



# End of Job Report

## MSD-GT-01 perforating

April 2024

*Conform Mijnbouwregeling artikel 8.2.2.2 and Bijlage 12*

**Authorisation**

Function	Name	Date	Signature
Drilling Manager	G. Schurink	27-5-2024	[Redacted]
Plaatsvervangend drilling manager	B.J. Koers	27-5-2024	[Redacted]

**colofon.**

**kenmerk** EOJR MSD-GT-01  
**status** Final  
**versie** V1  
**auteur(s)** B.J. Koers  
**datum** 27 mei 2024

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# 1 Project Details

## 1.1 Organisation

Project Director	Marco van Soerland
Project Manager	Geert van Ek
Drilling Manager	Gerrit Schurink
Plaatsvervangend Drilling Manager	Bert Jan Koers
Sr. Production Engineer	Axel Sanden
Production Engineer	Sander Maat
HSE Manager	Peter v.d. Burg

Well Site Supervisors:

Well Site Supervisor (day)	Mark de Jong	15-04-2024 / 19-04-2024
Well Site Supervisor (night)	Johan Schutte	15-04-2024 / 19-04-2024

## 1.2 Operational summary

Field	Maasdijk	
Well Number:	MSD-GT-01	
Well Name	MAASDIJK-GT-01	
Well Type	Geothermal producer	
Start operations	15-04-2024; 07:00 hr	
End of operations	19-04-2024; 07:00 hr	
Days Operational	4,5 days	
Operator	HVC Aardwarmte Maasdijk B.V.	
Surface coordinates	X: 73.456,45 (RD) Y: 442.449,68 (RD)	N 51° 57.869 (ETRS89) E 004° 12.040 (ETRS89)
Surface elevation (Ground level)	+1.40 m above NAP	

## 1.3 Equipment & Contractors

### Main Contractor

Well Services Group : Coiled tubing and nitrogen services  
 Equipment : 2" Coiled Tubing

### Other contractors

Expro : Perforation (TCP)  
 Boekestijn : Crane

## 1.4 Objectives

Project objectives:

- Perforate reservoir interval in two runs using TCP guns.

## 1.5 Summary of operations

Rigged up 2" intellect coil tubing unit, spotted extra tower to support injector head while running perforations guns. Installed 7 1/16" BOP and pressure tested against 9" master valve.

RIH coil to 800m, created 30bar underbalance by removing 25m3 of 1.08s.g. brine by reverse circulation through the coil. Nitrogen was injected into the casing x coil annulus with coil at 800m depth.

Removed CT top frame and 2x middle box for easier running guns. RIH 4.5" TCP guns as per loading sheet (appendix 1). RIH guns and tagged HUD at 3217.8m. Pulled up and correlated with gamma ray. Spaced out guns, pressured up coil to 215bar and noticed pressure drop indicating guns fired. Directly started POOH at 20m/min. Performed pressure log at 400m (gauge depth 262,36m) for 20min, gauge

reading showed stable pressure of 19 bar. Based on the gauge data the static fluid level is at 83m. POOH to surface and laid out fired TCP guns, all guns fired. See appendix 6.3 for the pressure plot during the perforation run.

RIH TCP guns (run 2) and spaced out using gamma ray. Pressured up to 210 bar and observed pressure drop indicating guns fired. POOH to 400m and took pressure log for 30min (gauge depth 329m). Stable pressure of 26 bar, calculation proofs static fluid level at 84m. POOH to surface and laid down guns. All guns fired and in good condition. See appendix 6.4 for the pressure plot during the perforation run. Closed 9" swab valve and moved CT equipment to MSD-GT-02.

## 2 Well data

### 2.1 Depth reference and total depth

Used depth reference	: Ground Level
Elevation: Ground level – NAP	: +1.40 m (ground level lays above NAP)
Well total depth	: 3297mMD / 2917mTVD

### 2.2 Deviation plots

See drilling EOWR.

### 2.3 Casing scheme

Table 1. Casing details

Item OD [in]	Top (m MD)	Bottom (m MD)	Weight	Grade	Connection
24" conductor	0	145	0,5" WT	S355	Welded
13 3/8" Casing	0	1153	68 #	L80	VAM TOP
10 3/4" GRE lined csg	0	958	51/57,4 #	L80	VAM TOP
9 5/8" GRE lined csg	958	2839	47/51,9 #	L80	VAM TOP
9 5/8" Cr13 casing	2839	3281	47#	L8013Cr	VAM TOP
9 5/8" L80 casing	3281	3305	47#	L80	VAM TOP

Table 2. Cement details

Item	TOC (m MD)	Lead Slurry Volume (m³)	Lead Slurry Weight (s.g.)	Tail Slurry Volume (m³)	Tail Slurry Weight (s.g.)	Type
13 3/8" Casing	Surface	103.5	1,35	14.7	1,60	HOZ Lite lead and HOZ tail
10 3/4" x 9 5/8" Casing	1218 (confirmed by RBT log)	61.7	1,35	20.4	1,84	HOZlite lead HMR+ tail

## 2.4 Cement log evaluation

Table 3. Summary of cement job results

Section	Cement job	TOC (mAHL GL)	Comments
10 3/4" x 9 5/8" Casing	Partial returns	1218	Some losses during cement job, intervals with good bonding present. Some signs of channeling but could be of GRE lining. Good cement over the following (sealing) layers; Upper Holland Marl, Middle Holland Claystone, Lower Holland Marl, Vlieland Clay, Rodenrijs Claystone and Alblasserdam. TOC in top Ommelanden.

Table 4. RBT log interpretation vs. formation and rock type

Formation	Rock type	Bond quality	Remarks
Ommelanden	aquitard	Partial	Top of cement: 1218mMD BGL.
Texel Marl	reservoir	Partial	
U Holland Marl	aquitard	Good	
M Holland Clay	seal rock	Good	
Holland Greensand	reservoir	Partial	
L Holland Marl	aquitard	Good	
Lier Sand	reservoir	Partial	
Vlieland Clay	seal rock	Good	
Berkel Clastics	reservoir	Partial	
Rijswijk Sandstone	reservoir	Partial	
Rodenrijs Claystone	seal rock	Good	
Alblasserdam	reservoir	Good	Tail slurry 1,84 s.g. HMR+

Full RBT log can be found in attachment 6.6.

## 2.5 Well schematic – post job

\*Not in scale.

## 3 Drilling fluid summary

Not applicable. Well filled with 1.08s.g. brine.

## 4 Geology

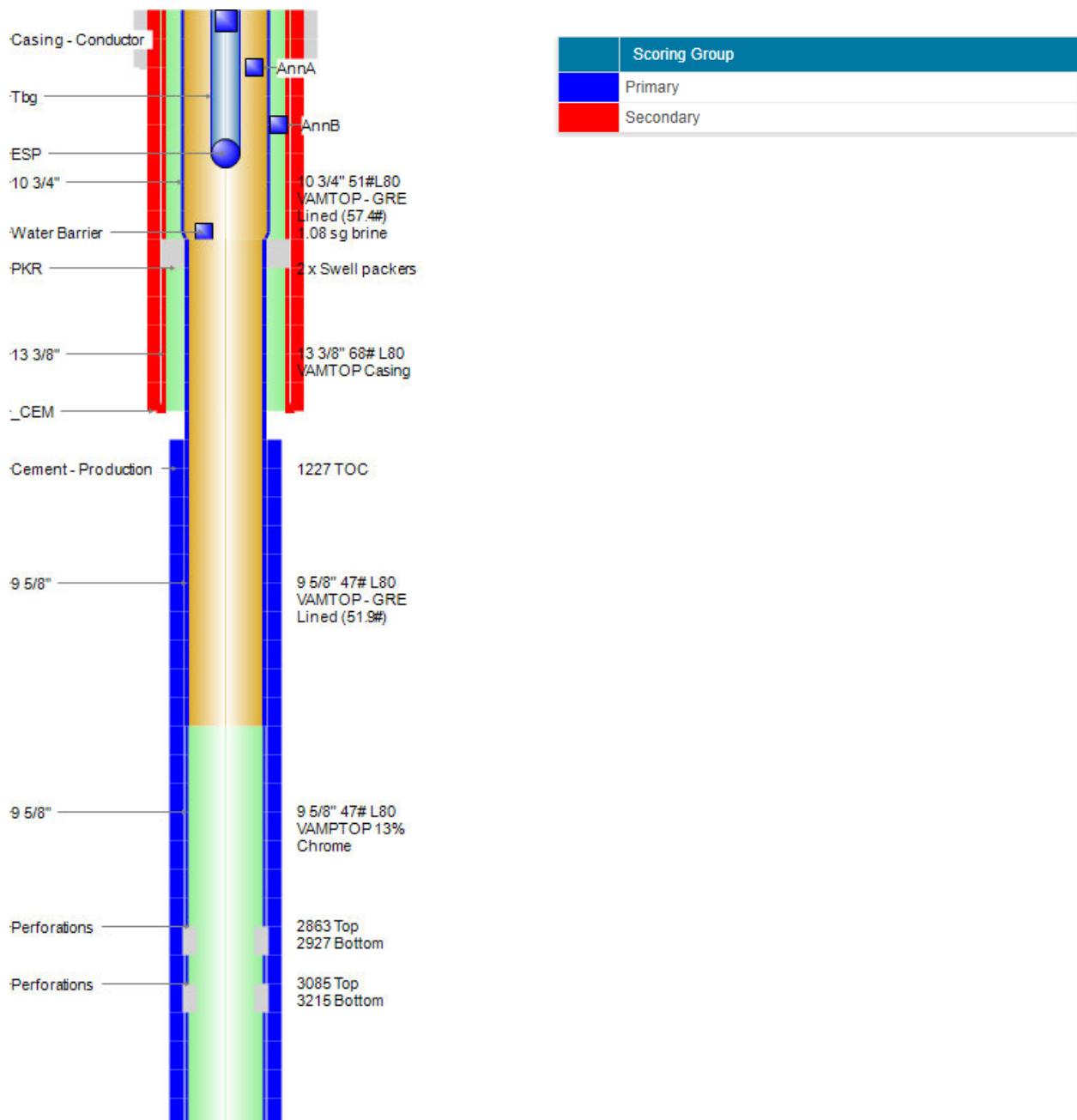
Not applicable – refer to drilling end of well report.

## 5 Well completion

### 5.1 Well status

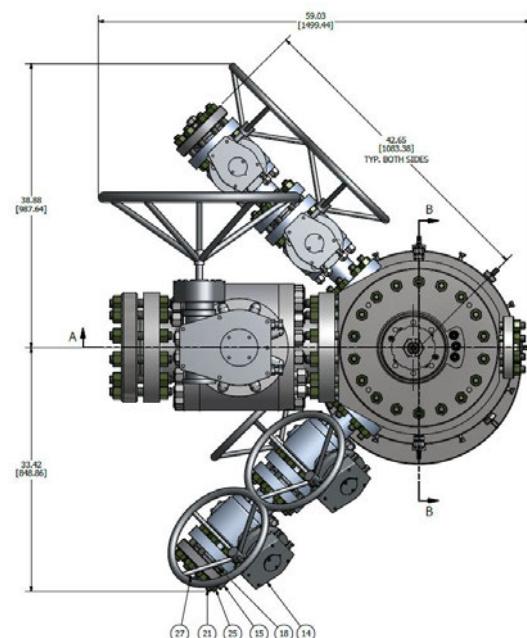
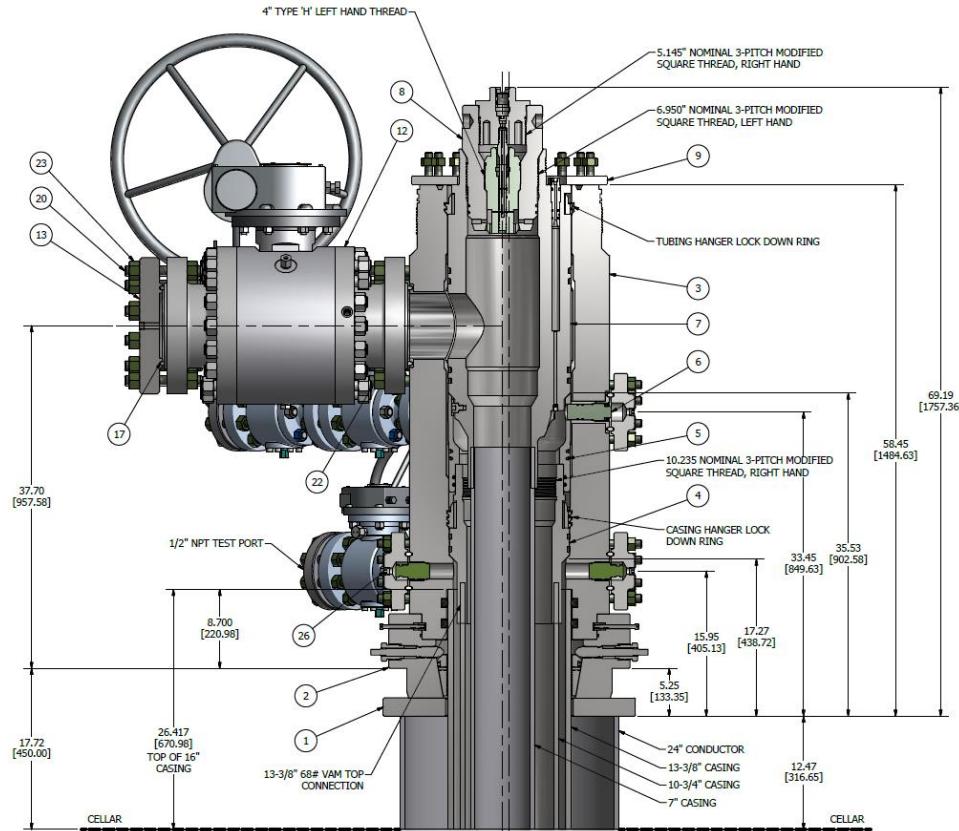
Well is suspended with 1.08 s.g. formation brine. Horizontal mastervalve (7 1/16" 3k ball valves with blind flange) and 2 1/16" 3k side outlet valves are installed. A temporary 9" 3k ball valve is installed on top of the wellhead. This will be removed once the ESP installation will be done.

## 5.2 Well barrier schematic



## 5.3 Wellhead drawing

Note: A temporary adapter + 9" 3K ball valve is installed, this will be removed when the ESP will be installed.



PARTS LIST			
ITEM	PART NUMBER	DESCRIPTION	MATERIAL
1	05-101311-MA	24" x 13-5/8" Eccentric Base Plate	8630
2	05-101139-AS	13-5/8" Slip Housing	8630
3	05-10137-AS	13-5/8" Wellhead Housing	8630 with Inconel 625 Clad
4	05-101140-AS	10-3/4" Casing Hanger	FGNM
5	05-101290-AS	Landing Sub	FGNM
6	05-101336-AS	Landing Sub Anti-Rotation Plug	FGNM
7	05-101666-AS	7" Tubing Hanger	FGNM
8	05-101168-AS	Tubing Hanger Blanking Plug	FGNM
9	05-101143-FM	Wellhead Top Plate	Steel, Carbon
10	09-101313-PP	9", 3 KSI Ball Valve	Carbon Steel with 316 Stainless Steel Clad
11	05-101324-FM	9" 3K Blind Flange	Steel, Carbon
12	09-101312-PP	7-1/16", 3 KSI Ball Valve	Carbon Steel with 316 Stainless Steel Clad
13	05-101356-FM	7-1/16" 3K Blind Flange	Steel, Carbon
14	09-101311-PP	2-1/16", 3 KSI Ball Valve	Carbon Steel with 316 Stainless Steel Clad
15	SK20349	2.06", 3K Blind Flange for HXTS (FM)	Carbon Steel
16	SK20352-49	R49 Type R Ring Gasket (PP)	Stainless Steel
17	SK20352-45	R45 Type R Ring Gasket (PP)	Stainless Steel
18	SK20352-24	R24 Type R Ring Gasket (PP)	Stainless Steel
19	SK20304-20	All Threaded Stud Bolt 1-3/8"-8 UN x 9-1/2" Long	Steel, High Strength Low Alloy
20	SK20304-17	All Threaded Stud Bolt 1-1/8"-8 UN x 8-1/2" Long (PP)	Steel, High Strength Low Alloy
21	SK20304-03	All Threaded Stud Bolt 7/8"-9 UNC x 6-1/2" Long (PP)	Steel, High Strength Low Alloy
22	SK20306-17	Tap End Stud 1-1/8"-8 UN x 5-7/8" Long (PP)	Steel, High Strength Low Alloy
23	SK20004-11	Heavy Hex Nut 1-1/8"-8 UN (PP)	Steel, Mild
24	SK20004-15	1-3/8"-8 UN Heavy Hex Nut	Steel, Mild
25	SK20004-09	7/8"-9 UNC HEAVY HEX NUT (PP)	Steel, Mild
26	SK20222-05	1/2" NPT LEVL Plug (PP)	Stainless Steel, Austenitic
27	SK20104	Autoclave Blow Down Plug (PP)	Carbon Steel

## 5.4 Completion schematic

Not applicable.

# 6 Appendixes

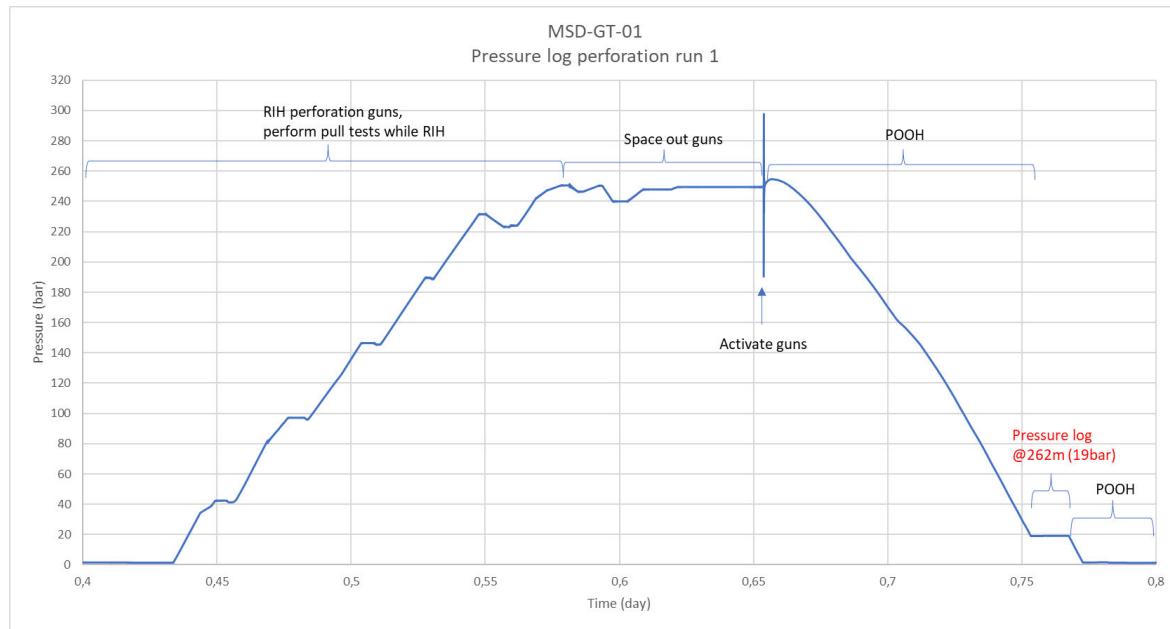
## 6.1 TCP toolstring run 1

Job Number		Client		Rig		Well Number		Field / Block				Date
Run No.	Revision No.	HVC		WSG Coll		MSD-GT-01 RUN 1		Maasdijk Geothermal				16-4-2024
Casing / Liner Description		Top Depth	Bottom Depth	Nominal ID (in.)	Drilled ID (in.)	Max. Deviation	Max. BHT	Max. BHP	Completion Fluid Type	Weight	Cushion Fluid Type	Weight
10 3/4" GRE Lined csg		0	049			40	200F		CaCl	9.01		
9 5/8" GRE Lined csg		949	2830				47/51.9#	L80				
9 5/8" Cr13 Casing			3295					47#	L80			
Diagram annotations	Layout	Item	Equipment Description	Details	Supplier	Serial No.	Connection	OD (in.)	ID (in.)	Volume ID (CUM)	Length	Depth (MD) Top Bottom
		43					Top			m3	m	m
		12 2" Coil			WSG		N/A		2.000			3,073.00 3,073.00
		13 Inline connector			WSG				2.000		0.12	3,073.00 3,073.12
		14 Straight Bar			WSG		1.5" AMT Box	1.5"AMT Pin	2.850		0.70	3,073.12 3,073.82
		15 intelleCT cable connector			WSG		1.5" AMT Box	1.5"AMT Pin	2.850		0.67	3,073.82 3,074.49
		16 Motor Head Assembly			WSG		1.5" AMT Box	1.5"AMT Pin	2.850		0.45	3,074.49 3,074.94
		17 intelleCT Quick Coupling	2 x .197 ports		WSG		1.5" AMT Box	1.5"AMT Pin	2.850		0.56	3,074.94 3,075.50
		18 Gauge Carrier GR/CCL			WSG		1.5" AMT Box	1.5"AMT Pin	2.850		3.04	3,075.50 3,078.54
		19 Bypass Gauge Carrier Press/Temp			WSG		1.5" AMT Box	1.5"AMT Pin	2.850		0.92	3,078.54 3,079.46
		20 Crossover 1.5" AMT to 2 3/8" PAC			WSG		1.5" AMT Box	2 3/8" PAC Pin	2.875		0.13	3,079.46 3,079.59
		21 CarSac			WSG		2 3/8" PAC Box	2 3/8" PAC Pin	2.875		0.67	3,079.59 3,080.26
		22 Crossover 2 3/8PAC to 2 3/8" EUE			WSG		2 3/8" PAC Box	2 3/8" EUE 8rd	2.875		0.18	3,080.26 3,080.44
		23 Auto Vent Pressure Activated Firing Head			Expro		2 3/8" EUE 8rd Box	2.75 6P Acme Box	3.500	N/A N/A	0.45	3,080.44 3,080.89
		24 4.5" Partial Blank, Safety Spacer		Roller Sub OD 6.39	Expro	0000042	2.75 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	3.81	3,080.89 3,084.70
		4.5" Partial Loaded 39SPM GH TCP Gun P-P		Roller Sub OD 6.39	Expro	0000012	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	1.76	3,084.70 3,088.48
		23 4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	Expro	0000010	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.03	3,088.48 3,092.09
		22 4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	Expro	0000018	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.63	3,092.09 3,097.72
		21 4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	Expro	0000015	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.63	3,097.72 3,103.35
		20 4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	Expro	0000020	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.63	3,103.35 3,108.98
		19 4.5" Partial Loaded 39SPM GH TCP Gun P-P		Roller Sub OD 6.39	Expro	0000048	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	4.02	3,108.98 3,113.00
		4.5" Partial Blank		Roller Sub OD 6.39	Expro	0000111	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	1.55	3,113.00 3,114.55
		18 4.5" Fully Blank TCP Gun P-B		Roller Sub OD 6.39	Expro	0000111	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.63	3,114.55 3,120.18
		17 4.5" Partial Blank		Roller Sub OD 6.39	Expro	0000039	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	4.52	3,120.18 3,124.70
		16 4.5" Partial Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	Expro	0000007	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.63	3,125.75 3,131.38
		15 4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	Expro	0000004	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.63	3,131.38 3,137.01
		14 4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	Expro	0000014	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.63	3,137.01 3,142.64
		13 4.5" Partial Loaded 39SPM GH TCP Gun P-P		Roller Sub OD 6.39	Expro	0000007	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	2.66	3,142.64 3,145.30
		4.5" Partial Blank		Roller Sub OD 6.39	Expro	0000047	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	2.91	3,145.30 3,149.21
		12 4.5" Partial Blank		Roller Sub OD 6.39	Expro	0000040	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	3.69	3,146.21 3,152.10
		4.5" Partial Loaded 39SPM GH TCP Gun P-P		Roller Sub OD 6.39	Expro	0000046	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	1.68	3,152.10 3,153.78
		11 4.5" Partial Loaded 39SPM GH TCP Gun P-P		Roller Sub OD 6.39	Expro	0000046	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	4.82	3,153.78 3,158.60
		4.5" Partial Blank		Roller Sub OD 6.39	Expro	0000037	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	0.75	3,158.60 3,159.35
		10 4.5" Partial Loaded 39SPM GH TCP Gun P-P		Roller Sub OD 6.39	Expro	0000037	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	3.65	3,159.35 3,163.00
		9 4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	Expro	0000005	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.63	3,164.92 3,170.55
		4.5" Partial Loaded 39SPM GH TCP Gun P-P		Roller Sub OD 6.39	Expro	0000045	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.15	3,170.55 3,175.70
		8 4.5" Partial Blank		Roller Sub OD 6.39	Expro	0000045	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	0.42	3,175.70 3,176.12
		7 4.5" Fully Blank TCP Gun P-B		Roller Sub OD 6.39	Expro	0000010	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.63	3,176.12 3,181.75
		6 4.5" Partial Blank		Roller Sub OD 6.39	Expro	0000038	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	2.15	3,181.75 3,183.90
		4.5" Partial Loaded 39SPM GH TCP Gun P-P		Roller Sub OD 6.39	Expro	0000044	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	3.42	3,183.90 3,187.32
		5 4.5" Partial Blank		Roller Sub OD 6.39	Expro	0000044	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	3.28	3,187.32 3,190.60
		4 4.5" Partial Blank		Roller Sub OD 6.39	Expro	0000038	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	2.29	3,190.60 3,192.89
		3 4.5" Partial Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	Expro	0000030	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	4.11	3,192.89 3,197.00
		2 4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	Expro	0000008	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	1.46	3,197.00 3,198.46
		1 4.5" Fully Loaded 39SPM GH TCP Gun P-P		Roller Sub OD 6.39	Expro	0000052	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A N/A	5.63	3,198.46 3,204.09
		TCP Bull Nose						Nose	4.500	N/A N/A	1.04	3,214.60 3,215.64

## 6.2 TCP toolstring run 2

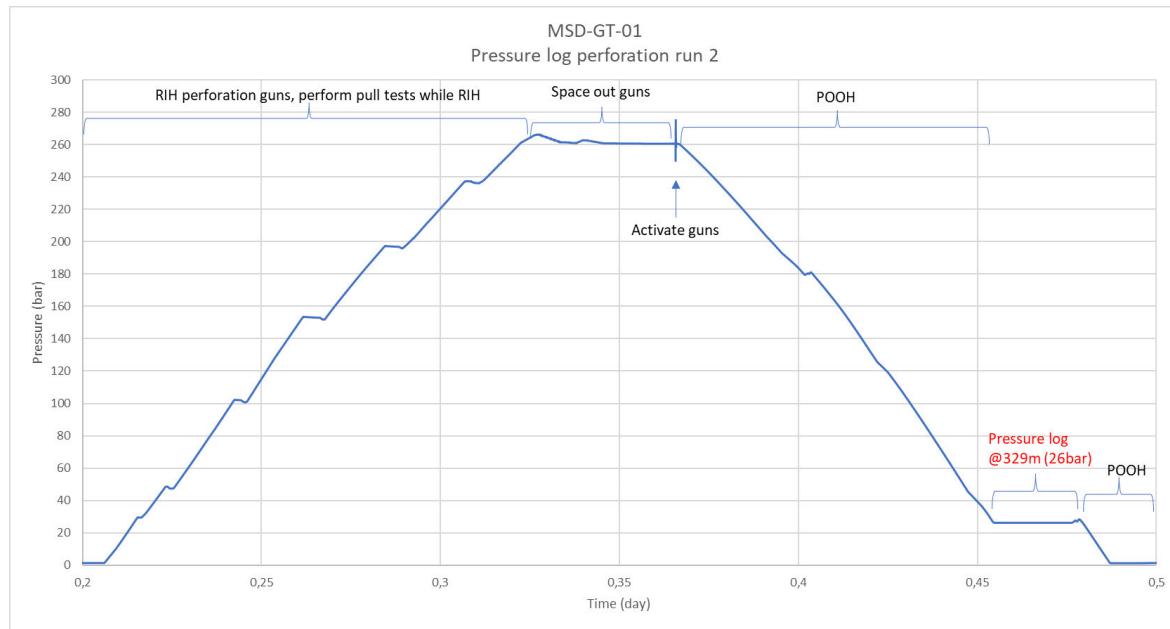
Job Number		Client		Rig		Well Number		Field / Block		Date
Run No.	Revision No.	HVC	WSG Coil	MSD-GT-01 RUN 2		Maasvlakte Geothermal				16-4-2024
		Perforating / Test Interval(s)		Max. Deviation	Max. BHT	Max. BHP	Completion Fluid Type	Weight	Cushion Fluid Type	Weight
2	2			40	200F		CaCl	9.01		
<b>Casing / Liner Description</b>		<b>Top Depth</b>	<b>Bottom Depth</b>	<b>Nominal ID (in.)</b>	<b>Drifted ID (in.)</b>	<b>Weight</b>	<b>Grade</b>	<b>Pipework Description</b>	<b>ID (in.)</b>	<b>Weight</b>
10 3/4" GRE Lined csg		0	949		51/57.4#	L80	2in Coil			
9 5/8" GRE Lined csg		649	2830		47/51.9#	L80				
9 5/8" GRIS Casing		2830	3295		47#	L80				
<b>Diagram annotations</b>	<b>Layout</b>	<b>Item</b>	<b>Equipment Description</b>	<b>Details</b>	<b>Supplier</b>	<b>Serial No.</b>	<b>Connection</b>	<b>OD (in.)</b>	<b>ID (in.)</b>	<b>Volume ID (CUM)</b>
							Top	Bottom		m3
		43								m
		24	2" Coil		WSG		N/A		2.000	
		23	Inline connector		WSG			1.5"AMT Pin	2.000	
		22	Straight Bar		WSG		1.5" AMT Box	1.5"AMT Pin	2.650	0.70
		21	intelleCT cable connector		WSG		1.5" AMT Box	1.5"AMT Pin	2.650	0.67
		20	Motor Head Assembly		WSG		1.5" AMT Box	1.5"AMT Pin	2.650	0.45
		19	intelleCT Quick Coupling	2 x .197 ports	WSG		1.5" AMT Box	1.5"AMT Pin	2.650	0.56
		18	Gauge Carrier GR/CCL		WSG		1.5" AMT Box	1.5"AMT Pin	2.650	3.04
		17	Bypass Gauge Carrier Press/Temp		WSG		1.5" AMT Box	1.5"AMT Pin	2.650	0.92
		16	Crossover 1.5" AMT to 2 3/8 PAC		WSG		1.5" AMT Box	2 3/8 PAC Pin	2.875	0.13
		15	CarSao		WSG		2 3/8 PAC Box	2 3/8 PAC Pin	2.875	0.67
		14	Crossover 2 3/8PAC to 2 3/8 EUE		WSG		2 3/8 PAC Box	2 3/8 EUE 8rd	2.875	0.18
		13	Auto Vent Pressure Activated Firing Head		Expro		2 3/8 EUE 8rd Box	2.75 6P Acme Box	3.500	N/A
									0.45	2.856.86
		12	4.5" Partial Blank, Safety Spacer		Roller Sub OD 6.39	0000006	2.75 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
			4.5" Partial Loaded 39SPM GH TCP Gun P-P						1.48	2.853.40
		11	4.5" Partial Loaded 39SPM GH TCP Gun P-P		Roller Sub OD 6.39	0000051	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
			4.5" Partial Blank						3.22	2.864.88
		10	4.5" Partial Blank		Roller Sub OD 6.39	0000050	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
			4.5" Partial Loaded 39SPM GH TCP Gun P-P						2.35	2.868.10
		9	4.5" Partial Blank		Roller Sub OD 6.39	0000049	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
			4.5" Partial Blank						1.95	2.870.45
		8	4.5" Partial Blank		Roller Sub OD 6.39	0000031	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
			4.5" Partial Loaded 39SPM GH TCP Gun P-B						3.62	2.872.40
		7	4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	0000072	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
		6	4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	0000028	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
		5	4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	0000033	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
		4	4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	0000027	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
		3	4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	0000029	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
		2	4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	0000032	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
		1	4.5" Fully Loaded 39SPM GH TCP Gun P-B		Roller Sub OD 6.39	0000024	3.94 6P Acme Pin	3.94 6P Acme Box	4.500	N/A
			TCP Bull Nose						5.47	2.921.03
									0.51	2.926.50
									0.51	2.927.01

## 6.3 Pressure log perforating run#1



Fluid column above pressure gauge: 19bar / (1.08s.g. \*0.0981) = 179m  
Static water level: 262m – 179m = 83m

## 6.4 Pressure log perforating run#2



Fluid column above pressure gauge: 26bar / (1.08s.g. \*0.0981) = 245m  
Static water level: 329m – 245m = 84m

## 6.5 MFC log

See separate file

Note: log taken in May 2023

## 6.6 RBT log

See separate file

Note: log taken in June 2023 but was not yet included in the drilling EOWR.