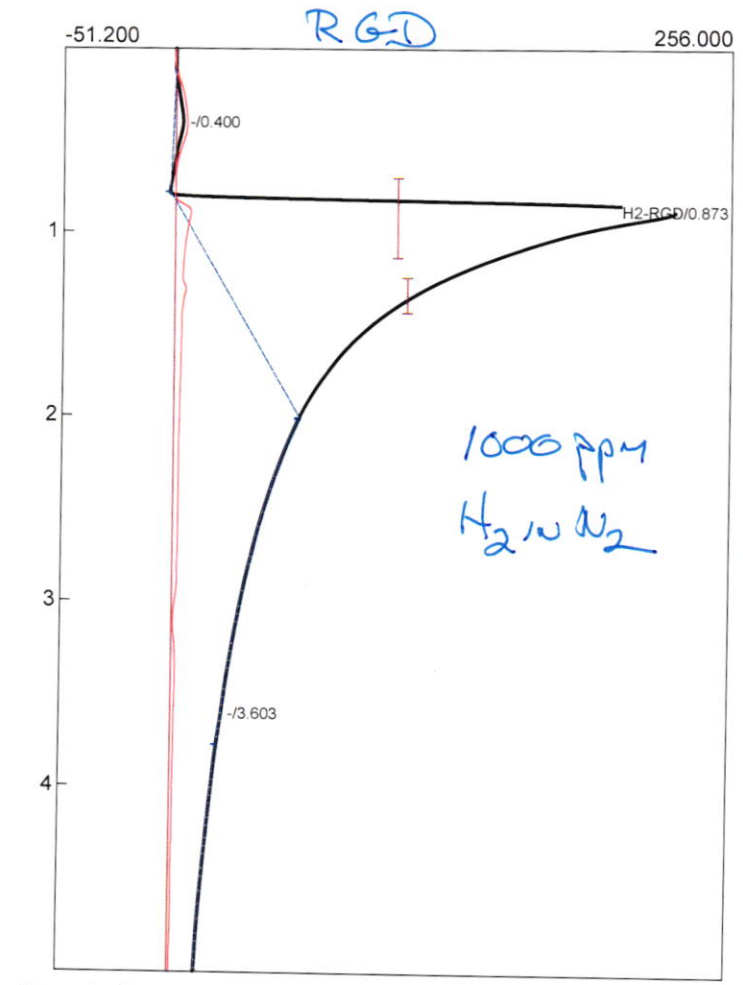
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 14:36:48
Method: 1ml loop PCBF
Description: RGD higain
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=90.0 Base sens=60.0 Min area= 1.00 Standar
Data file: 333calibration926.CHR ()
Sample: 1000ppm H2 in N2
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp
50.00	10.000	0.000	50.00

Events:

Time	Event
0.000	ZERO 100
0.020	G ON (Valve1)
0.300	G OFF (Valve1)
2.000	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-RGD	0.873	6241.0850	1000.0000	ppm
O2-RGD	0.000	0.0000	0.0000	%
		6241.0850	1000.0000	

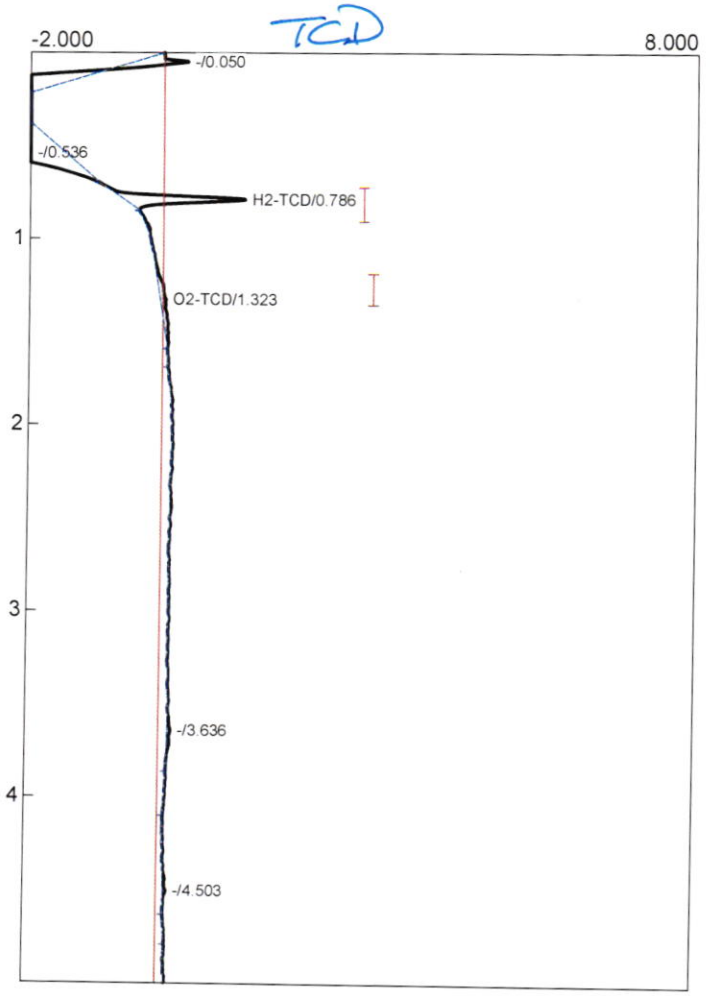
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 14:36:48
Method: 1ml loop PCBF
Description: TCD lowcurrent 100C
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=80.0 Base sens=60.0 Min area= 0.20 Standar
Data file: Cornell-TCD925.CHR ()
Sample: 1000ppm H2 in N2
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp

Events:

Time	Event
0.000	ZERO
0.700	INTEG BASED IMMEDIATE
1.000	INTEG BASED IMMEDIATE
5.500	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-TCD	0.786	4.4016	1000.0000	ppm
O2-TCD	1.323	1.5867	36.6274	%
		5.9883	1036.6274	

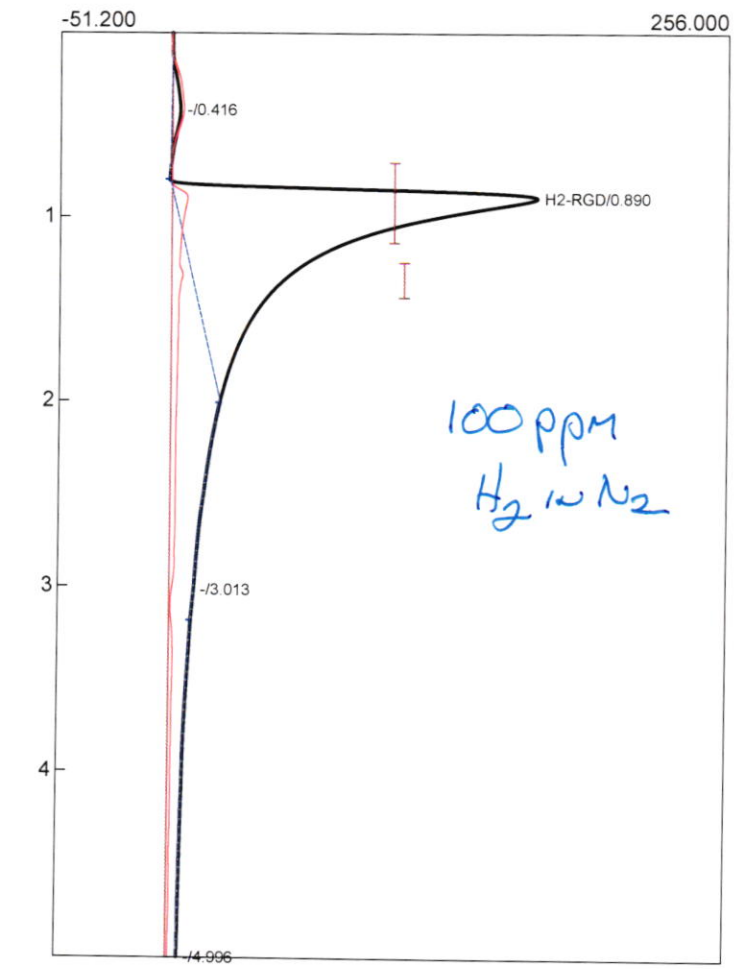
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 15:03:23
Method: 1ml loop PCBF
Description: RGD higain
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=90.0 Base sens=60.0 Min area= 1.00 Standar
Data file: 333calibration927.CHR ()
Sample: 100ppm H2 in N2
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp
50.00	10.000	0.000	50.00

Events:

Time	Event
0.000	ZERO 100
0.020	G ON (Valve1)
0.300	G OFF (Valve1)
2.000	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-RGD	0.890	3555.4525	100.0000	ppm
O2-RGD	0.000	0.0000	0.0000	%
		3555.4525	100.0000	

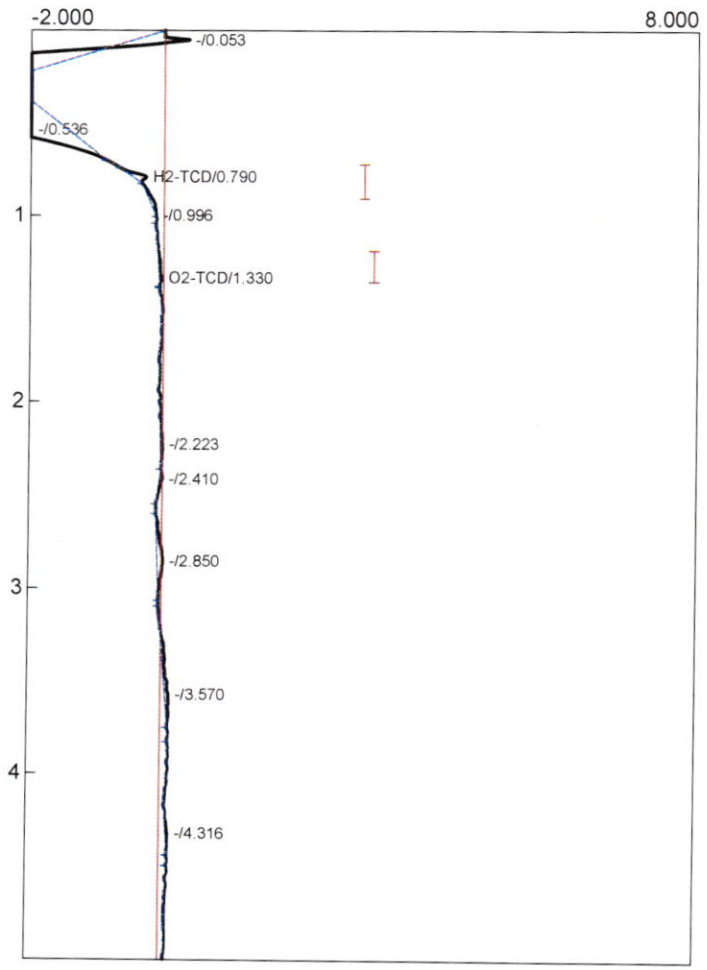
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 15:03:23
Method: 1ml loop PCBF
Description: TCD lowcurrent 100C
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=80.0 Base sens=60.0 Min area= 0.20 Standar
Data file: Cornell-TCD926.CHR ()
Sample: 100ppm H2 in N2
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp

Events:

Time	Event
0.000	ZERO
0.700	INTEG BASED IMMEDIATE
1.000	INTEG BASED IMMEDIATE
5.500	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-TCD	0.790	0.4046	100.0000	ppm
O2-TCD	1.330	0.3441	7.9432	%
		0.7487	107.9432	

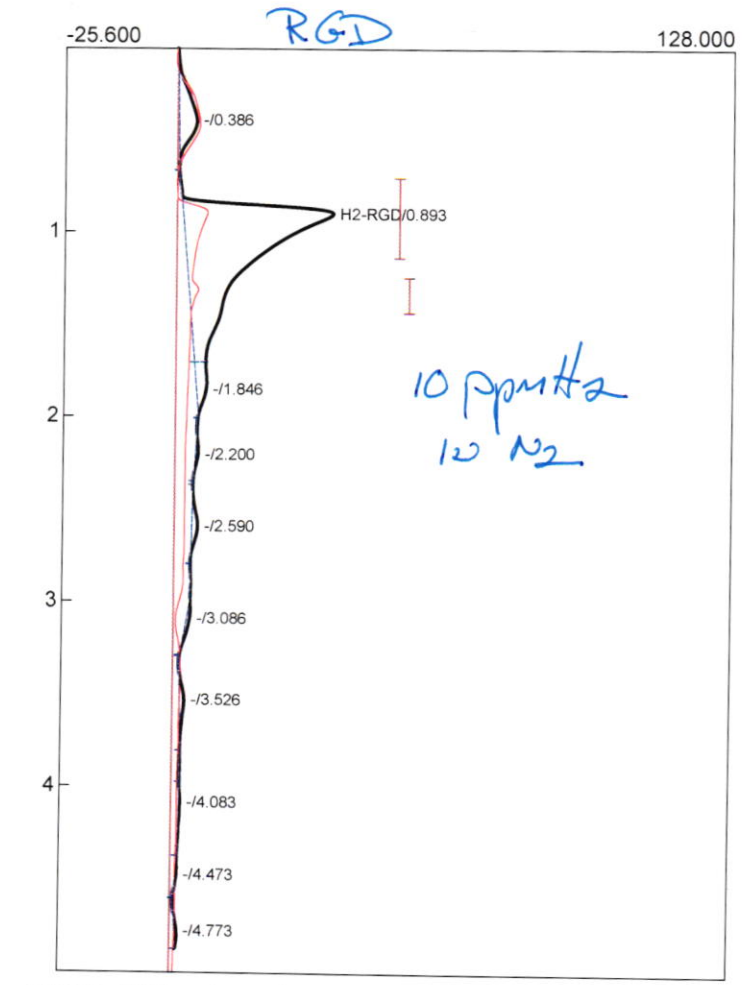
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 14:02:10
Method: 1ml loop PCBF
Description: RGD higain
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=90.0 Base sens=60.0 Min area= 1.00 Standar
Data file: 333calibration925.CHR ()
Sample: 10ppm H2 in N2
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp
50.00	10.000	0.000	50.00

Events:

Time	Event
0.000	ZERO 100
0.020	G ON (Valve1)
0.300	G OFF (Valve1)
2.000	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-RGD	0.893	718.4124	10.0000	ppm
O2-RGD	0.000	0.0000	0.0000	%
		718.4124	10.0000	

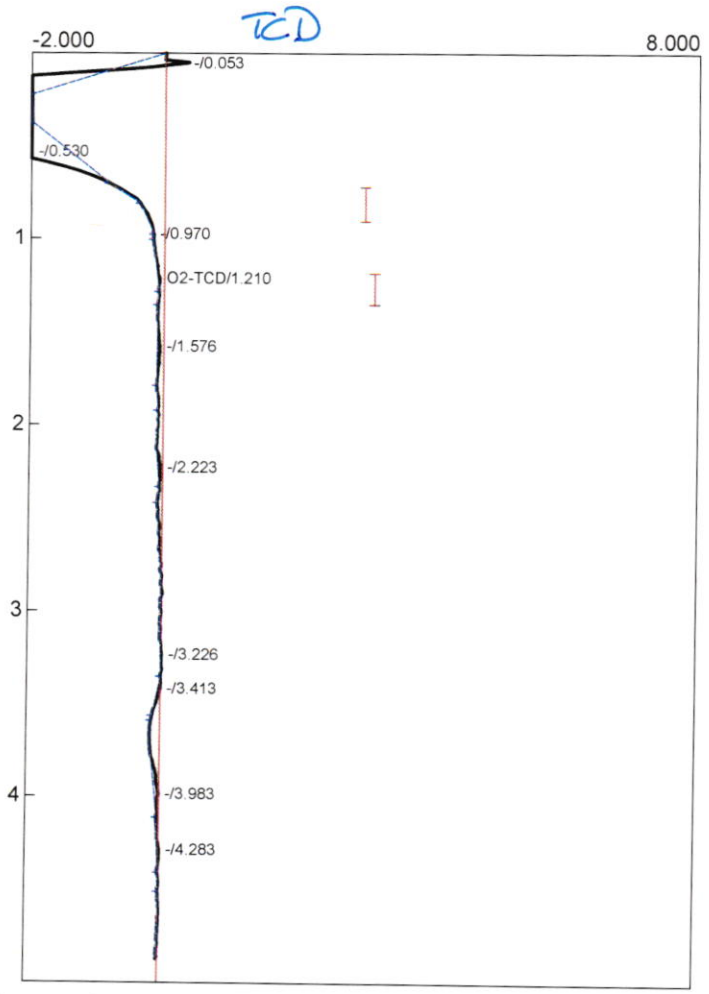
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 14:02:10
Method: 1ml loop PCBF
Description: TCD lowcurrent 100C
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=80.0 Base sens=60.0 Min area= 0.20 Standar
Data file: Cornell-TCD924.CHR ()
Sample: 10ppm H2 in N2
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp

Events:

Time	Event
0.000	ZERO
0.700	INTEG BASED IMMEDIATE
1.000	INTEG BASED IMMEDIATE
5.500	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-TCD	0.000	0.0000	0.0000	ppm
O2-TCD	1.210	0.2418	5.5817	%
		0.2418	5.5817	

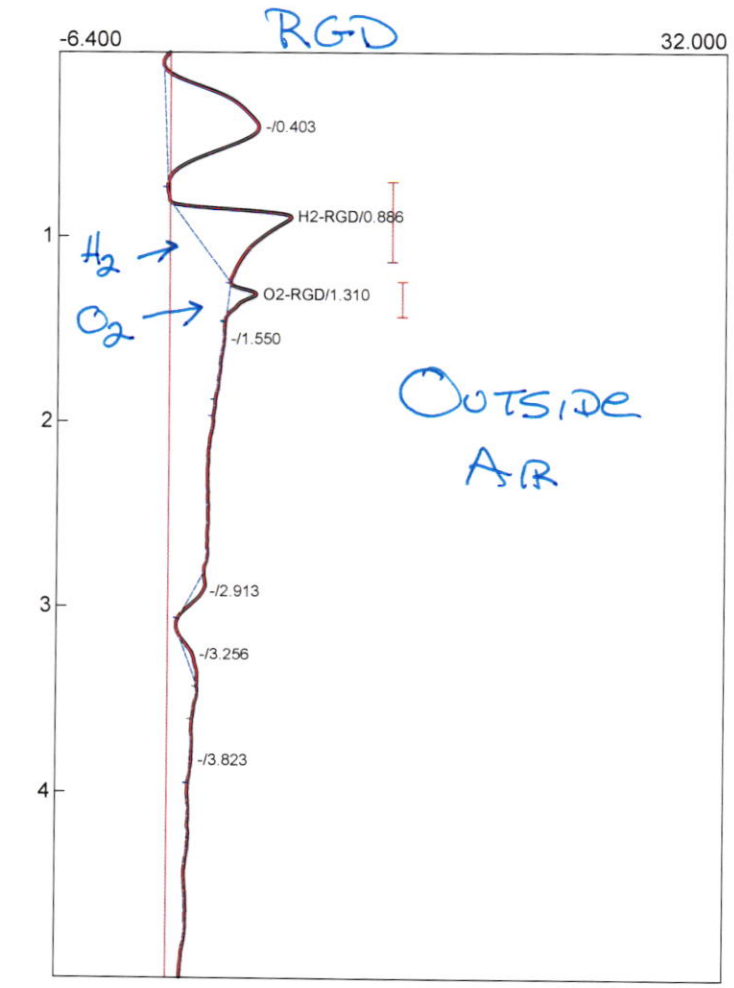
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 13:19:43
Method: 1ml loop PCBF
Description: RGD higain
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=80.0 Base sens=60.0 Min area= 1.00 Standar
Data file: 333calibration922.CHR ()
Sample: Outside air
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp
50.00	10.000	0.000	50.00

Events:

Time	Event
0.000	ZERO 100
0.020	G ON (Valve1)
0.300	G OFF (Valve1)
2.000	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-RGD	0.886	73.6193	0.5000	ppm
O2-RGD	1.310	7.7475	20.0000	%
		81.3668	20.5000	

} CALIBRATE ON THIS

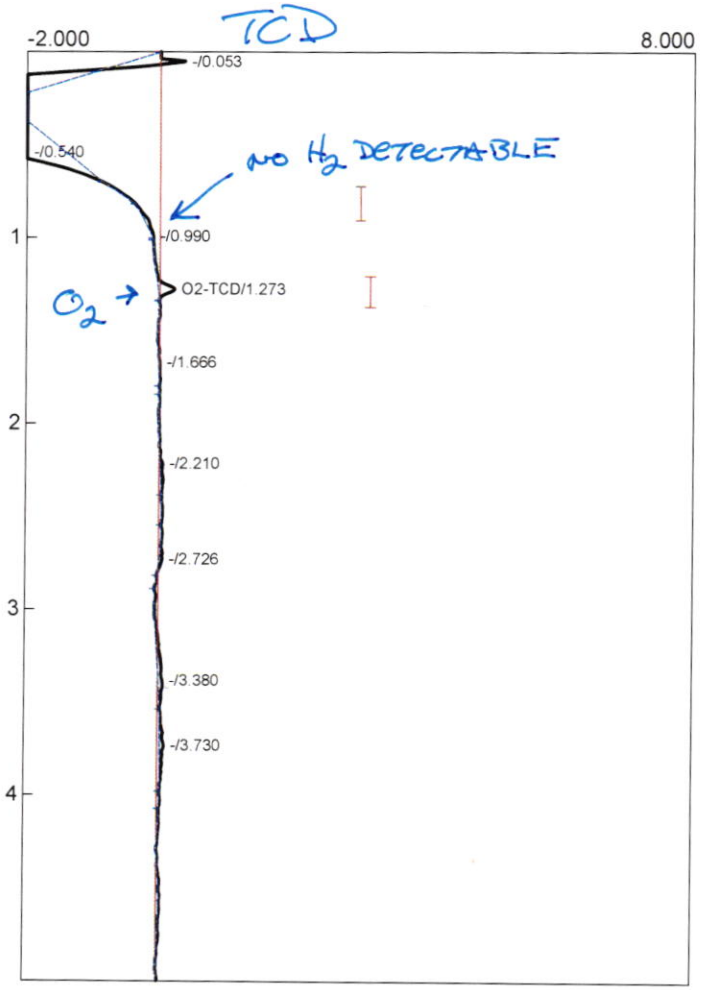
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 13:19:43
Method: 1ml loop PCBF
Description: TCD lowcurrent 100C
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=80.0 Base sens=60.0 Min area= 0.20 Standar
Data file: Cornell-TCD921.CHR ()
Sample: Outside air
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp

Events:

Time	Event
0.000	ZERO
0.700	INTEG BASED IMMEDIATE
1.000	INTEG BASED IMMEDIATE
5.500	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-TCD	0.000	0.0000	0.0000	ppm
O2-TCD	1.273	0.8664	20.0000	%
		0.8664	20.0000	

← CALIBRATE

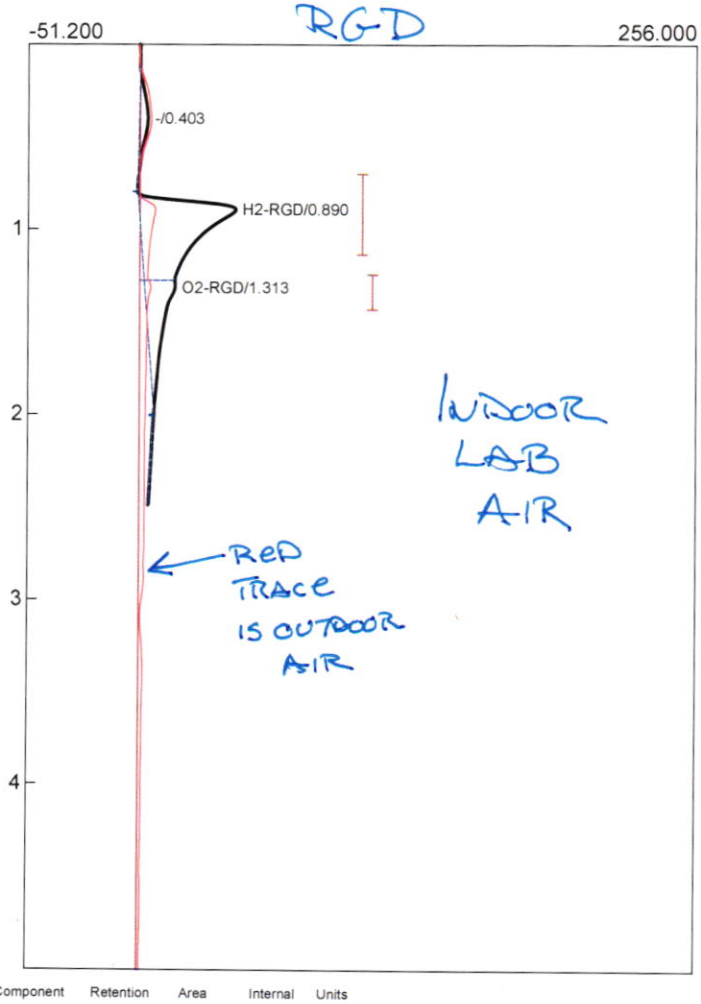
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 15:16:34
Method: 1ml loop PCBF
Description: RGD higain
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=90.0 Base sens=60.0 Min area= 1.00 Standar
Data file: 333calibration928.CHR ()
Sample: Indorr Lab air
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp
50.00	10.000	0.000	50.00

Events:

Time	Event
0.000	ZERO 100
0.020	G ON (Valve1)
0.300	G OFF (Valve1)
2.000	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-RGD	0.890	712.2796	9.9096	ppm
O2-RGD	1.313	266.0810	686.8822	%
		978.3606	696.7919	

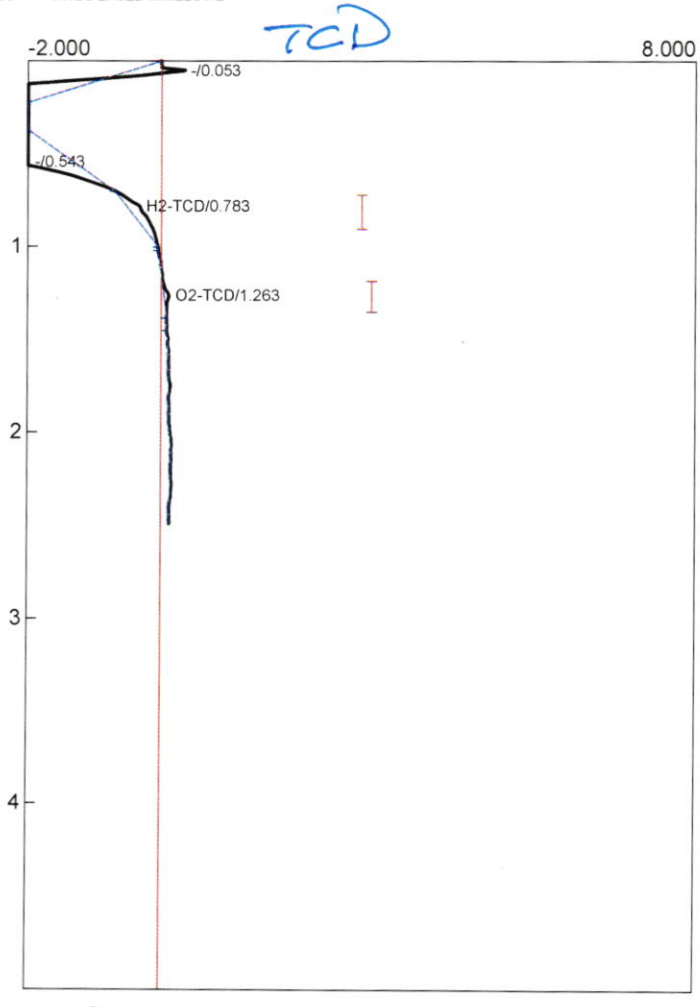
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 15:16:34
Method: 1ml loop PCBF
Description: TCD lowcurrent 100C
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=80.0 Base sens=60.0 Min area= 0.20 Standar
Data file: Cornell-TCD927.CHR ()
Sample: Indorr Lab air
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp

Events:

Time	Event
0.000	ZERO
0.700	INTEG BASED IMMEDIATE
1.000	INTEG BASED IMMEDIATE
5.500	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-TCD	0.783	2.0540	471.3935	ppm
O2-TCD	1.263	0.5280	12.1884	%
		2.5820	483.5819	

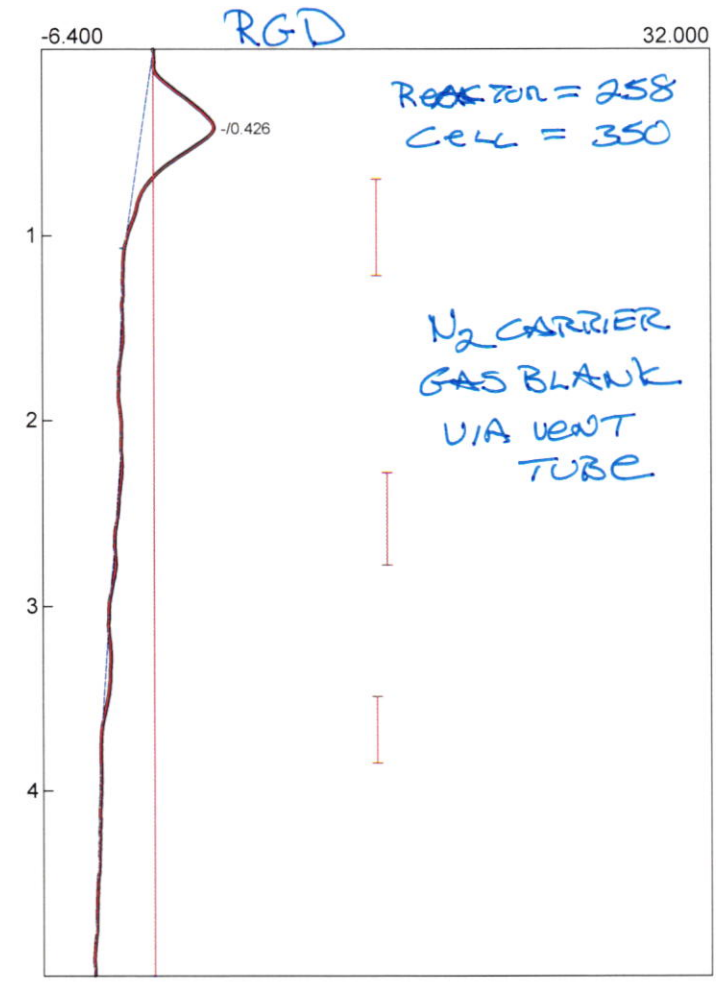
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 12:33:06
Method: 1ml loop PCBF
Description: RGD higain
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=80.0 Base sens=60.0 Min area= 10.00 Standa
Data file: 333calibration919.CHR ()
Sample: N2 carrier gas blank via vent tube
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp
50.00	10.000	0.000	50.00

Events:

Time	Event
0.000	ZERO 100
0.020	G ON (Valve1)
0.300	G OFF (Valve1)
2.000	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-RGD	0.000	0.0000	0.0000	ppm
N2	0.000	0.0000	0.0000	ppm
CO-RGD	0.000	0.0000	0.0000	ppm
		0.0000	0.0000	

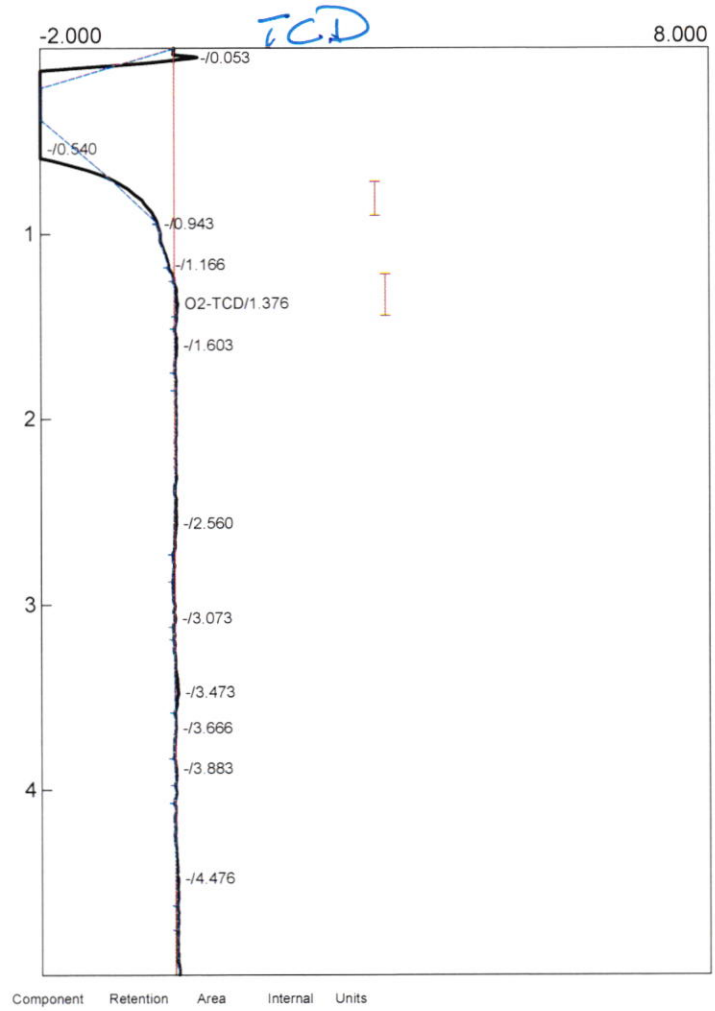
Lab name: SRI Instruments
Client: Caltech
Client ID: N12893
Analysis date: 09/25/2025 12:33:06
Method: 1ml loop PCBF
Description: TCD lowcurrent 100C
Column: 18"HayDPC+6'MS5A
Carrier: N2@45psi
Integration: Peak sens=80.0 Base sens=60.0 Min area= 0.10 Standar
Data file: Cornell-TCD918.CHR ()
Sample: N2 carrier gas blank via vent tube
Comments: RGD reactor=258C cell=350

Temperature program:

Init temp	Hold	Ramp	Final temp

Events:

Time	Event
0.000	ZERO
0.700	INTEG BASED IMMEDIATE
1.000	INTEG BASED IMMEDIATE
5.500	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
H2-TCD	0.000	0.0000	0.0000	ppm
O2-TCD	1.376	0.2514	0.2777	%
		0.2514	0.2777	

PRECOL BACKFLUSH TO VENT
(-) = LOAD
(+) = INJECT
TO POL-PAL
CARRIER TO VALVE TEE
18" HAYESEP-D
12' MS 5A
TCD
DCR
VENT

WARNING: CARRIER FLOW
MUST BE NOT DURING
FIVE POINT BAKE CYCLE.