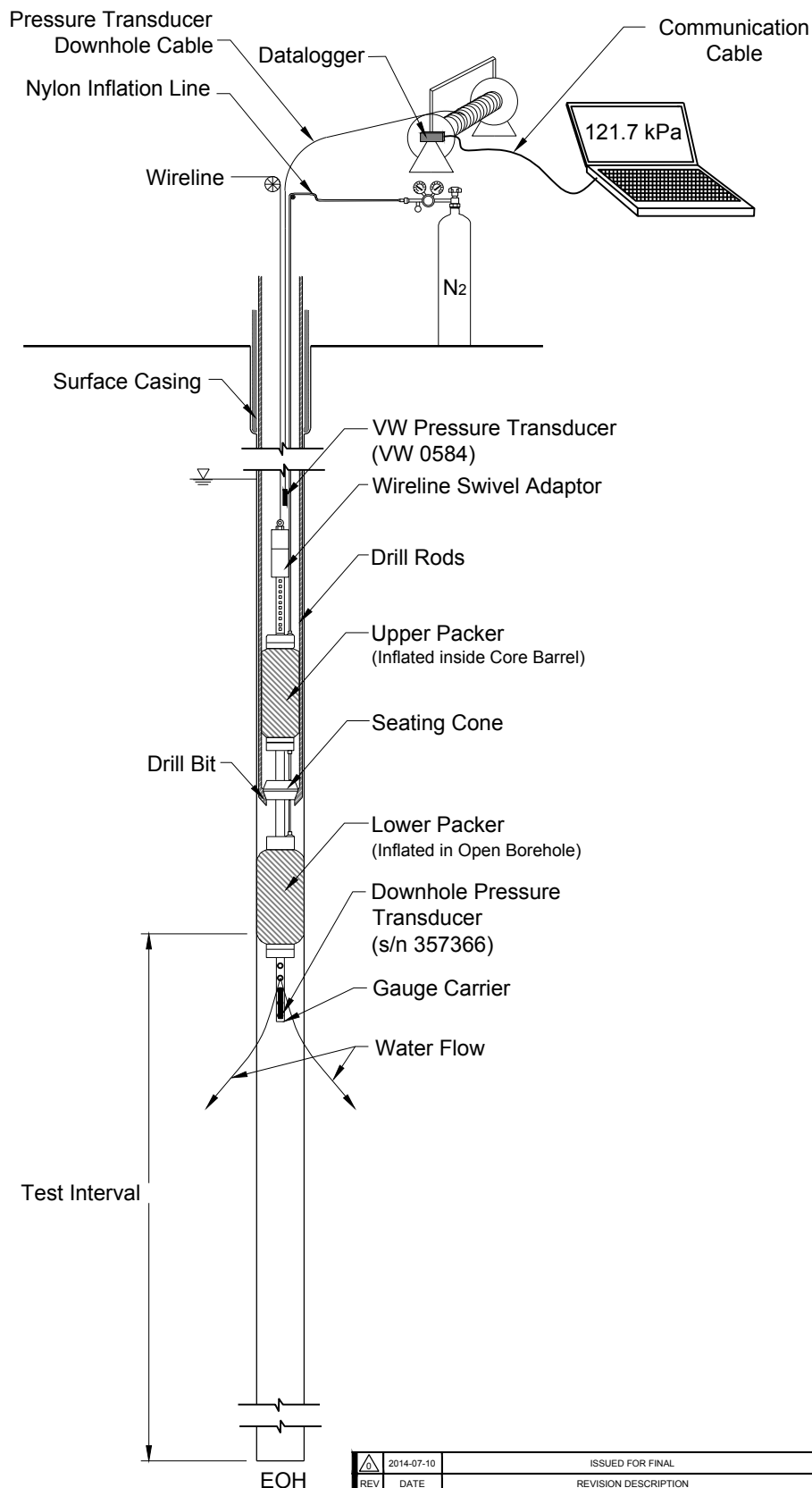
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Mike Dobr, RNDr. P.Geo.
Principal, Senior Hydrogeologist

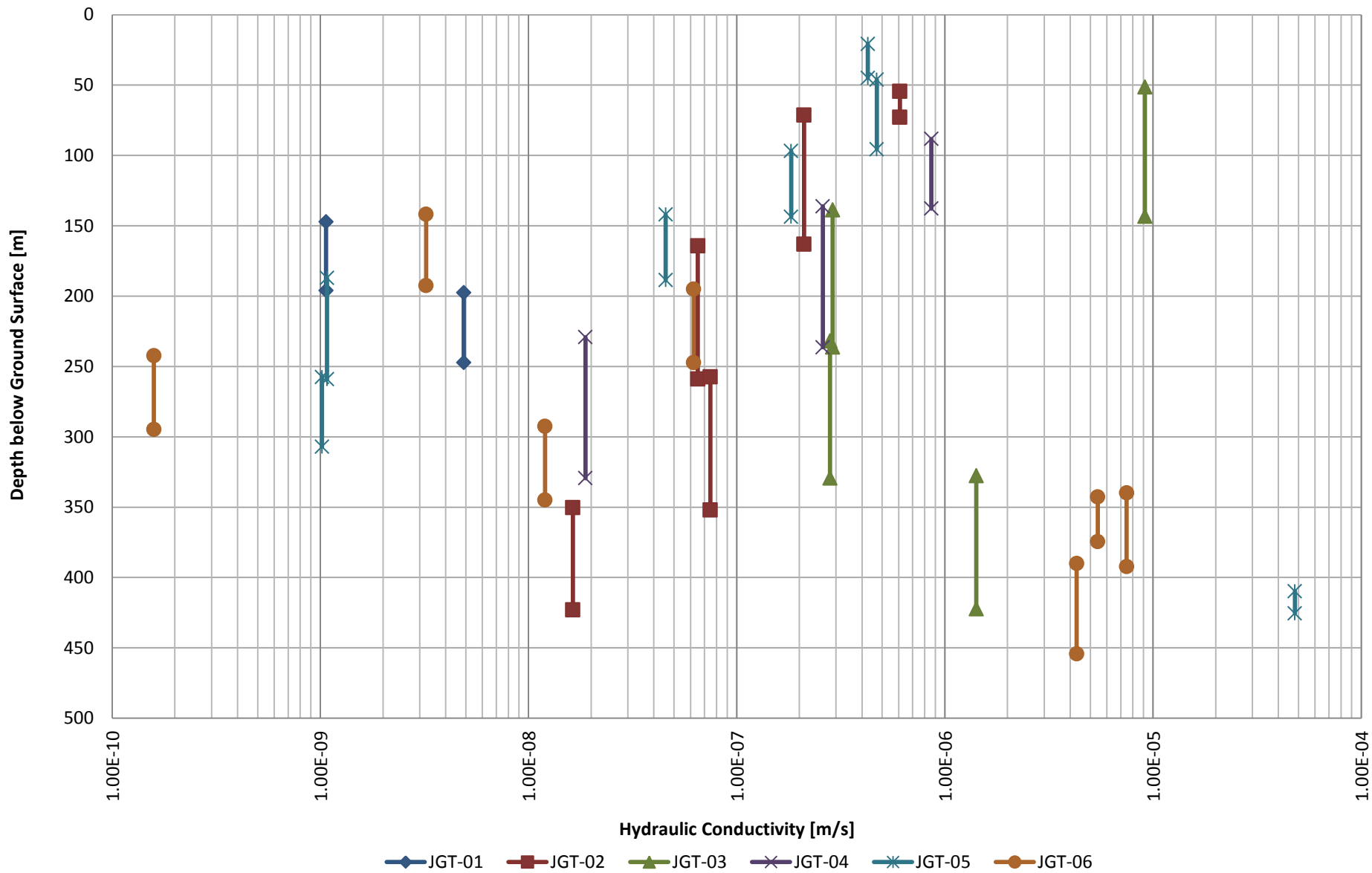
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REFERENCE

Gringarten AC. 2008. From Straight Lines to Deconvolution: The Evolution of the State of the Art in Well Test Analysis. SPE Reservoir Evaluation & Engineering 11: 41-62.



	2014-07-10	ISSUED FOR FINAL				DV	MSH	NG	MD
REV	DATE	REVISION DESCRIPTION				DES	CADD	CHK	RVW
PROJECT  DOMINION DIAMOND						JAY PROJECT NORTHWEST TERRITORIES, CANADA			
TITLE SINGLE PACKER WIRELINE DOWNHOLE ASSEMBLY - SCHEMATIC									
		PROJECT No. 13-1328-0041.2010.70				FILE No. 1313280041-2010-70-E14040-01			
		DESIGN	DV	2014-05-30		SCALE		AS SHOWN	
		CADD	MSH	2014-05-30		FIGURE			
		CHECK	NG	2014-07-10					
		REVIEW	MD	2014-07-10					
						1			



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YYYY-MM-DD	2014-05-30
PREPARED	DV
DESIGN	TD
REVIEW	MD
APPROVED	MD

PROJECT
JAY PROJECT
NORTHWEST TERRITORIES

TITLE
**SUMMARY OF HYDRAULIC CONDUCTIVITY
VERSUS DEPTH**

PROJECT No.
13-1328-0041

Phase.
2010

Rev.
0

Fig.
2

ATTACHMENT A
Transducer Calibration Certificates

Instrument Details:

Instrument Model: **Level TROLL 700**
Full Scale Pressure Range: **6894.76 KPa (1000 PSI) non-vented**
Serial Number: **318995**

Calibration Details:

Calibration Result: **PASS**
Calibration Date: **2012-08-07 20:44:58 (UTC)**
Nominal Range of Applied Temperature: **-5 C to +50 C**
Temperature Accuracy Specification: **+/- 0.1 C From 0 C to +50 C**
Nominal Range of Applied Pressure: **48.3 KPa to 6894.8 KPa (7.0 PSI to 1000.0 PSI)**
Pressure Accuracy Specification: **+/- 0.1 %FS from -5 C to +50 C, +/- 0.05 %FS at +15 C**

Post-Calibration Check:

Parameter	Applied	Reported	Deviation
Pressure	1000.0000	1000.2340	0.0234
Pressure	424.0600	424.0975	0.0038
Pressure	7.0000	7.0579	0.0058
Temperature	24.6810	24.6943	0.0133

Calibration Procedures and Equipment Used:

Automated calibration procedures used.
Manu Agilent Model 34980A SerialNo MY44001931
Manu Instrulab Model 4312A-15 SerialNo 30117
Manu Instrulab Model 832-151-01 SerialNo 809
Manu Mensor Model PCS-400 SerialNo 180695
Manu Mensor Model PCS-400 SerialNo 180695
Manu Ruska Model 7215xi SerialNo 55556
Manu Agilent Model 53131A-010 SerialNo MY47002282
Manu MENSOR Model 600 SerialNo 620225

Notes:

1. Standards used in this calibration are traceable to the National Institute of Standards and Technology.
2. This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
3. A calibration interval of 12 to 18 months is recommended.
4. The post-calibration data is collected at nominal +20 C.
5. 1.0 PSI = 6.894757 KPa

Performed By: FM

Instrument Details:

Instrument Model: **Level TROLL 700**
Full Scale Pressure Range: **6894.76 KPa (1000 PSI) non-vented**
Serial Number: **334788**

Calibration Details:

Calibration Result: **PASS**
Calibration Date: **2013-03-19 17:36:52 (UTC)**
Nominal Range of Applied Temperature: **-5 C to +50 C**
Temperature Accuracy Specification: **+/- 0.1 C From 0 C to +50 C**
Nominal Range of Applied Pressure: **48.3 KPa to 6894.8 KPa (7.0 PSI to 1000.0 PSI)**
Pressure Accuracy Specification: **+/- 0.1 %FS from -5 C to +50 C, +/- 0.05 %FS at +15 C**

Post-Calibration Check:

Parameter	Applied	Reported	Deviation
Pressure	1000.0050	999.9681	-0.0037
Pressure	424.0600	424.1859	0.0126
Pressure	7.0000	7.0374	0.0037
Temperature	24.6820	24.6938	0.0118

Calibration Procedures and Equipment Used:

Automated calibration procedures used.
Manu Agilent Model 34980A SerialNo MY44003951
Manu Instrulab Model 4312A-15 SerialNo 30117
Manu Instrulab Model 832-151-01 SerialNo 809
Manu Mensor Model PCS-400 SerialNo 180695
Manu Mensor Model PCS-400 SerialNo 180695
Manu Agilent Model 53131A-010 SerialNo MY47002282
Manu MENSOR Model 600 SerialNo 620699

Notes:

1. Standards used in this calibration are traceable to the National Institute of Standards and Technology.
2. This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
3. A calibration interval of 12 to 18 months is recommended.
4. The post-calibration data is collected at nominal +20 C.
5. 1.0 PSI = 6.894757 KPa

Performed By: FM

Instrument Details:

Instrument Model: **Level TROLL 700**
Full Scale Pressure Range: **6894.76 KPa (1000 PSI) non-vented**
Serial Number: **335363**

Calibration Details:

Calibration Result: **PASS**
Calibration Date: **2013-03-19 17:36:52 (UTC)**
Nominal Range of Applied Temperature: **-5 C to +50 C**
Temperature Accuracy Specification: **+/- 0.1 C From 0 C to +50 C**
Nominal Range of Applied Pressure: **48.3 KPa to 6894.8 KPa (7.0 PSI to 1000.0 PSI)**
Pressure Accuracy Specification: **+/- 0.1 %FS from -5 C to +50 C, +/- 0.05 %FS at +15 C**

Post-Calibration Check:

Parameter	Applied	Reported	Deviation
Pressure	1000.0000	1000.1200	0.0120
Pressure	424.0600	424.0735	0.0013
Pressure	7.0000	7.0594	0.0059
Temperature	24.6860	24.6910	0.0050

Calibration Procedures and Equipment Used:

Automated calibration procedures used.

Manu Agilent Model 34980A SerialNo MY44003951

Manu Instrulab Model 4312A-15 SerialNo 30117

Manu Instrulab Model 832-151-01 SerialNo 809

Manu Mensor Model PCS-400 SerialNo 180695

Manu Mensor Model PCS-400 SerialNo 180695

Manu Agilent Model 53131A-010 SerialNo MY47002282

Manu MENSOR Model 600 SerialNo 620699

Notes:

- Standards used in this calibration are traceable to the National Institute of Standards and Technology.
- This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
- A calibration interval of 12 to 18 months is recommended.
- 1.0 KPa = 6.894757 PSI

Performed By: FM

Instrument Details:

Instrument Model: **Level TROLL 700**
Full Scale Pressure Range: **6894.76 KPa (1000 PSI) non-vented**
Serial Number: **335396**

Calibration Details:

Calibration Result: **PASS**
Calibration Date: **2013-03-19 17:36:52 (UTC)**
Nominal Range of Applied Temperature: **-5 C to +50 C**
Temperature Accuracy Specification: **+/- 0.1 C From 0 C to +50 C**
Nominal Range of Applied Pressure: **48.3 KPa to 6894.8 KPa (7.0 PSI to 1000.0 PSI)**
Pressure Accuracy Specification: **+/- 0.1 %FS from -5 C to +50 C, +/- 0.05 %FS at +15 C**

Post-Calibration Check:

Parameter	Applied	Reported	Deviation
Pressure	1000.0000	1000.1450	0.0145
Pressure	424.0600	424.0537	-0.0006
Pressure	7.0000	7.0113	0.0011
Temperature	24.6860	24.6843	-0.0017

Calibration Procedures and Equipment Used:

Automated calibration procedures used.

Manu Agilent Model 34980A SerialNo MY44003951

Manu Instrulab Model 4312A-15 SerialNo 30117

Manu Instrulab Model 832-151-01 SerialNo 809

Manu Mensor Model PCS-400 SerialNo 180695

Manu Mensor Model PCS-400 SerialNo 180695

Manu Agilent Model 53131A-010 SerialNo MY47002282

Manu MENSOR Model 600 SerialNo 620699

Notes:

- Standards used in this calibration are traceable to the National Institute of Standards and Technology.
- This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
- A calibration interval of 12 to 18 months is recommended.
- 1.0 KPa = 6.894757 PSI

Performed By: FM



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instrumentation

Calibration Record

RST Instruments Ltd., 11545 Kingston St., Maple Ridge, British Columbia, Canada V2X 0Z5
Tel: 604 540 1100 • Fax: 604 540 1005 • Toll Free: 1 800 665 5599 (North America only)
e-mail: info@rstinstruments.com • Website: www.rstinstruments.com

Vibrating Wire Pressure Transducer

Customer: GOLDER CONSTRUCTION - VANCOUVER
Model: VWWL2100-1.0
Serial Number: VW7541
Mfg Number: 07-14632
Range: 1.0 MPa
Date of Calibration: May 1, 2013
Temperature: 22.8 °C
Barometric Pressure: 1037 millibars
W.O. Number: 200738
Cable Length: 100 meters
Cable Colour Code: red / black (coil) green / white (thermistor)
Cable Type: EL380004K
Thermistor type: 3 Kohms

Applied Pressure (MPa)	First Reading (B units)	Applied Pressure (MPa)	Second Reading (B units)	Average Pressure (MPa)	Average Readings (B units)	Calculated Linear (MPa)	Linearity F.S. Error (%)	Polynomial Fit (% FS)
0.000	8864	0.000	8865	0.000	8865	0.002	0.18	0.00
0.200	8119	0.200	8118	0.200	8119	0.200	-0.03	0.00
0.400	7369	0.400	7369	0.400	7369	0.399	-0.15	0.00
0.600	6615	0.600	6615	0.600	6615	0.599	-0.14	0.00
0.800	5857	0.800	5858	0.800	5858	0.800	-0.05	-0.01
1.000	5095	1.000	5095	1.000	5095	1.002	0.18	0.00
Max. Error (%):							0.18	0.01

Linear Calibration Factor: C.F. = 0.00026530 MPa/B unit
Regression Zero: At Calibration Bi = 8871.2 B unit
Temperature Correction Factor: Tk = -0.0002699 MPa/°C rise

Polynomial Gage Factors (MPa) A: -9.5454E-10 B: -0.00025198 C: 2.3086

Pressure is calculated with the following equations:

Linear, $P(\text{MPa}) = \text{C.F.} \times (\text{Li} - \text{Lc}) - [\text{Tk} (\text{Ti} - \text{Tc})] + [0.00010 (\text{Bi} - \text{Bc})]$

Polynomial: $P(\text{MPa}) = \text{A}(\text{Lc})^2 + \text{B}\text{Lc} + \text{C} + \text{Tk}(\text{Tc} - \text{Ti}) - [0.00010(\text{Bc} - \text{Bi})]$

	Date (dd/mm/yr)	VW Readout Pos. B (Li)	Temp °C (Ti)	Baro (Bi)
Factory Zero Readings:	6-Aug-07	8824	24.4	990.1
Shipped Zero Readings:	May 1, 2013	8863	22.8	1037.0

Li, Lc = initial (at installation) and current readings

Ti, Tc = initial (at installation) and current temperature, in °C

Bi, Bc = initial (at installation) and current barometric pressure readings, in millibars

B units = B scale output of VW 2102, VW 2104, VW 2106 and DT 2011 readouts

B units = $\text{Hz}^2 / 1000$ ie: $1700\text{Hz} = 2890$ B units

Technician: K.Hicks

Date: May 1, 2013

This instrument has been calibrated using standards traceable to the NIST in compliance with ANSI Z540-1

Document Number: ELL0143E



MIG0106B

CALIBRATION REPORT

Instrument type VW transducer with data logger
 Calibration Date 12-Dec-13 Due date: 12-Dec-14
 Model Number VW2100-1.0-HD
 Pressure Range 1.0 MPa or 145.04MPa
 Manufacturer RST instruments
 Serial number VW8102

Pressure Test Data Sheet

GOLDER	INSTRUMENT		
STANDARD	CALCULATED	deviation	Polynomial Fits
Reading	Polynomial		FS Error
psi	psi	psi	%
0	0.0	0.0	0.01
30	30.5	0.5	0.34
60	60.5	0.5	0.34
90	90.7	0.7	0.48
120	120.7	0.7	0.48
145	145.9	0.8	0.58
		0.0	0.00
		0.0	0.00
		0.0	0.00
		0.8	0.6

End of calibration data

Performed by A.Brugger

Calibration and Equipment used:

Instrument type DPG1001B-1KG

Calibration Date 15-Feb-13

Manufacturer Omega

Equipment used are traceable to the National Institute of Standard a pressure range 0-1000 psi

Accuracy 1%

Serial number 5225903001

CALIBRATION REPORT

Instrument type VW transducer with data logger
 Calibration Date 4-Dec-13 Due date: 4-Dec-14
 Model Number VW2100-1.0-HD
 Pressure Range 1.0 MPa or 145.04MPa
 Manufacturer RST instruments
 Serial number VW19228

Pressure Test Data Sheet

GOLDER	INSTRUMENT		
STANDARD	CALCULATED	deviation	Polynomial Fits
Reading	Polynomial		FS Error
psi	psi	psi	%
0	0.0	0.0	0.03
30	30.2	0.1	0.10
60	60.2	0.2	0.14
90	90.3	0.3	0.21
120	120.3	0.3	0.21
145	145.3	0.3	0.21
		0.0	0.00
		0.0	0.00
		0.0	0.00
		0.3	0.2

End of calibration data

Performed by A.Brugger

Calibration and Equipment used:

Instrument type DPG1001B-1KG

Calibration Date 15-Feb-13

Manufacturer Omega

Equipment used are traceable to the National Institute of Standard a pressure range 0-1000 psi

Accuracy 1%

Serial number 5225903001

CALIBRATION REPORT

Instrument type VW transducer with data logger
 Calibration Date 19-Dec-13 Due date: 19-Dec-14
 Model Number VW2100-1.0-HD
 Pressure Range 1.0 MPa or 145.04MPa
 Manufacturer RST instruments
 Serial number VW25704

Pressure Test Data Sheet

GOLDER	INSTRUMENT		
STANDARD	CALCULATED	deviation	Polynomial Fits
Reading	Polynomial		FS Error
psi	psi	psi	%
0	0.0	0.0	-0.01
30	30.6	0.6	0.38
60	60.5	0.5	0.34
90	90.6	0.5	0.38
120	125.5	5.5	3.78
145	145.6	0.6	0.41
		0.0	0.00
		0.0	0.00
		0.0	0.00
		5.5	3.8

End of calibration data

Performed by A.Brugger

Calibration and Equipment used:

Instrument type DPG1001B-1KG

Calibration Date 15-Feb-13

Manufacturer Omega

Equipment used are traceable to the National Institute of Standard a pressure range 0-1000 psi

Accuracy 1%

Serial number 5225903001

ATTACHMENT B

HydroBench[®] Analysis Reports

Note: These reports are computer generated protocols, and some values might differ from values discussed within the text section of this document.

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-01
Test Name Test 1
Test Date/Time
Interval top: 149.42 m bottom: 199.10 m
Description Analyzed by: DV
 Reviewed by: DSL

Basic Data

Test Interval 49.68 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 10.0 deg
Test Volume 359.595 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	1462.11			4.9e-07
PSR	Recovery	0.10833	1467.86			4.9e-07
SW-Init	dP-Event	0.25417	1468.55	71.4 *		4.9e-07
SW	Slug	0.26111	1397.16	1468.6		4.9e-07

Analysis Results

Analysis "SW-Final"

Static Pressure: 1468.57 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	5.3e-08	9.7e-05	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	4.9e-05	0.0
PSR	4.9e-05	0.0
SW-Init	4.9e-07	0.0
SW	4.9e-07	0.0

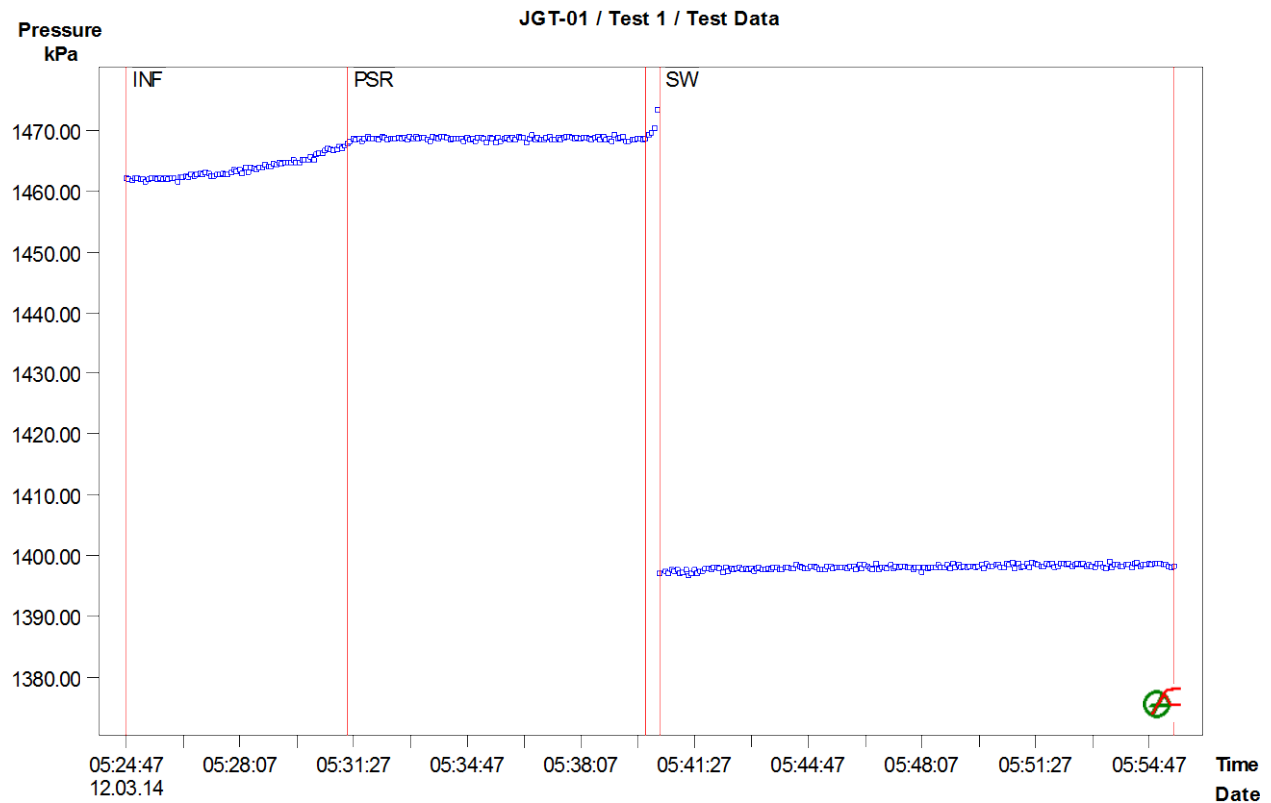


Figure 1: Pressure response and sequence definition

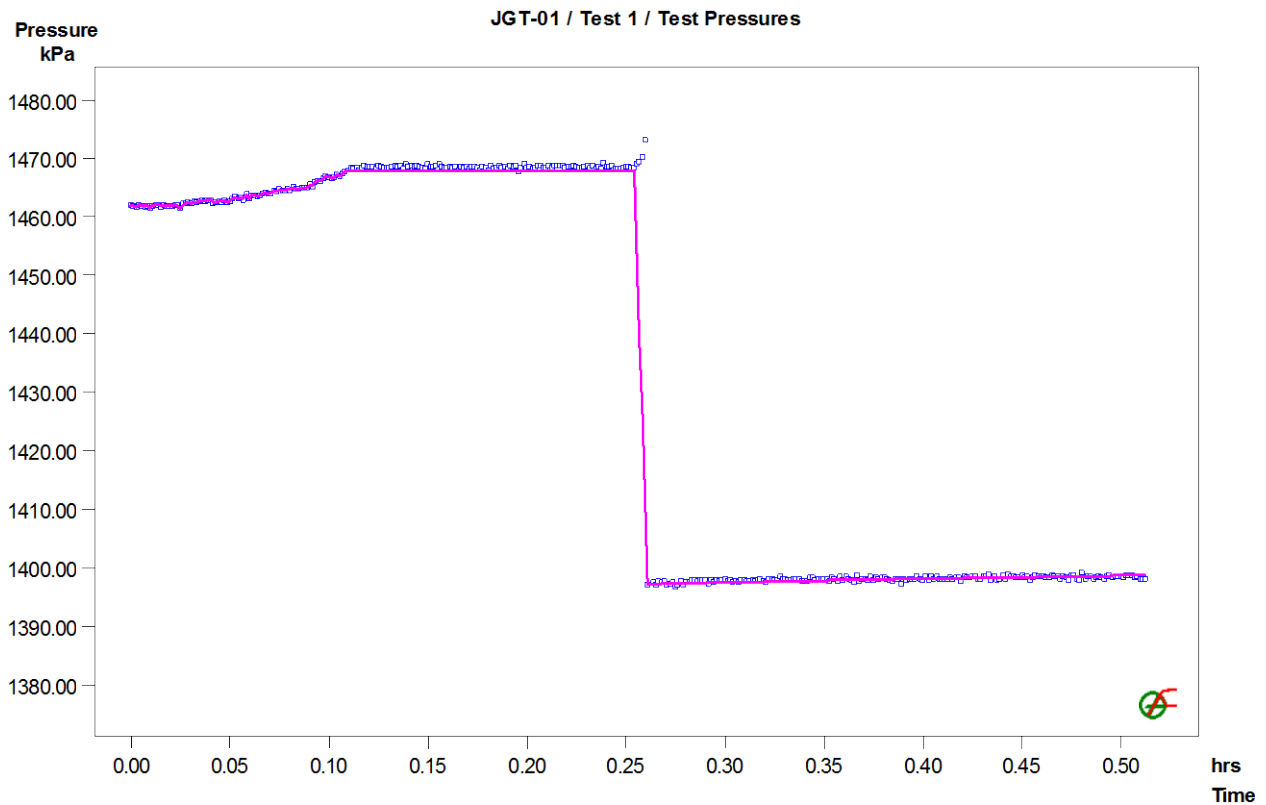


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-01 / Test 1 / SW: LogLog Plot, variable P(i)

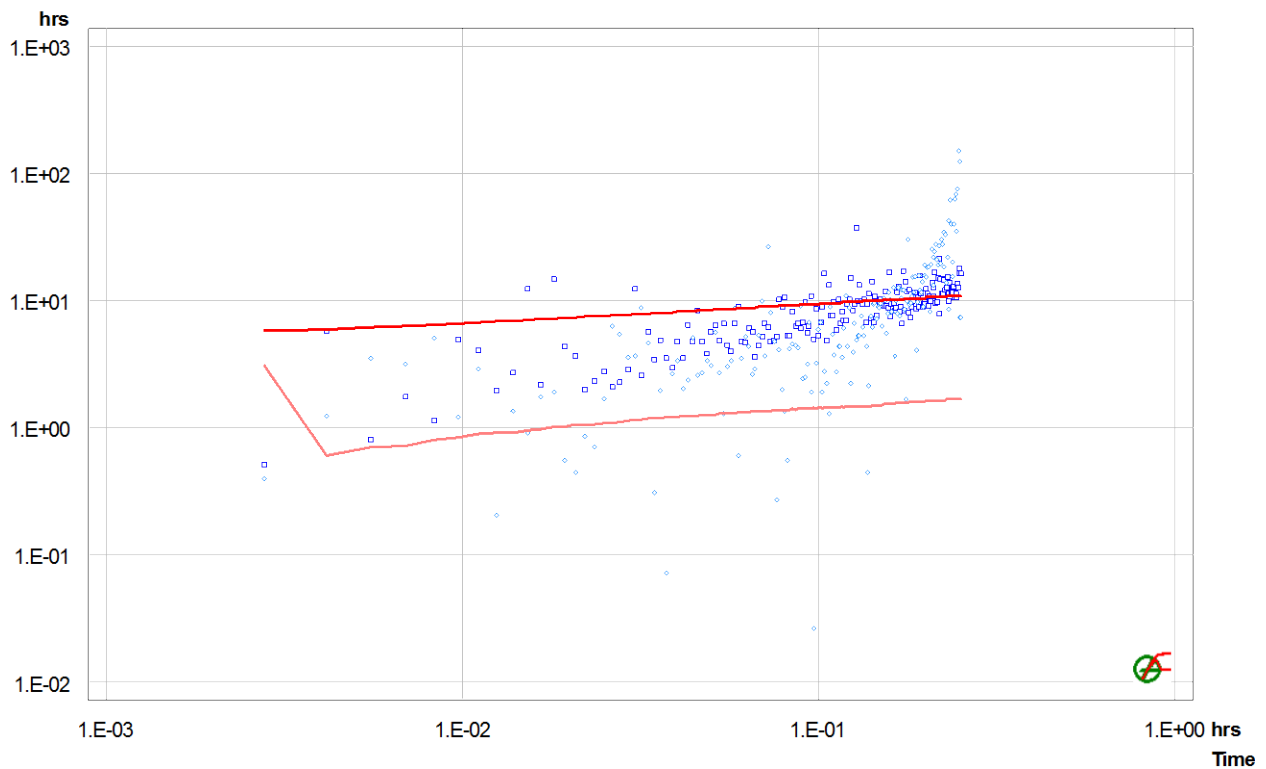


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project	Dominion Diamond	
Site	Jay Project	
Source Well	JGT-01	
Test Name	Test 2	
Test Date/Time		
Interval	top: 200.62 m	bottom: 251.00 m
Description	Analyzed by: DV	
	Reviewed by: DSL	

Basic Data

Test Interval	50.38 m		
Porosity	0.10		
Well Radius	0.048 m	Tubing Radius	0.039 m
Inclination	10.0 deg		
Test Volume	364.662 l		
Well Type	Source		

Fluid Properties

Viscosity	0.001 Pa*s
Density	1000.0 kg/m ³
Compressibility	2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m³/Pa]
INF	Variable Pressure	0.00000	1936.60			4.9e-07
PSR	Recovery	0.52778	1946.71			4.9e-07
SW-Init	dP-Event	0.86389	1944.67	86.1 *		4.9e-07
SW	Slug	0.88056	1858.53	1944.7		4.9e-07

Analysis Results

Analysis "SW-Final"

Static Pressure: 1938.67 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	2.5e-07	9.9e-05	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	2.1e-07	0.0
PSR	2.1e-07	0.0
SW-Init	4.9e-07	0.0
SW	4.9e-07	0.0

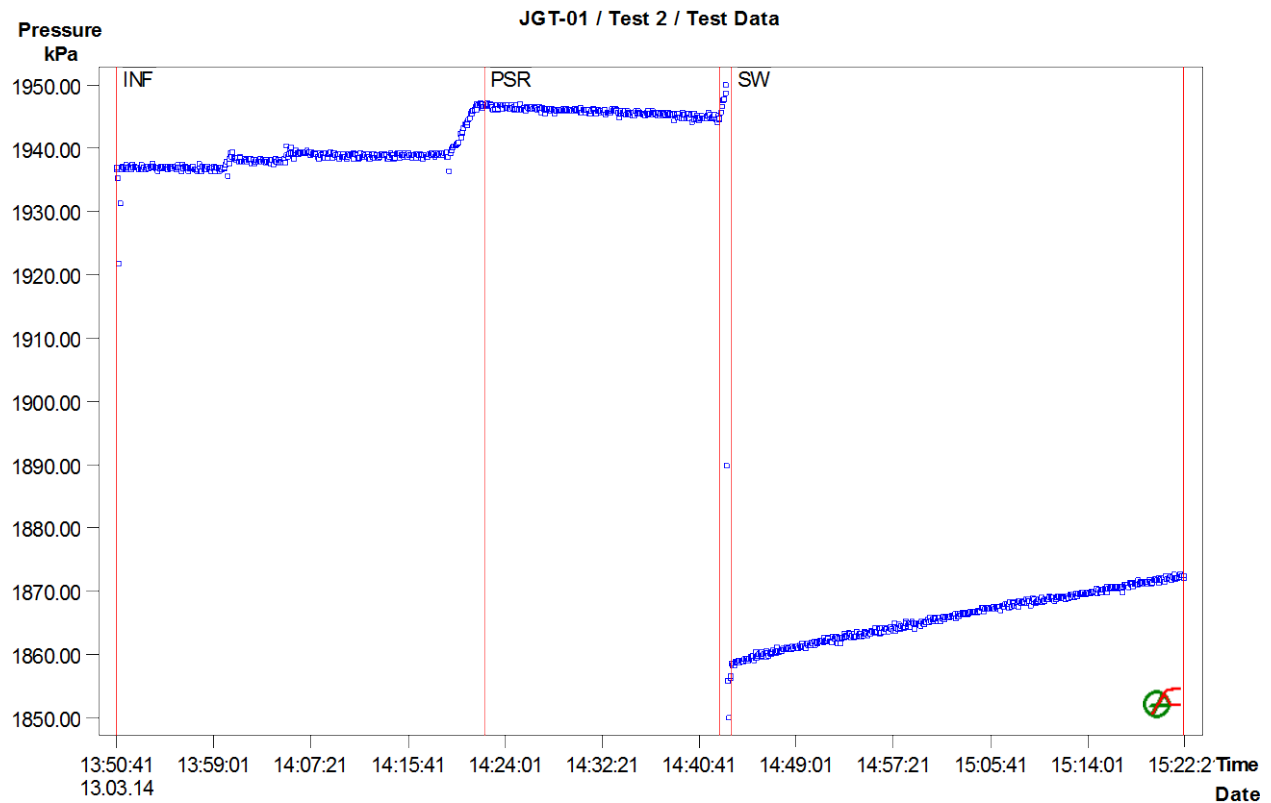


Figure 1: Pressure response and sequence definition

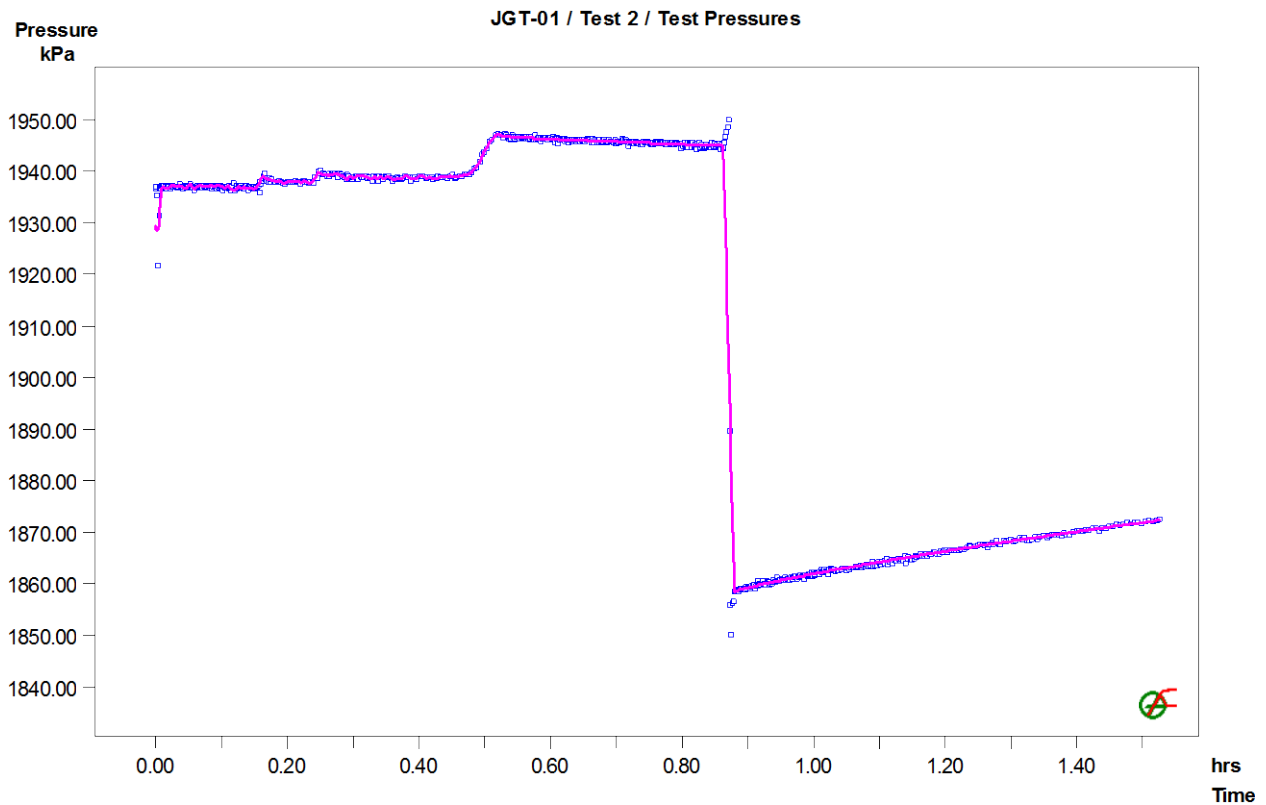


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-01 / Test 2 / SW: LogLog Plot, variable P(i)

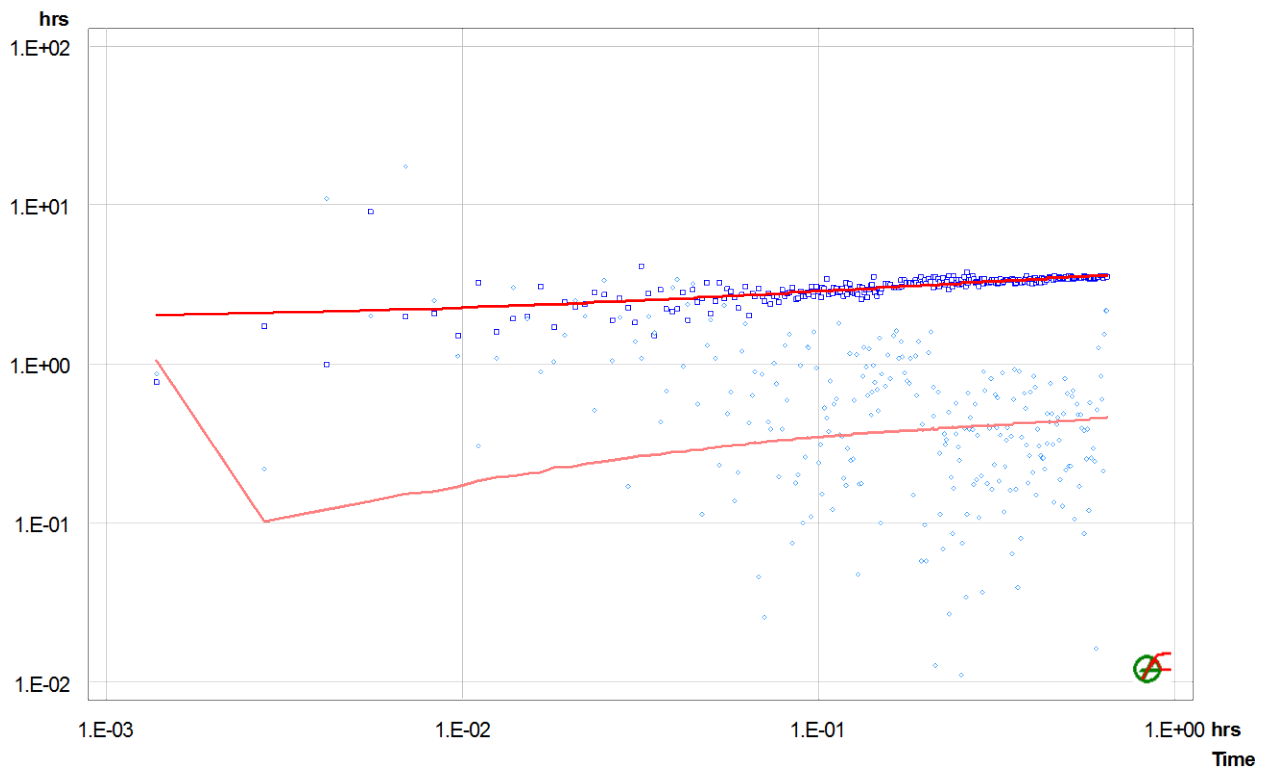


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-02
Test Name Test 1
Test Date/Time April 15, 2014 , 17:00
Interval top: 57.85 m bottom: 77.55 m
Description Analyzed by: DSL
Reviewed by: DV

Basic Data

Test Interval 19.70 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 18.2 deg
Test Volume 142.593 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
COM	Variable Pressure	0.00000	545.42			5.1e-07
PSR	Recovery	0.55333	544.05			2.9e-10
SW-Init 1	dP-Event	0.91583	543.96	64.3 *		5.1e-07
SW	Slug	0.92333	479.66	544.0		5.1e-07
SW-Init 2	dP-Event	1.54000	543.50	59.8 *		5.1e-07
SW2	Slug	1.54833	483.66	543.5		5.1e-07

Analysis Results

Analysis "SW-2 shell-FINAL"

Static Pressure: 543.91 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	1.2e-05	3.9e-05	6.42	2.0
Shell 2	2.6e-04	3.9e-05	--	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
COM	5.1e-07	0.0
PSR	5.2e-07	0.0
SW-Init 1	5.1e-07	0.0
SW	5.1e-07	0.0
SW-Init 2	5.1e-07	0.0
SW2	5.1e-07	0.0

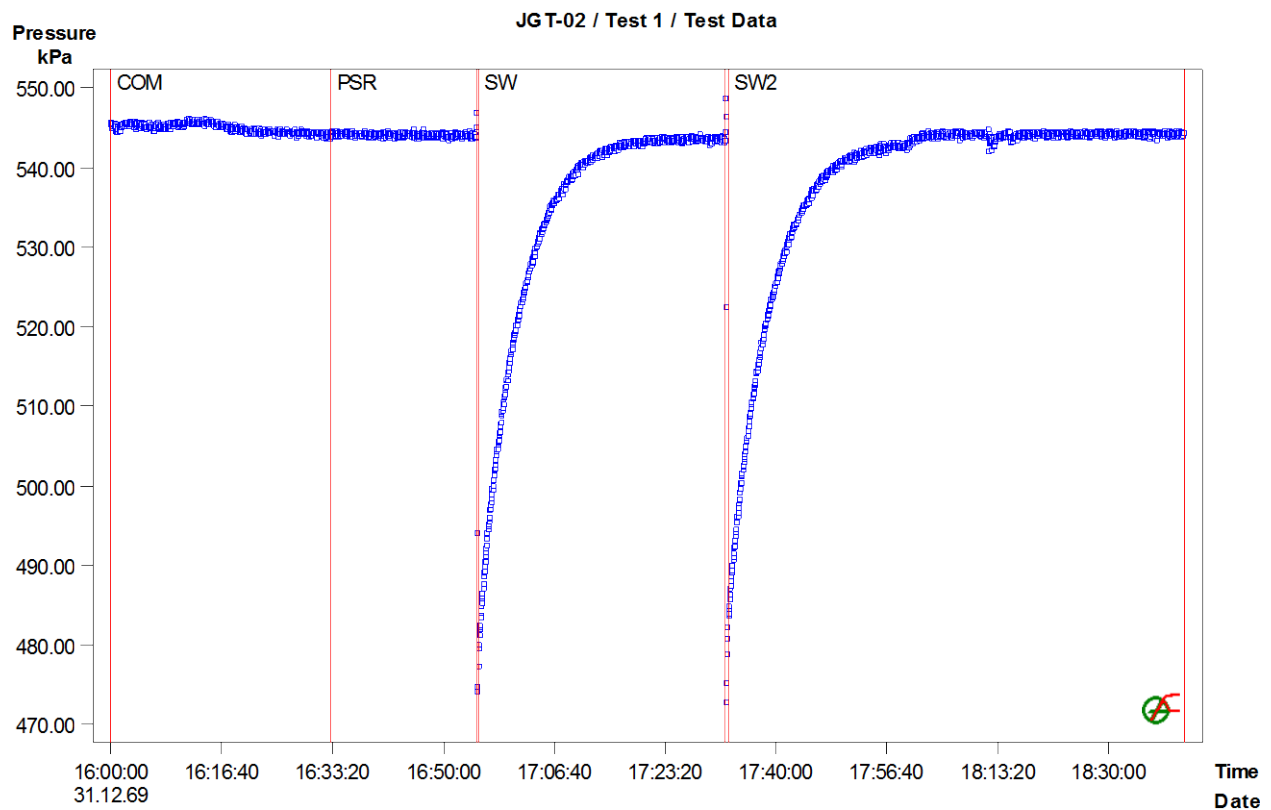


Figure 1: Pressure response and sequence definition

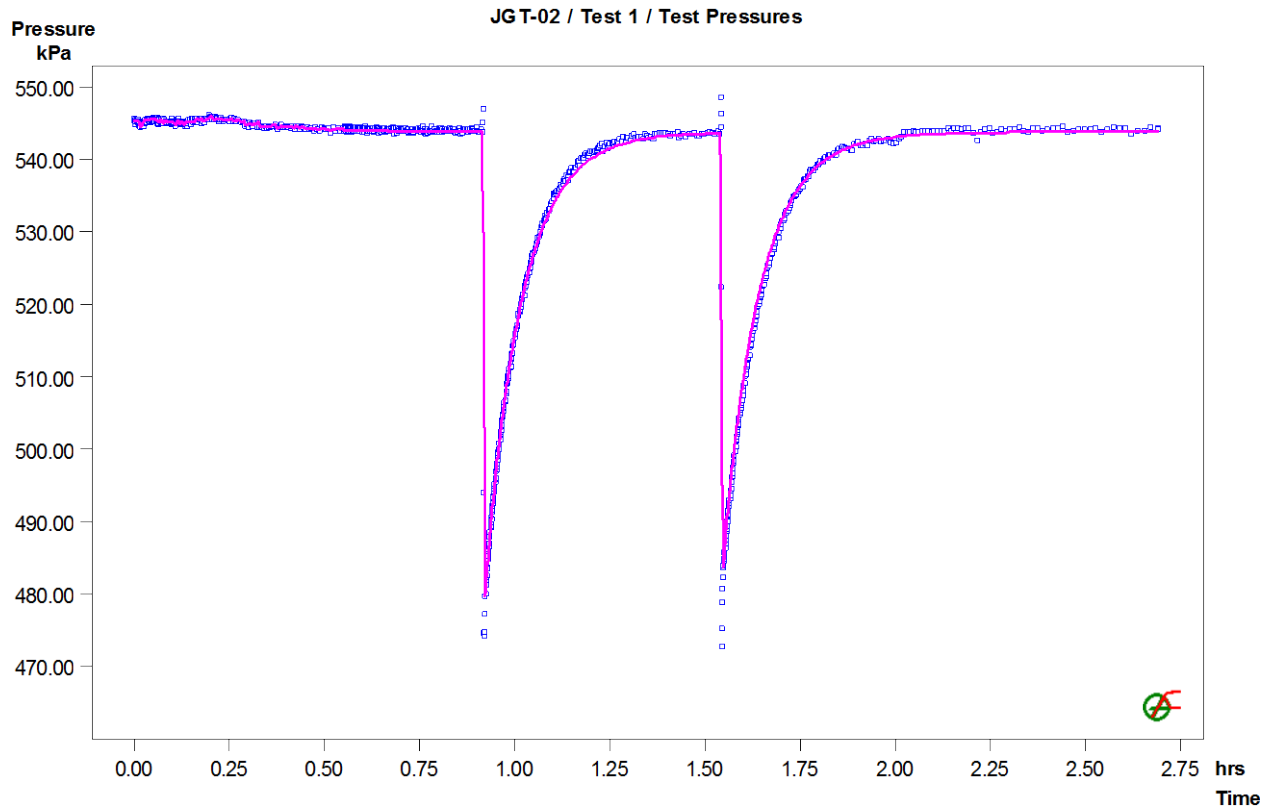


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-02 / Test 1 / SW2: LogLog Plot, constant P(i)

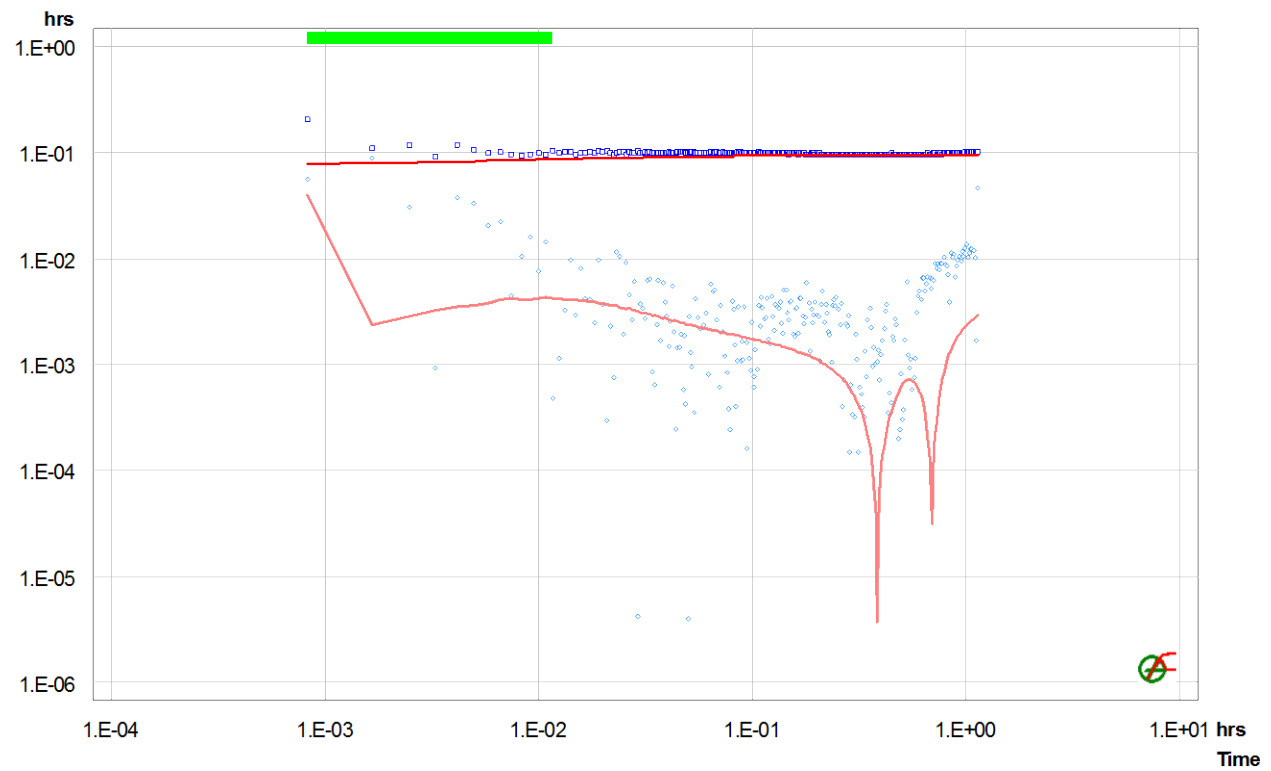


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-02
Test Name Test 2
Test Date/Time April 17, 2014, 16:30
Interval top: 75.85 m bottom: 173.55 m
Description Analyzed by: DSL
Reviewed by: DV

Basic Data

Test Interval 97.70 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 18.2 deg
Test Volume 707.175 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	716.97			5.1e-07
PSR	Recovery	0.74583	716.96			3.3e-07
SW-1 Init	dP-Event	1.06083	717.37	60.7 *		5.1e-07
SW-1	Slug	1.06833	656.66	717.4		5.1e-07
SW-2 Init	dP-Event	1.59083	717.35	63.0 *		5.1e-07
SW-2	Slug	1.59750	654.39	717.4		5.1e-07

Analysis Results

Analysis "SW-1-2shell FINAL"

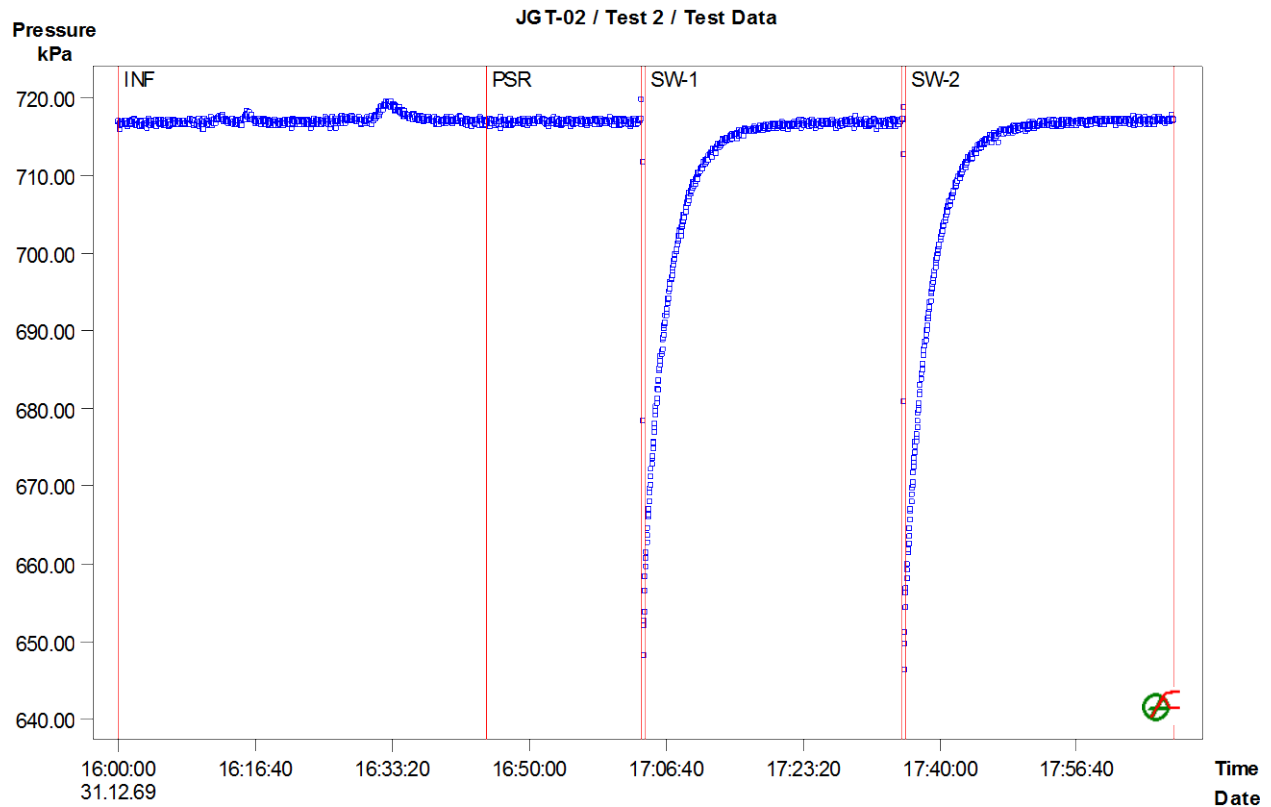
Static Pressure: 716.69 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	2.1e-05	1.9e-04	3.40	2.0
Shell 2	3.9e-04	1.9e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	5.1e-07	0.0
PSR	1.5e-06	0.0
SW-1 Init	5.1e-07	0.0
SW-1	5.1e-07	0.0
SW-2 Init	5.1e-07	0.0
SW-2	5.1e-07	0.0



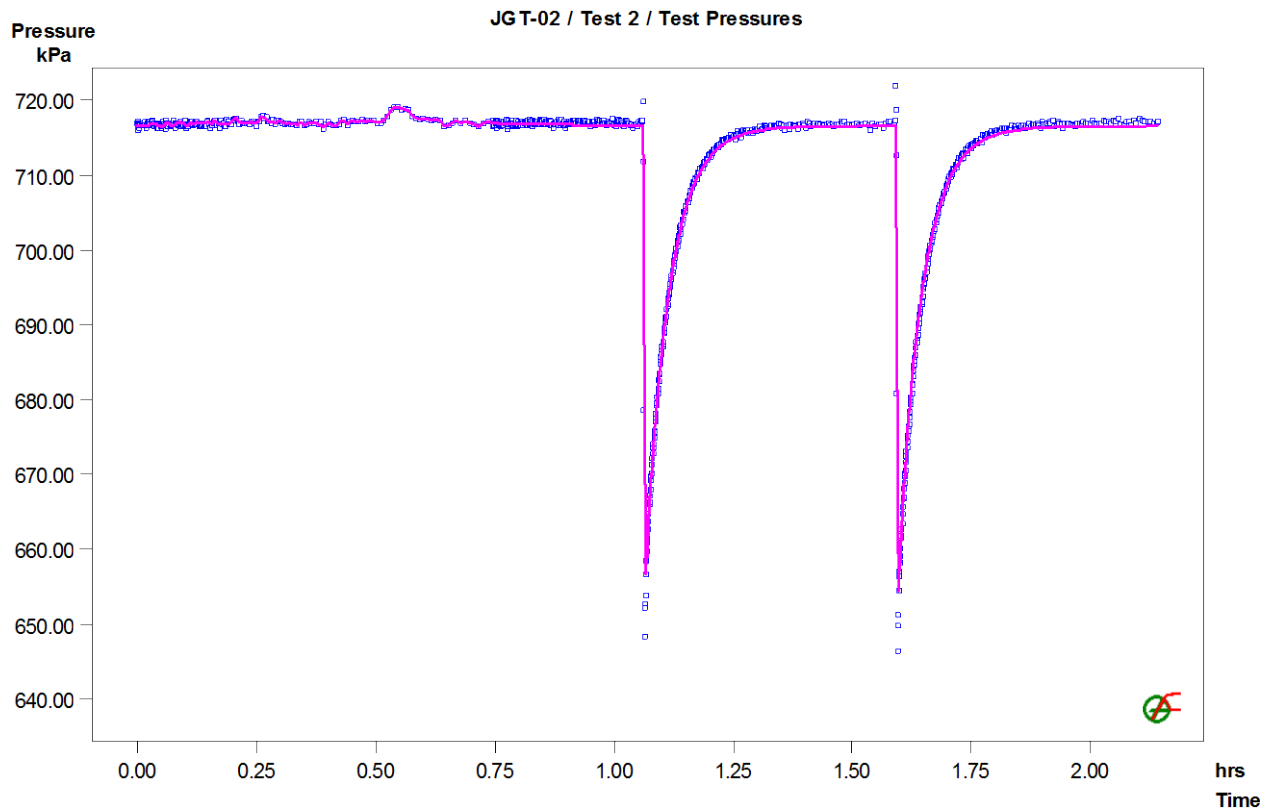


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-02 / Test 2 / SW-1: LogLog Plot, variable P(i)

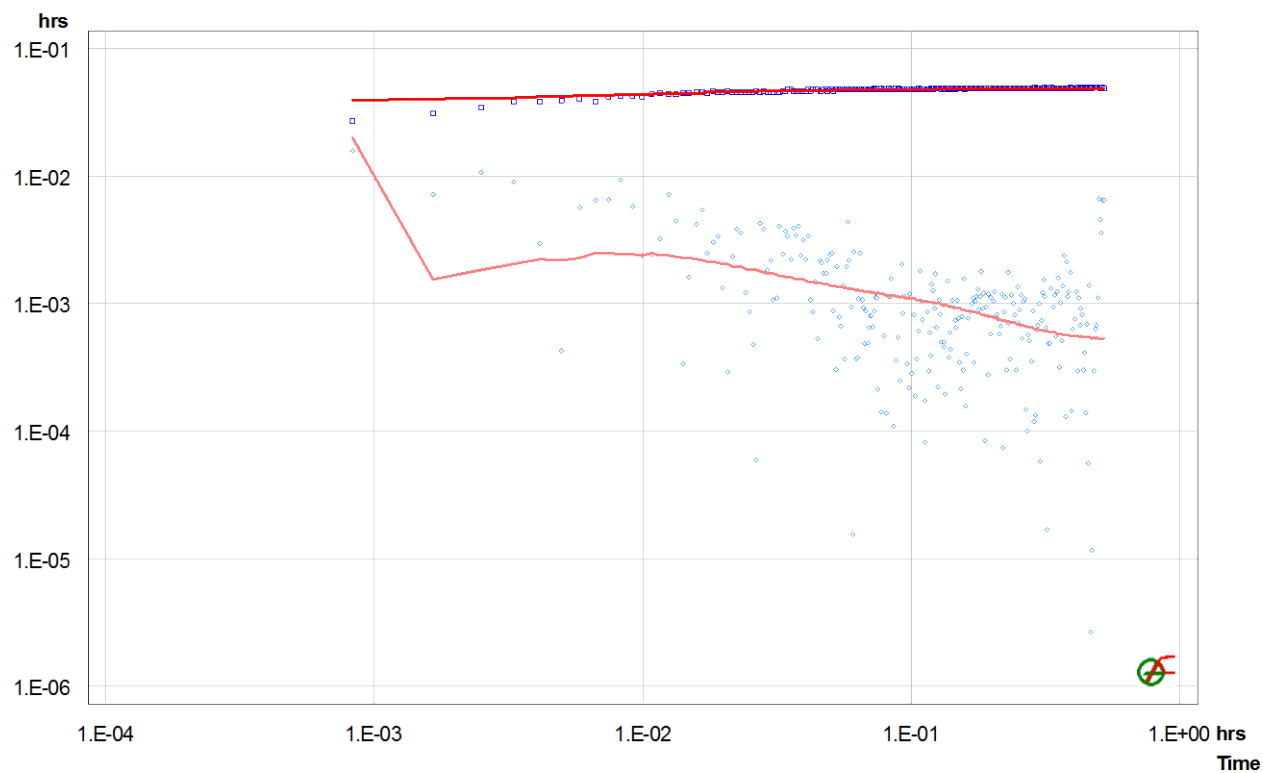


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-02
Test Name Test 3
Test Date/Time April 19, 2014, 13:00
Interval top: 174.85 m bottom: 275.55 m
Description Analyzed by: DSL
Reviewed by: DV

Basic Data

Test Interval 100.70 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 18.2 deg
Test Volume 728.890 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	1740.71			5.1e-07
PSR	Variable Pressure	0.59861	1741.50			3.2e-08
SW-Init	dP-Event	1.11806	1741.51	94.2 *		5.1e-07
SW	Slug	1.12194	1647.29	1741.5		5.1e-07
VAR	Variable Pressure	1.61278	1741.09			5.1e-07
RI	Constant Rate	1.76667	1739.51		-1.24e+01	2.7e-07
DEF	Variable Pressure	2.29806	2017.53			3.2e-08

Analysis Results

Analysis "RI-Final"

Static Pressure: 1769.68 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	6.5e-06	2.0e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	5.1e-07	0.0
PSR	1.2e-07	0.0
SW-Init	5.1e-07	0.0
SW	5.1e-07	0.0
VAR	5.1e-07	0.0
RI	5.9e-08	0.0
DEF	1.2e-07	0.0

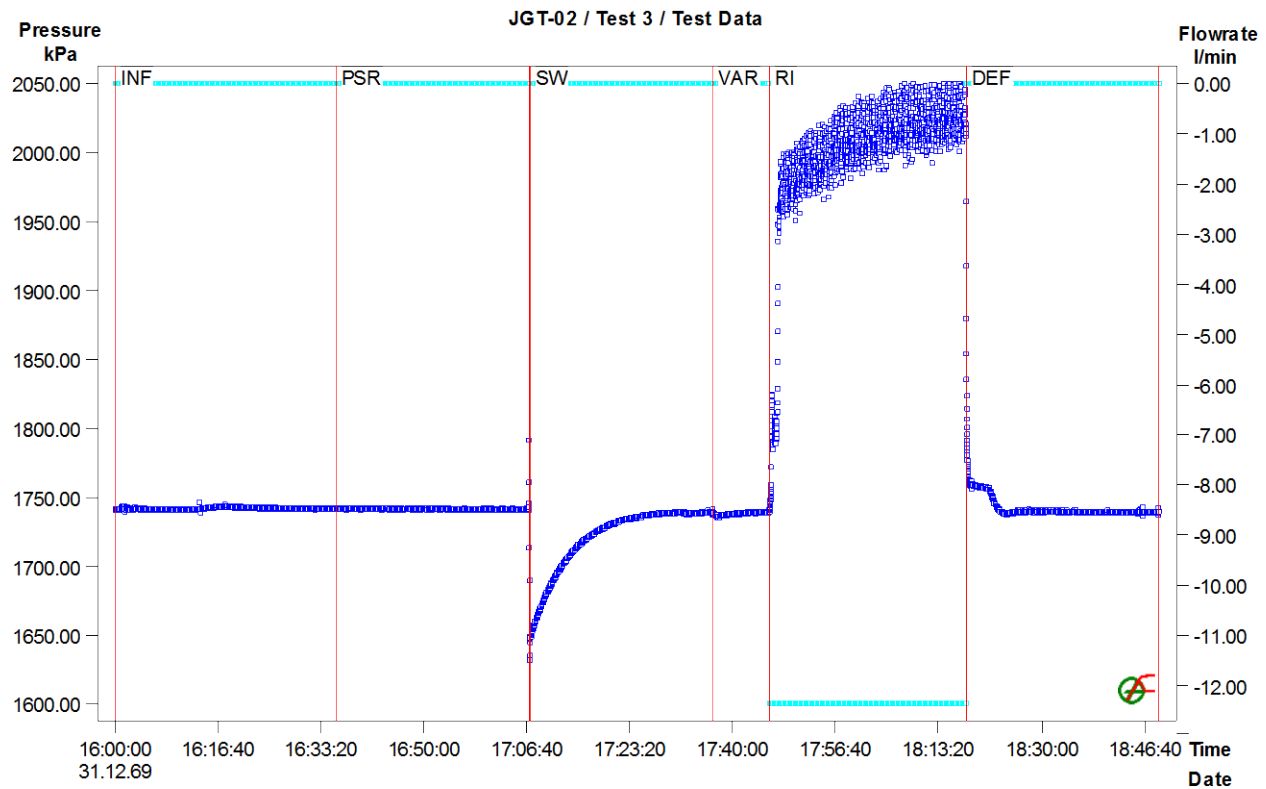


Figure 1: Pressure response and sequence definition

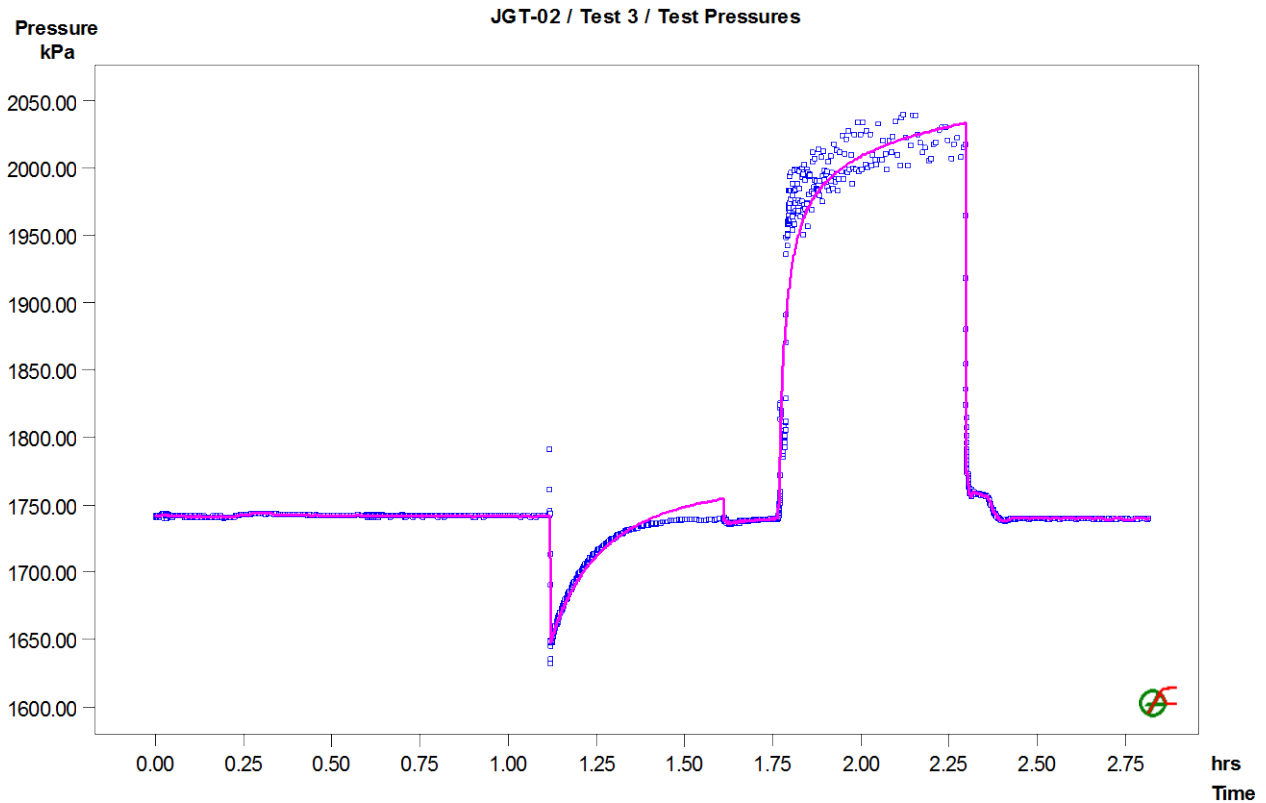


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot

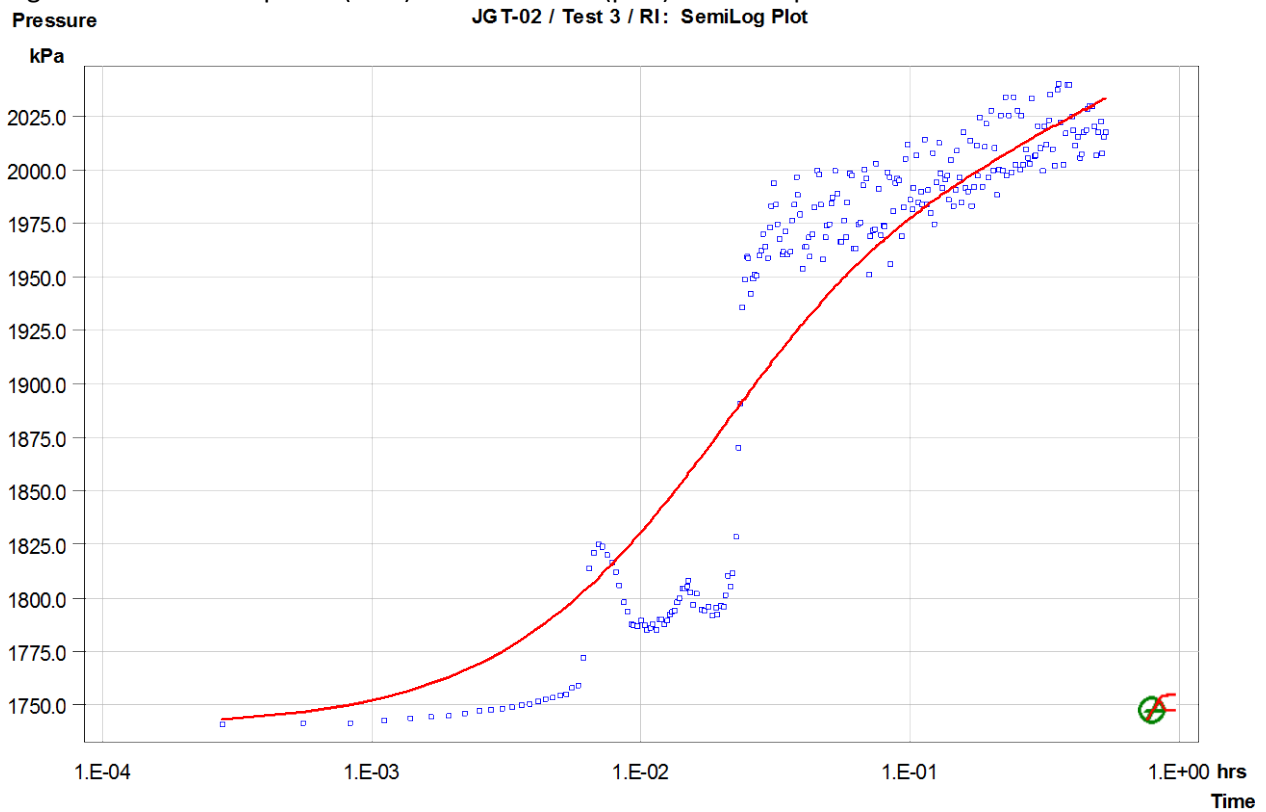


Figure 3: Pressure response (dark blue) and simulation (red): Semi Log diagnostic plot, RI sequence

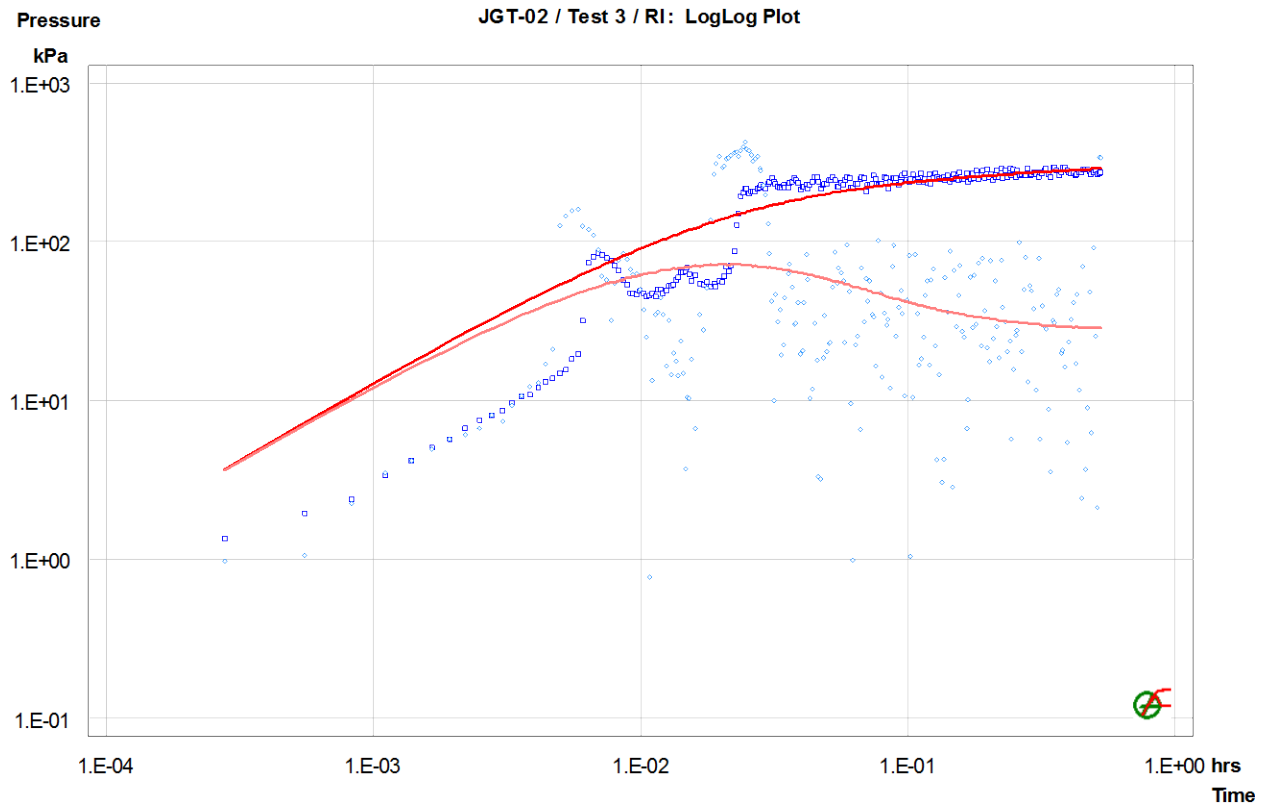


Figure 4: Pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, RI sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-02
Test Name Test 4
Test Date/Time
Interval top: 273.85 m bottom: 374.55 m
Description Analyzed by : DV
Reviewed by: DSL

Basic Data

Test Interval 100.70 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 18.2 deg
Test Volume 728.890 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
PSR	Variable Pressure	0.00000	2561.48			5.2e-07
Sw-Init	dP-Event	0.82417	2563.18	96.0 *		5.2e-07
SW	Slug	0.82694	2467.22	2563.2		5.2e-07
COM	Variable Pressure	1.11750	2556.37			5.2e-07
RI	Constant Rate	1.52472	2578.70		-2.18e+01	1.0e-07
RIR	Recovery	2.04861	3041.10			1.0e-07

Analysis Results

Analysis "RI- 2 shell- final"

Static Pressure: 2564.00 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	7.5e-06	2.0e-04	54.20	2.0
Shell 2	6.6e-06	2.0e-04	--	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
PSR	1.0e-07	0.0
Sw-Init	5.2e-07	0.0
SW	5.2e-07	0.0
COM	1.0e-07	0.0
RI	8.2e-08	0.0
RIR	8.2e-08	0.0

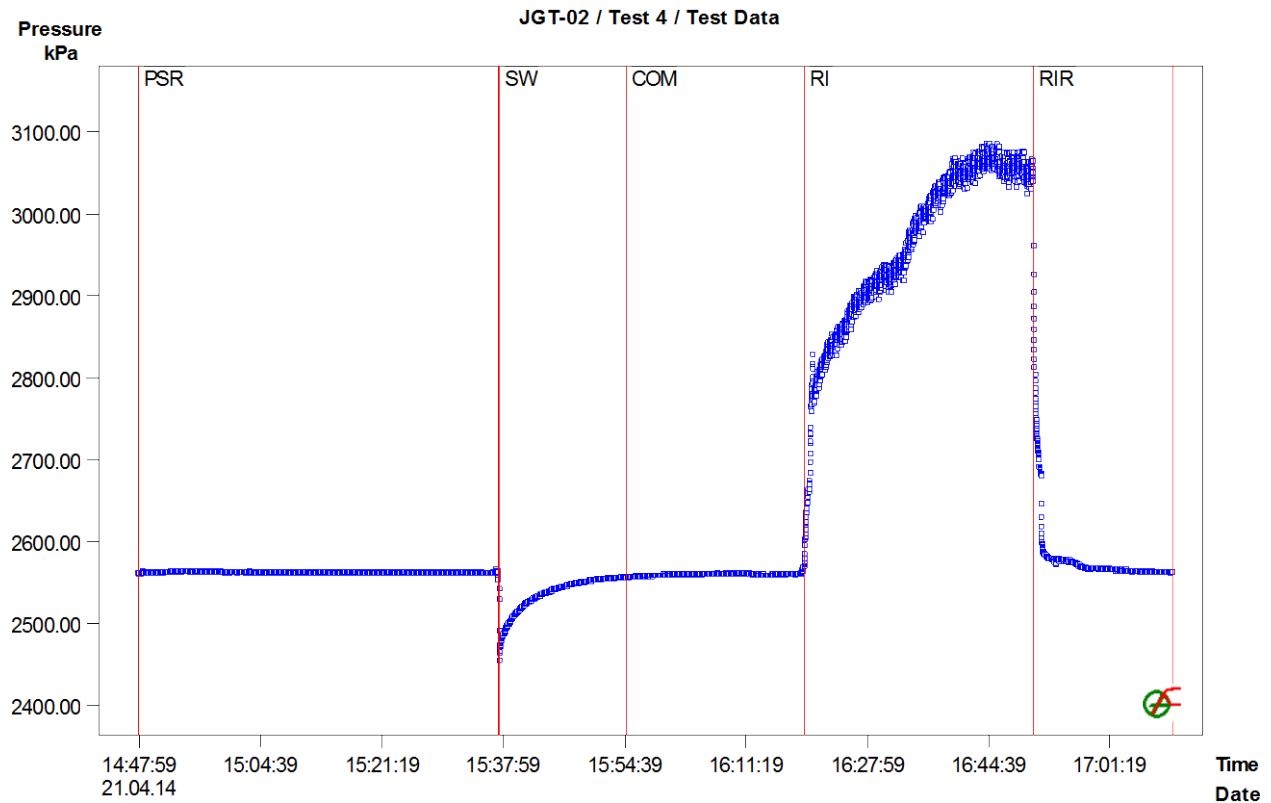


Figure 1: Pressure response and sequence definition

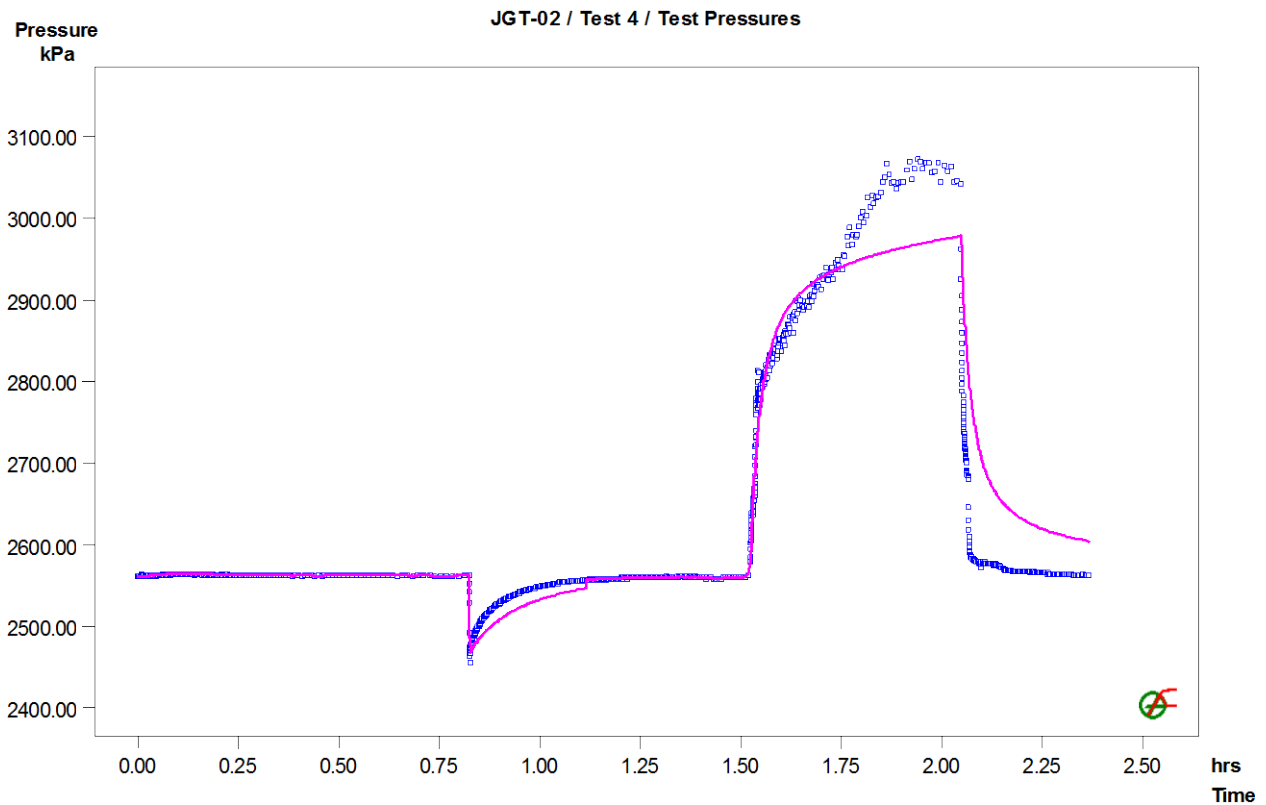


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot

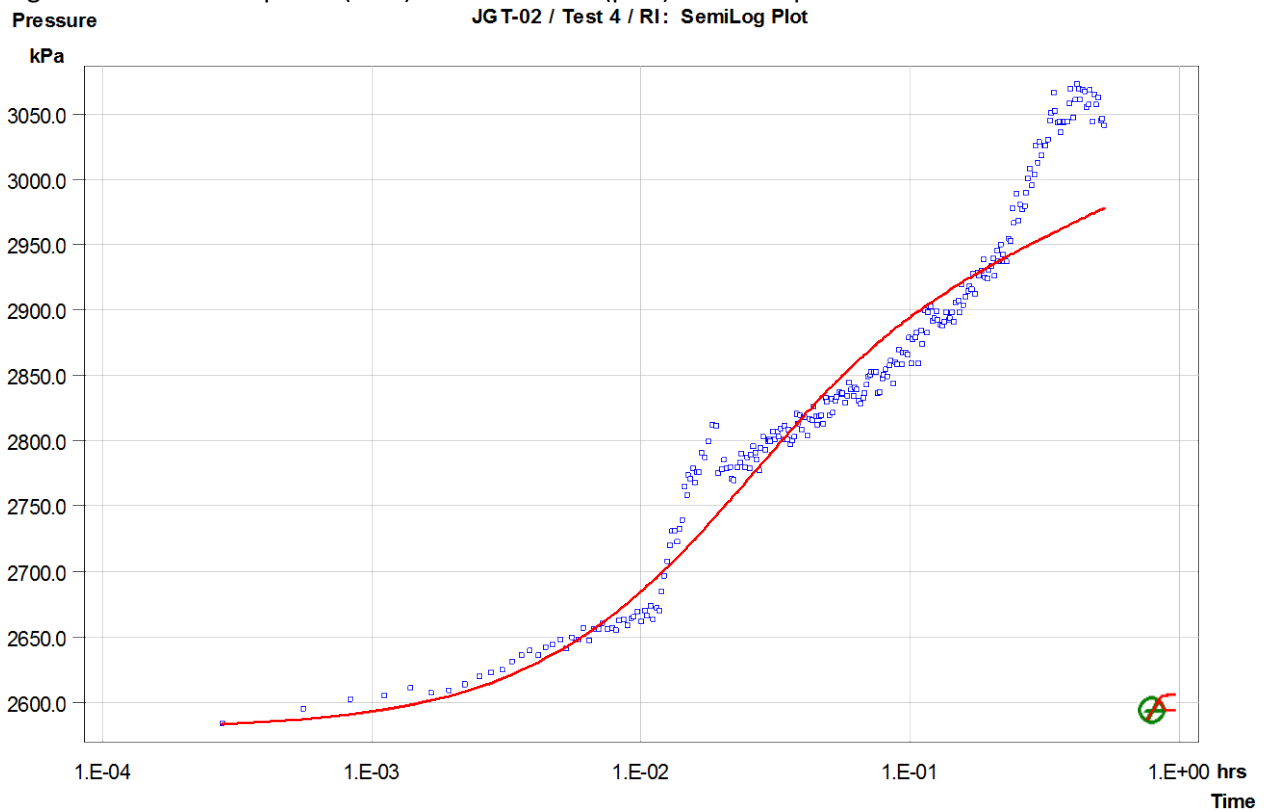


Figure 3: Pressure response (dark blue) and simulation (red): Semi Log diagnostic plot, RI sequence

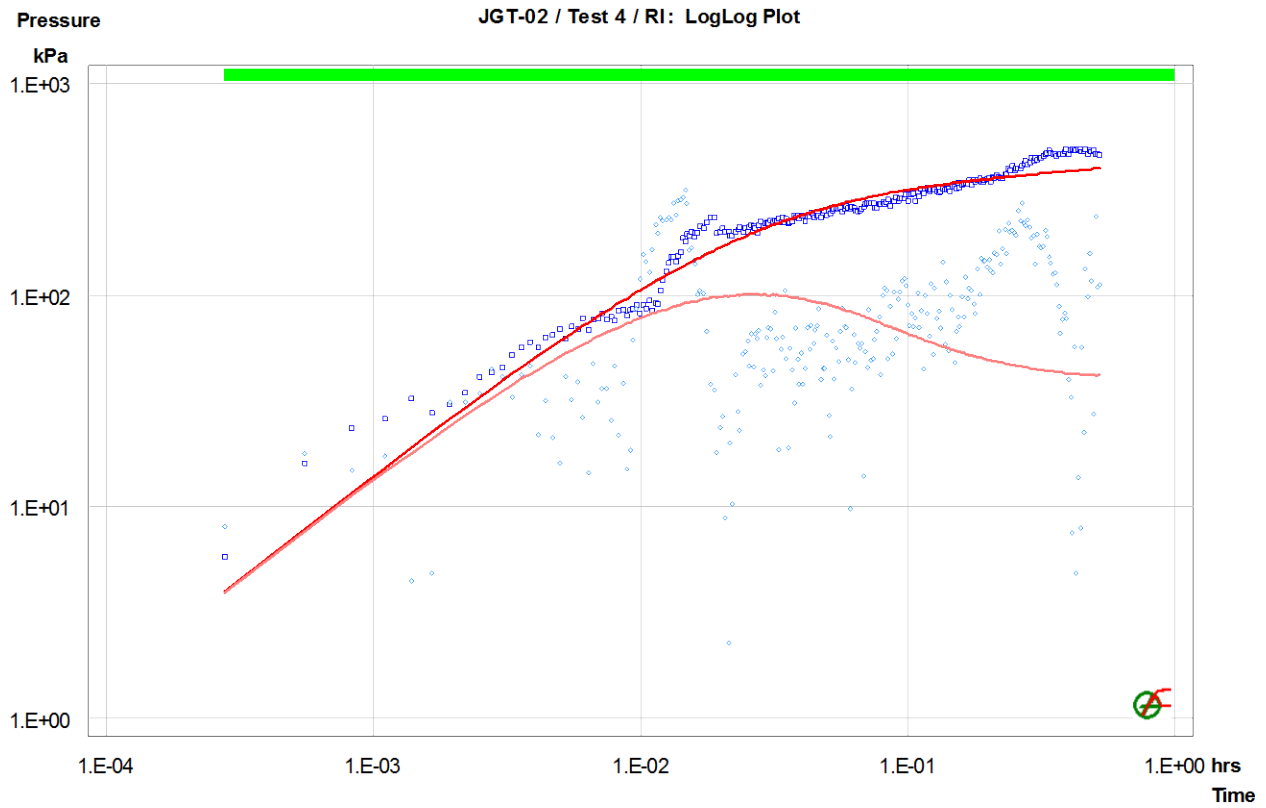


Figure 4: Pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, RI sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-02
Test Name Test 5
Test Date/Time
Interval top: 372.85 m bottom: 450.13 m
Description Analyzed by: DV
 Reviewed by: DSL

Basic Data

Test Interval 77.28 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 18.2 deg
Test Volume 559.370 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
COM	Variable Pressure	0.00000	3482.83			5.2e-07
PSR	Recovery	0.39278	3487.42			5.2e-07
SW-Init	dP-Event	1.61806	3483.57	54.7 *		5.2e-07
SW	Slug	1.62417	3428.86	3483.6		5.2e-07
DEF	Variable Pressure	2.39806	3462.10			5.2e-07

Analysis Results

Analysis "SW-Final"

Static Pressure: 3483.34 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	1.3e-06	1.5e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
COM	4.2e-07	0.0
PSR	4.2e-07	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0
DEF	4.2e-07	0.0

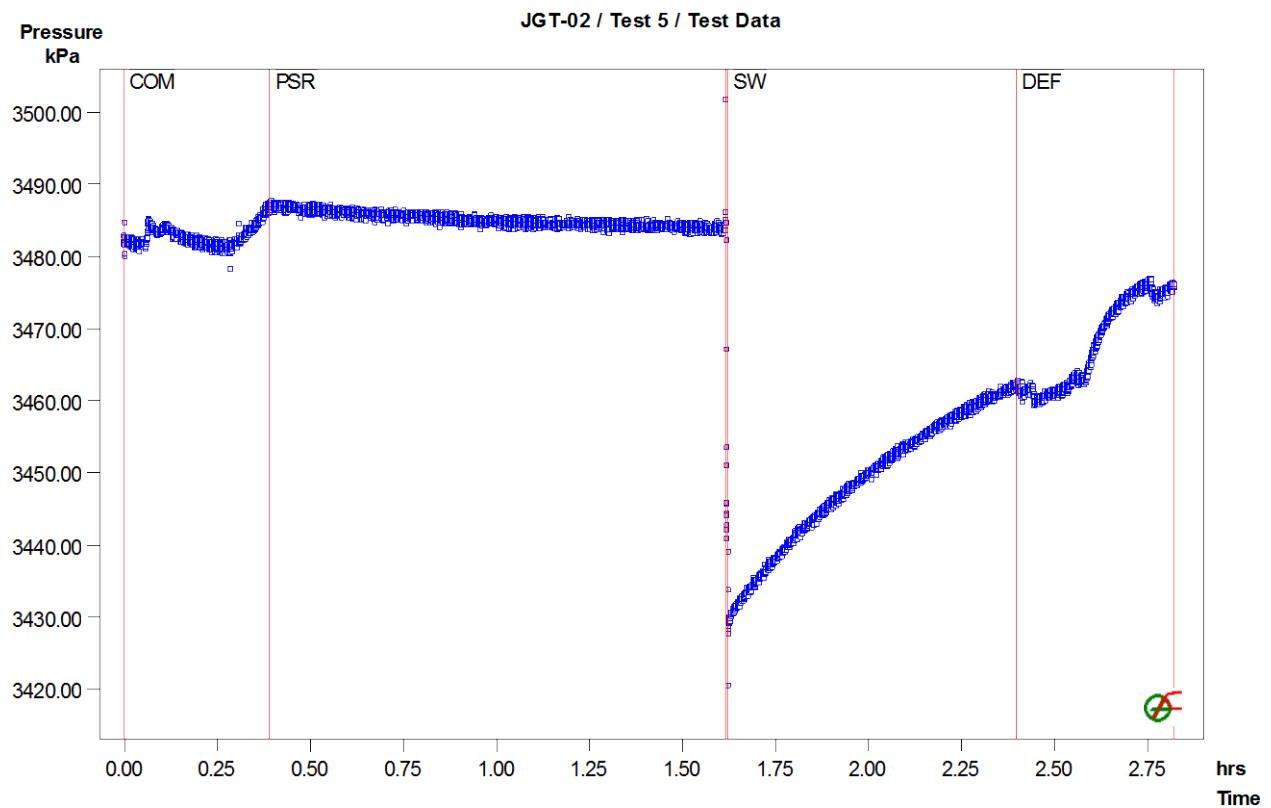


Figure 1: Pressure response and sequence definition

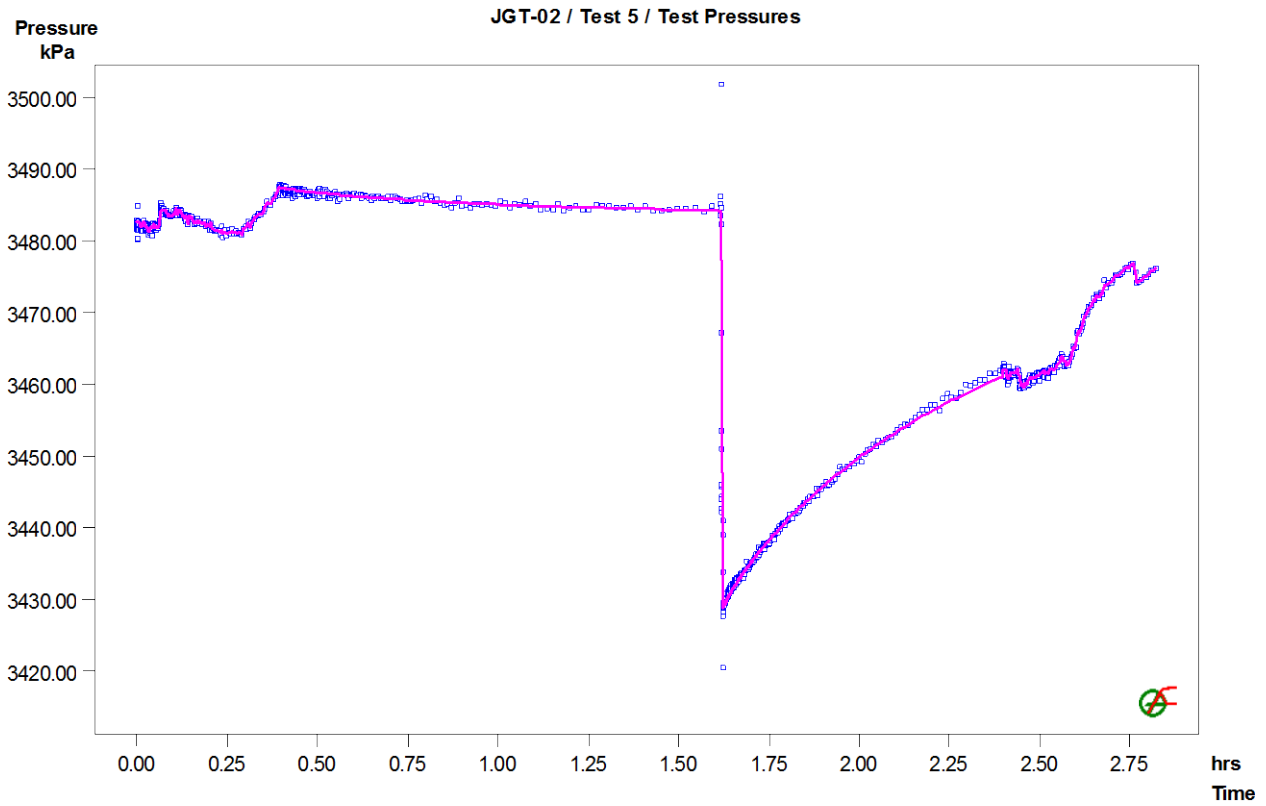


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-02 / Test 5 / SW: LogLog Plot, variable P(i)

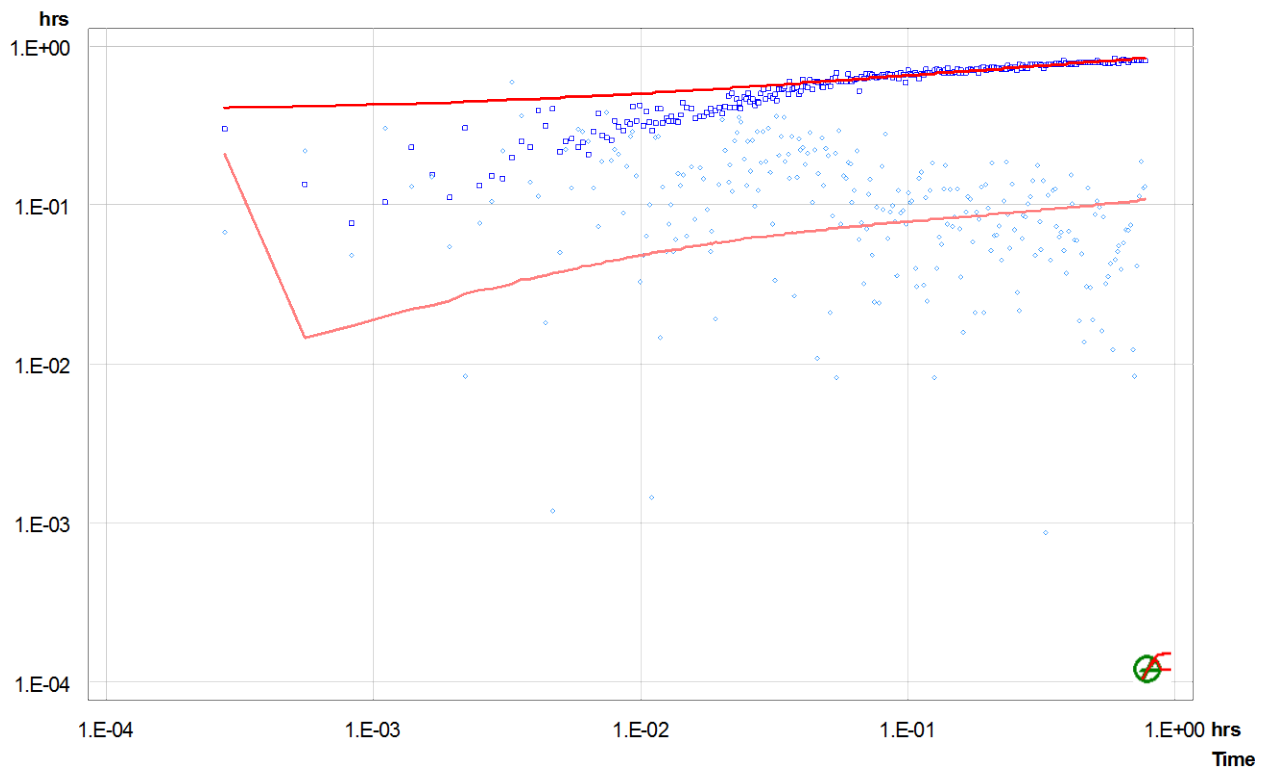


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-03
Test Name Test 1
Test Date/Time
Interval top: 54.68 m bottom: 152.48 m
Description Analysed by: DV only RI-1
 Reviewed by: DSL

Basic Data

Test Interval 97.80 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 20.0 deg
Test Volume 707.899 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	520.21			1.4e-09
PSR	Variable Pressure	0.28750	520.06			1.4e-09
SW-Init	dP-Event	1.12083	519.80	2.7 *		1.4e-09
SW	Slug	1.12778	517.14	519.8		1.4e-09
RI	Constant Rate	1.83889	519.28		-8.00e+01	5.0e-05
VAR	Variable Pressure	2.15556	534.95			1.4e-09
DEF	Variable Pressure	3.20833	541.42			1.4e-09

Analysis Results

Analysis "RI"

Static Pressure: 519.20 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	8.9e-04	1.9e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	7.3e-05	0.0
PSR	7.3e-05	0.0
SW-Init	7.3e-05	0.0
SW	7.3e-05	0.0
RI	2.1e-05	0.0
VAR	7.3e-05	0.0
DEF	7.3e-05	0.0

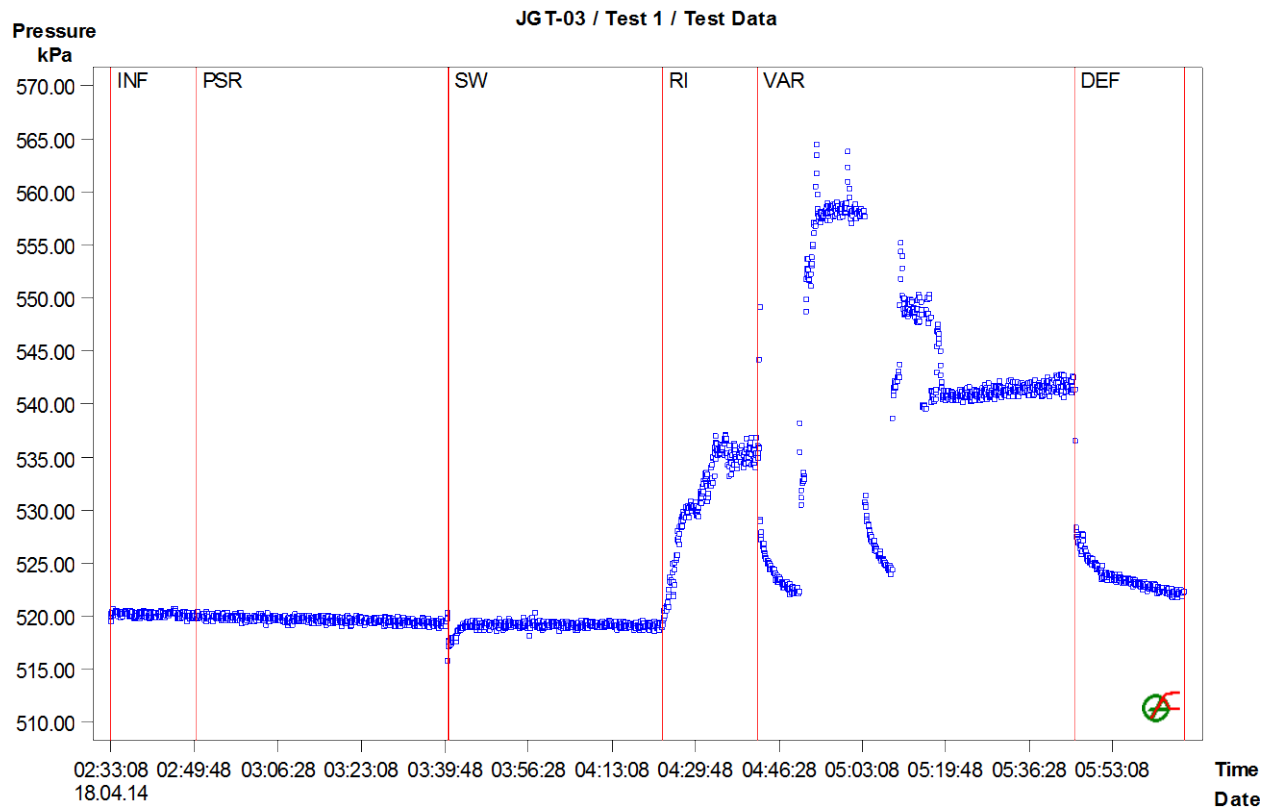


Figure 1: Pressure response and sequence definition

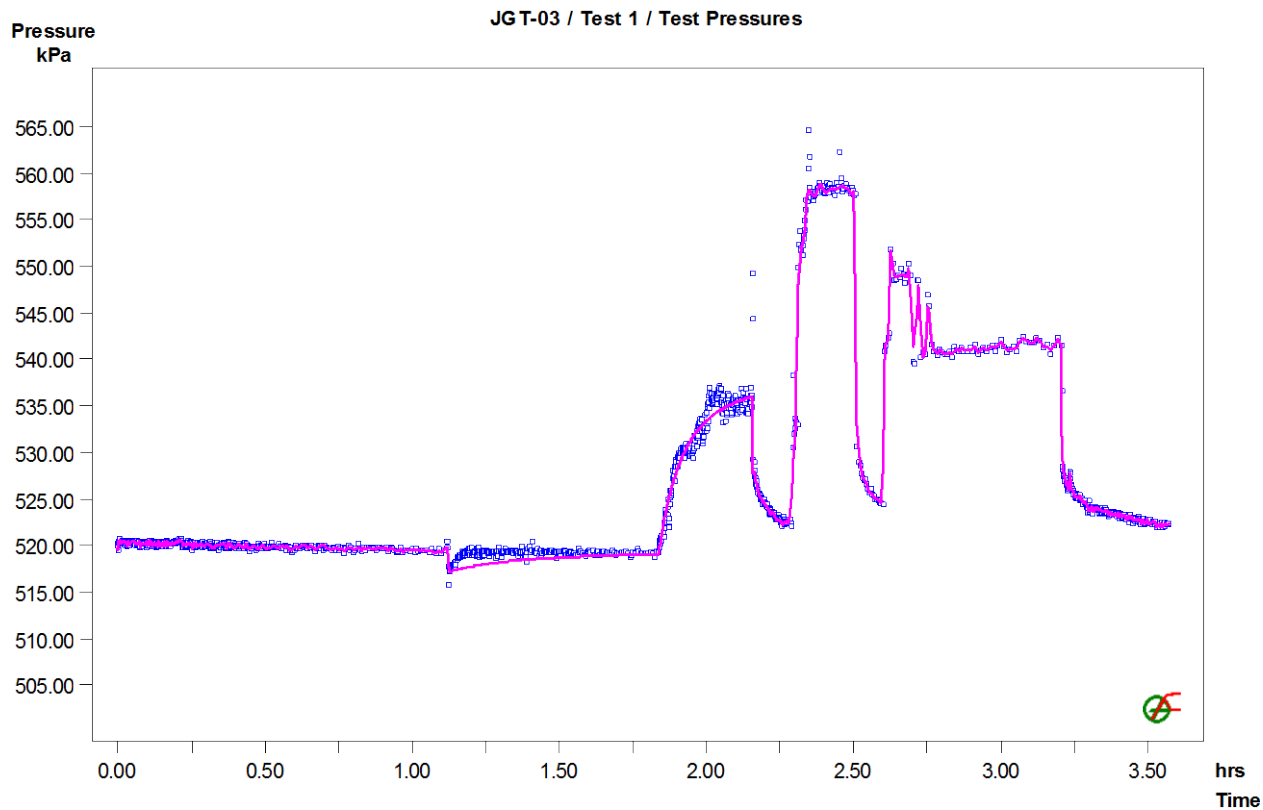


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot

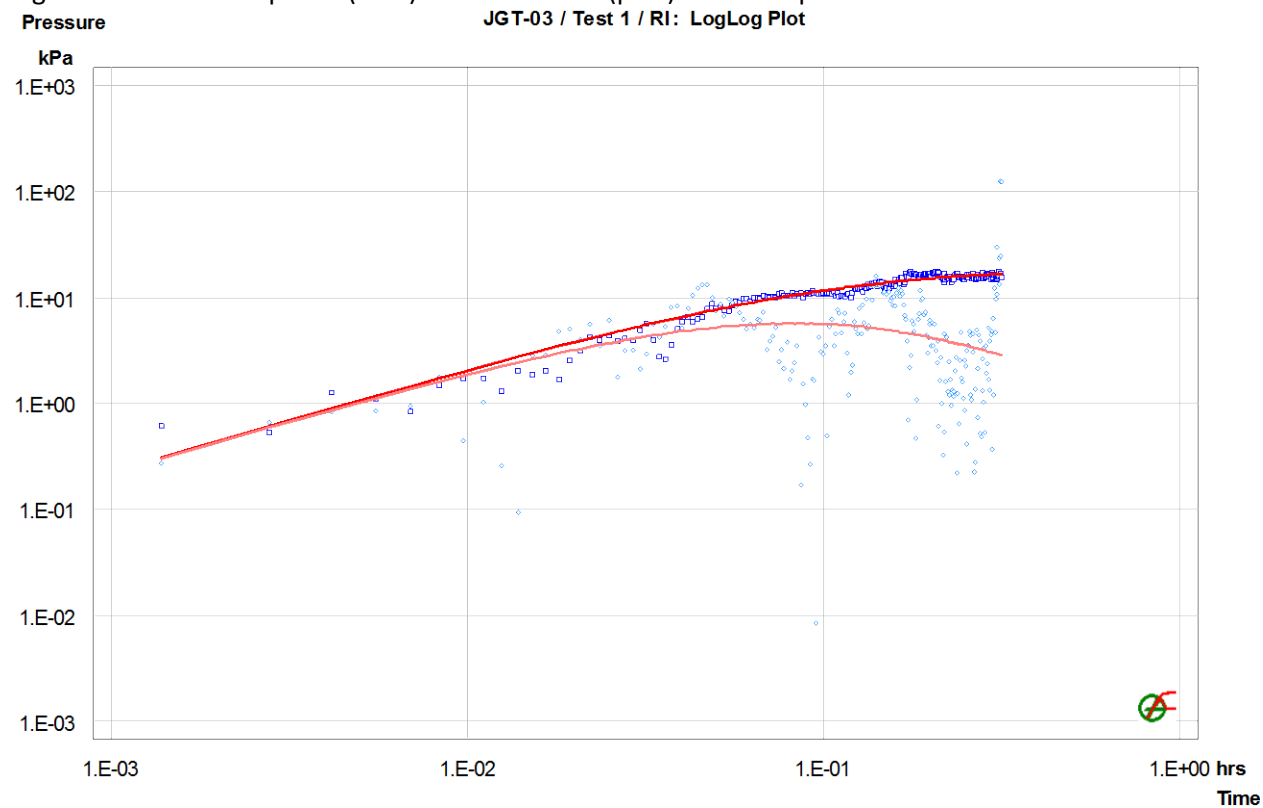


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-03
Test Name Test 2
Test Date/Time April 19, 2014, 13:00
Interval top: 147.68 m bottom: 251.48 m
Description Analyzed by: DSL
Reviewed by: DV

Basic Data

Test Interval 103.80 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 20.0 deg
Test Volume 751.328 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	1389.59			5.2e-07
PSR	Variable Pressure	0.86306	1393.43			5.2e-07
SW-Init	dP-Event	1.46611	1392.63	66.2 *		5.2e-07
SW	Slug	1.47222	1326.40	1392.6		5.2e-07
DEF	Variable Pressure	2.15750	1330.88			5.2e-07

Analysis Results

Analysis "SW"

Static Pressure: 1331.45 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	3.5e-07	2.0e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	5.2e-07	0.0
PSR	5.2e-07	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0
DEF	5.2e-07	0.0

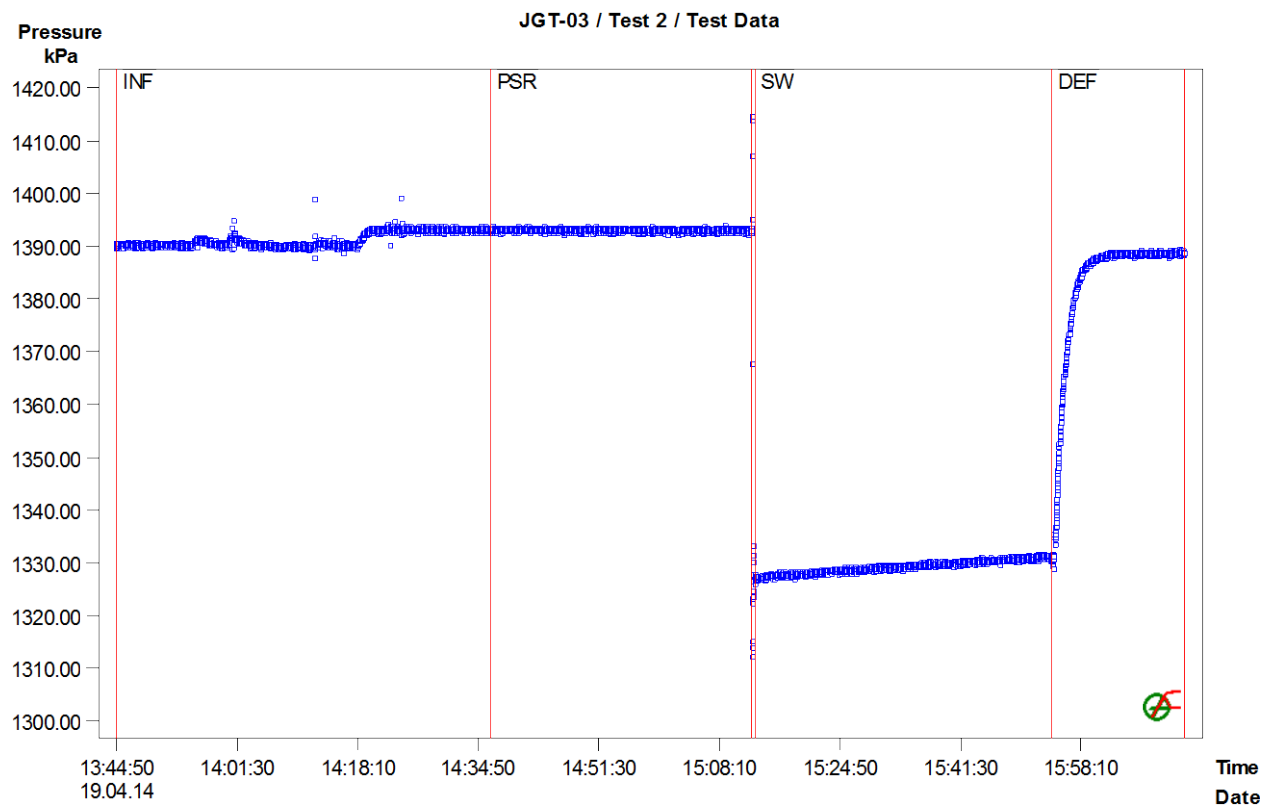


Figure 1: Pressure response and sequence definition

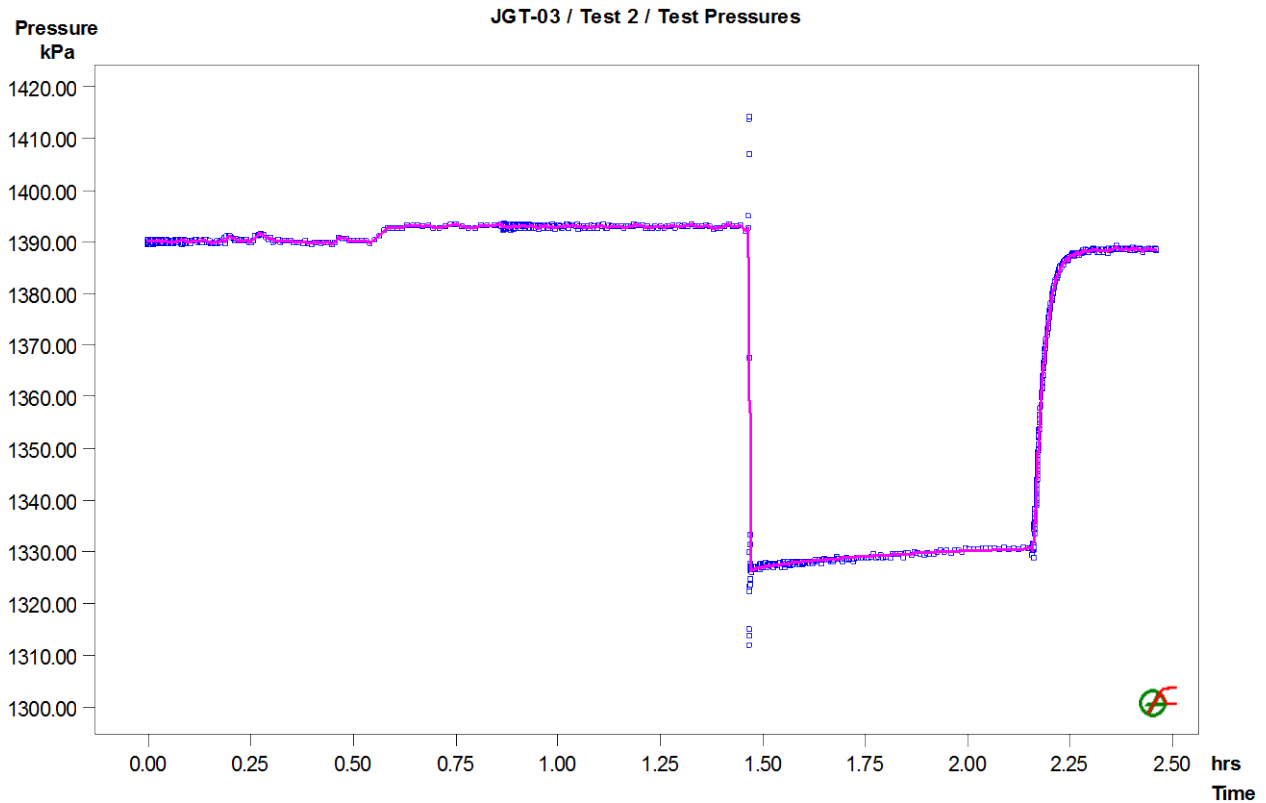


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-03 / Test 2 / SW: LogLog Plot, constant P(i)

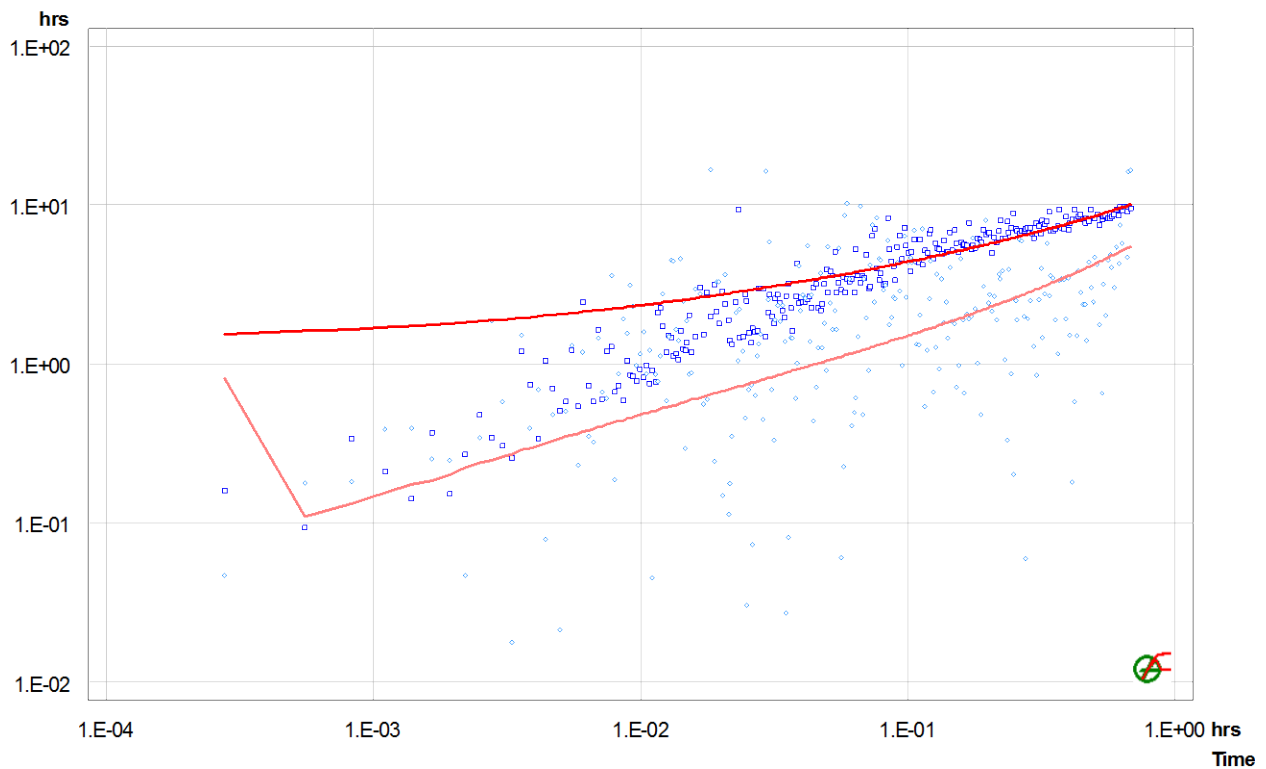


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-03
Test Name Test 3
Test Date/Time April 21, 2014, 20:00
Interval top: 246.68 m bottom: 350.48 m
Description Analyzed by: DSL
Reviewed by: DV

Basic Data

Test Interval 103.80 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 20.0 deg
Test Volume 751.328 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	2308.56			5.2e-07
PSR	Variable Pressure	0.72806	2307.25			5.2e-07
SW-Init	dP-Event	1.42750	2306.10	50.2 *		5.2e-07
SW	Slug	1.43611	2255.87	2306.1		5.2e-07
COM	Variable Pressure	1.97250	2306.55			5.2e-07
PSR2	Variable Pressure	2.78639	2307.10			5.2e-07
RI	Constant Rate	3.00722	2308.14		-3.09e+01	5.6e-07
DEF	Variable Pressure	3.46361	2484.93			5.6e-07

Analysis Results

Analysis "RI- 2 shell final"

Static Pressure: 2307.48 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	2.9e-05	2.0e-04	124.91	2.0
Shell 2	3.3e-05	2.0e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	5.2e-07	0.0
PSR	3.7e-05	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0
COM	3.7e-05	0.0
PSR2	3.7e-05	0.0
RI	2.7e-07	0.0
DEF	2.7e-07	0.0

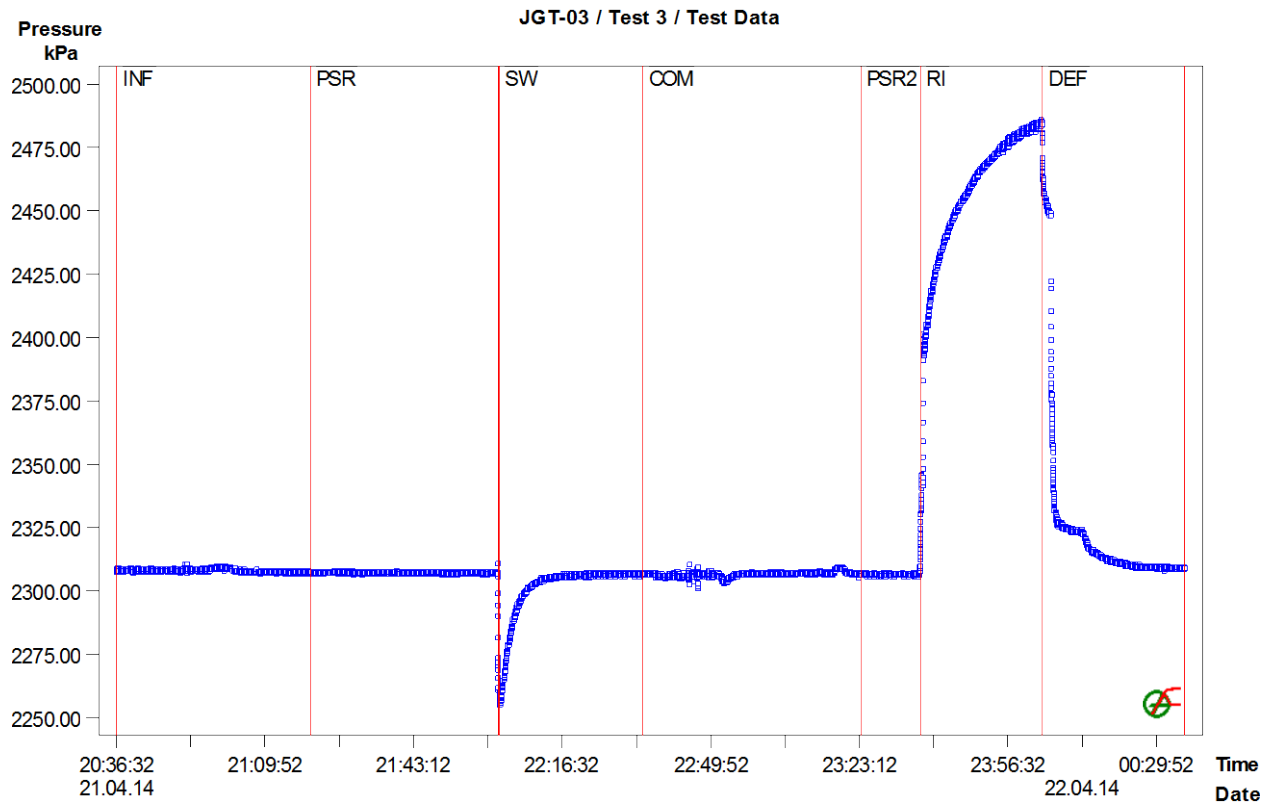


Figure 1: Pressure response and sequence definition

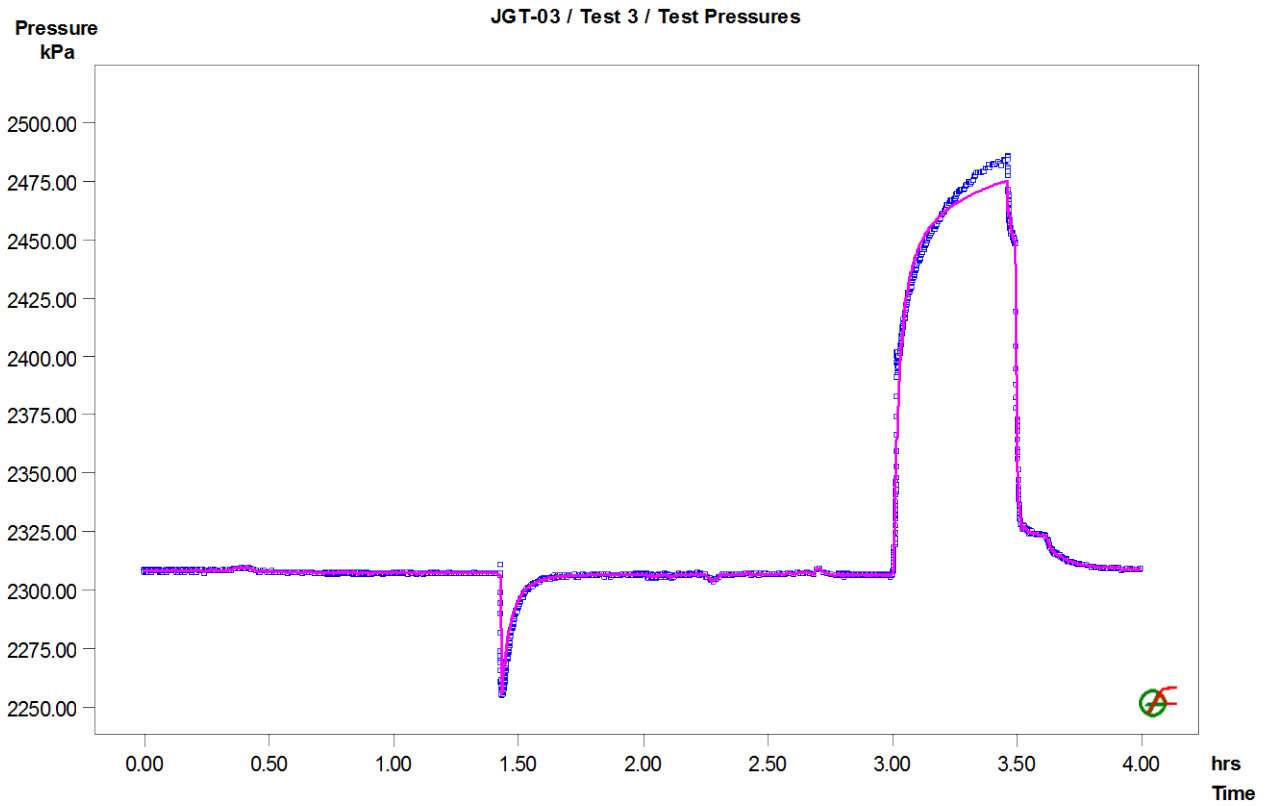


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot

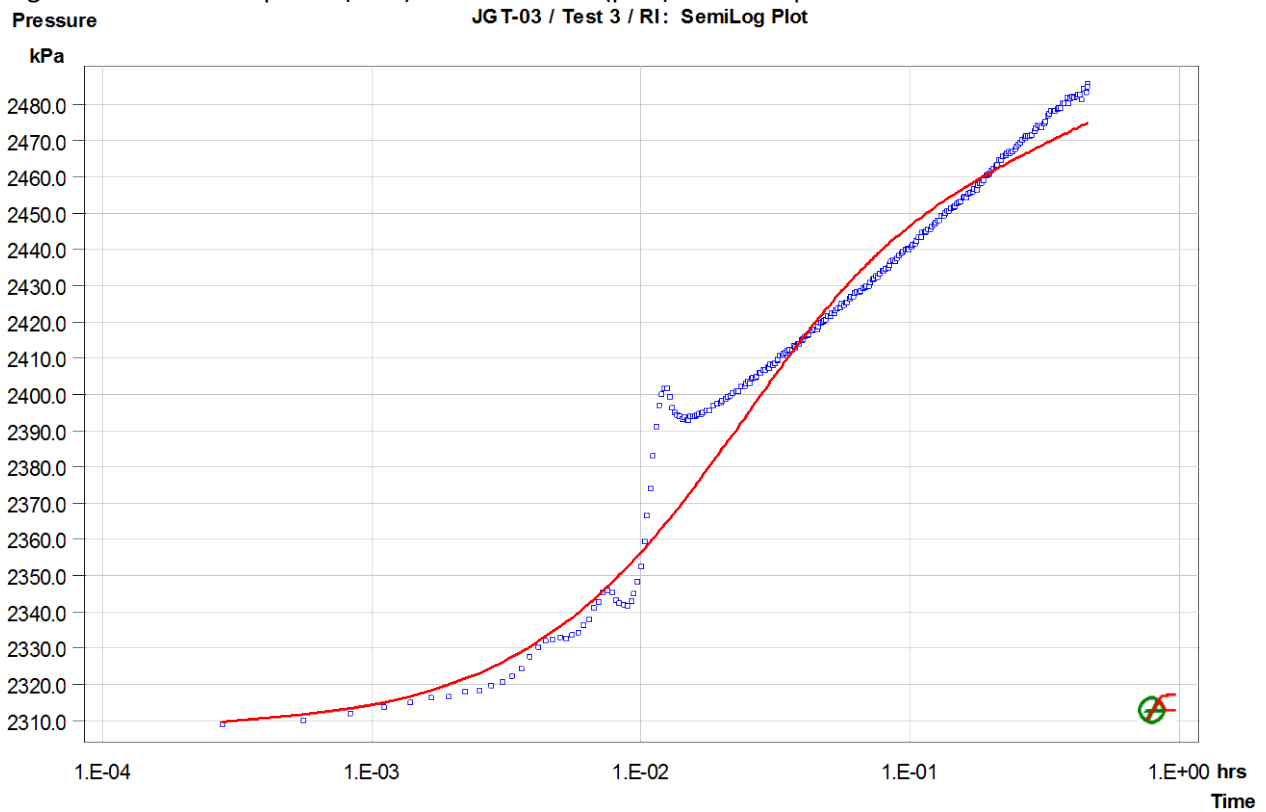


Figure 3: Pressure response (dark blue) and simulation (red): Semi Log diagnostic plot, RI sequence

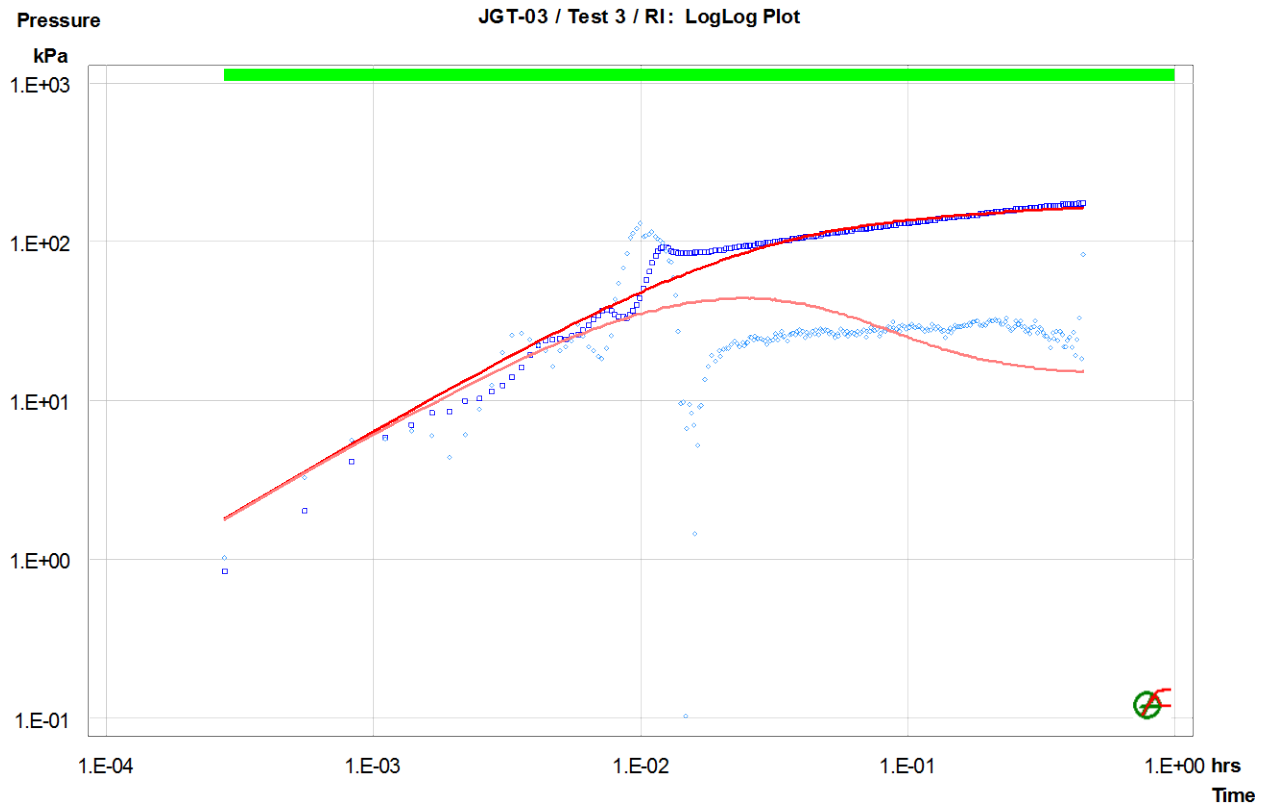


Figure 4: Pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, RI sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-03
Test Name Test 4
Test Date/Time
Interval top: 348.68 m bottom: 449.48 m
Description Analyzed by: DV
Reviewed by: DSL

Basic Data

Test Interval 100.80 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 20.0 deg
Test Volume 729.614 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
PSR	Variable Pressure	0.00000	3230.93			5.2e-07
SW-Init	dP-Event	0.87861	3231.00	42.1 *		5.2e-07
SW	Slug	0.88167	3188.93	3231.0		5.2e-07
VAR	Variable Pressure	1.10944	3230.55			5.2e-07
RI	Constant Rate	1.47417	3230.57		-4.51e+01	8.4e-07
RIR	Recovery	2.01222	3289.69			8.4e-07

Analysis Results

Analysis "RI-2 shell final"

Static Pressure: 3230.28 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	1.4e-04	2.0e-04	424.74	2.0
Shell 2	4.6e-04	2.0e-04	--	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
PSR	3.9e-06	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0
VAR	3.9e-06	0.0
RI	2.1e-06	0.0
RIR	2.1e-06	0.0

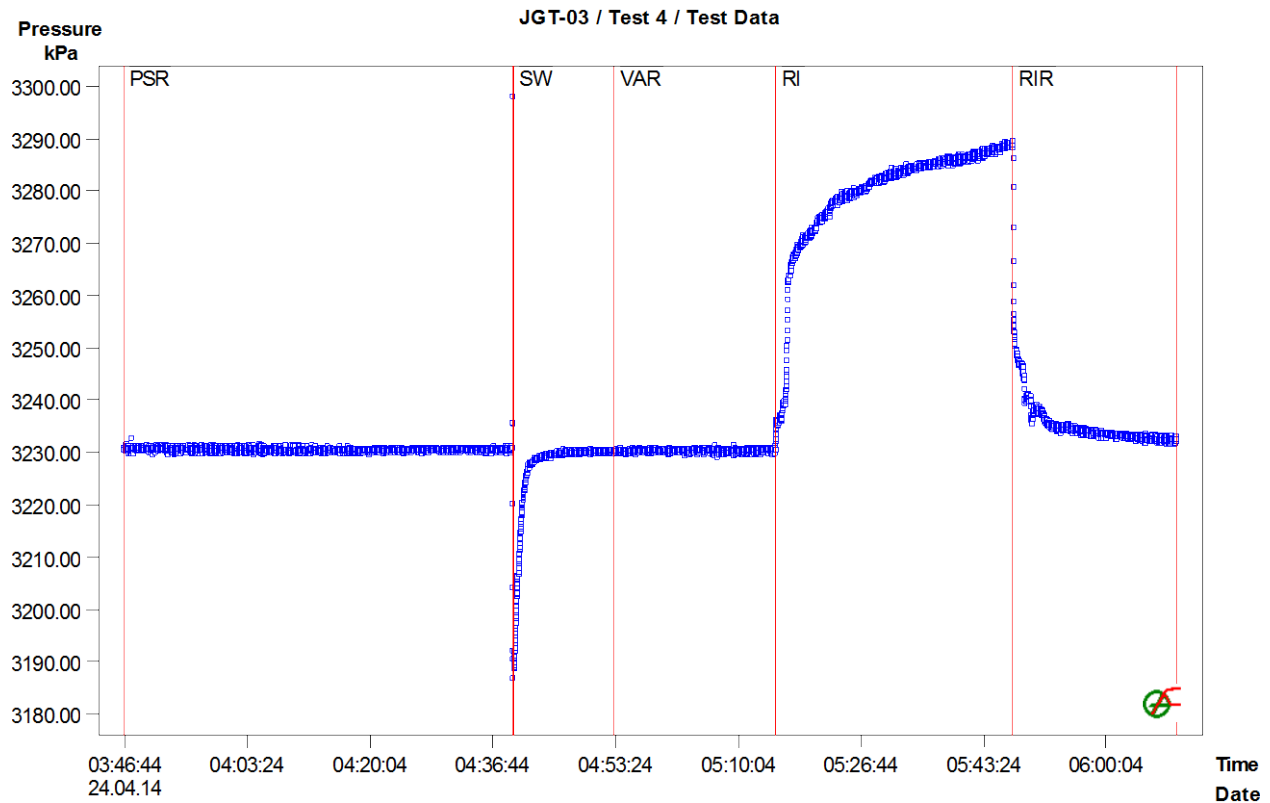


Figure 1: Pressure response and sequence definition

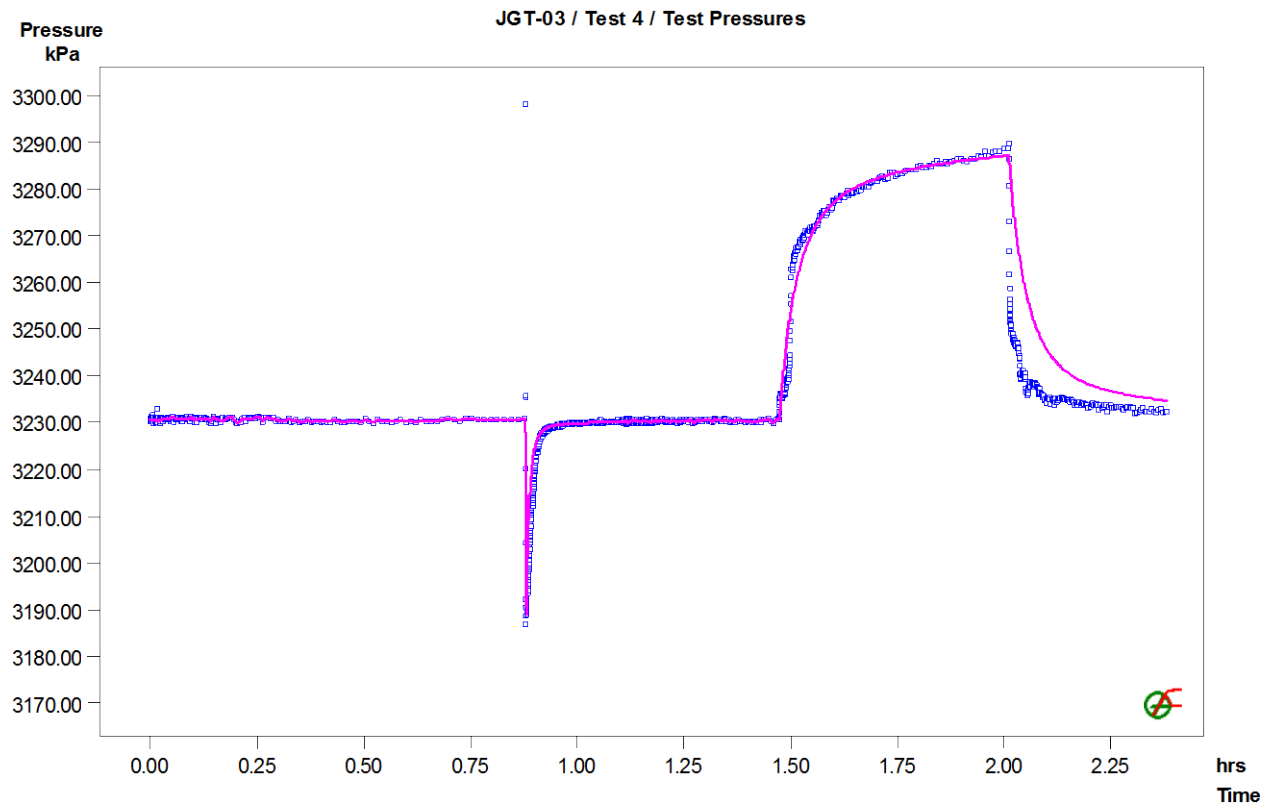


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot

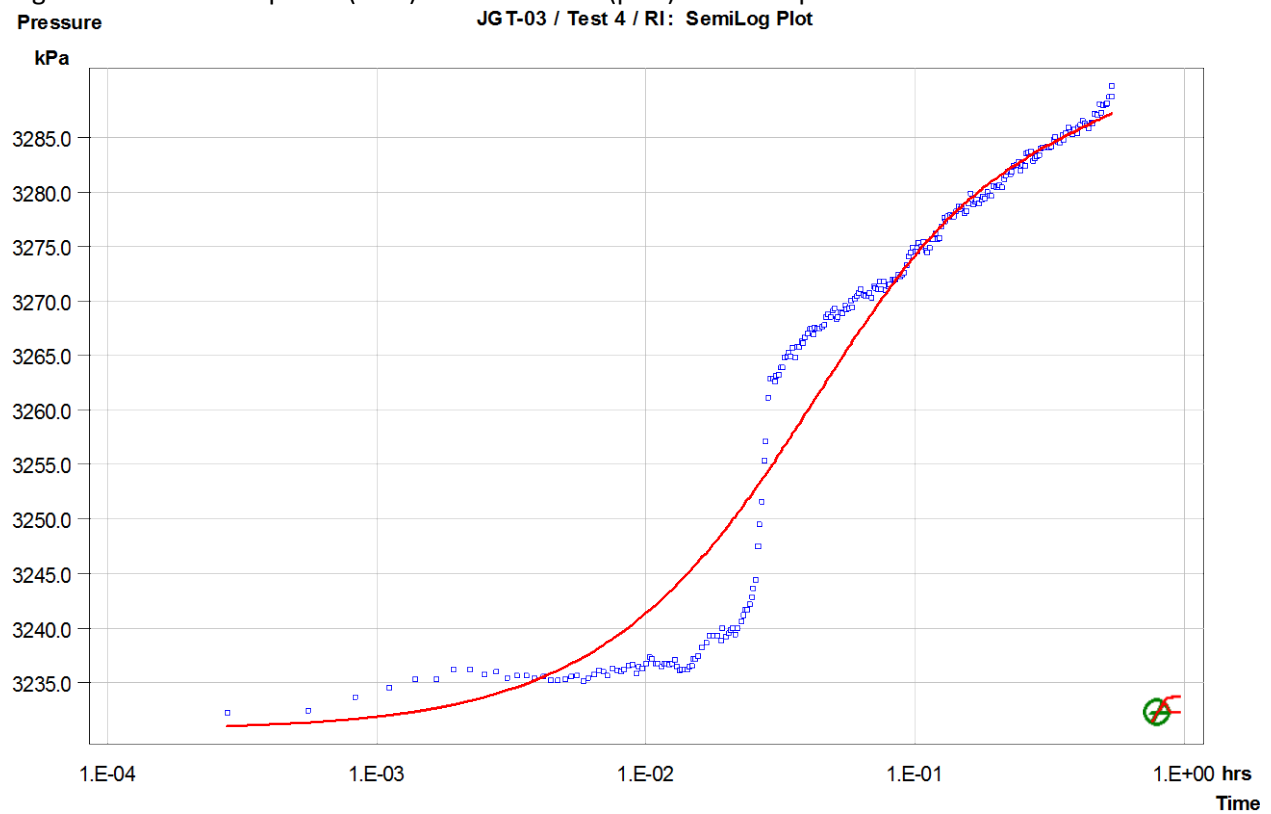


Figure 3: Pressure response (dark blue) and simulation (red): Semi Log diagnostic plot, RI sequence

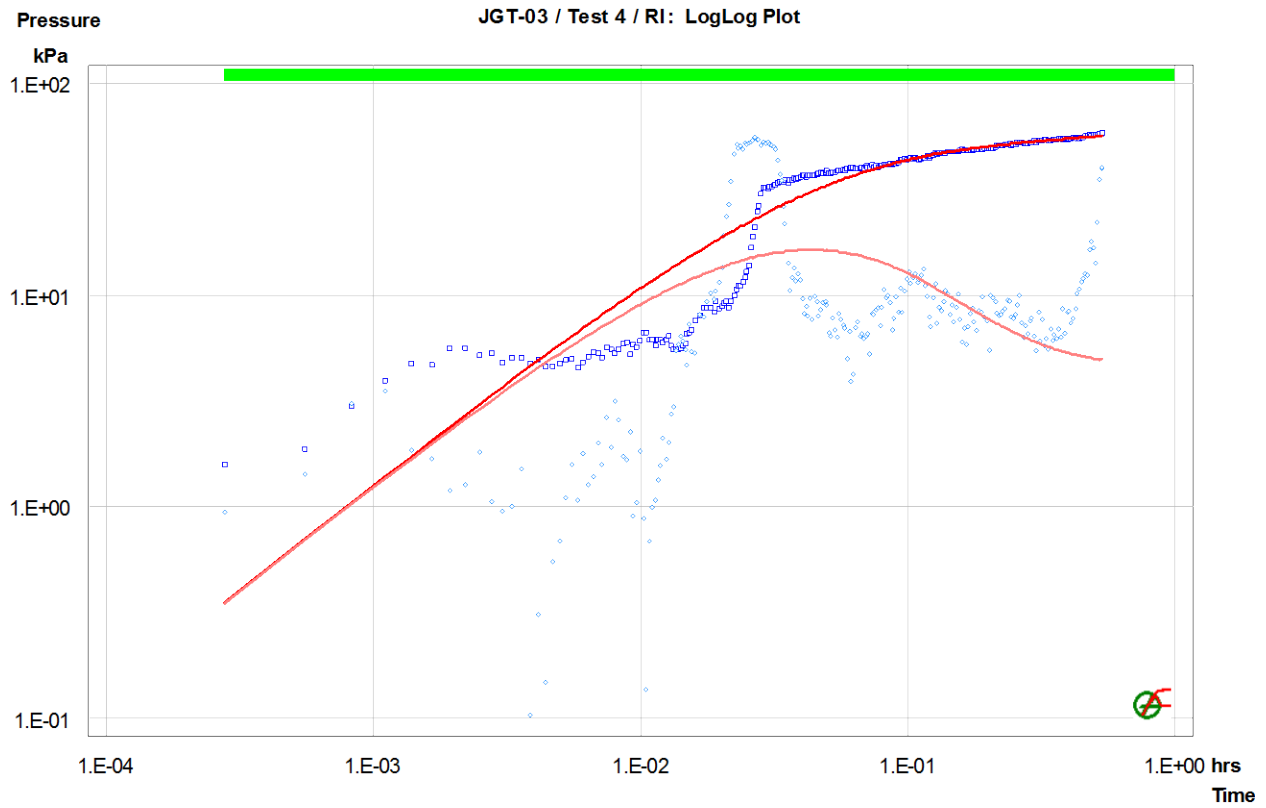


Figure 4: Pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, RI sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-04
Test Name Test 1
Test Date/Time
Interval top: 93.92 m bottom: 146.58 m
Description Analyzed by: DV
 Reviewed by: DSL

Basic Data

Test Interval 52.66 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 20.0 deg
Test Volume 381.165 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	305.60			5.2e-07
PSR	Recovery	0.23417	306.34			5.2e-07
SW-Init	dP-Event	0.58833	304.54	102.8 *		5.2e-07
SW	Slug	0.59417	201.78	304.5		5.2e-07
COM	Variable Pressure	0.72333	301.48			5.2e-07

Analysis Results

Analysis "Sw-Final"

Static Pressure: 304.55 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	4.5e-05	1.0e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	5.4e-07	0.0
PSR	5.4e-07	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0
COM	5.4e-07	0.0

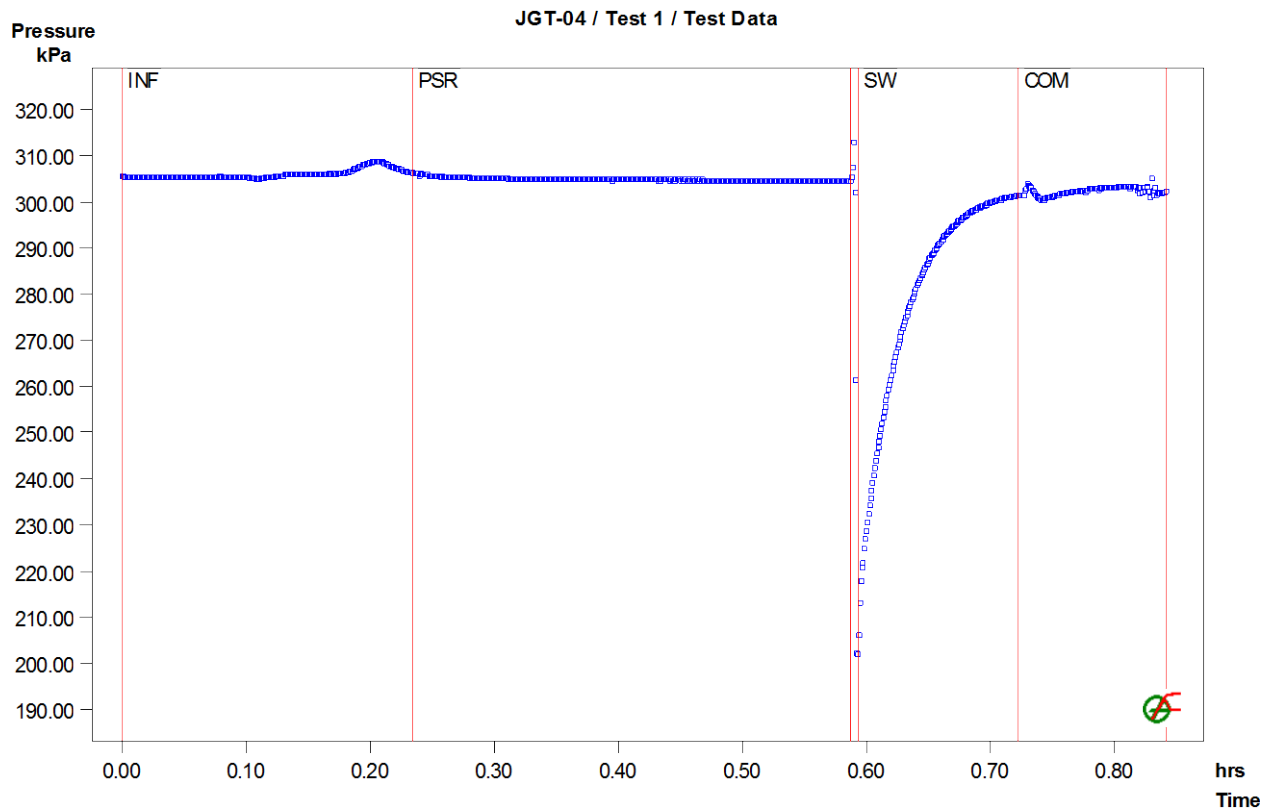


Figure 1: Pressure response and sequence definition

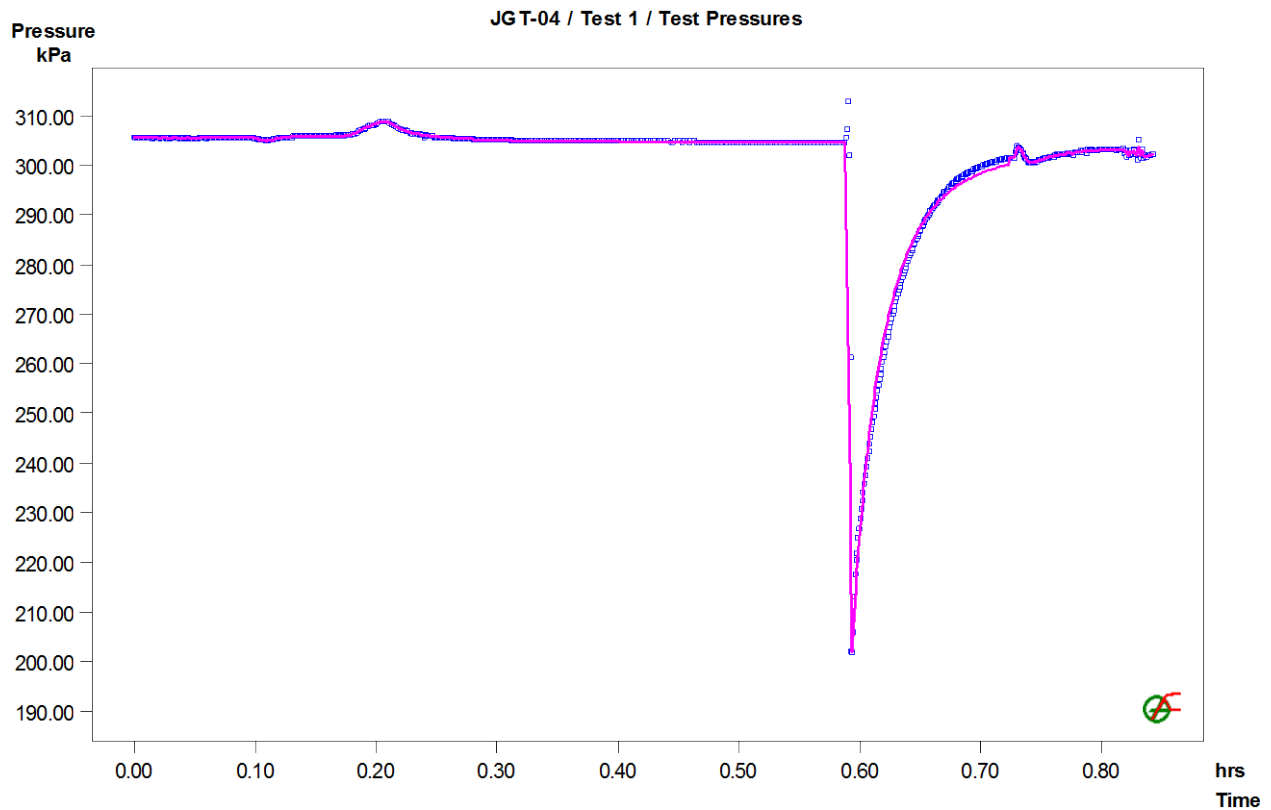


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-04 / Test 1 / SW: LogLog Plot, variable P(i)

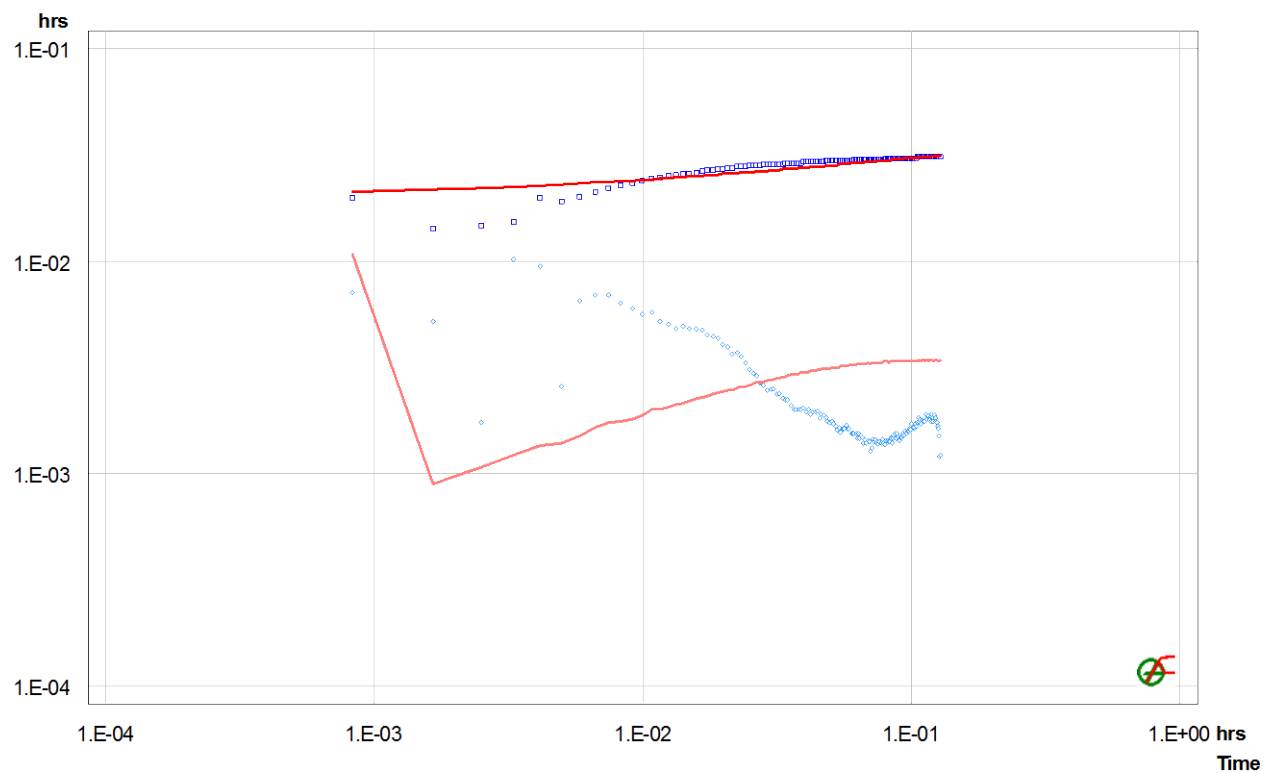


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project	Dominion Diamond	
Site	Jay Project	
Source Well	JGT--04	
Test Name	Test 2	
Test Date/Time	April 9, 2014, 0100	
Interval	top: 144.92 m bottom: 251.58 m	
Description	Analyzed by: DSL Reviewed by: DV	

Basic Data

Test Interval	106.66 m		
Porosity	0.10		
Well Radius	0.048 m	Tubing Radius	0.039 m
Inclination	20.0 deg		
Test Volume	772.030 l		
Well Type	Source		

Fluid Properties

Viscosity	0.001 Pa*s
Density	1000.0 kg/m ³
Compressibility	2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m³/Pa]
PSR	Variable Pressure	0.00000	1454.73			5.2e-07
SW-Init	dP-Event	0.75417	1454.42	41.2 *		5.2e-07
SW	Slug	0.75972	1413.18	1454.4		5.2e-07
PSR2	Variable Pressure	0.95278	1453.57			5.2e-07
RI-1	Variable Pressure	1.32778	1464.93			2.4e-07
RI-2	Variable Pressure	1.58611	1865.91			2.4e-07
DEF	Variable Pressure	2.13333	1827.09			5.2e-07

Analysis Results

Analysis "SW-Final"

Static Pressure: 1455.49 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	2.8e-05	2.1e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
PSR	2.4e-06	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0
PSR2	2.4e-06	0.0
RI-1	2.4e-07	0.0
RI-2	2.4e-07	0.0
DEF	2.4e-06	0.0

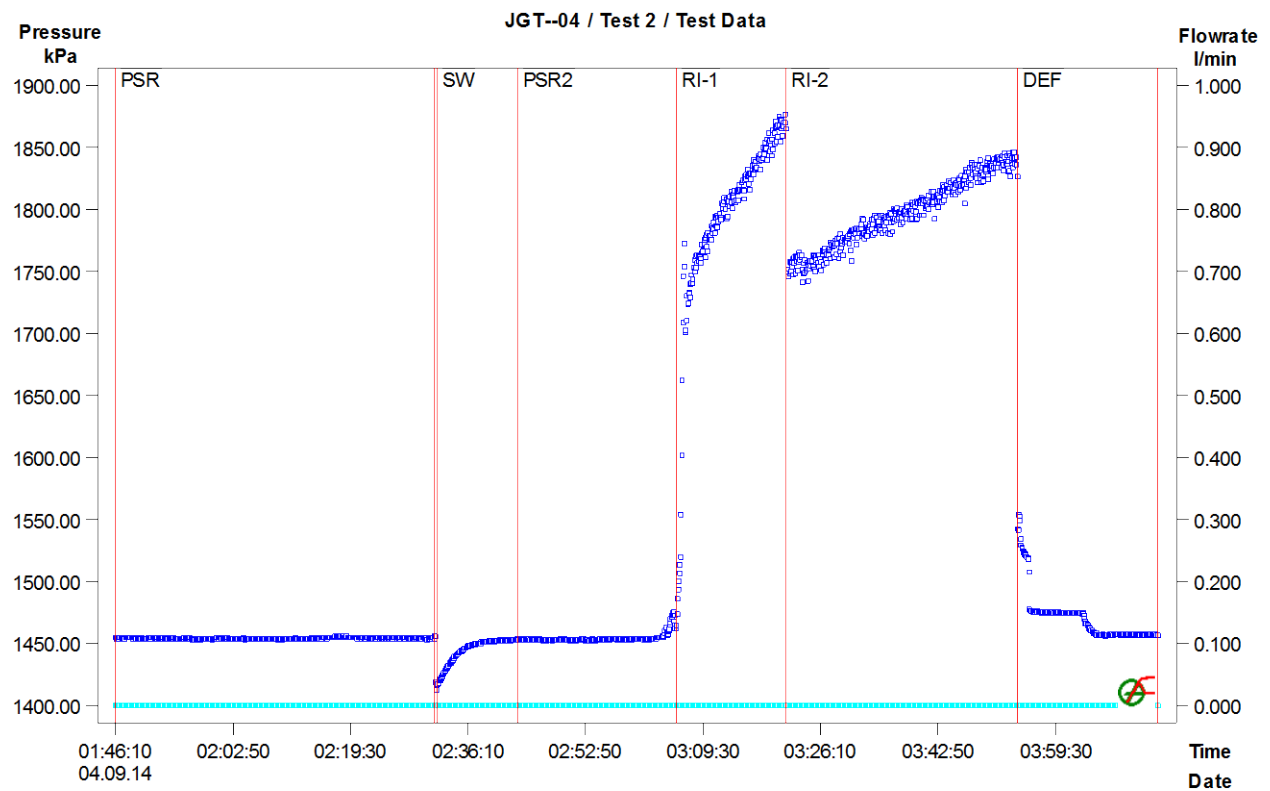


Figure 1: Pressure response and sequence definition

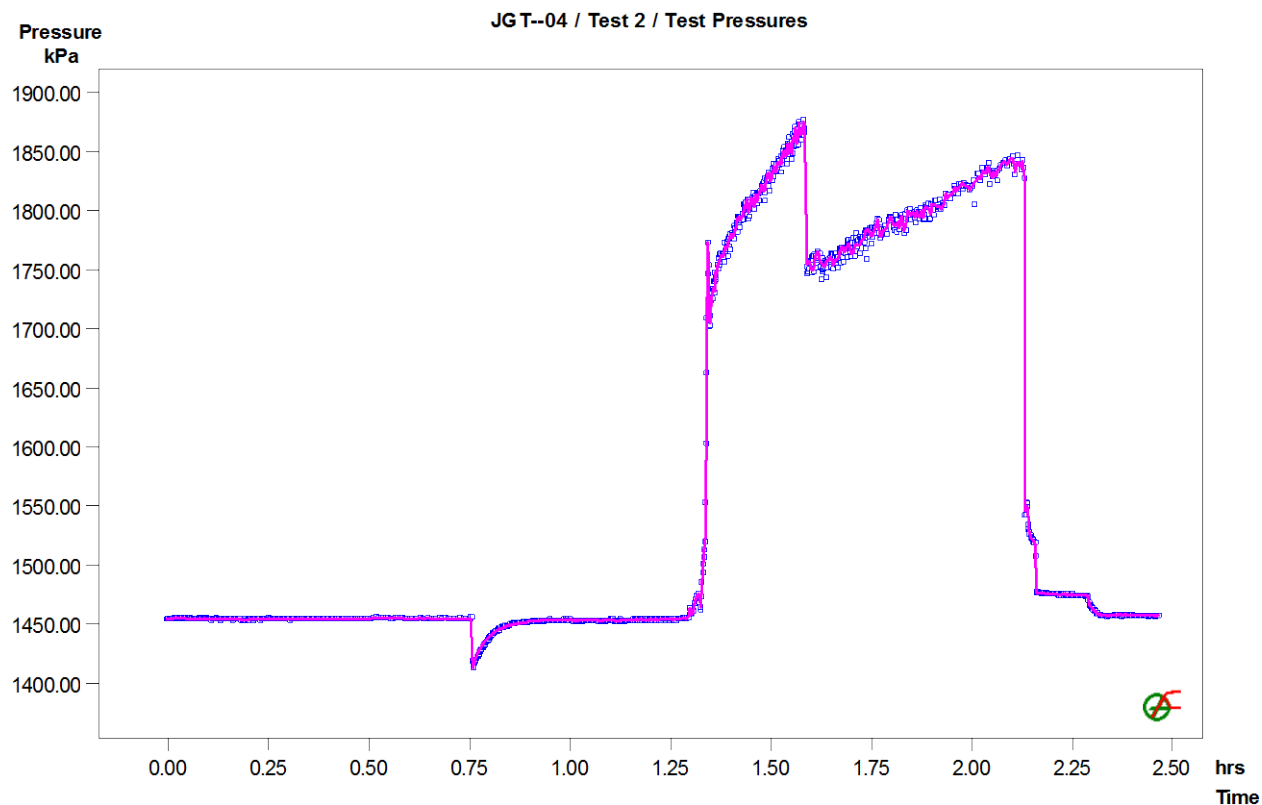


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT--04 / Test 2 / SW: LogLog Plot, constant P(i)

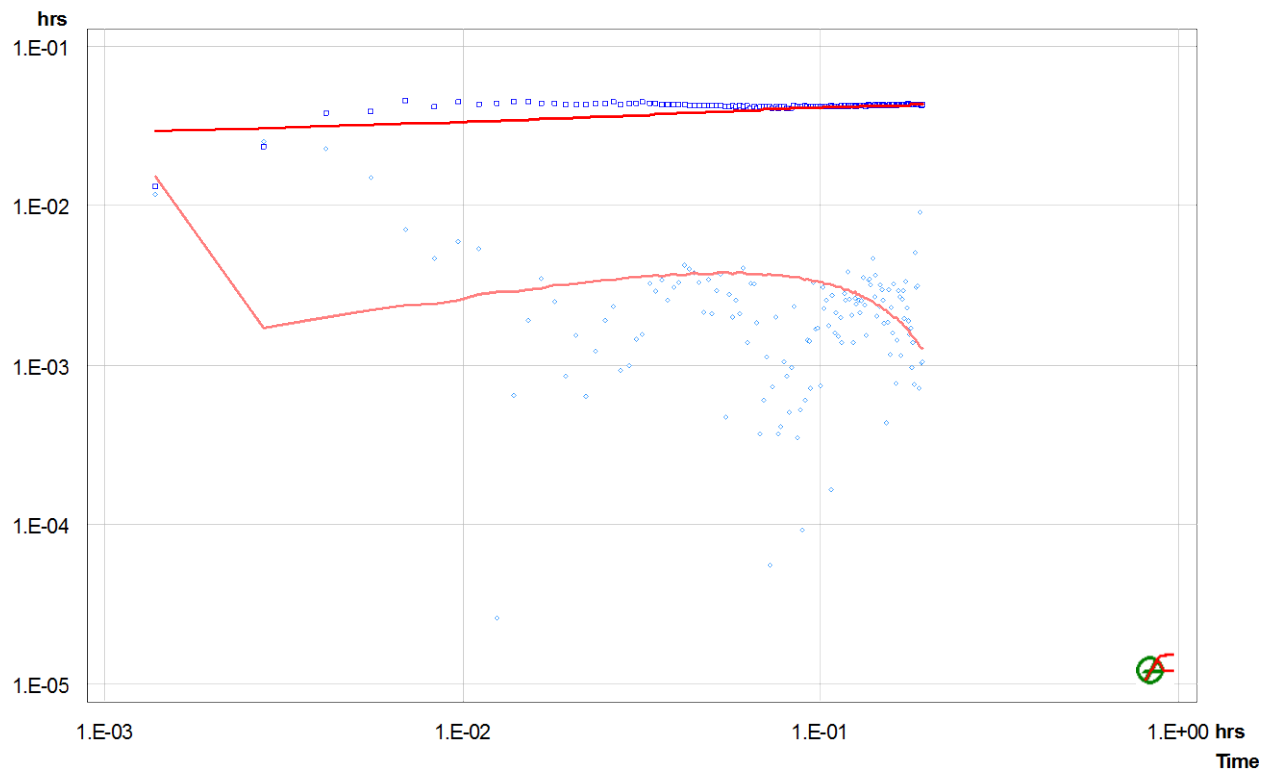


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-04
Test Name Test 3
Test Date/Time April 11, 2014, 0300
Interval top: 243.92 m bottom: 350.58 m
Description Analyzed by: DSL
Reviewed by: DV

Basic Data

Test Interval 106.66 m
Porosity 0.10
Well Radius 0.079 m Tubing Radius 0.039 m
Inclination 30.0 deg
Test Volume 2091.249 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
COM	Variable Pressure	0.00000	2376.76			5.6e-07
PSR	Recovery	1.30972	2376.70			5.6e-07
Sequence 3	dP-Event	1.68611	2379.43	38.6 *		5.6e-07
SW	Slug	1.71944	2340.84	2379.4		5.6e-07
RI	Constant Rate	2.40278	2378.15		-1.08e+01	4.2e-09
DEF	Variable Pressure	3.03889	2642.75			5.6e-07

Analysis Results

Analysis "RI-2 shell Final"

Static Pressure: 2380.77 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	7.8e-06	2.1e-04	1.25	2.0
Shell 2	4.3e-06	2.1e-04	--	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
COM	5.6e-07	0.0
PSR	3.6e-07	0.0
Sequence 3	5.6e-07	0.0
SW	5.6e-07	0.0
RI	5.7e-09	0.0
DEF	5.6e-07	0.0

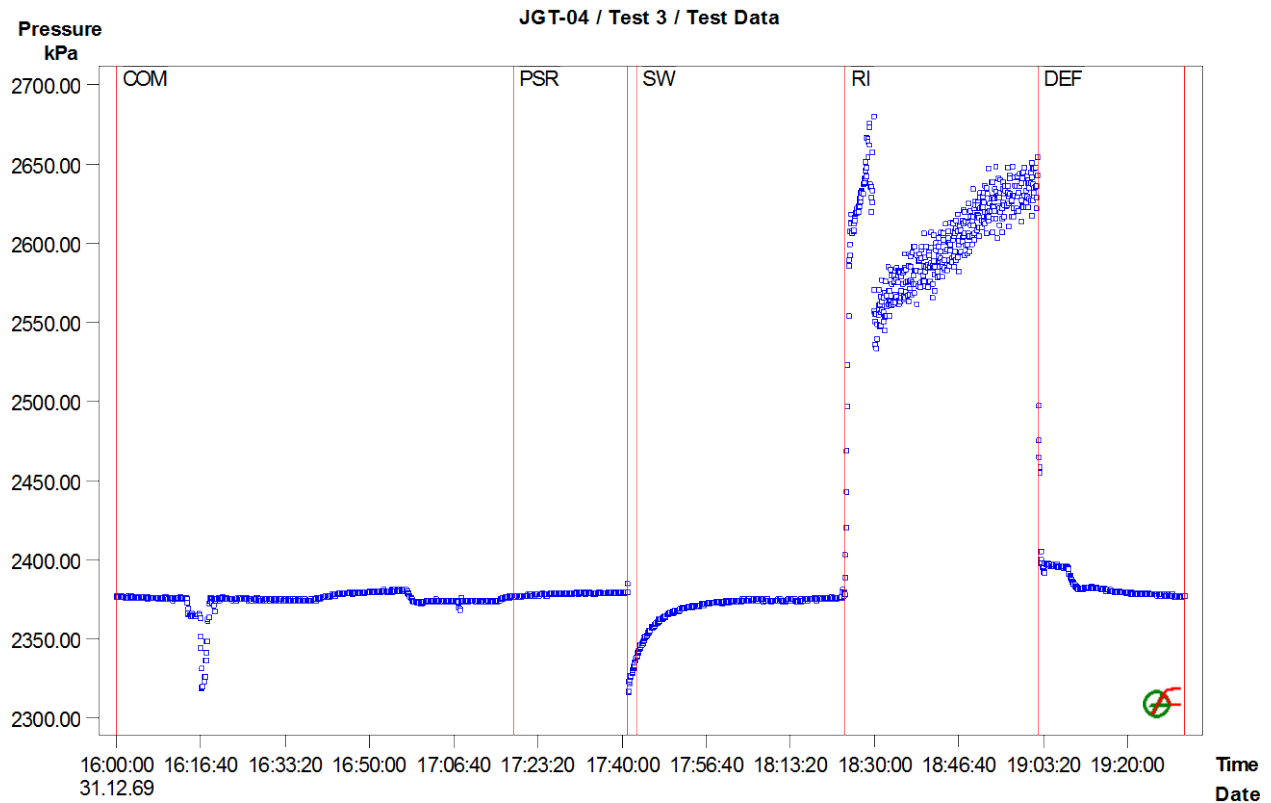


Figure 1: Pressure response and sequence definition

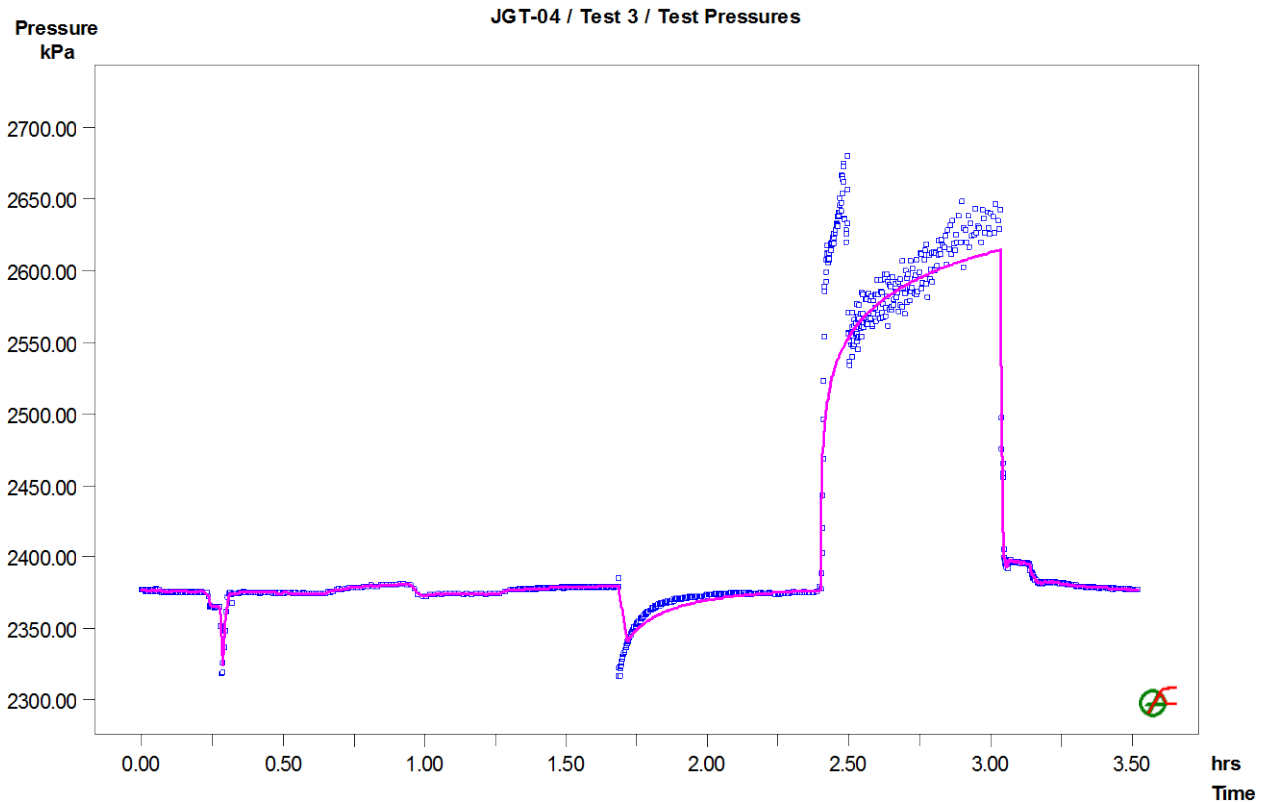


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot

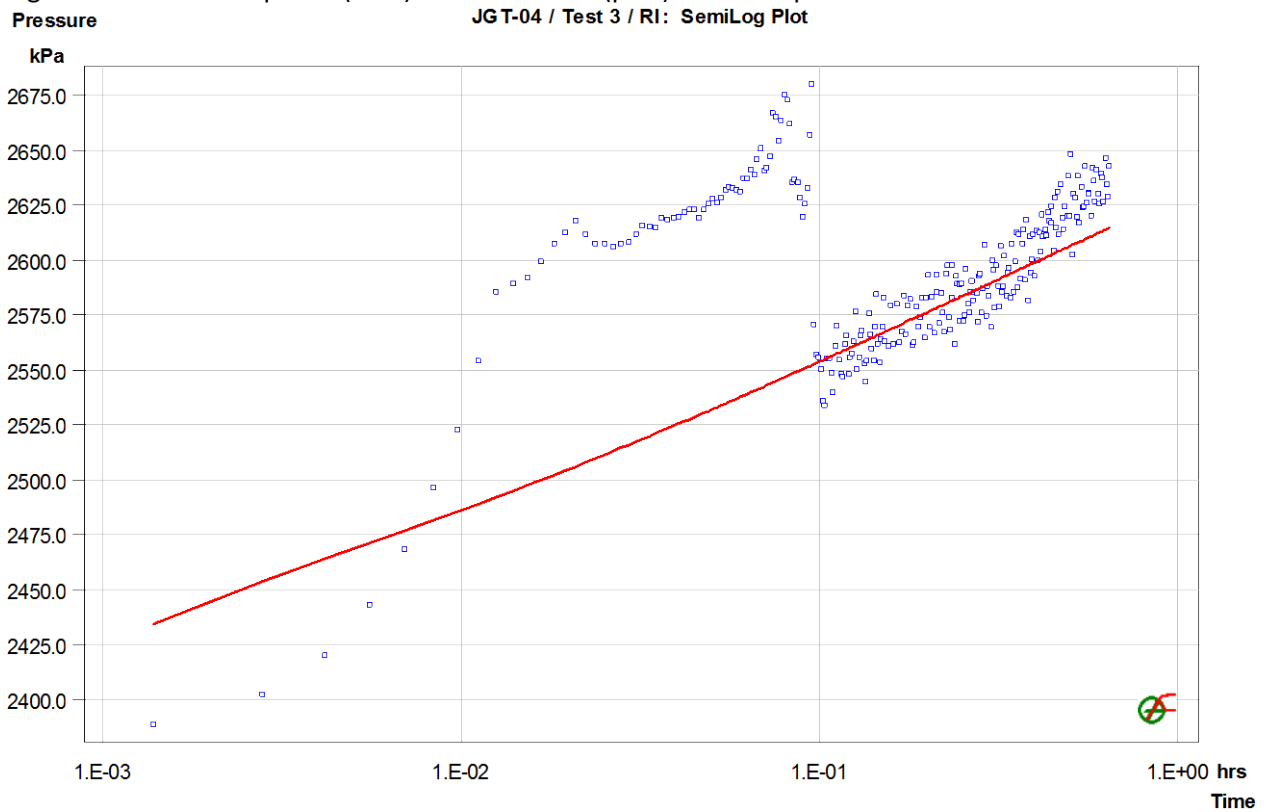


Figure 3: Pressure response (dark blue) and simulation (red): Semi Log diagnostic plot, RI sequence

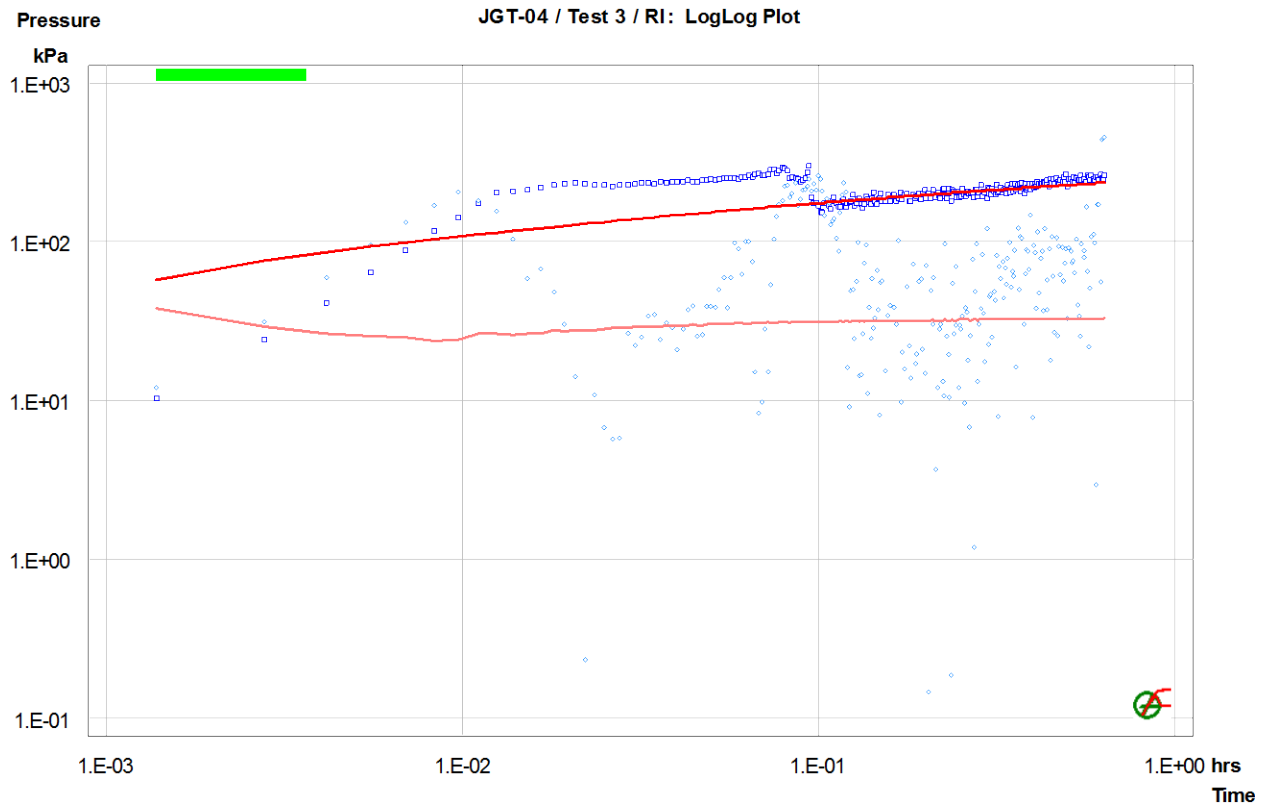


Figure 4: Pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, RI sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-05
Test Name Test 1
Test Date/Time
Interval top: 22.09 m bottom: 47.77 m
Description Analyzed by: DV
 Reviewed by: DSL

Basic Data

Test Interval 25.68 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 20.0 deg
Test Volume 185.878 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	207.52			5.2e-07
PSR	Recovery	0.08750	205.30			4.4e-07
SW-Init	dP-Event	0.35972	204.63	52.4 *		5.2e-07
SW	Slug	0.36389	152.25	204.6		5.2e-07
COM	Variable Pressure	0.64306	199.44			5.2e-07
RI-1	Constant Rate	1.51944	218.15		-5.60e+00	3.7e-08
RI-2	Constant Rate	1.73889	544.85		-4.00e+00	3.7e-08

Analysis Results

Analysis "SW-Final"

Static Pressure: 204.30 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	1.1e-05	5.0e-05	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	1.3e-07	0.0
PSR	1.3e-07	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0
COM	1.3e-07	0.0
RI-1	3.7e-10	0.0
RI-2	3.7e-10	0.0

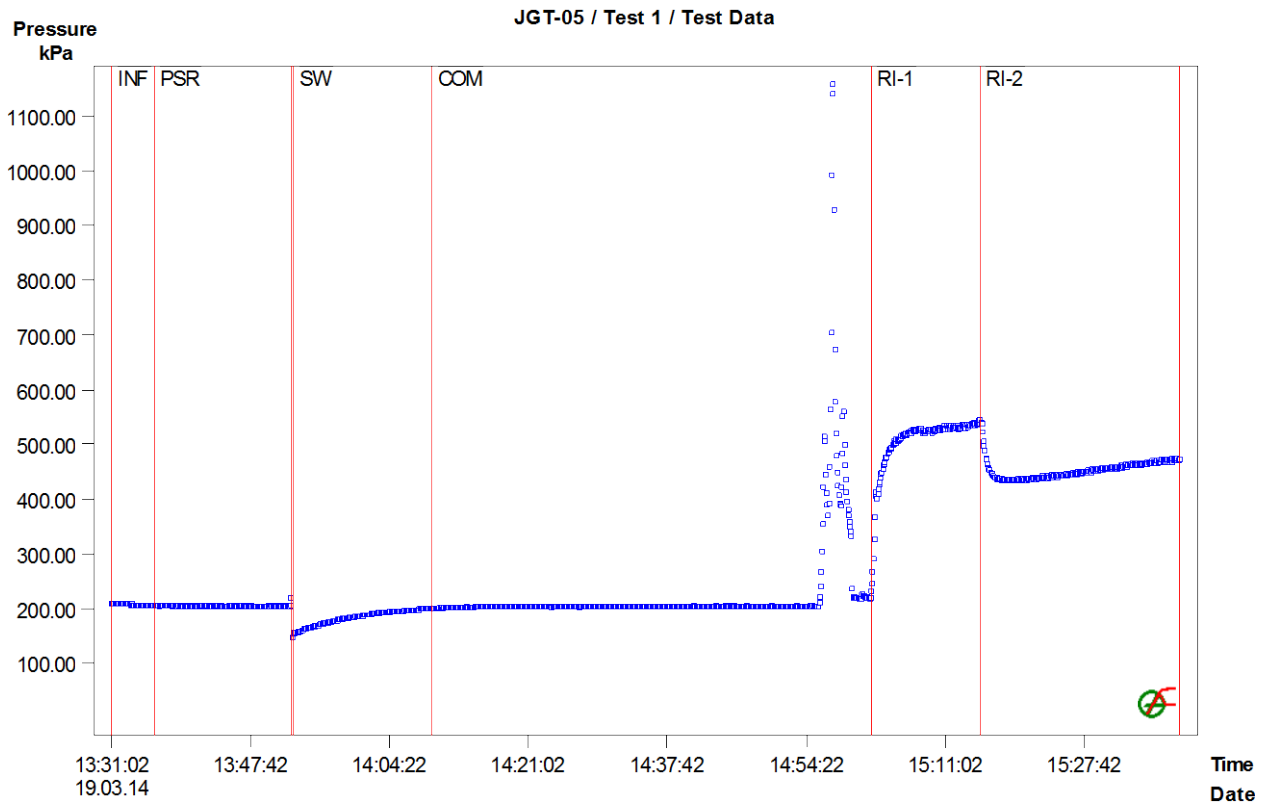


Figure 1: Pressure response and sequence definition

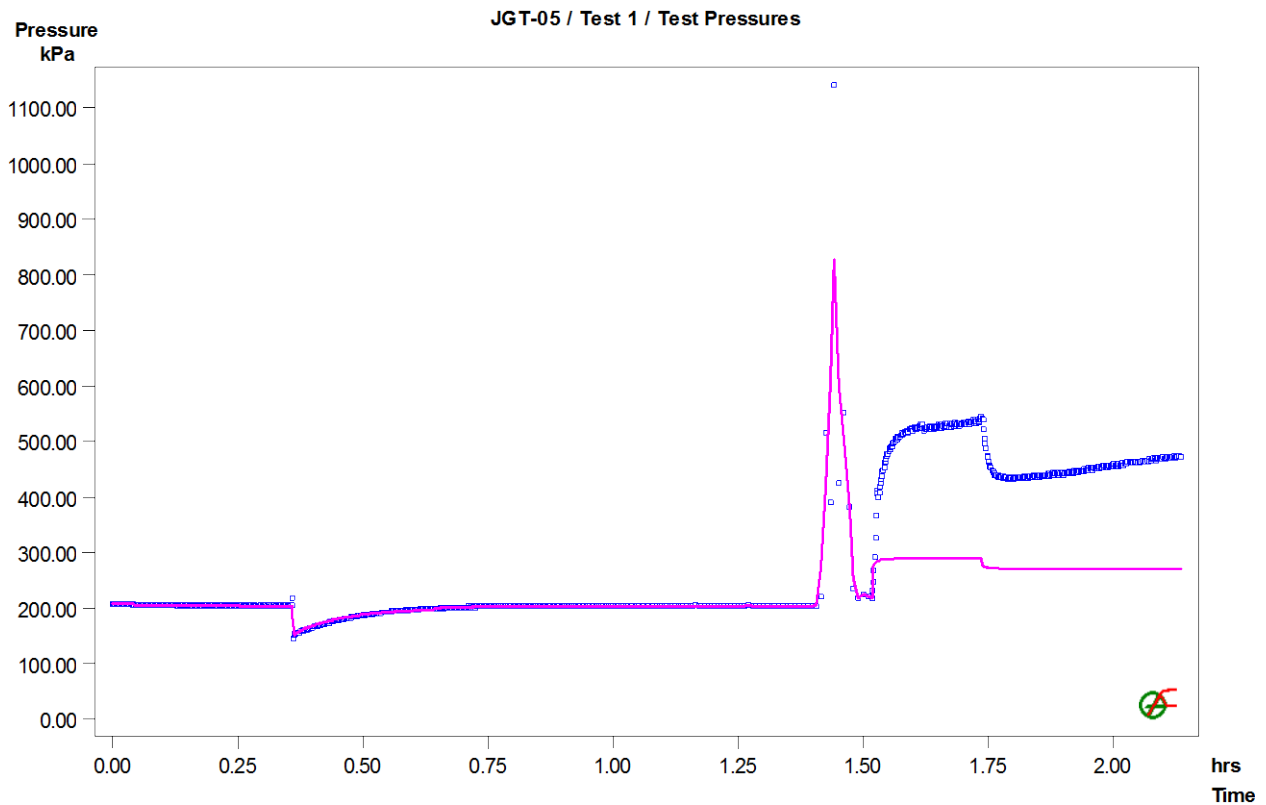


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-05 / Test 1 / SW: LogLog Plot, variable P(i)

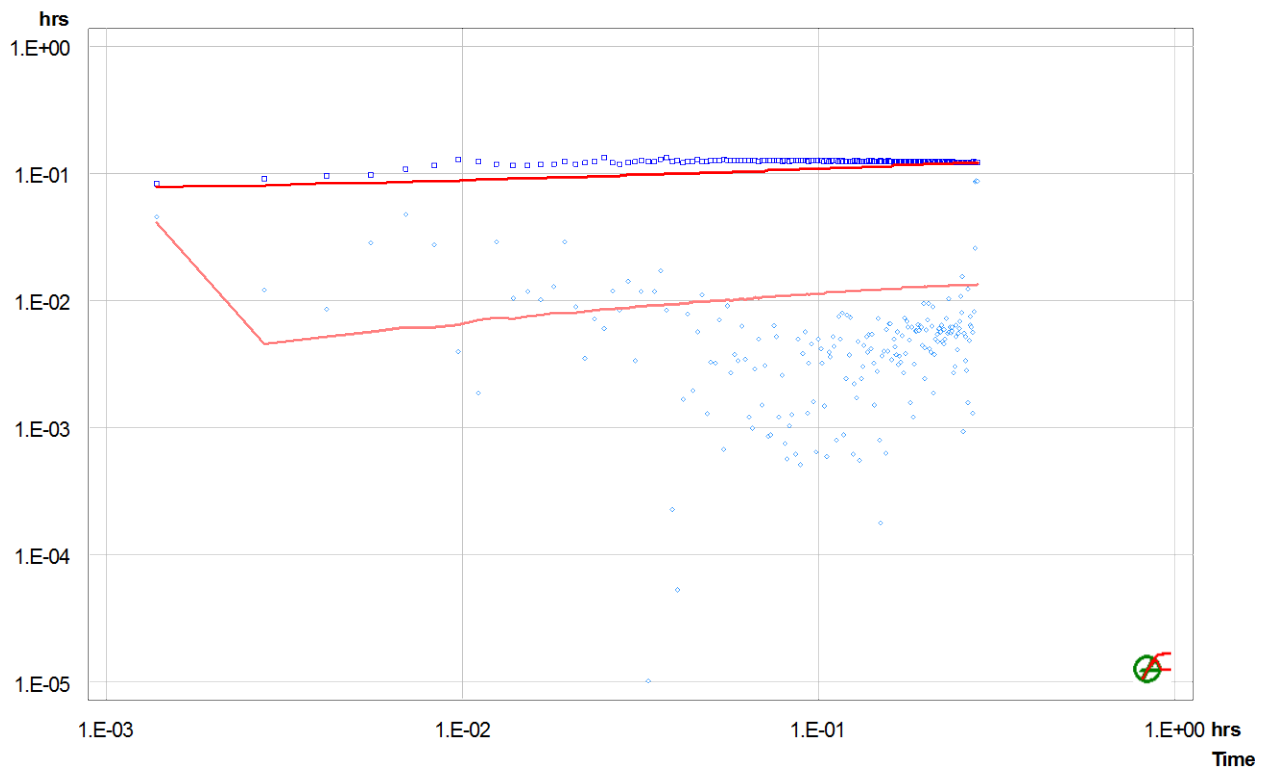


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-05
Test Name Test 2
Test Date/Time
Interval top: 49.09 m bottom: 101.77 m
Description Analyzed by: DV
Reviewed by: DSL

Basic Data

Test Interval 52.68 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 20.0 deg
Test Volume 381.310 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
PSR	Variable Pressure	0.00000	458.55			5.2e-07
SW-Init	dP-Event	0.33194	458.92	84.2 *		5.2e-07
SW	Slug	0.33472	374.68	458.9		5.2e-07
COM	Variable Pressure	0.54583	457.55			5.2e-07
RI	Constant Rate	2.44167	460.43		-2.10e+00	2.2e-08
DEF	Variable Pressure	3.00556	804.77			2.2e-08

Analysis Results

Analysis "SW-final"

Static Pressure: 456.99 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	2.5e-05	1.0e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
PSR	2.7e-05	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0
COM	2.7e-05	0.0
RI	3.4e-09	0.0
DEF	3.4e-09	0.0

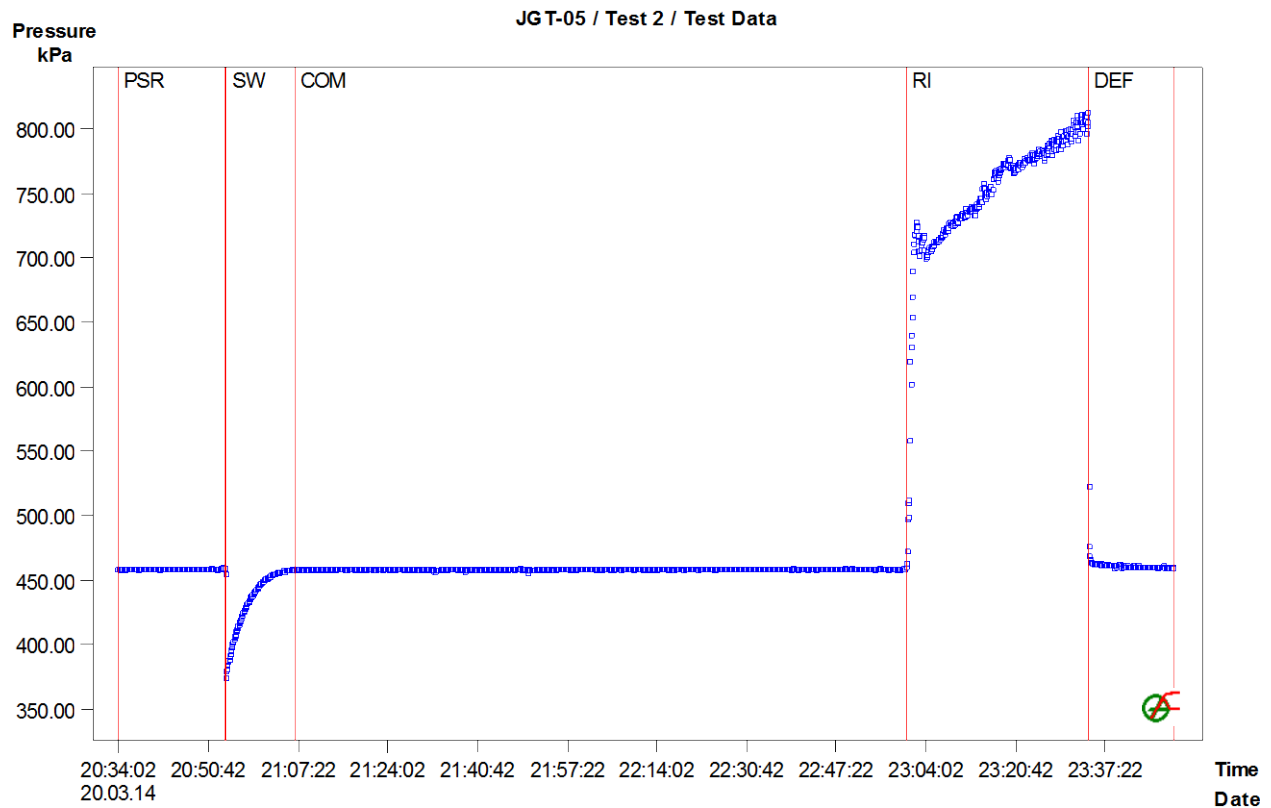


Figure 1: Pressure response and sequence definition

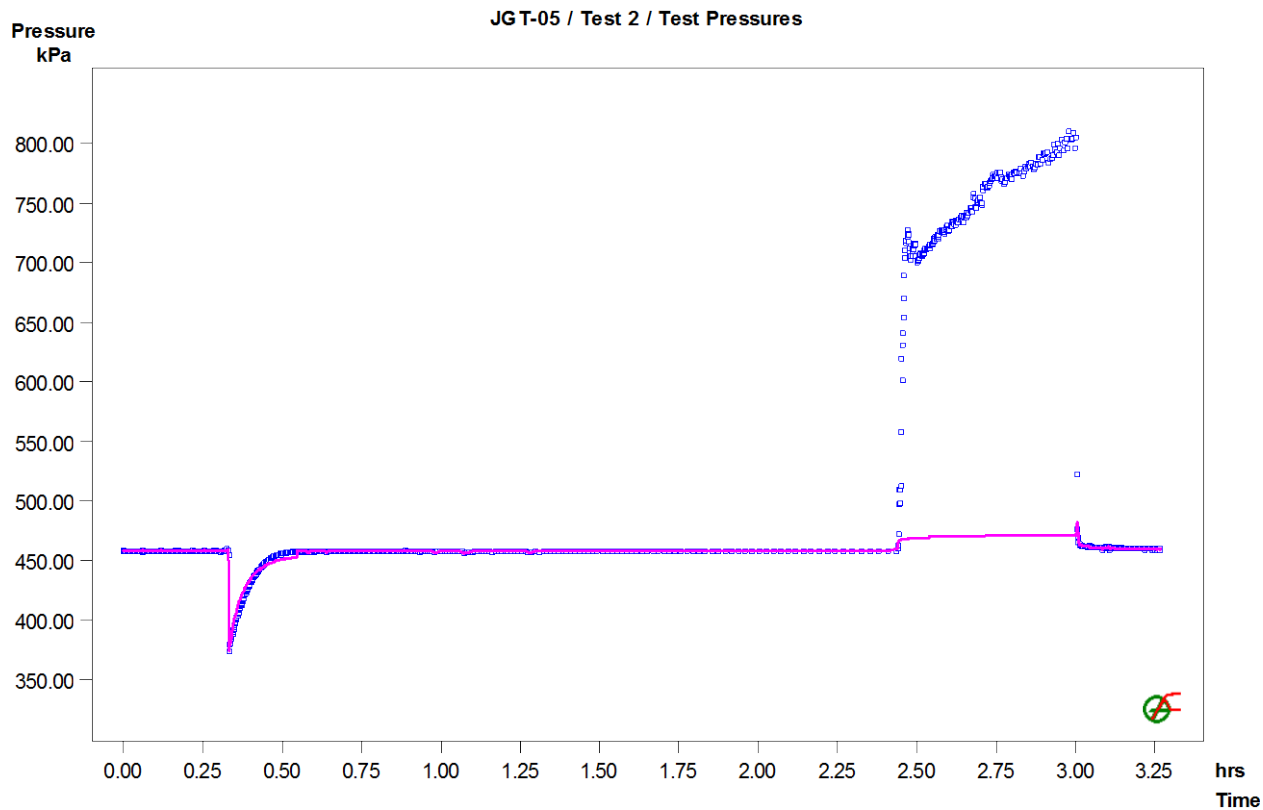


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-05 / Test 2 / SW: LogLog Plot, constant P(i)

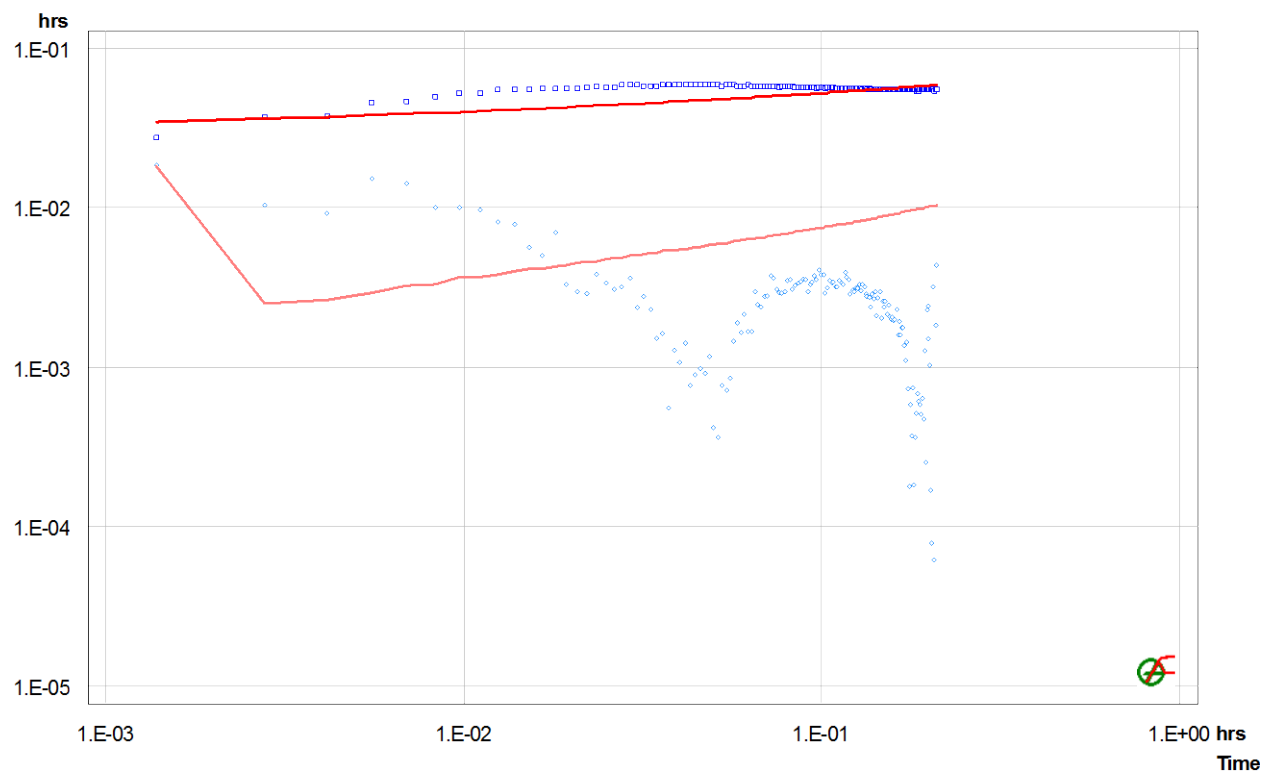


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project	Dominion Diamond	
Site	Jay Project	
Source Well	JGT-05	
Test Name	Test 3	
Test Date/Time		
Interval	top: 103.09 m	bottom: 152.77 m
Description	Analyzed by: DV	
	Reviewed by: DSL	

Basic Data

Test Interval	49.68 m		
Porosity	0.10		
Well Radius	0.048 m	Tubing Radius	0.039 m
Inclination	20.0 deg		
Test Volume	359.595 l		
Well Type	Source		

Fluid Properties

Viscosity	0.001 Pa*s
Density	1000.0 kg/m ³
Compressibility	2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m³/Pa]
PSR	Variable Pressure	0.00000	960.99			5.2e-07
SW-Init	dP-Event	0.40417	963.55	75.4 *		5.2e-07
SW	Slug	0.40583	888.19	963.5		5.2e-07
COM	Variable Pressure	0.71667	959.20			5.2e-07
RI-1	Constant Rate	1.38833	964.61		-1.12e+01	2.3e-08
RI-2	Constant Rate	1.55083	1416.06		-5.90e+00	2.3e-08
DEF	Variable Pressure	2.07583	1222.29			5.2e-07

Analysis Results

Analysis "SW-Final"

Static Pressure: 962.70 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	9.1e-06	9.7e-05	5.03	2.0
Shell 2	1.0e-02	9.7e-05	--	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
PSR	9.8e-05	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0
COM	9.8e-05	0.0
RI-1	6.0e-07	0.0
RI-2	6.0e-07	0.0
DEF	9.8e-05	0.0

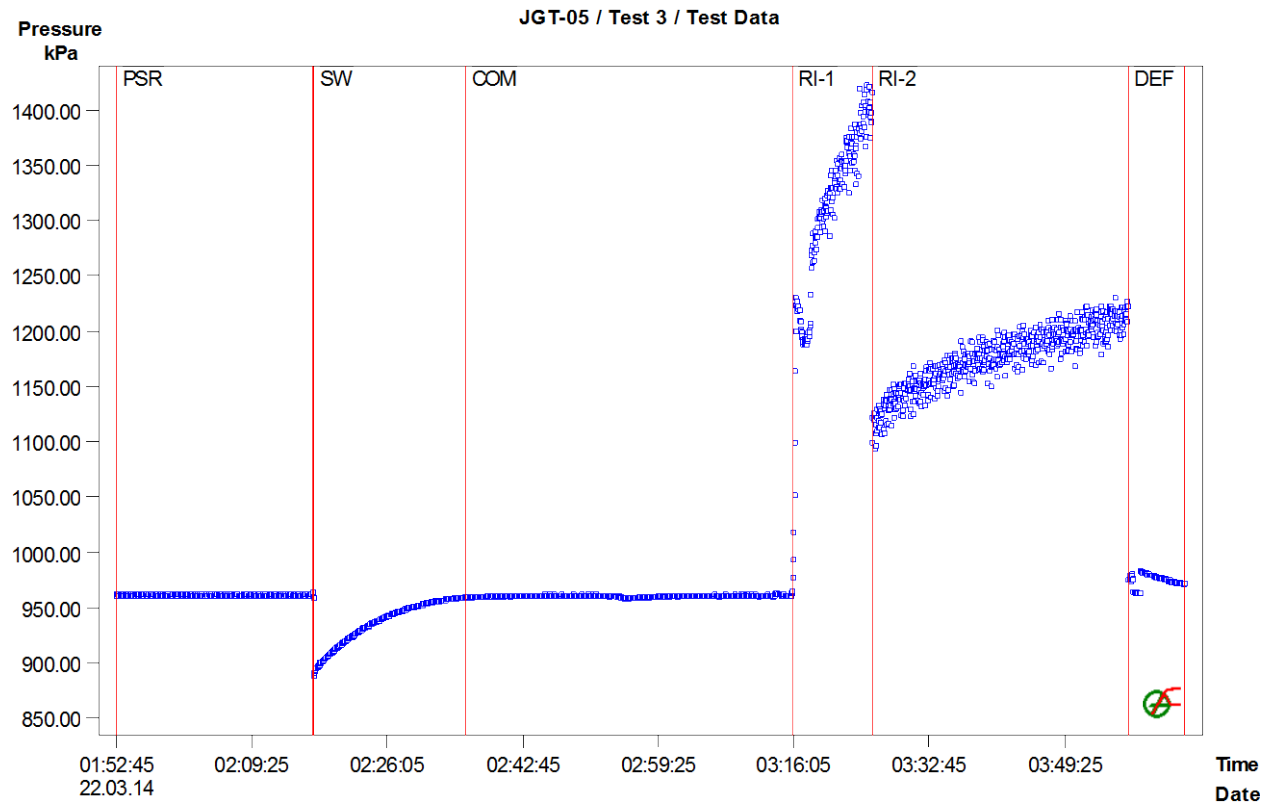


Figure 1: Pressure response and sequence definition

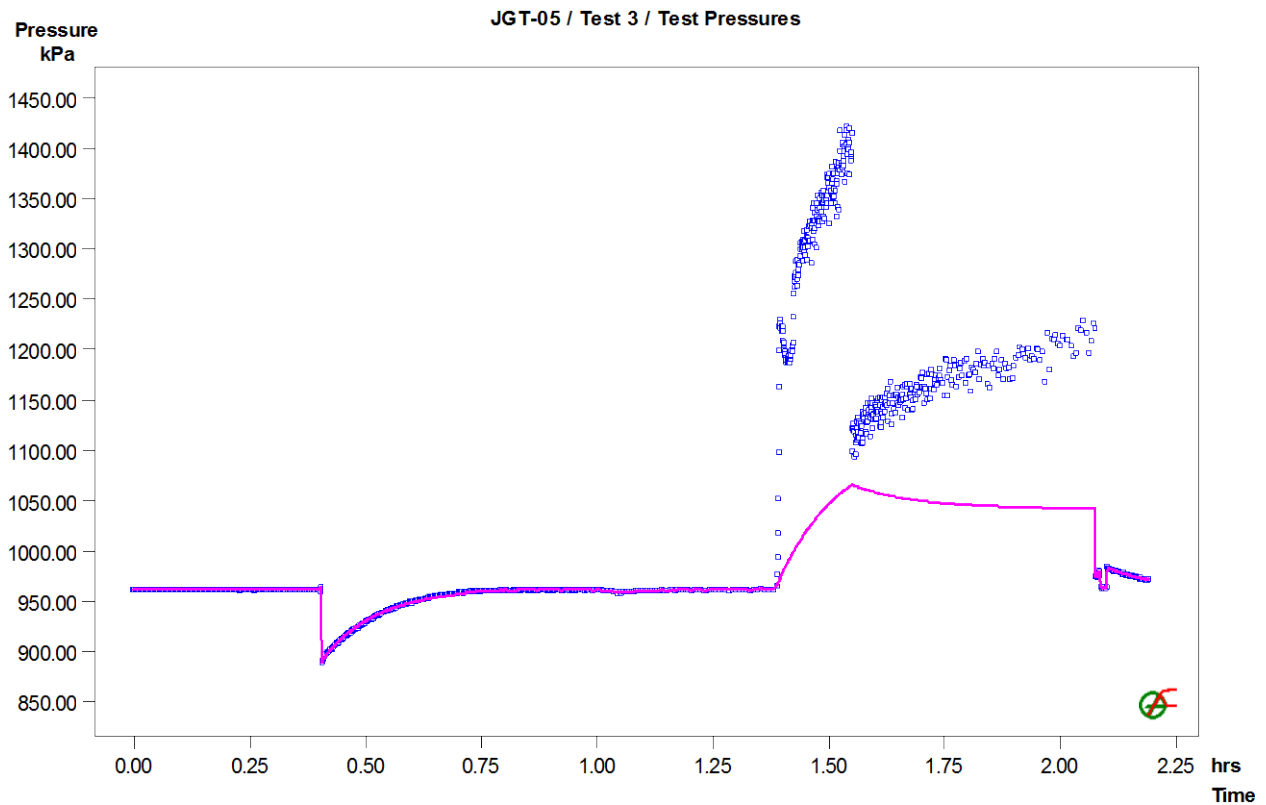


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-05 / Test 3 / SW: LogLog Plot, constant P(i)

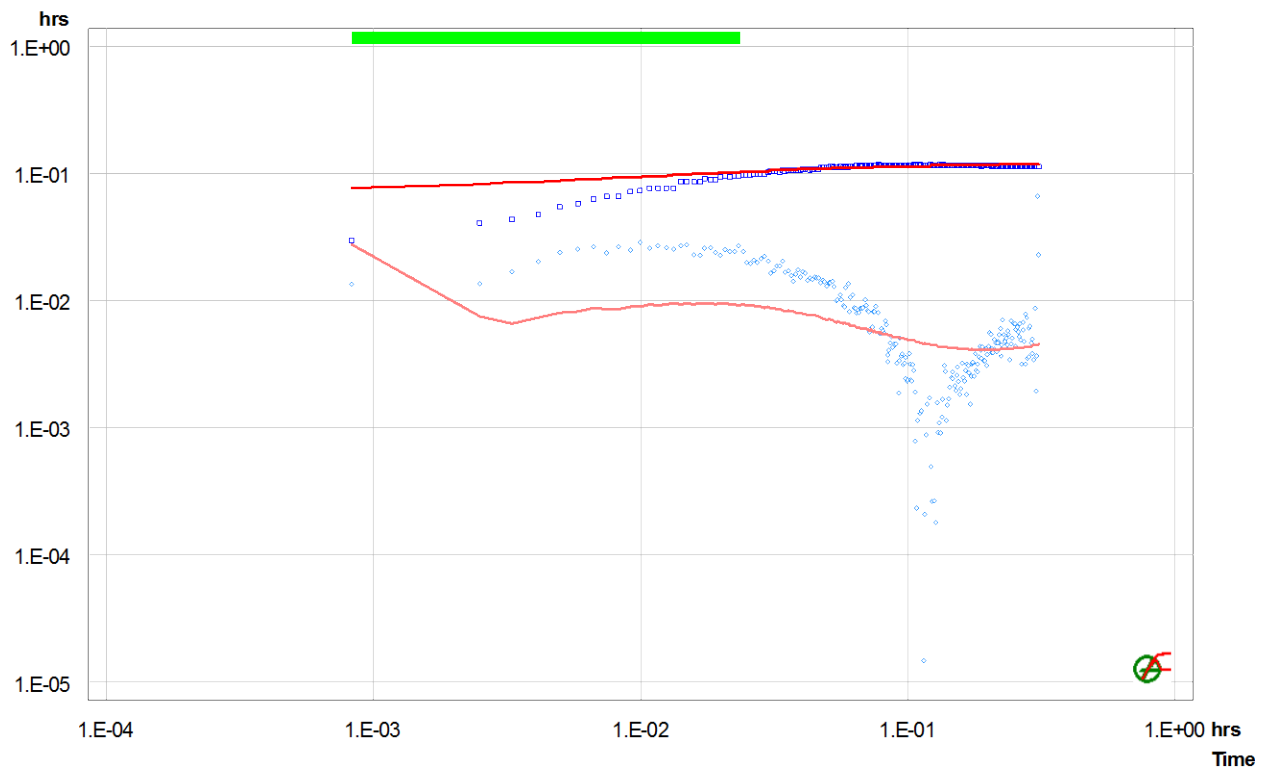


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-05
Test Name Test 4
Test Date/Time
Interval top: 151.09 m bottom: 200.77 m
Description Analyzed by: DV
 Reviewed by: DSL

Basic Data

Test Interval 49.68 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 20.0 deg
Test Volume 359.595 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	1510.34			5.2e-07
PSR	Recovery	0.44861	1512.48			5.2e-07
SW-Init	dP-Event	1.05833	1509.97	157.0 *		5.2e-07
SW	Slug	1.06111	1352.96	1510.0		5.2e-07

Analysis Results

Analysis "SW-Final"

Static Pressure: 1505.50 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	2.3e-06	9.7e-05	6.00	2.0
Shell 2	6.6e-05	9.7e-05	--	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	7.8e-07	0.0
PSR	7.8e-07	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0

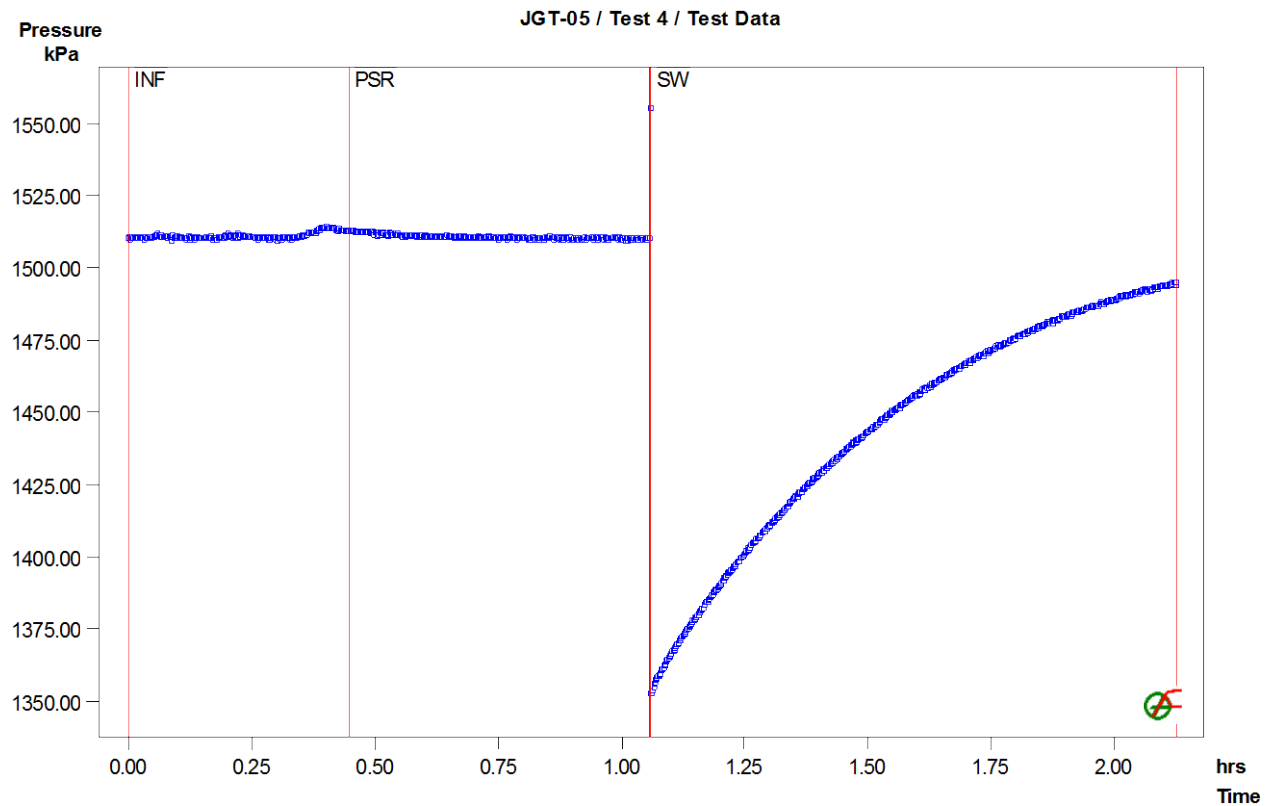


Figure 1: Pressure response and sequence definition

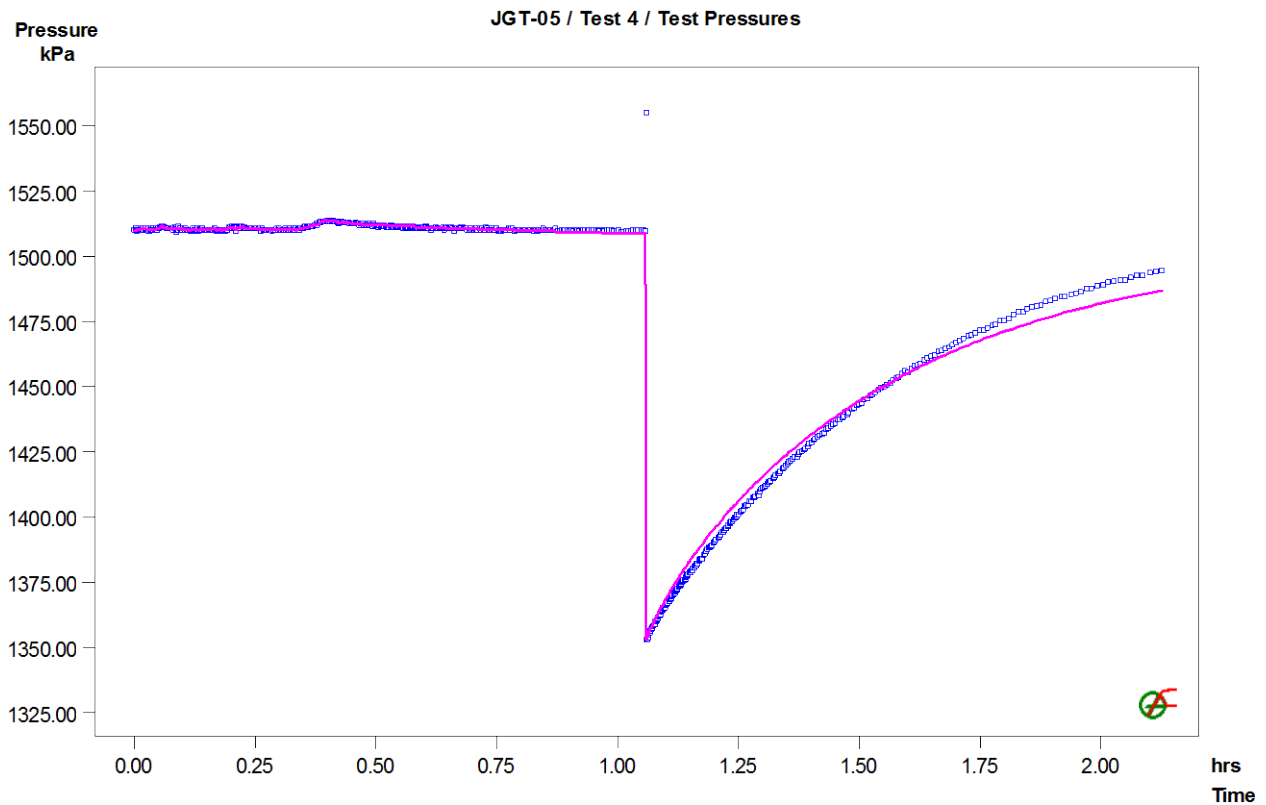


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-05 / Test 4 / SW: LogLog Plot, variable P(i)

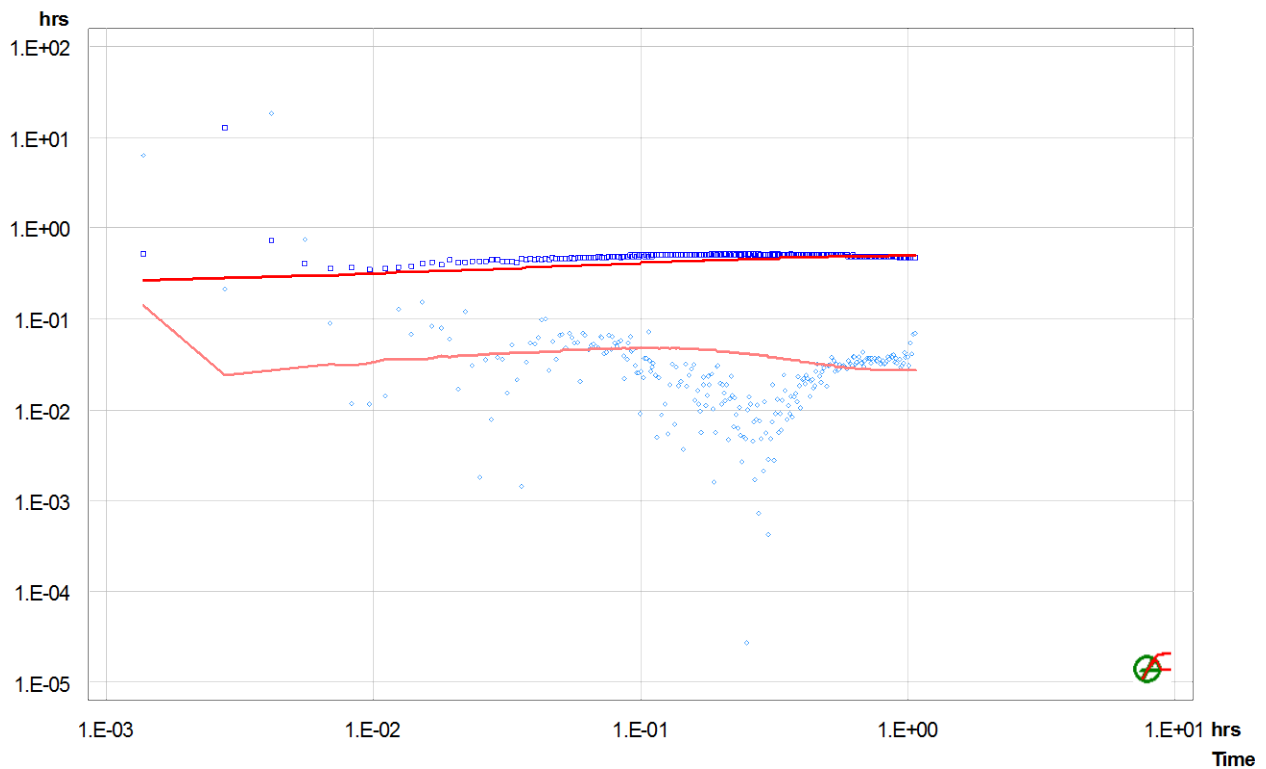


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-05
Test Name Test 5
Test Date/Time
Interval top: 199.09 m bottom: 275.77 m
Description Analyzed by: DV
Reviewed by: DSL

Basic Data

Test Interval 76.68 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 20.0 deg
Test Volume 555.027 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	1854.11			5.2e-07
PSR	Recovery	0.48194	1859.89			5.2e-07
SW-Init	dP-Event	1.47361	1857.49	88.2 *		5.2e-07
SW	Slug	1.47917	1769.31	1857.5		5.2e-07

Analysis Results

Analysis "SW-Final"

Static Pressure: 1856.88 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	8.3e-08	1.5e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	7.8e-07	0.0
PSR	7.8e-07	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0

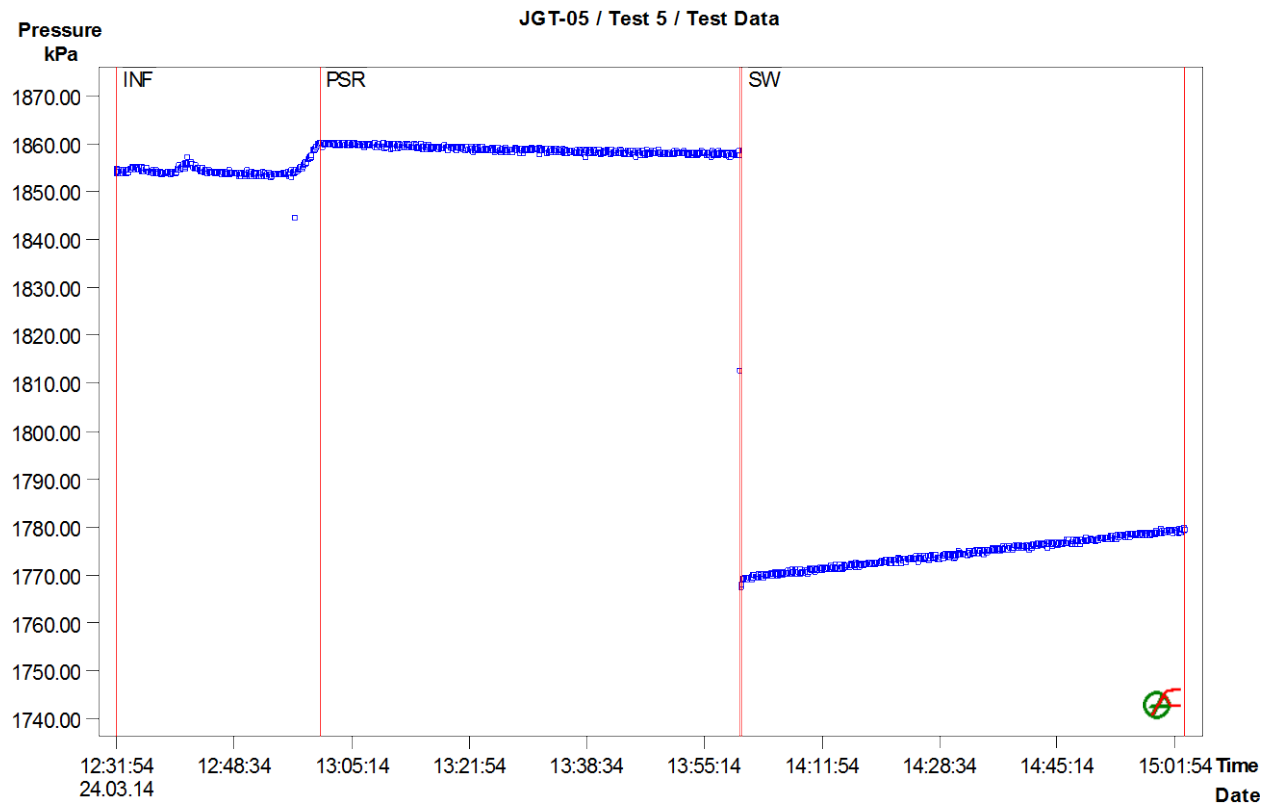


Figure 1: Pressure response and sequence definition

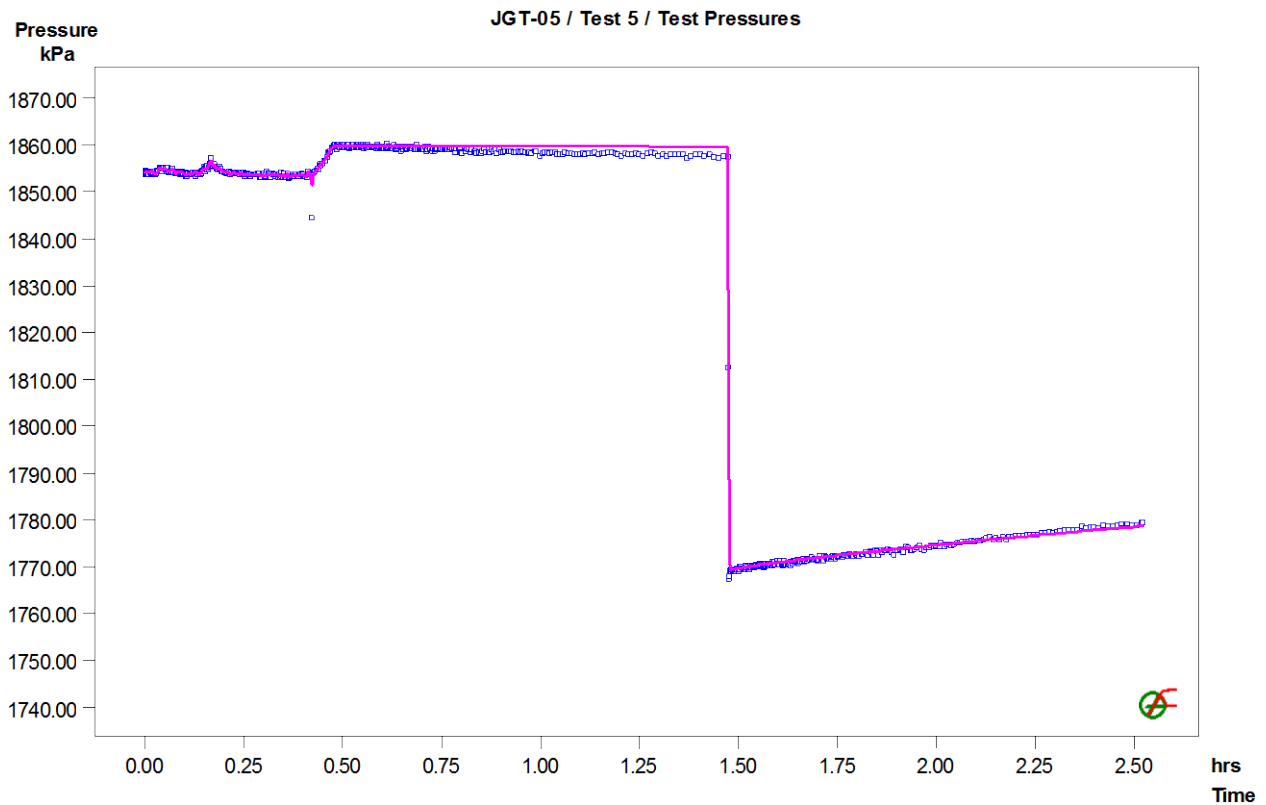


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-05 / Test 5 / SW: LogLog Plot, variable P(i)

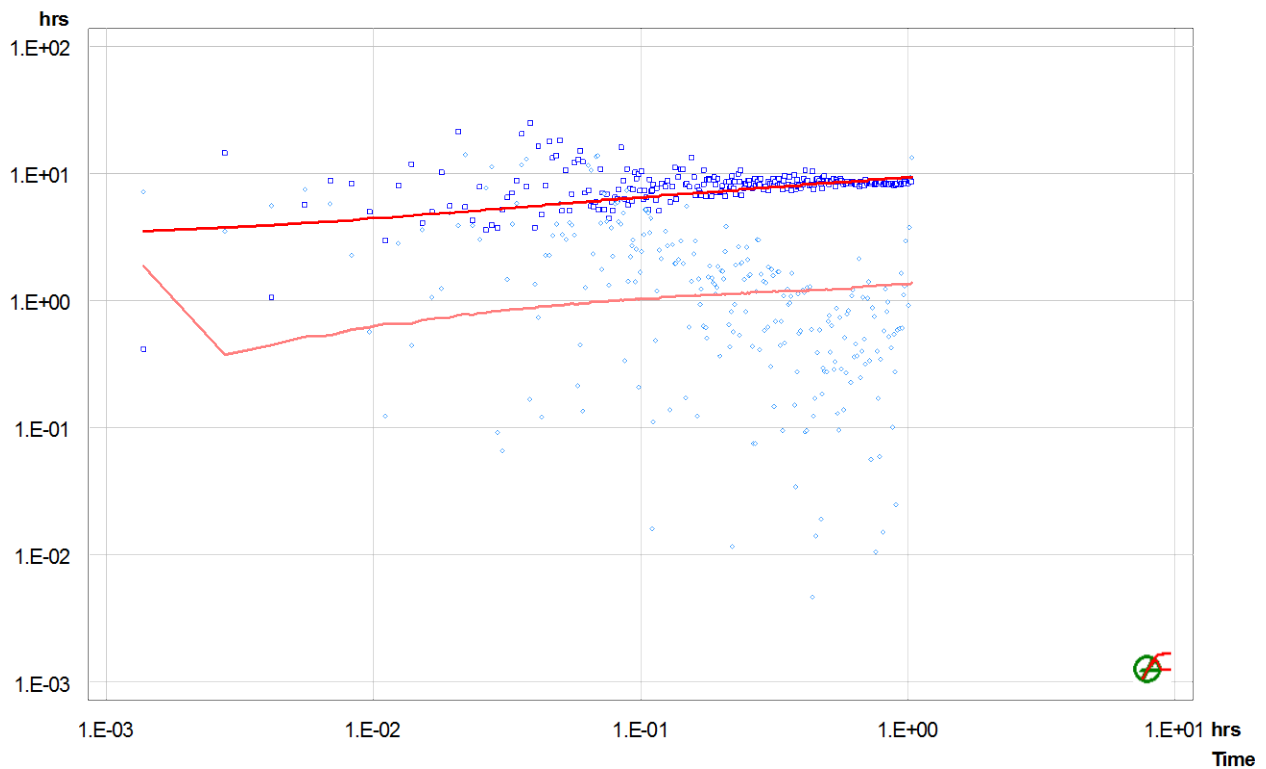


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-05
Test Name Test 6
Test Date/Time
Interval top: 274.09 m bottom: 326.77 m
Description Analyzed by: DV
Reviewed by: DSL

Basic Data

Test Interval 52.68 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 20.0 deg
Test Volume 381.310 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	2550.25			5.2e-07
PSR	Recovery	0.77222	2557.17			5.2e-07
SW-Init	dP-Event	0.95417	2557.68	116.7 *		5.2e-07
SW	Slug	0.96528	2440.94	2557.7		5.2e-07

Analysis Results

Analysis "SW-2 shell final"

Static Pressure: 2565.26 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	2.1e-07	1.0e-04	0.20	2.0
Shell 2	5.4e-08	1.0e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	5.9e-08	0.0
PSR	5.9e-08	0.0
SW-Init	5.2e-07	0.0
SW	5.2e-07	0.0

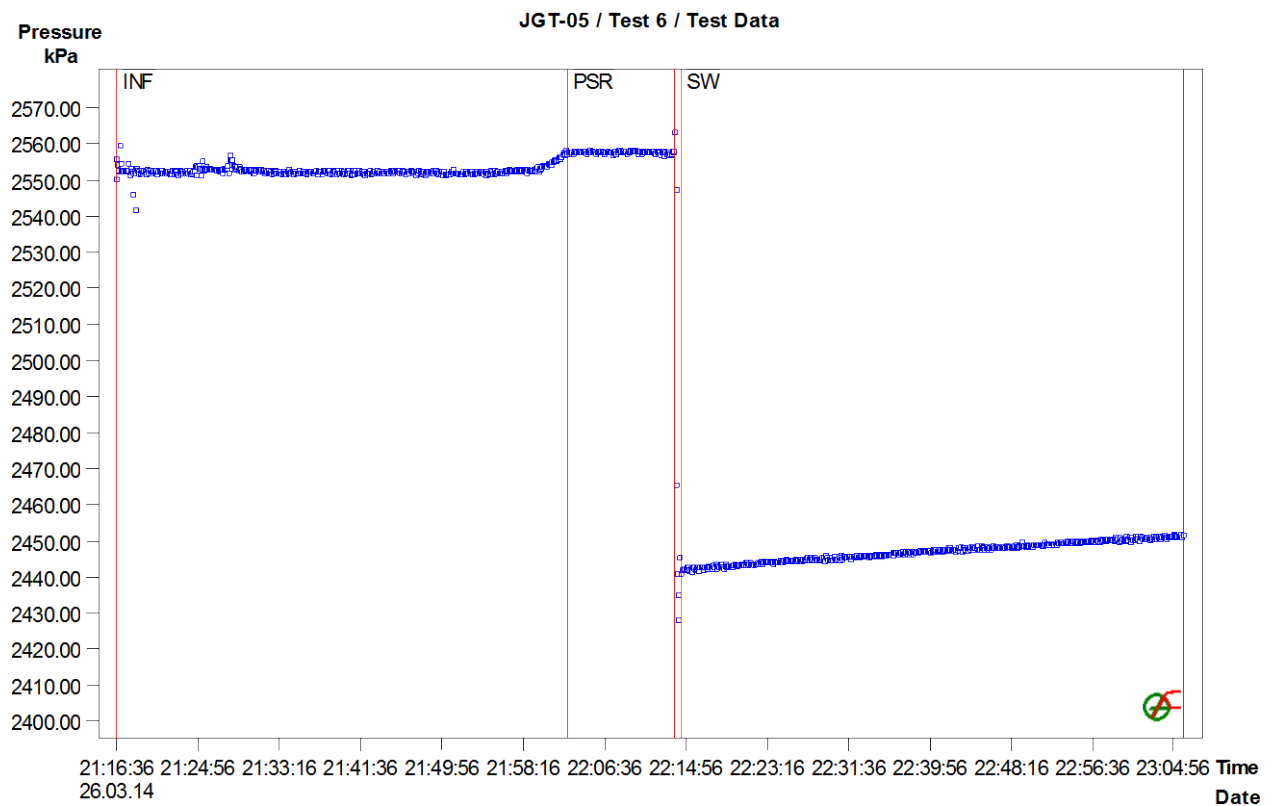


Figure 1: Pressure response and sequence definition

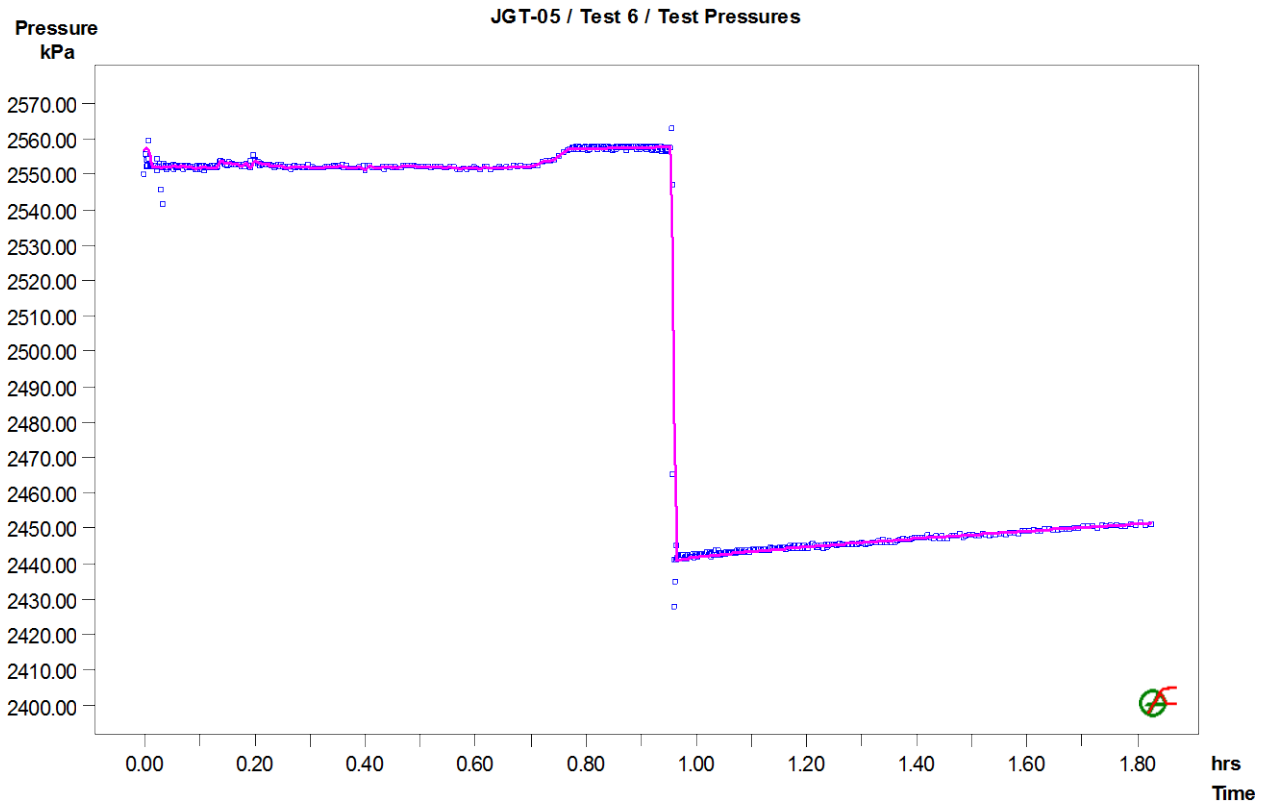


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-05 / Test 6 / SW: LogLog Plot, variable P(i)

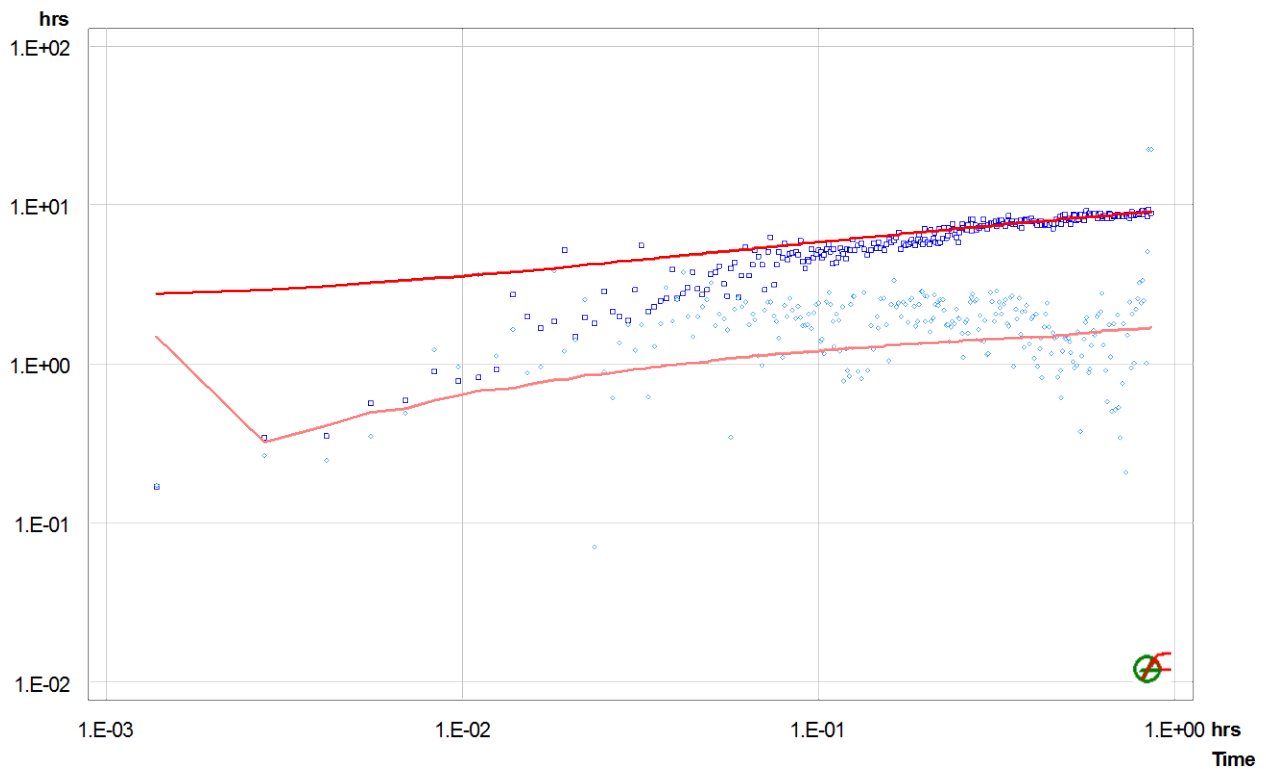


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-05
Test Name Test 7
Test Date/Time
Interval top: 436.09 m bottom: 452.77 m
Description Analyzed by: DV
Reviewed by: DSL

Basic Data

Test Interval 16.68 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius
Inclination 20.0 deg
Test Volume 120.734 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
PSR	Variable Pressure	0.00000	4169.12			3.9e-10
RI	Constant Rate	0.64444	4171.15		-8.00e+01	2.0e-05
RIR	Recovery	1.03472	4191.57			2.0e-05

Analysis Results

Analysis "RI-Final"

Static Pressure: 4170.08 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	8.0e-04	3.3e-05	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
PSR	2.8e-05	0.0
RI	2.2e-05	0.0
RIR	2.2e-05	0.0

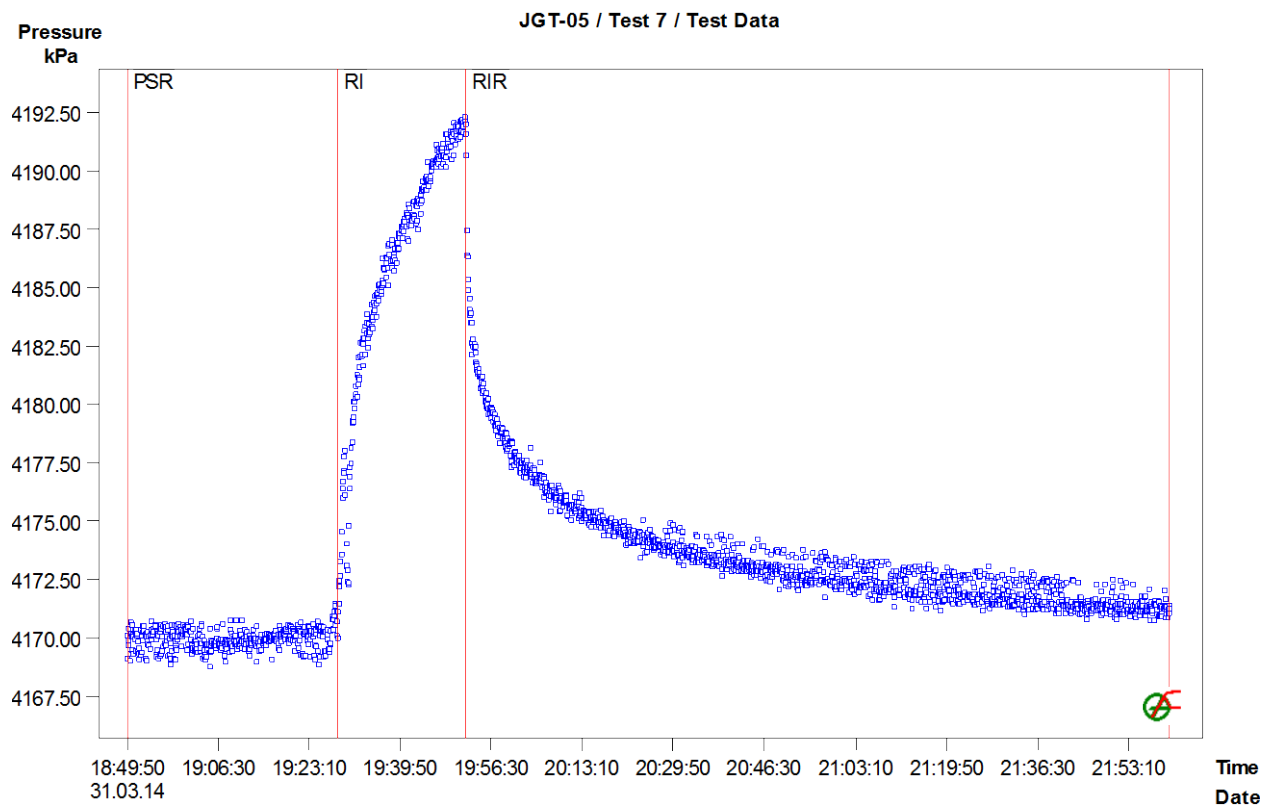


Figure 1: Pressure response and sequence definition

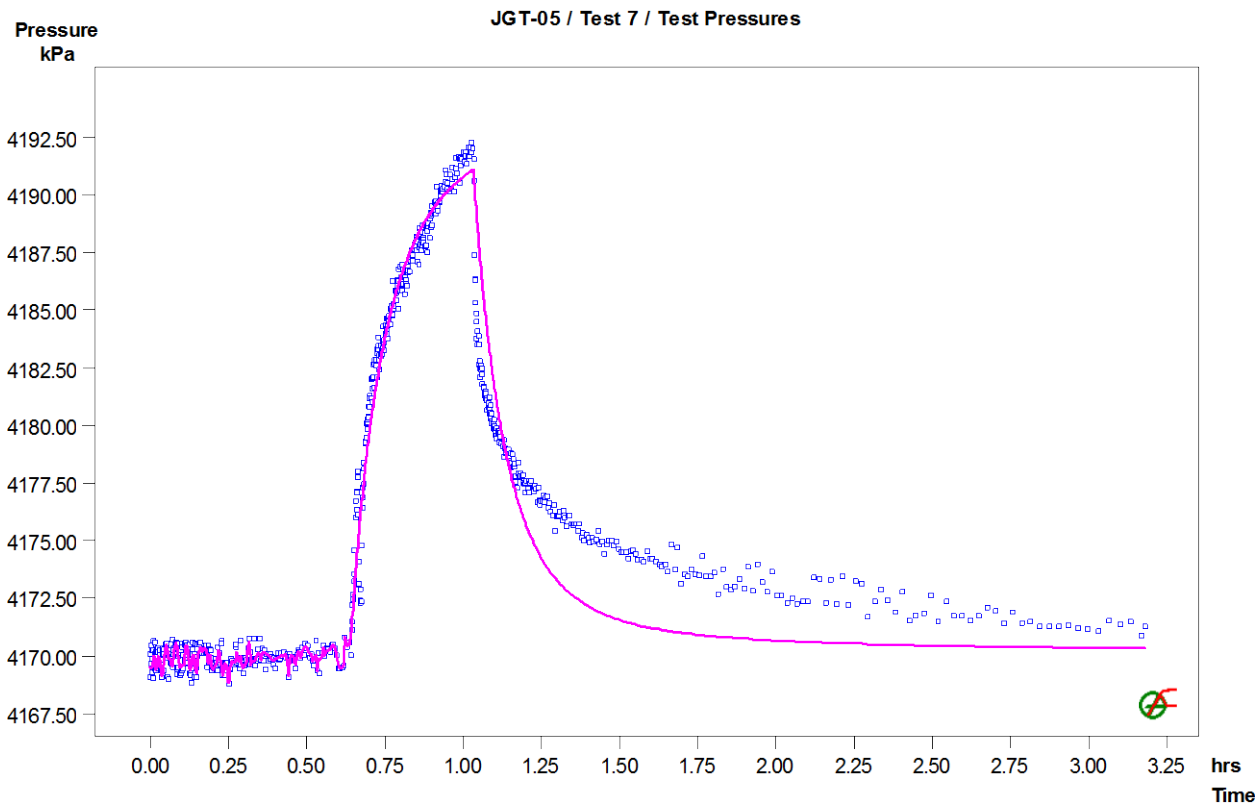


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot

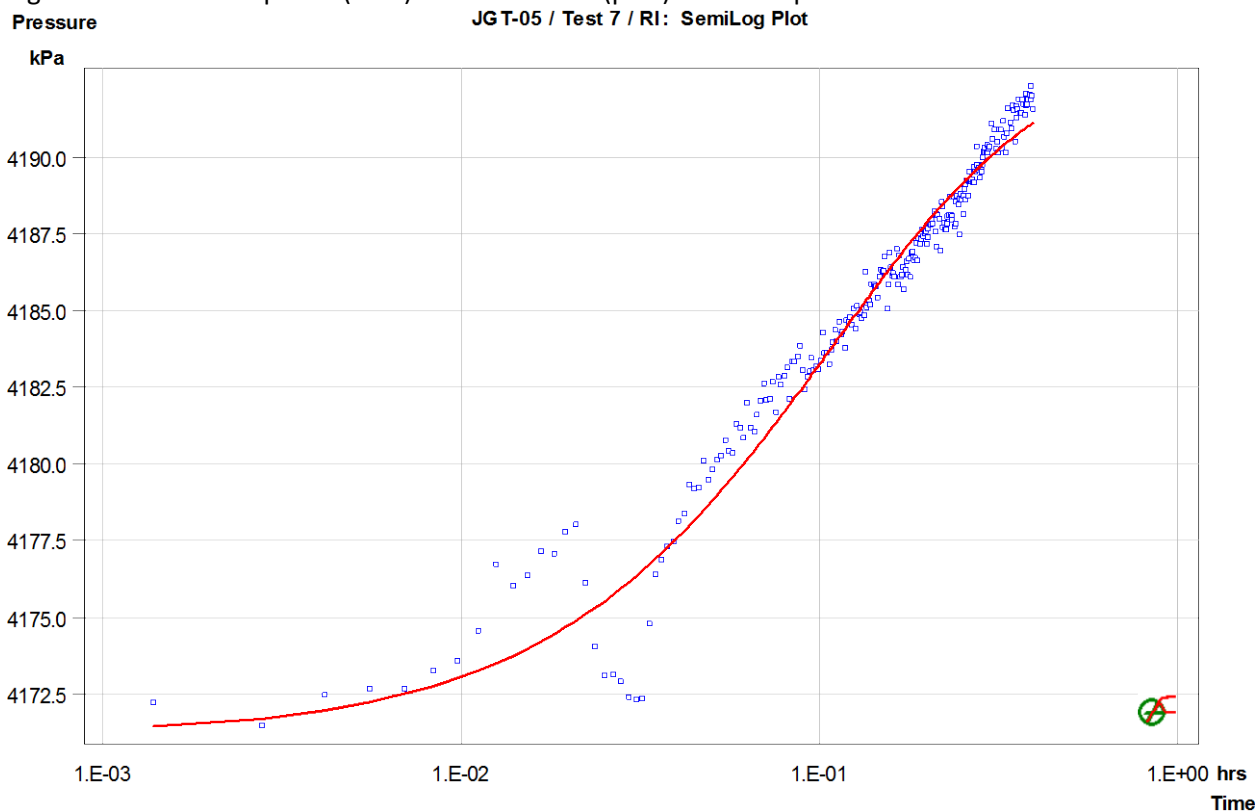


Figure 3: Pressure response (dark blue) and simulation (red): Semi Log diagnostic plot, RI sequence

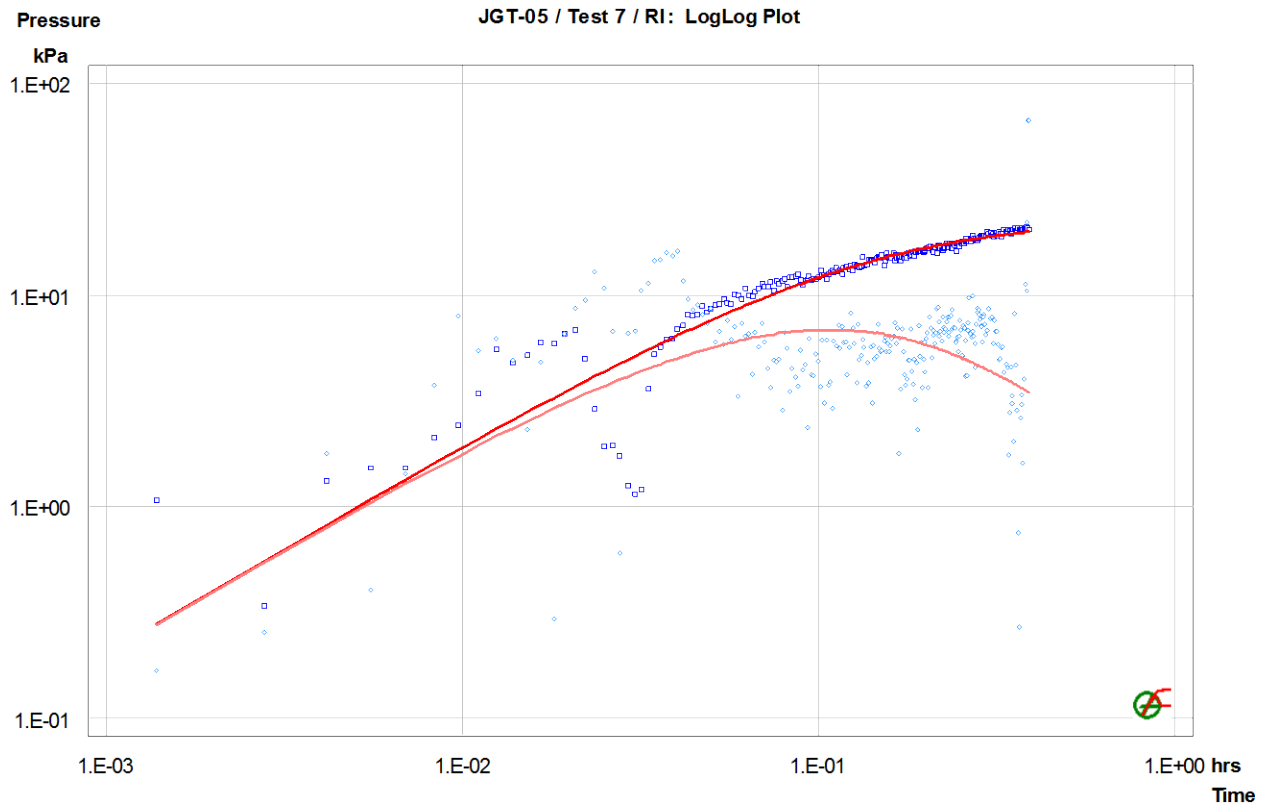


Figure 4: Pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, RI sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-06
Test Name Test 1
Test Date/Time
Interval top: 144.02 m bottom: 195.43 m
Description Analyzed by: DV
Reviewed by: DSL

Basic Data

Test Interval 51.41 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 10.0 deg
Test Volume 372.117 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	1382.76			4.9e-07
PSR	Recovery	0.37083	1389.47			4.9e-07
SW-Init	dP-Event	0.74028	1389.31	103.6 *		4.9e-07
SW	Slug	0.75139	1285.76	1389.3		4.9e-07

Analysis Results

Analysis "SW- 2 shell -final"

Static Pressure: 1388.83 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	1.5e-07	1.0e-04	1.11	2.0
Shell 2	1.5e-06	1.0e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	5.0e-07	0.0
PSR	5.0e-07	0.0
SW-Init	4.9e-07	0.0
SW	4.9e-07	0.0

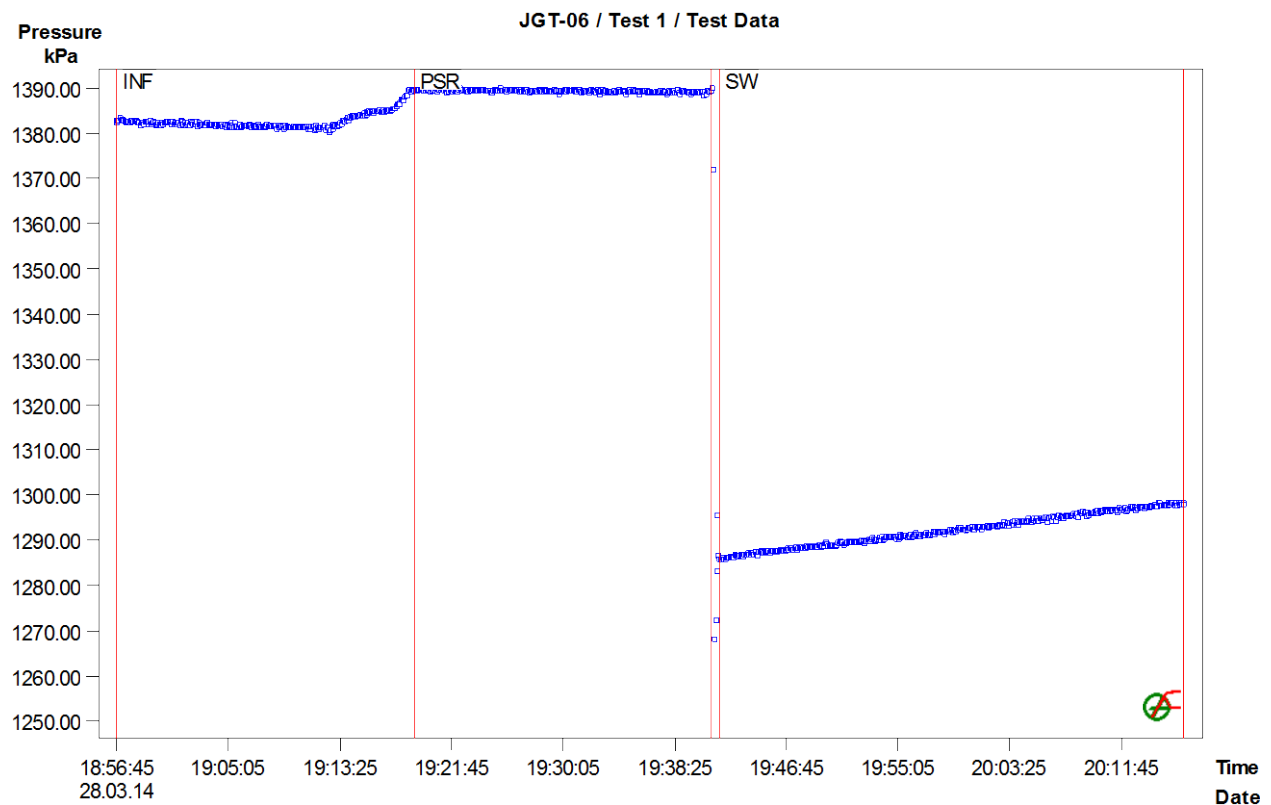


Figure 1: Pressure response and sequence definition

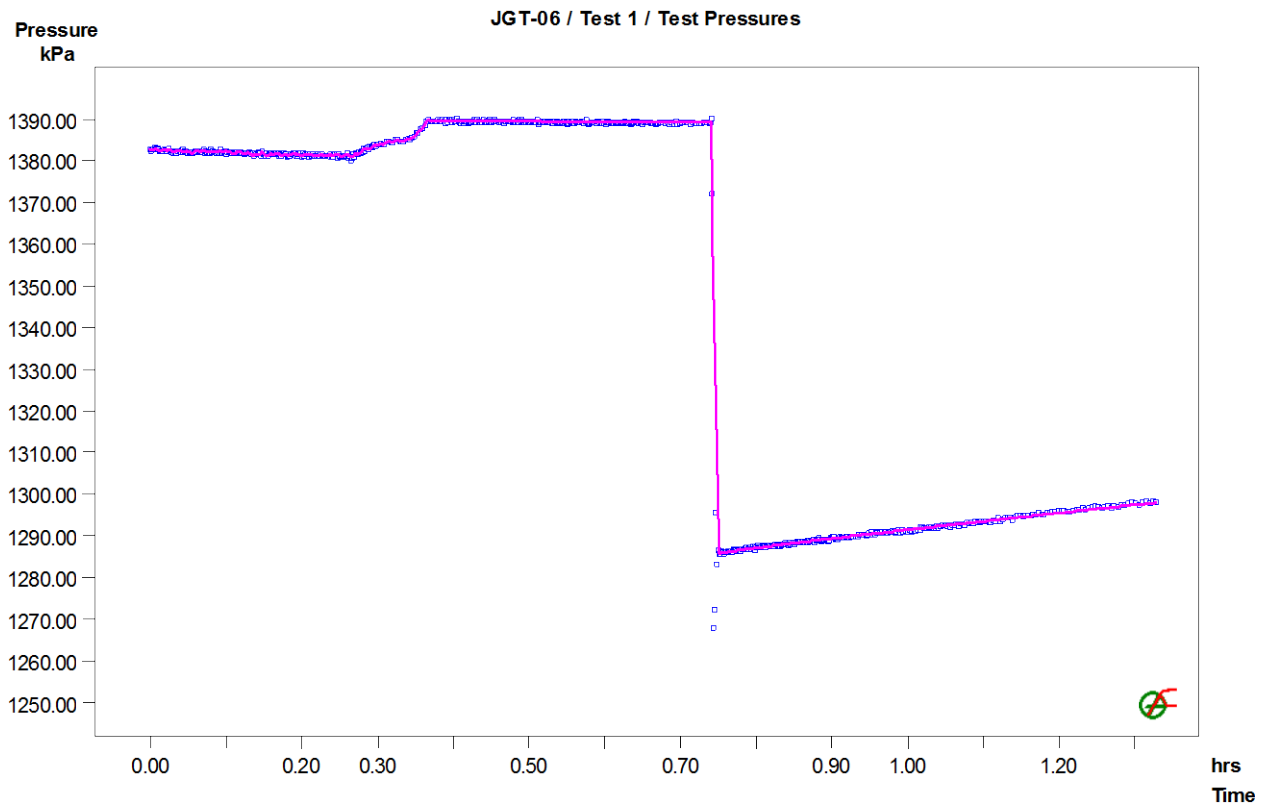


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-06 / Test 1 / SW: LogLog Plot, variable P(i)

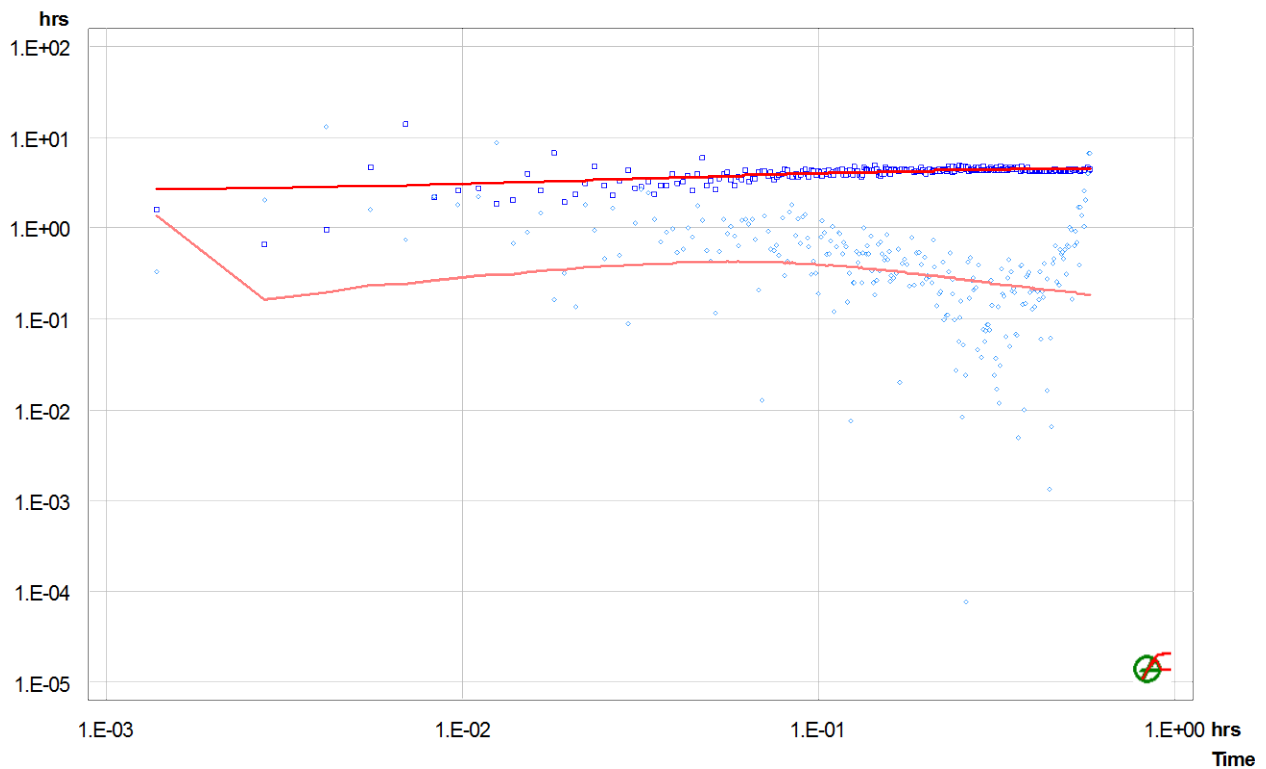


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-06
Test Name Test 2
Test Date/Time
Interval top: 198.02 m bottom: 251.30 m
Description Analyzed by: DV
Reviewed by: DSL

Basic Data

Test Interval 53.28 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 10.0 deg
Test Volume 385.653 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	1894.14			4.9e-07
PSR	Recovery	0.39444	1898.11			4.9e-07
SW-Init	dP-Event	1.06389	1879.23	73.4 *		4.9e-07
SW	Slug	1.07361	1805.82	1879.2		4.9e-07

Analysis Results

Analysis "SW-2 shell"

Static Pressure: 1876.99 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	3.3e-06	1.0e-04	3.94	2.0
Shell 2	6.3e-05	1.0e-04	--	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	3.7e-07	0.0
PSR	3.7e-07	0.0
SW-Init	4.9e-07	0.0
SW	4.9e-07	0.0

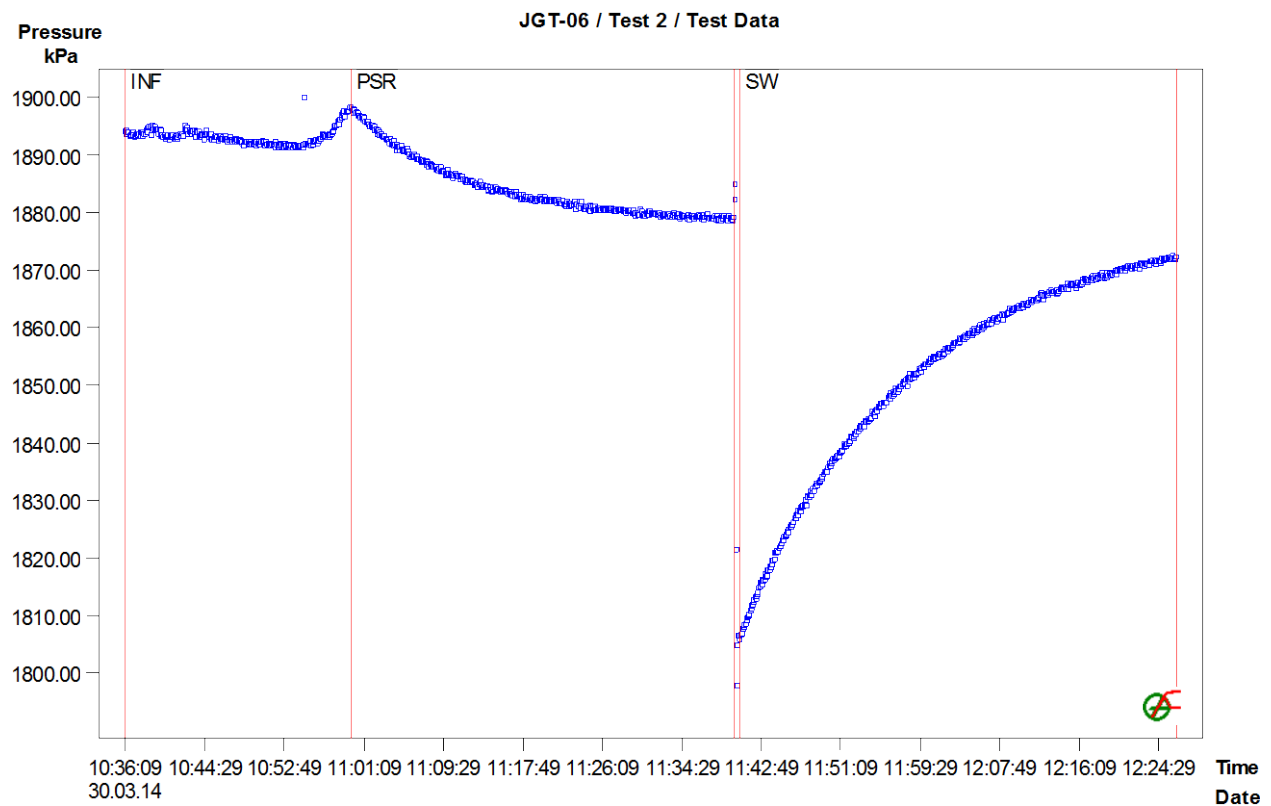


Figure 1: Pressure response and sequence definition

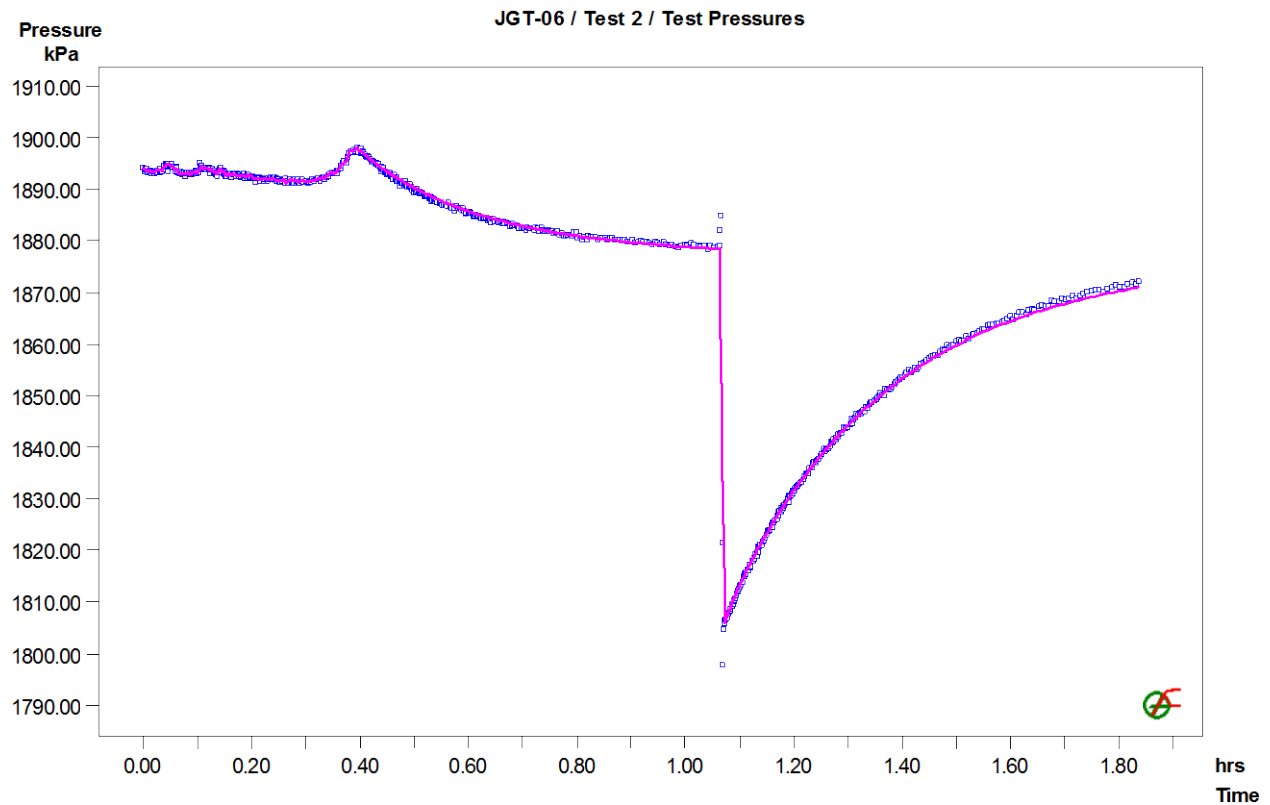


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-06 / Test 2 / SW: LogLog Plot, variable P(i)

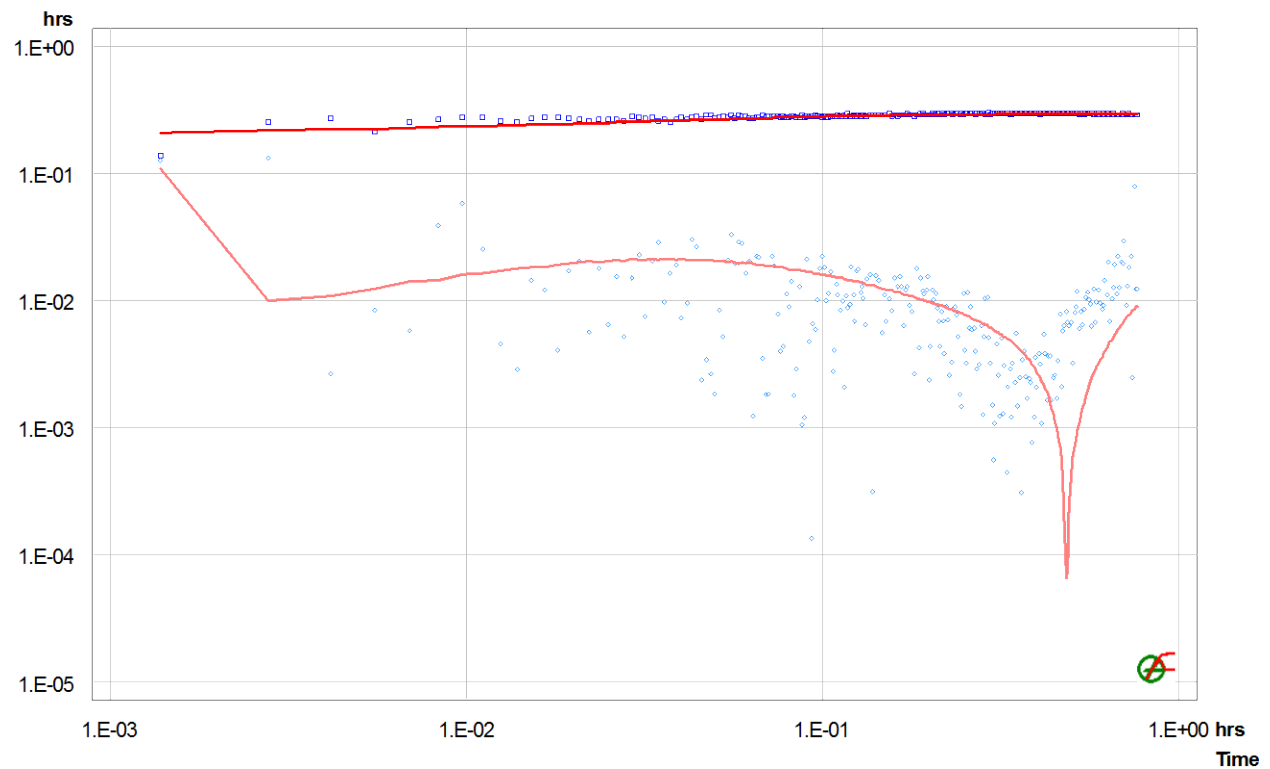


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-06
Test Name Test 3
Test Date/Time
Interval top: 246.02 m bottom: 299.30 m
Description Analyzed by: DV
Reviewed by: DSL

Basic Data

Test Interval 53.28 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 10.0 deg
Test Volume 385.653 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	2361.94			4.9e-07
PSR	Recovery	0.54167	2366.22			4.9e-07
SW-Init	dP-Event	0.80278	2367.19	108.1 *		4.9e-07
SW	Slug	0.82083	2259.13	2367.2		4.9e-07

Analysis Results

Analysis "SW"

Static Pressure: 2366.96 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	8.4e-09	1.0e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	3.4e-05	0.0
PSR	3.4e-05	0.0
SW-Init	4.9e-07	0.0
SW	4.9e-07	0.0

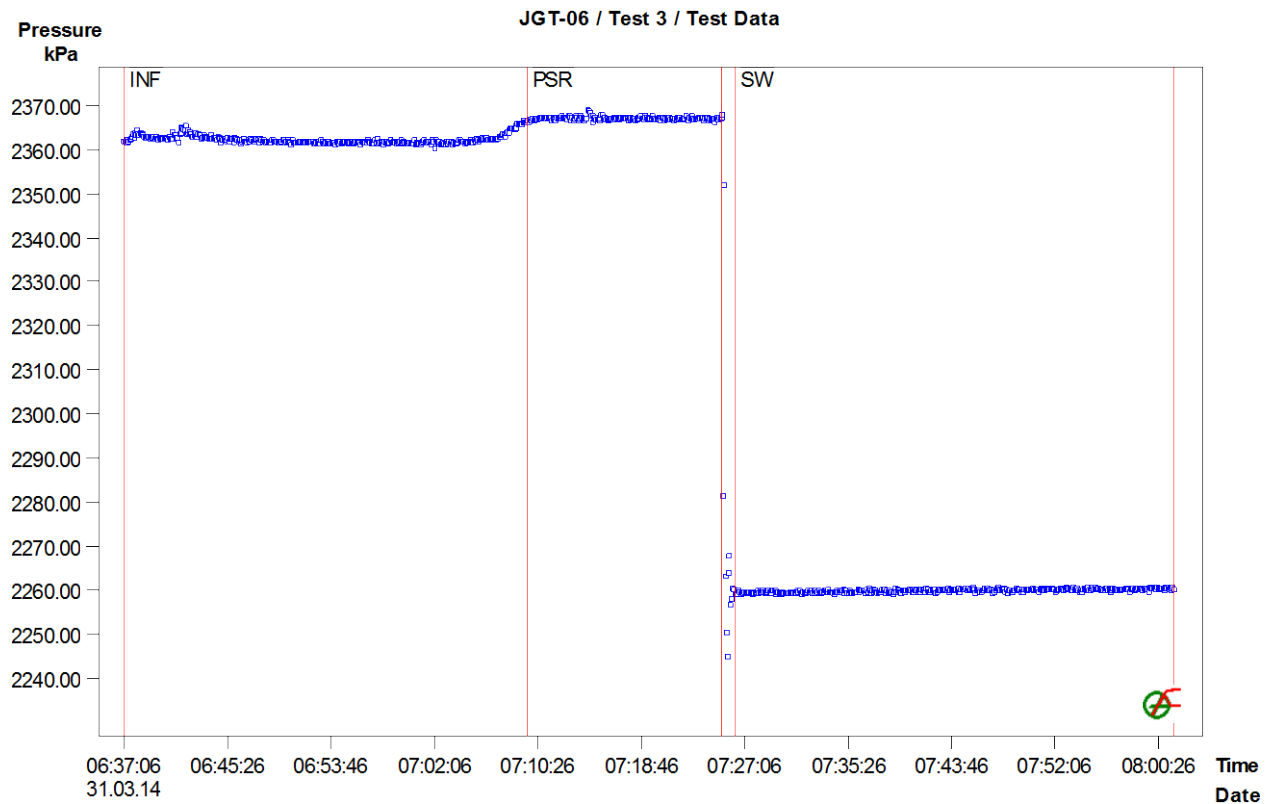


Figure 1: Pressure response and sequence definition

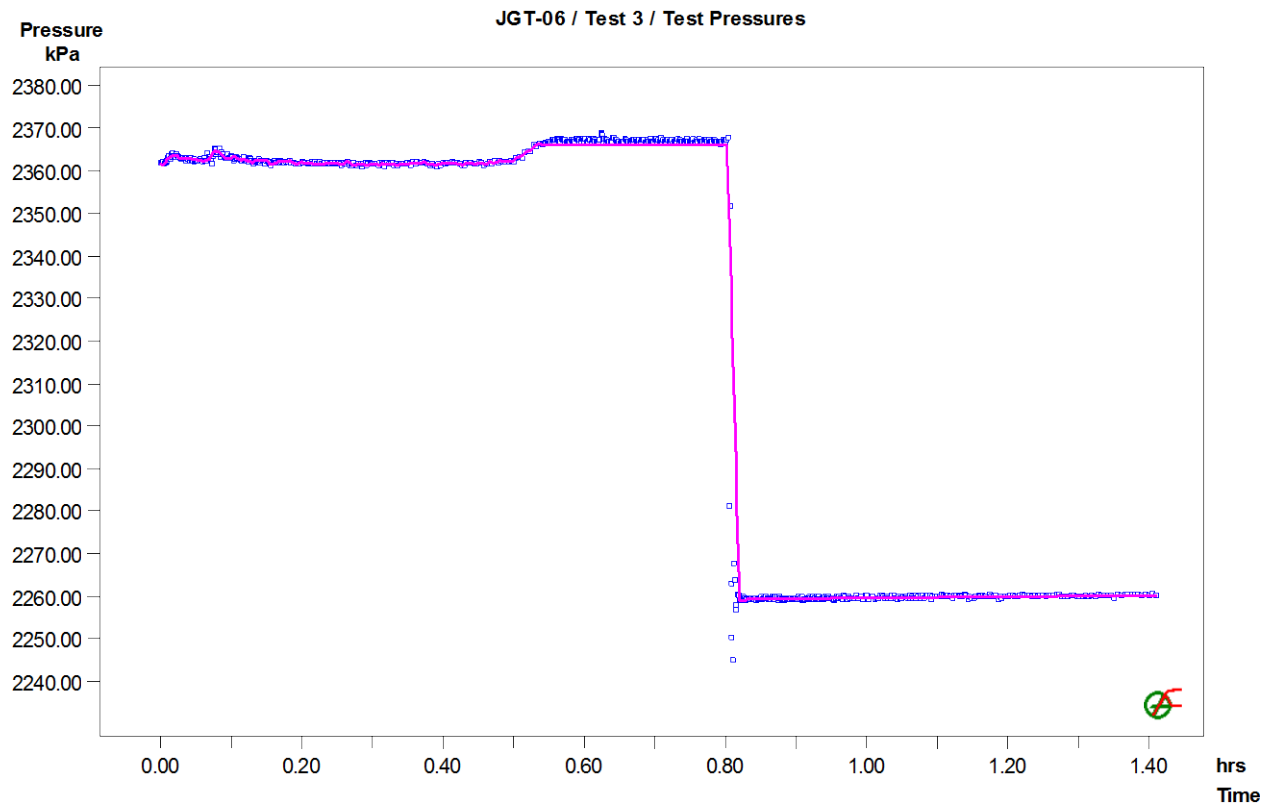


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-06 / Test 3 / SW: LogLog Plot, variable P(i)

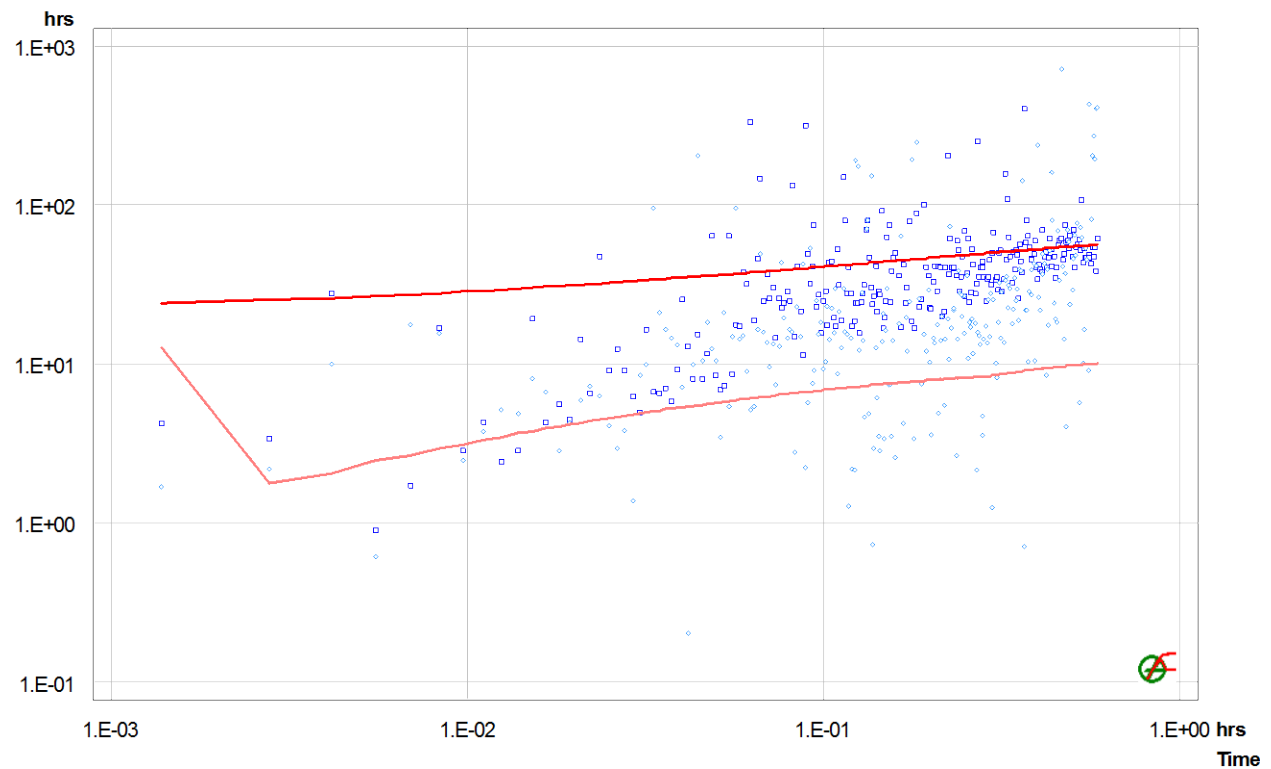


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project	Dominion Diamond	
Site	Jay Project	
Source Well	JGT-06	
Test Name	Test 4	
Test Date/Time		
Interval	top: 297.02 m	bottom: 350.30 m
Description	Analyzed by: DV	
	Reviewed by: DSL	

Basic Data

Test Interval	53.28 m		
Porosity	0.10		
Well Radius	0.048 m	Tubing Radius	0.039 m
Inclination	10.0 deg		
Test Volume	385.653 l		
Well Type	Source		

Fluid Properties

Viscosity	0.001 Pa*s
Density	1000.0 kg/m ³
Compressibility	2.0e-09 1/Pa

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
INF	Variable Pressure	0.00000	2851.68			4.9e-07
PSR	Recovery	0.58333	2859.86			4.9e-07
SW-Init	dP-Event	1.50556	2846.69	131.3 *		4.9e-07
SW	Slug	1.51806	2715.36	2846.7		4.9e-07

Analysis Results

Analysis "SW"

Static Pressure: 2841.95 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	6.4e-07	1.0e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
INF	1.9e-07	0.0
PSR	1.9e-07	0.0
SW-Init	4.9e-07	0.0
SW	4.9e-07	0.0

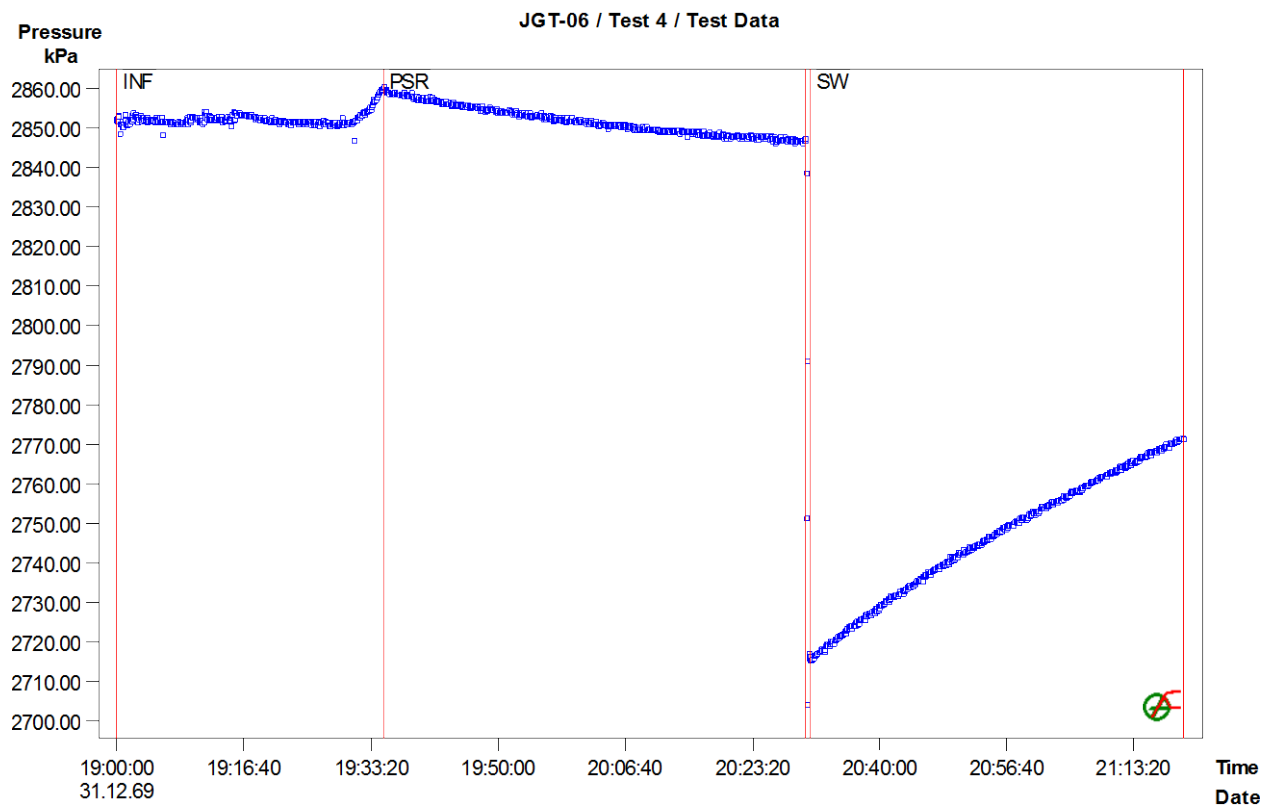


Figure 1: Pressure response and sequence definition

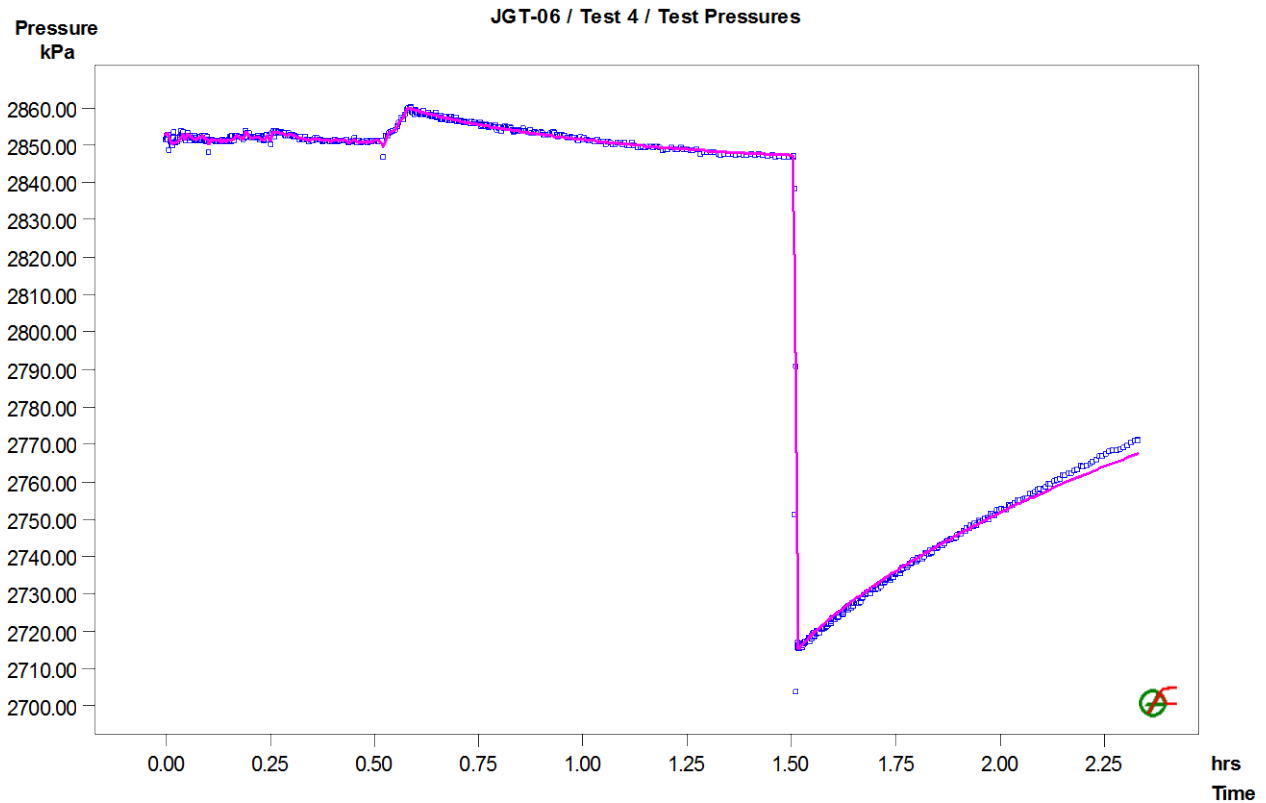


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-06 / Test 4 / SW: LogLog Plot, variable P(i)

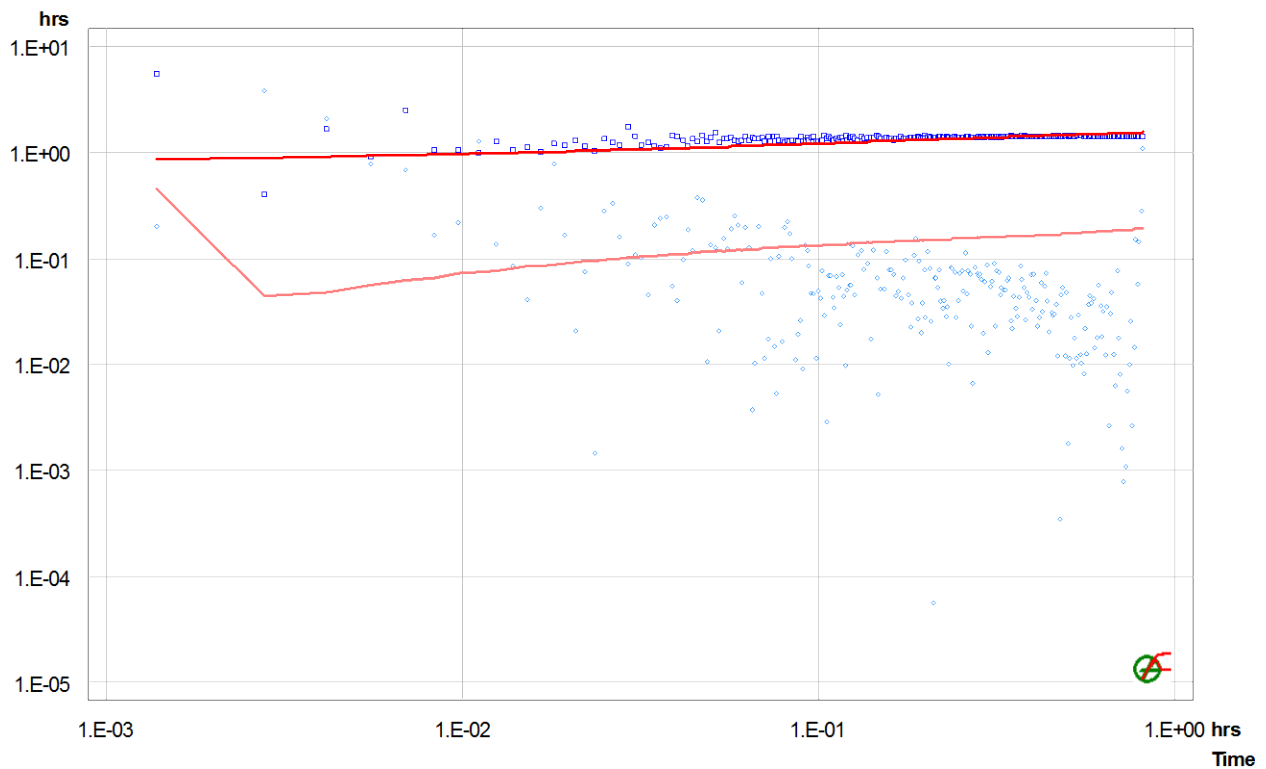


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-06
Test Name Test 5
Test Date/Time
Interval top: 348.02 m bottom: 380.30 m
Description Analyzed by: DV
Reviewed by: DSL

Basic Data

Test Interval 32.28 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 10.0 deg
Test Volume 233.650 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

History Definition

Name	Category	Duration [hrs]	P(o) [kPa]	Rate [l/min]	C [m ³ /Pa]	Skin
Auto_History	Const. Pressure	0.50	3321.46			0.00

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
PSR	Recovery	0.00000	3321.46			4.9e-07
SW-Init	dP-Event	1.31806	3319.70	26.3 *		4.9e-07
SW	Slug	1.32361	3293.39	3319.7		4.9e-07
COM	Variable Pressure	1.58333	3318.76			4.9e-07
RI	Constant Rate	2.26667	3320.27		-2.00e+00	5.3e-07
RI-2	Variable Pressure	2.28889	3327.22			5.3e-07
RIR	Recovery	2.51806	3370.18			5.3e-07

Analysis Results

Analysis "SW final"

Static Pressure: 3319.87 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	1.8e-04	6.3e-05	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
PSR	3.8e-05	0.0
SW-Init	4.9e-07	0.0
SW	4.9e-07	0.0
COM	3.8e-05	0.0
RI	1.0e-06	0.0
RI-2	1.0e-06	0.0
RIR	1.0e-06	0.0

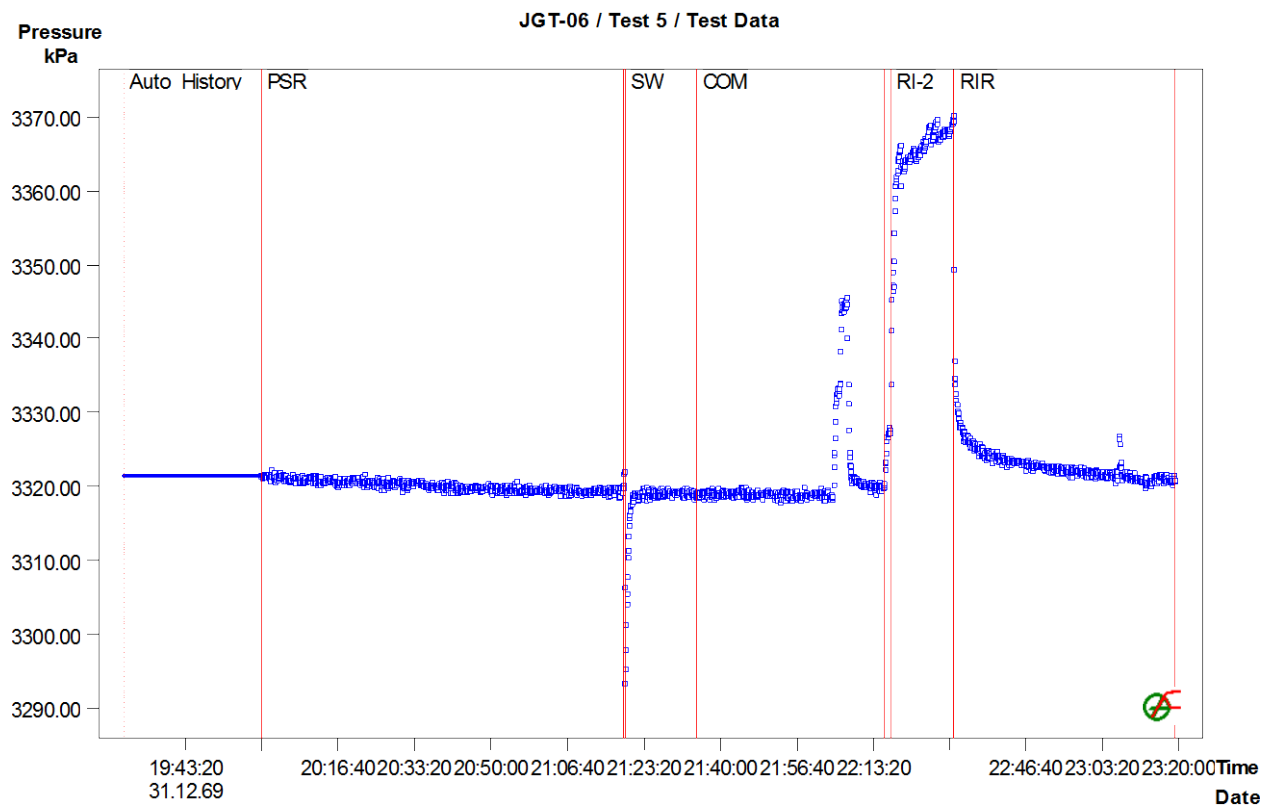


Figure 1: Pressure response and sequence definition

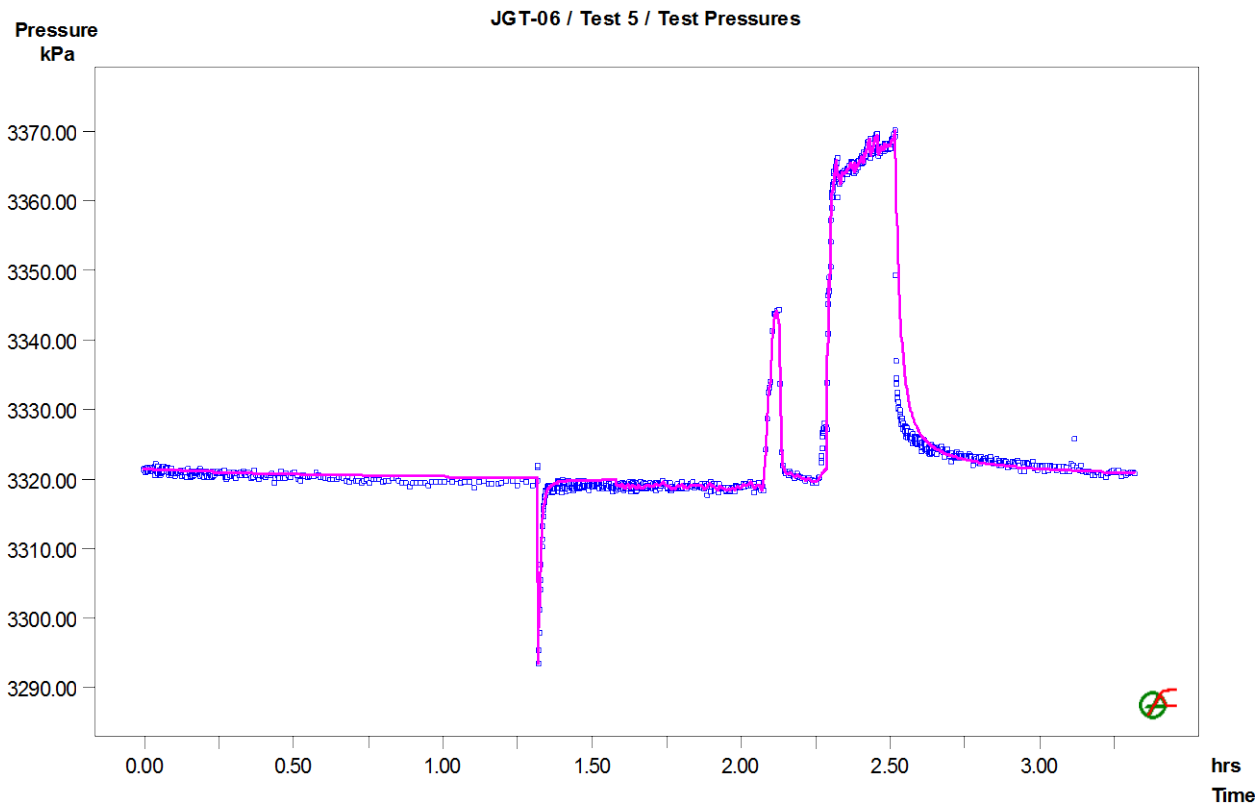


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P

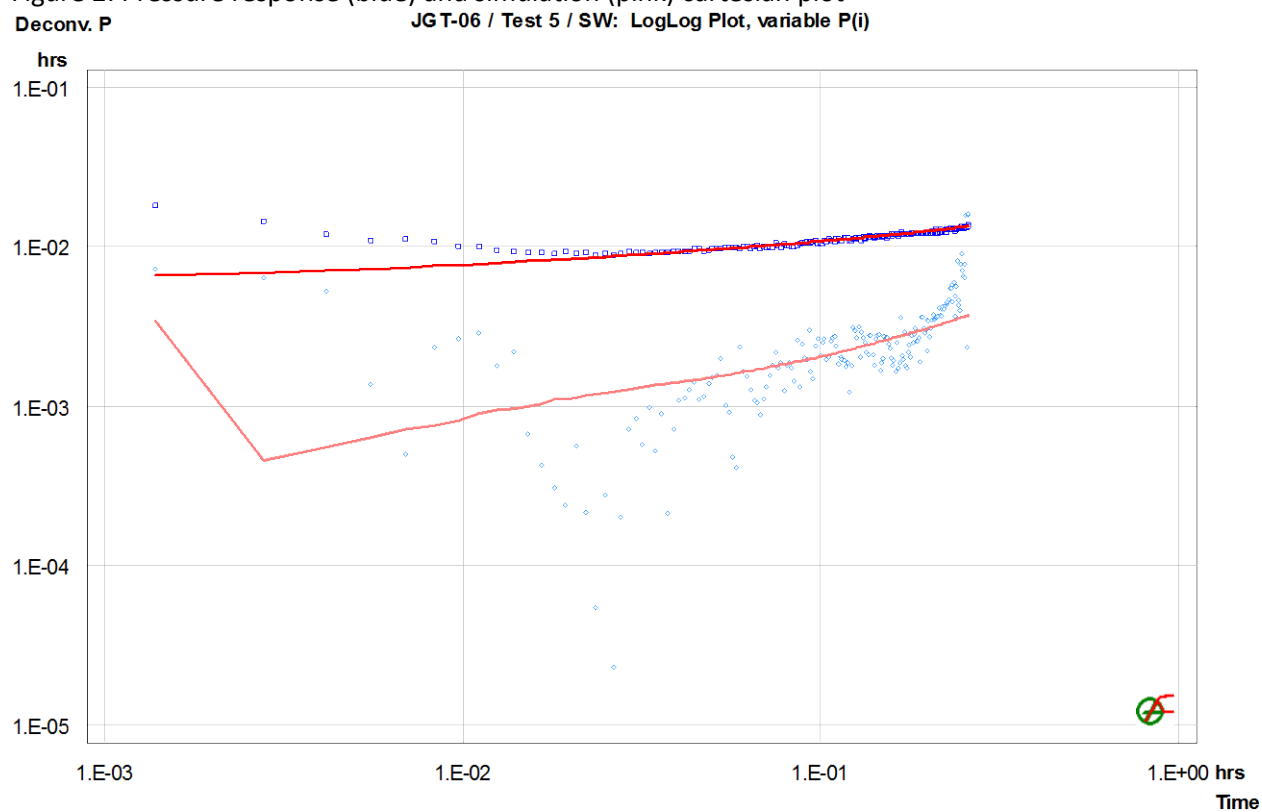


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

HYDROBENCH REPORT

Project Dominion Diamond
Site Jay Project
Source Well JGT-06
Test Name Test 6
Test Date/Time
Interval top: 345.02 m bottom: 398.30 m
Description Analyzed by: DV
 Reviewed by: DSL

Basic Data

Test Interval 53.28 m
Porosity 0.10
Well Radius 0.048 m Tubing Radius 0.039 m
Inclination 10.0 deg
Test Volume 385.653 l
Well Type Source

Fluid Properties

Viscosity 0.001 Pa*s
Density 1000.0 kg/m³
Compressibility 2.0e-09 1/Pa

History Definition

Name	Category	Duration [hrs]	P(o) [kPa]	Rate [l/min]	C [m ³ /Pa]	Skin
Auto_History	Const. Pressure	0.50	3299.44			0.00

Sequence Definition

Name	Category	t(o) [hrs]	P(o) [kPa]	P(i) [kPa]	Rate [l/min]	C [m ³ /Pa]
PSR	Recovery	0.00000	3299.44			4.9e-07
SW-Init-1	dP-Event	1.30833	3295.95	23.2 *		4.9e-07
SW-1	Slug	1.31806	3272.74	3295.9		4.9e-07
SW-Init-2	dP-Event	1.46389	3294.84	46.4 *		4.9e-07
SW-2	Slug	1.46667	3248.41	3294.8		4.9e-07
RI	Constant Rate	2.29444	3294.38		-4.80e+00	9.3e-07
RIR	Recovery	2.88889	3328.66			9.3e-07

Analysis Results

Analysis "SW-1-Final"

Static Pressure: 3295.16 kPa

Shell Parameters:

Name	Transmissivity [m ² /s]	Storativity [-]	Radius [m]	Flow Dimension [-]
Shell 1	4.0e-04	1.0e-04	- -	2.0

Sequence Parameters:

Name	Wellbore Storage [m ³ /Pa]	Skin [-]
PSR	7.5e-05	0.0
SW-Init-1	4.9e-07	0.0
SW-1	4.9e-07	0.0
SW-Init-2	4.9e-07	0.0
SW-2	4.9e-07	0.0
RI	9.3e-07	0.0
RIR	9.3e-07	0.0

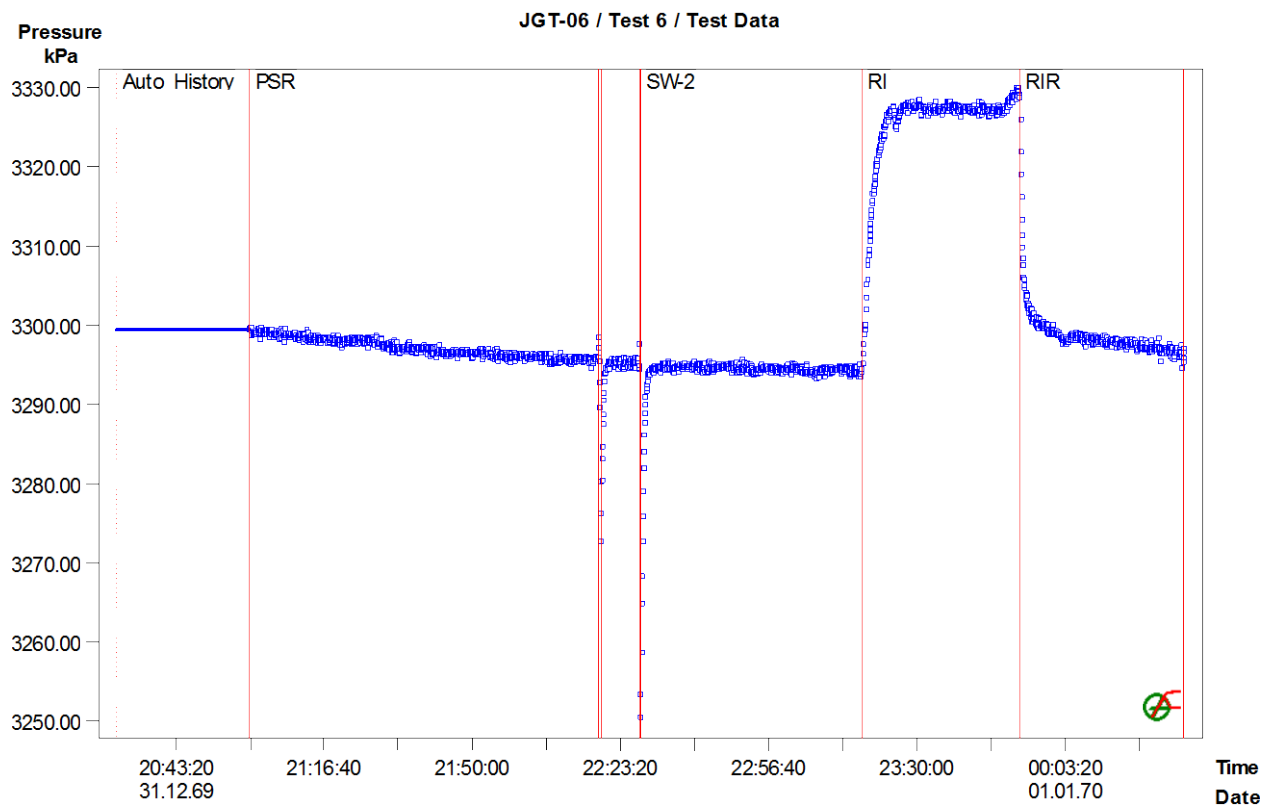


Figure 1: Pressure response and sequence definition

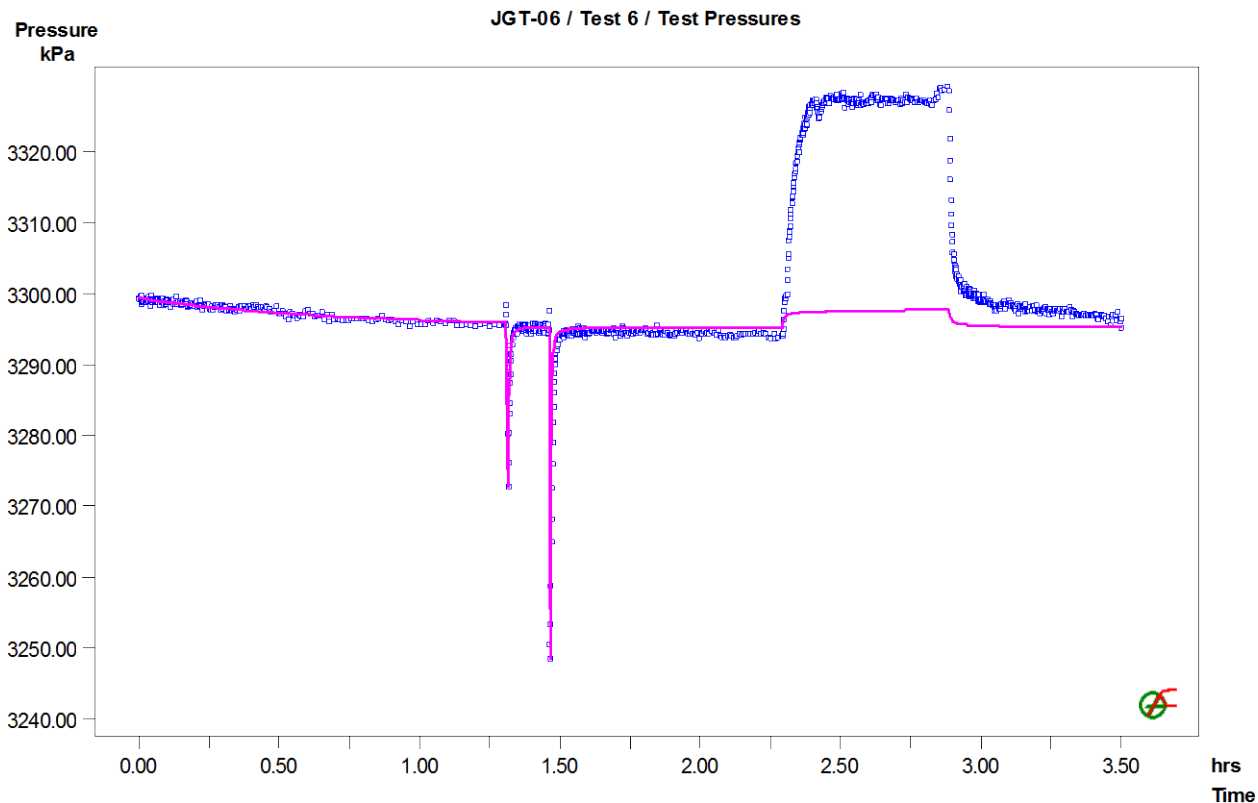


Figure 2: Pressure response (blue) and simulation (pink) cartesian plot
Deconv. P JGT-06 / Test 6 / SW-1: LogLog Plot, variable P(i)

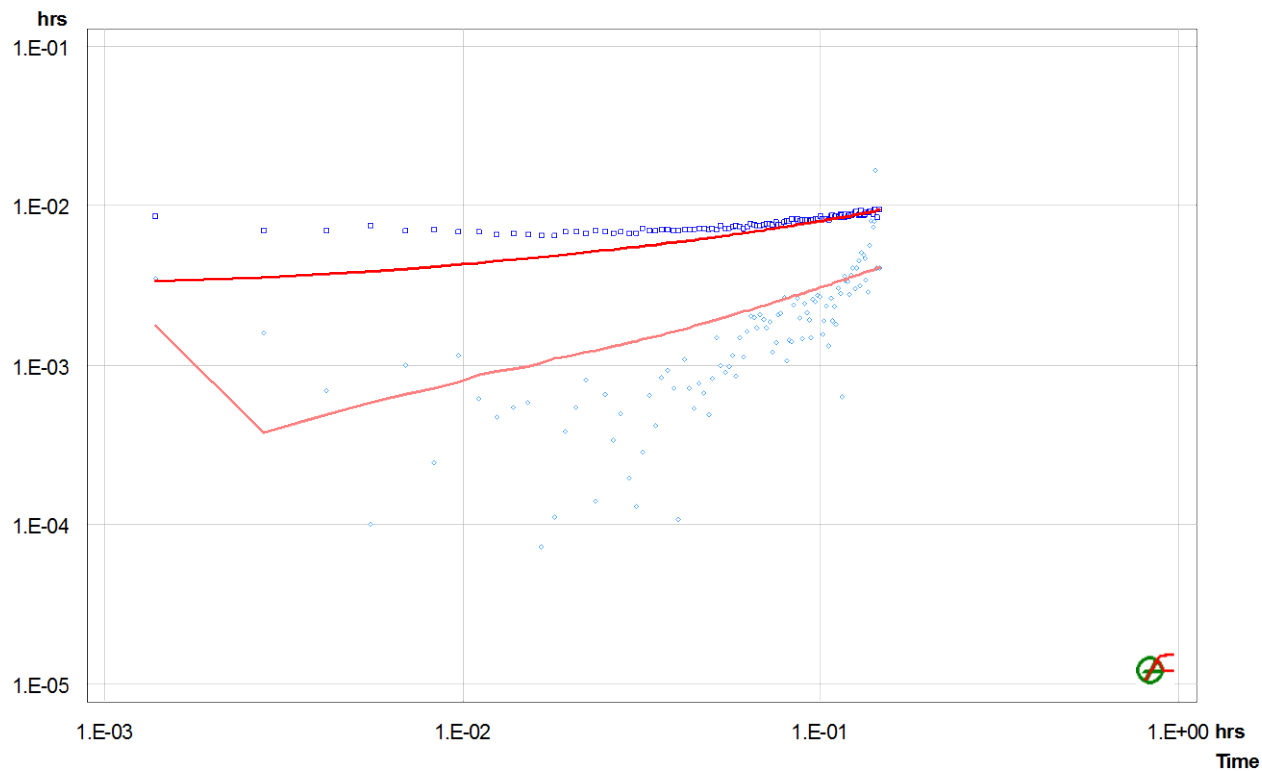


Figure 3: Deconvolved pressure response (dark blue), derivative (light blue) and simulation (red): Log-Log diagnostic plot, SW sequence

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