

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:35:51
 Method: Dual MS5A
 Description: TCD#1 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 10.00 Standar
 Data file: OXFPD-548.CHR ()
 Sample: room air

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:35:51
 Method: Dual MS5A
 Description: TCD#2 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: Argon@20psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standar
 Data file: OXFID-520.chr ()
 Sample: room air

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

Time	Event
0.000	ZERO
0.020	G ON (Valve1Rotate)
0.040	F ON (Valve2Rotate)
0.300	G OFF (Valve1Rotate)
0.350	F OFF (Valve2Rotate)

← F off @ .35

Temperature program:

Init temp	Hold	Ramp	Final temp
0.000			
0.900			

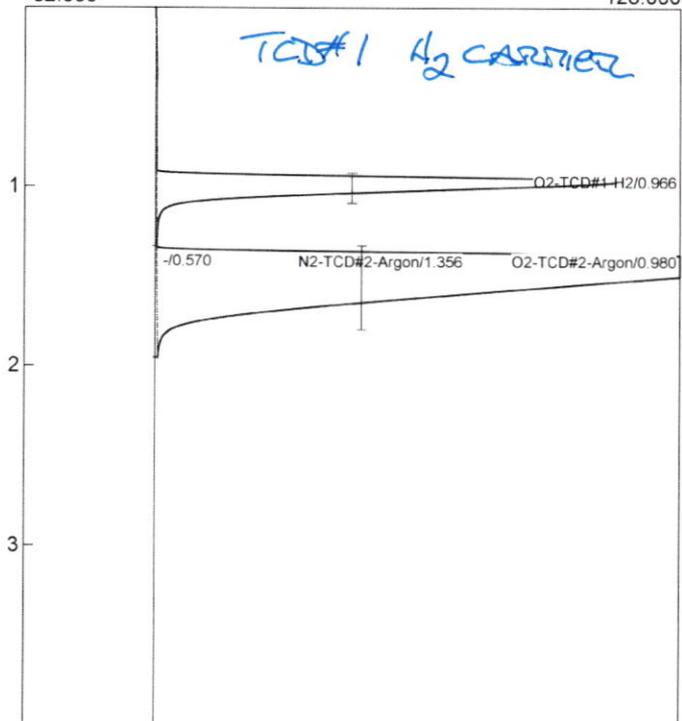
Events:

Time	Event
0.000	ZERO
0.900	INTEG BASED IMMEDIATE

TCD#2 Argon carrier

-32.000 128.000

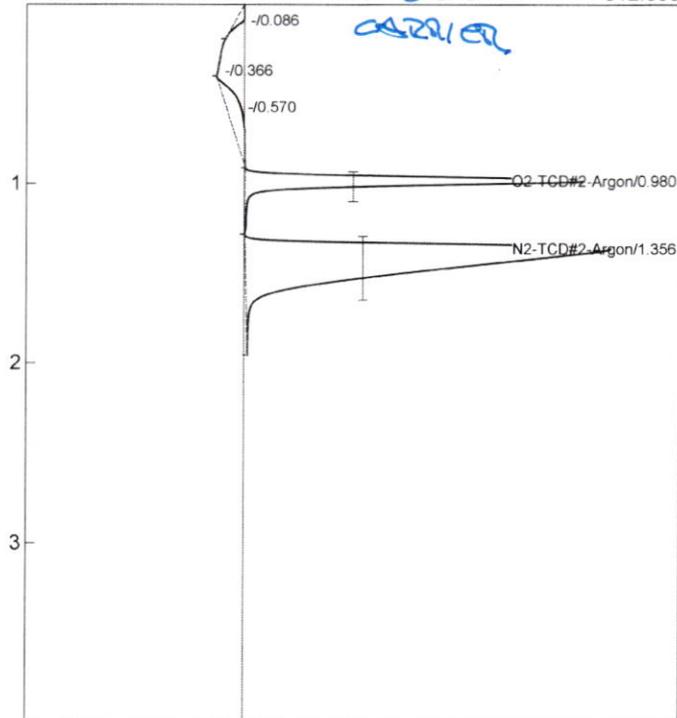
TCD#1 H2 carrier



Component	Retention	Area	Internal	Units
O2-TCD#1-H2	0.966	612.6225	201676.6928	ppm
N2-TCD#1-H2	1.406	2182.8627	789880.4592	ppm
O2-TCD#2-Argon	0.980	1307.9824	203784.3640	ppm
N2-TCD#2-Argon	1.356	4094.6628	777176.0846	ppm

8198.1304 1972517.6006

-256.000 512.000



Component	Retention	Area	Internal	Units
O2-TCD#2-Argon	0.980	1307.9824	203784.3640	ppm
N2-TCD#2-Argon	1.356	4094.6628	777176.0846	ppm
		5402.6452	980960.4486	

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:40:24
 Method: Dual MS5A
 Description: TCD#1 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 10.00 Standard
 Data file: OXFPD-549.CHR ()
 Sample: 10%H2balRoom air

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:40:24
 Method: Dual MS5A
 Description: TCD#2 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standard
 Data file: OXFID-521.chr ()
 Sample: 10%H2balRoom air

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

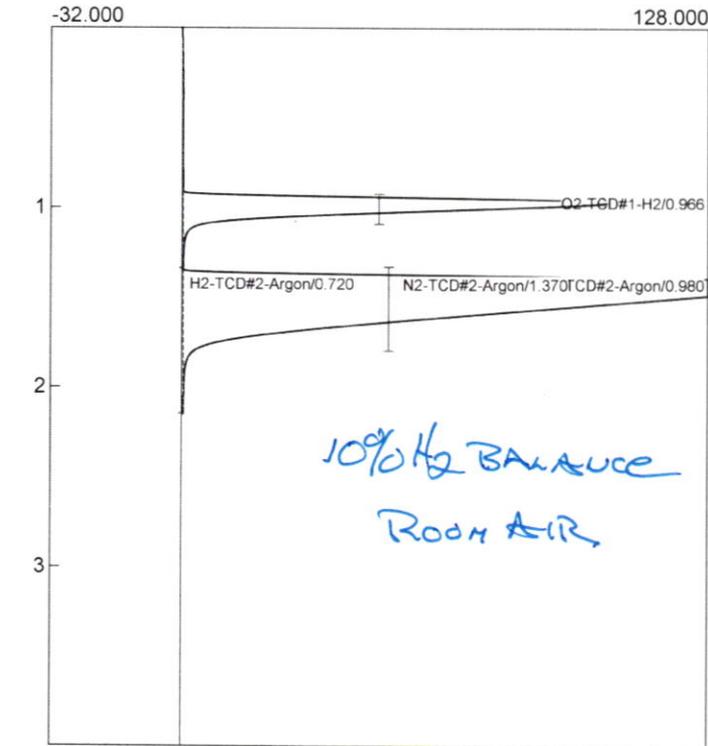
Time	Event
0.000	ZERO
0.020	G ON (Valve1Rotate)
0.040	F ON (Valve2Rotate)
0.300	G OFF (Valve1Rotate)
0.350	F OFF (Valve2Rotate)

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

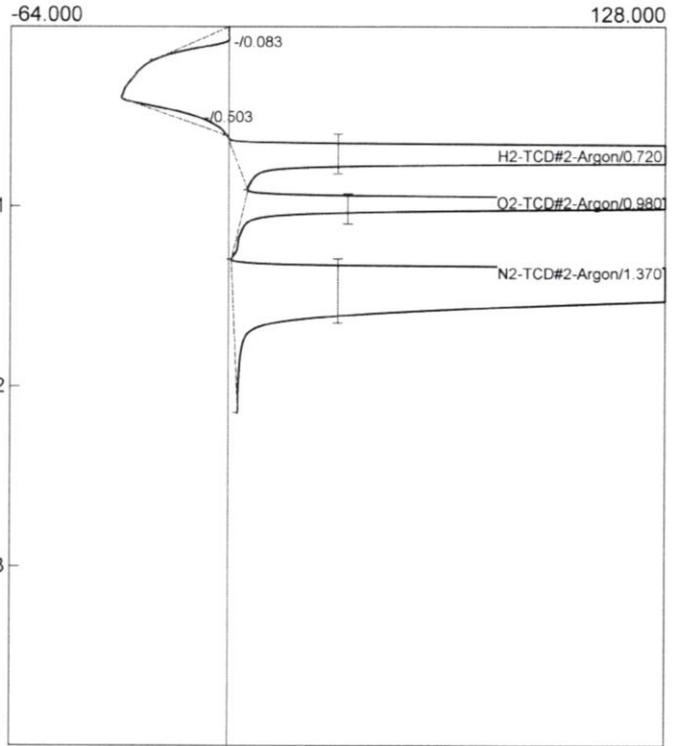
Events:

Time	Event
0.000	ZERO
0.600	INTEG BASED IMMEDIATE
0.900	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
O2-TCD#1-H2	0.966	544.5046	179252.1283	ppm
N2-TCD#1-H2	1.416	1955.1608	707485.3176	ppm
H2-TCD#2-Argon	0.720	5926.3660	100000.0000	ppm
O2-TCD#2-Argon	0.980	1163.9818	181348.9927	ppm
N2-TCD#2-Argon	1.370	3691.8672	700724.5860	ppm

13281.8804 1868811.0246



Component	Retention	Area	Internal	Units
H2-TCD#2-Argon	0.720	5926.3660	100000.0000	ppm
O2-TCD#2-Argon	0.980	1163.9818	181348.9927	ppm
N2-TCD#2-Argon	1.370	3691.8672	700724.5860	ppm
		10782.2150	982073.5788	

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:47:11
 Method: Dual MS5A
 Description: TCD#1 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 10.00 Standard
 Data file: OXFPD-550.CHR ()
 Sample: 90%H2 balRoom air

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:47:11
 Method: Dual MS5A
 Description: TCD#2 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standard
 Data file: OXFID-522.chr ()
 Sample: 90%H2 balRoom air

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

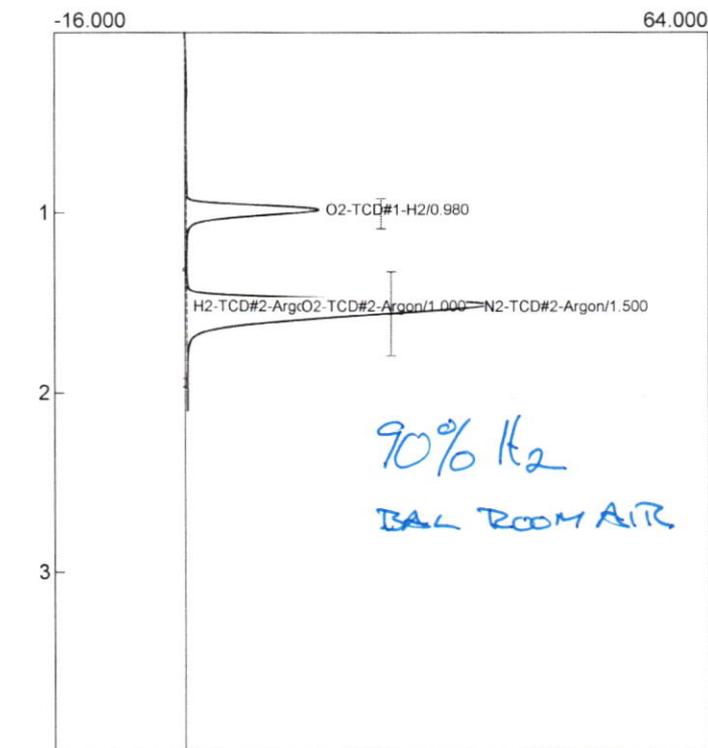
Time	Event
0.000	ZERO
0.020	G ON (Valve1Rotate)
0.040	F ON (Valve2Rotate)
0.300	G OFF (Valve1Rotate)
0.350	F OFF (Valve2Rotate)

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

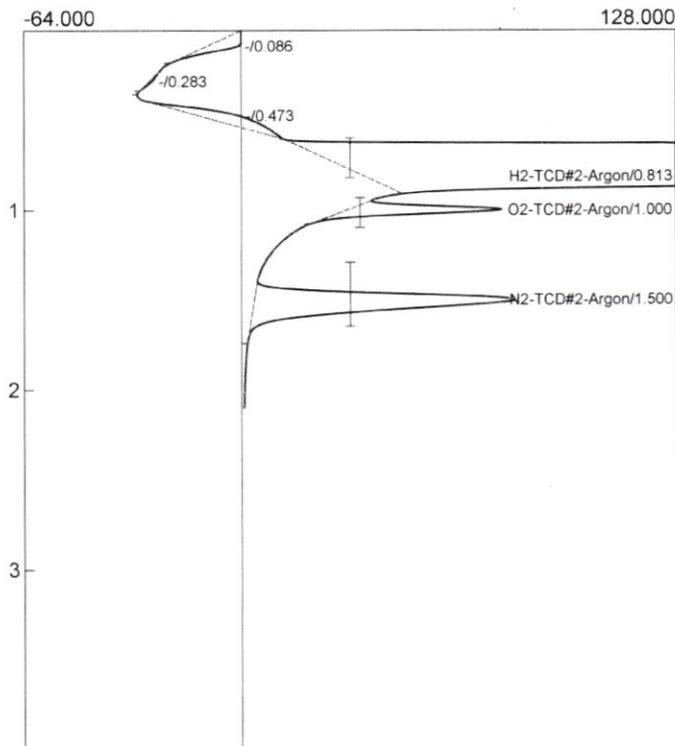
Events:

Time	Event
0.000	ZERO
0.600	INTEG BASED IMMEDIATE
0.900	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
O2-TCD#1-H2	0.980	67.5728	22245.1164	ppm
N2-TCD#1-H2	1.510	252.1658	91247.5338	ppm
H2-TCD#2-Argon	0.813	34737.5695	586152.9561	ppm
O2-TCD#2-Argon	1.000	134.2339	20913.7141	ppm
N2-TCD#2-Argon	1.500	471.3022	89454.2033	ppm

35662.8442 810013.5237



Component	Retention	Area	Internal	Units
H2-TCD#2-Argon	0.813	34737.5695	586152.9561	ppm
O2-TCD#2-Argon	1.000	134.2339	20913.7141	ppm
N2-TCD#2-Argon	1.500	471.3022	89454.2033	ppm
		35343.1056	696520.8735	

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:49:48
 Method: Dual MS5A
 Description: TCD#1 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 10.00 Standar
 Data file: OXFPD-551.CHR ()
 Sample: 100% H2

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:49:48
 Method: Dual MS5A
 Description: TCD#2 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standar
 Data file: OXFID-523.chr ()
 Sample: 100% H2

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

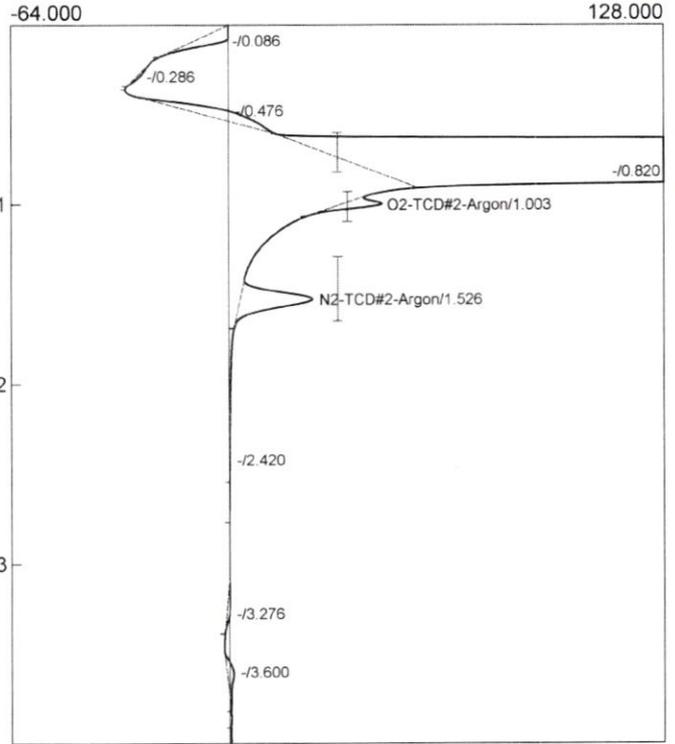
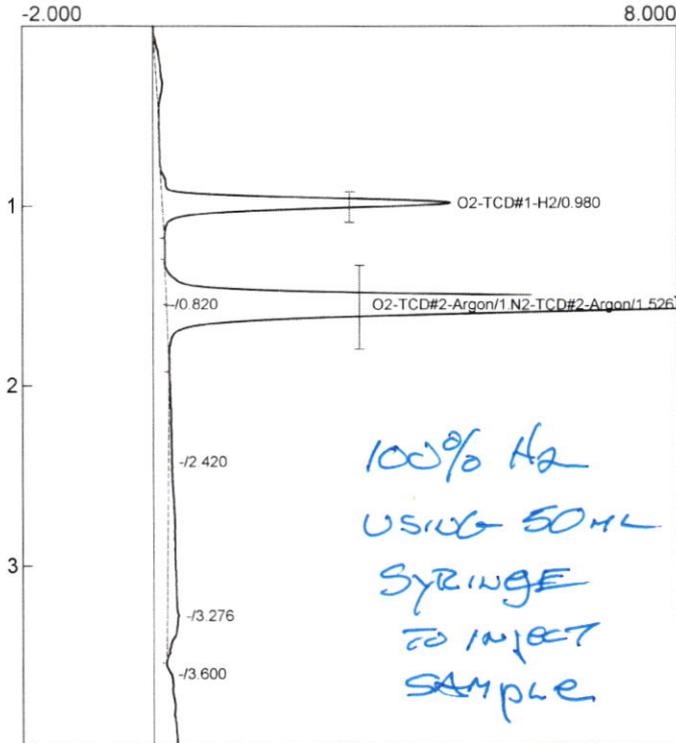
Time	Event
0.000	ZERO
0.020	G ON (Valve1Rotate)
0.040	F ON (Valve2Rotate)
0.300	G OFF (Valve1Rotate)
0.350	F OFF (Valve2Rotate)

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

Time	Event
0.000	ZERO
0.600	INTEG BASED IMMEDIATE
0.900	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
O2-TCD#1-H2	0.980	18.7148	6160.9539	ppm
N2-TCD#1-H2	1.536	68.3948	24749.0216	ppm
H2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
O2-TCD#2-Argon	1.003	34.5250	5379.0136	ppm
N2-TCD#2-Argon	1.526	125.0177	23728.6368	ppm

Component	Retention	Area	Internal	Units
H2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
O2-TCD#2-Argon	1.003	34.5250	5379.0136	ppm
N2-TCD#2-Argon	1.526	125.0177	23728.6368	ppm
		159.5427	29107.6505	

246.6523 60017.6259

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:54:37
 Method: Dual MS5A
 Description: TCD#1 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standard
 Data file: OXFPD-552.CHR ()
 Sample: 100% H2

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:54:37
 Method: Dual MS5A
 Description: TCD#2 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standard
 Data file: OXFID-524.chr ()
 Sample: 100% H2

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

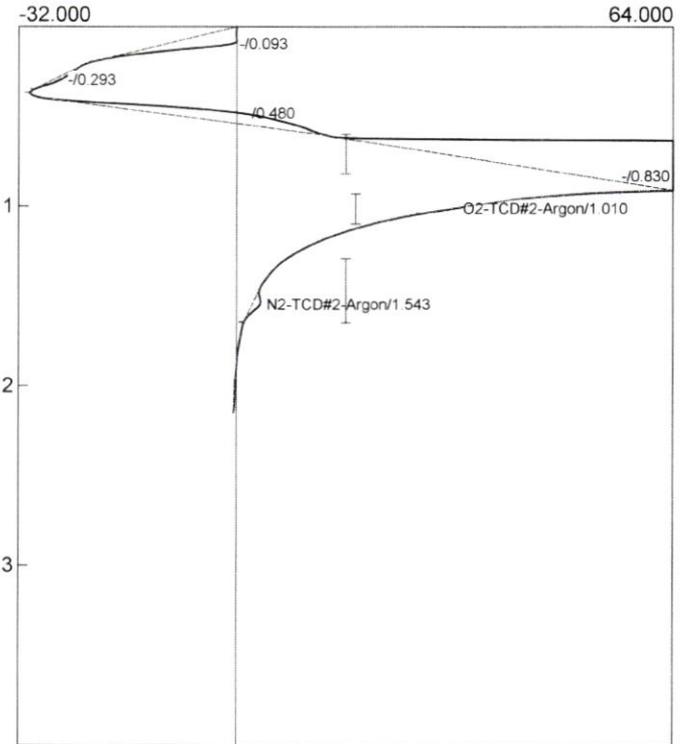
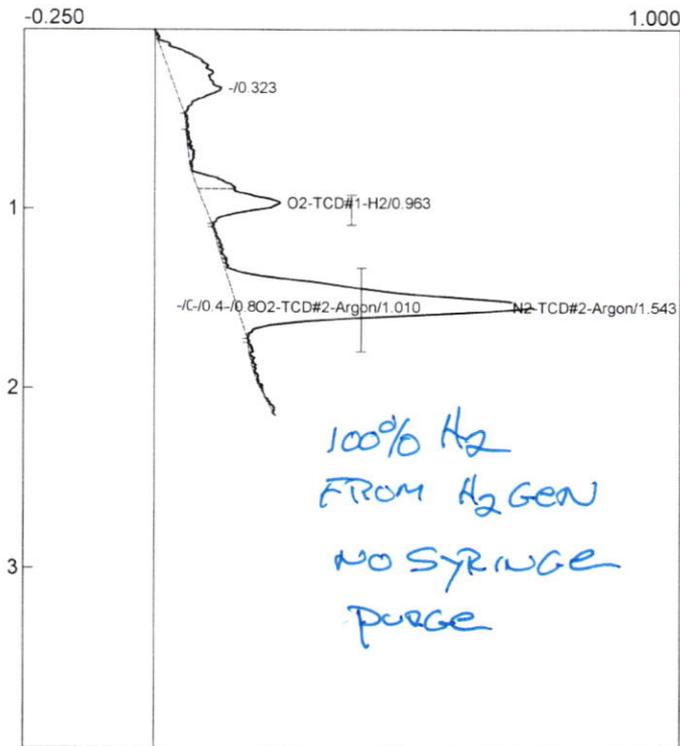
Time	Event
0.000	ZERO
0.020	G ON (Valve1Rotate)
0.040	F ON (Valve2Rotate)
0.300	G OFF (Valve1Rotate)
0.350	F OFF (Valve2Rotate)

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

Time	Event
0.000	ZERO
0.600	INTEG BASED IMMEDIATE
0.900	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
O2-TCD#1-H2	0.963	0.9472	311.8204	ppm
N2-TCD#1-H2	1.536	5.3472	1934.9127	ppm
H2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
O2-TCD#2-Argon	1.010	1.0591	165.0084	ppm
N2-TCD#2-Argon	1.543	5.9030	1120.4025	ppm
		13.2565	3532.1439	

Component	Retention	Area	Internal	Units
H2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
O2-TCD#2-Argon	1.010	1.0591	165.0084	ppm
N2-TCD#2-Argon	1.543	5.9030	1120.4025	ppm
		6.9621	1285.4108	

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:58:37
 Method: Dual MS5A
 Description: TCD#1 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standard
 Data file: OXFPD-553.CHR ()
 Sample: 100% H2

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 11:58:37
 Method: Dual MS5A
 Description: TCD#2 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standard
 Data file: OXFID-525.chr ()
 Sample: 100% H2

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

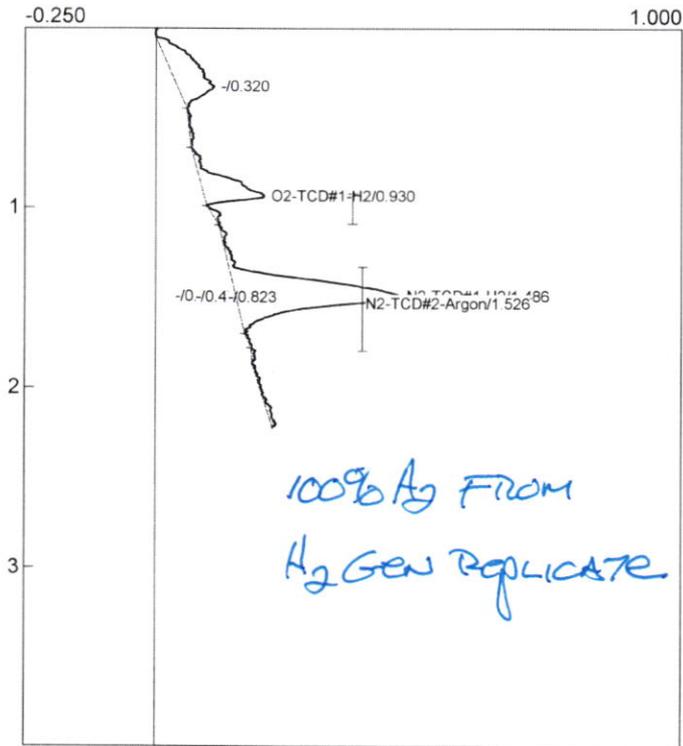
Time	Event
0.000	ZERO
0.020	G ON (Valve1Rotate)
0.040	F ON (Valve2Rotate)
0.300	G OFF (Valve1Rotate)
0.350	F OFF (Valve2Rotate)

Temperature program:

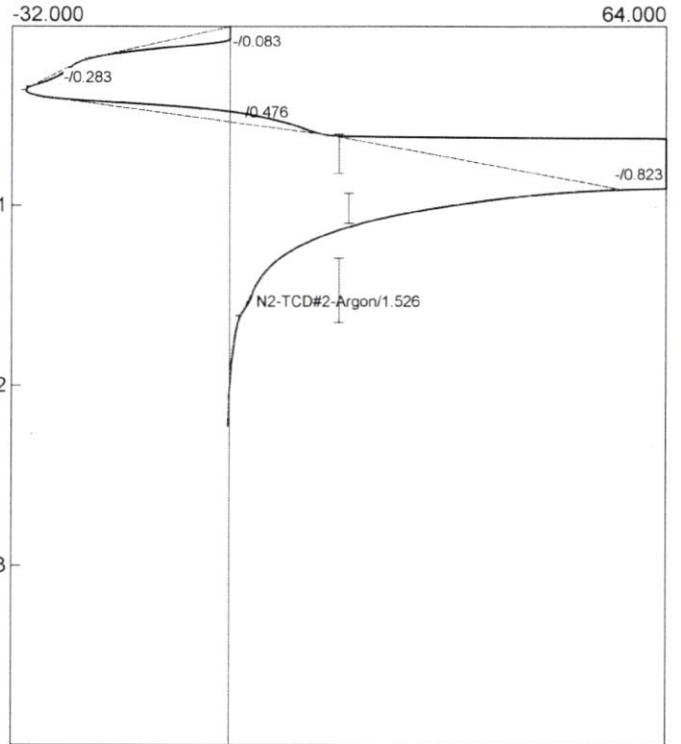
Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

Time	Event
0.000	ZERO
0.600	INTEG BASED IMMEDIATE
0.900	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
O2-TCD#1-H2	0.930	0.8424	277.3200	ppm
N2-TCD#1-H2	1.486	3.0488	1103.2245	ppm
H2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
O2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
N2-TCD#2-Argon	1.526	1.2441	236.1329	ppm
		5.1353	1616.6774	



Component	Retention	Area	Internal	Units
H2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
O2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
N2-TCD#2-Argon	1.526	1.2441	236.1329	ppm
		1.2441	236.1329	

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 12:05:24
 Method: Dual MS5A
 Description: TCD#1 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standard
 Data file: OXFPD-555.CHR ()
 Sample: 100% H2

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 12:05:24
 Method: Dual MS5A
 Description: TCD#2 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standard
 Data file: OXFID-527.chr ()
 Sample: 100% H2

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

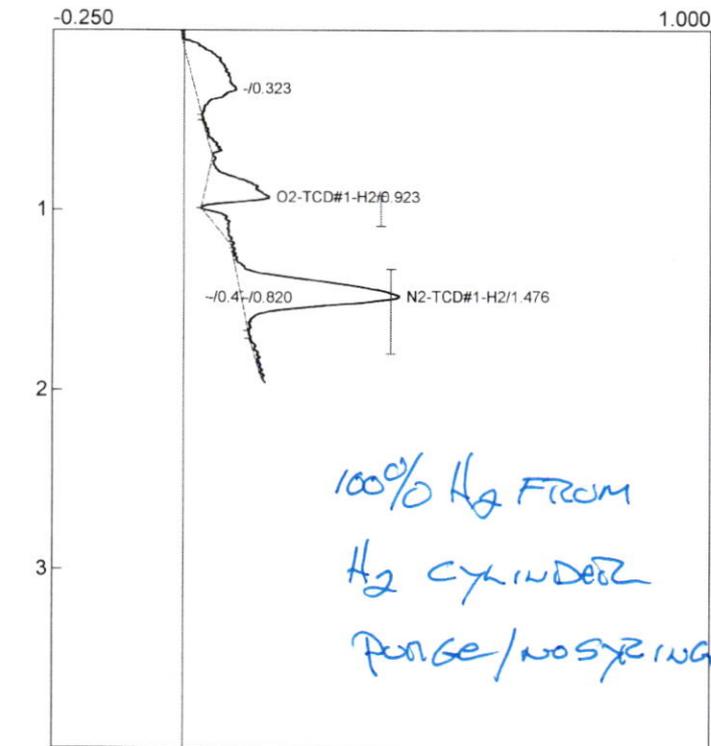
Time	Event
0.000	ZERO
0.020	G ON (Valve1Rotate)
0.040	F ON (Valve2Rotate)
0.300	G OFF (Valve1Rotate)
0.350	F OFF (Valve2Rotate)

Temperature program:

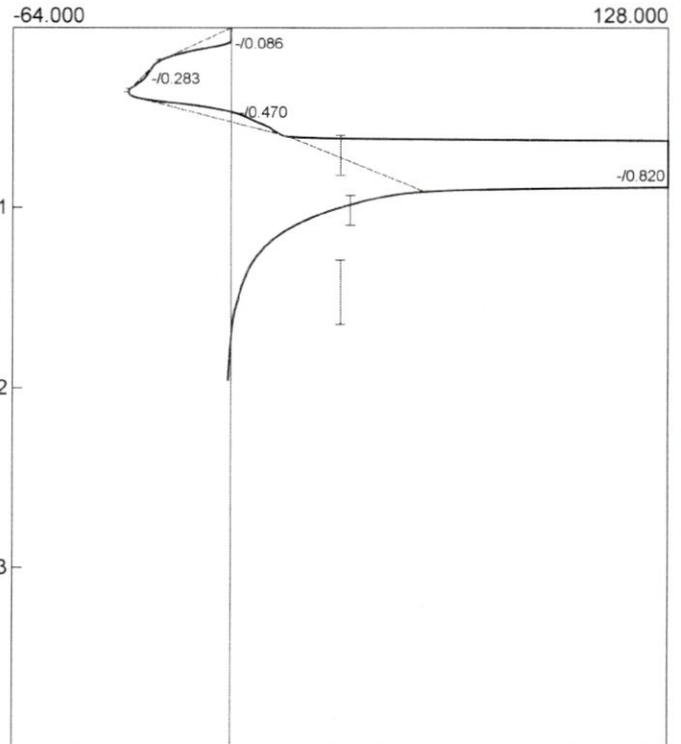
Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

Time	Event
0.000	ZERO
0.600	INTEG BASED IMMEDIATE
0.900	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
O2-TCD#1-H2	0.923	0.9478	312.0179	ppm
N2-TCD#1-H2	1.476	2.5362	953.9230	ppm
H2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
O2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
N2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
		3.5840	1265.9408	



Component	Retention	Area	Internal	Units
H2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
O2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
N2-TCD#2-Argon	0.000	0.0000	0.0000	ppm
		0.0000	0.0000	

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 12:13:43
 Method: Dual MS5A
 Description: TCD#1 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standarc
 Data file: OXFPD-557.CHR ()
 Sample: Room air H2 enriched

Lab name: SRI Instruments
 Client: Advanced Ionics
 Client ID: N12878
 Analysis date: 06/18/2025 12:13:43
 Method: Dual MS5A
 Description: TCD#2 lowcurrent 100C
 Column: 18" HayD+6' MS5A
 Carrier: H2@C1=10psi
 Integration: Peak sens=70.0 Base sens=60.0 Min area= 0.50 Standarc
 Data file: OXFID-529.chr ()
 Sample: Room air H2 enriched

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

Events:

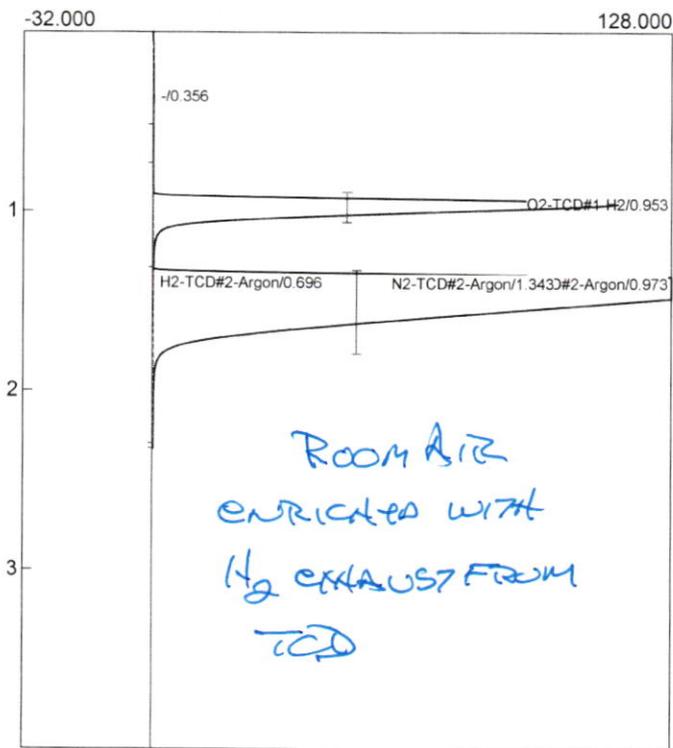
Time	Event
0.000	ZERO
0.020	G ON (Valve1Rotate)
0.040	F ON (Valve2Rotate)
0.300	G OFF (Valve1Rotate)
0.350	F OFF (Valve2Rotate)

Temperature program:

Init temp	Hold	Ramp	Final temp
70.00	10.000	0.000	70.00

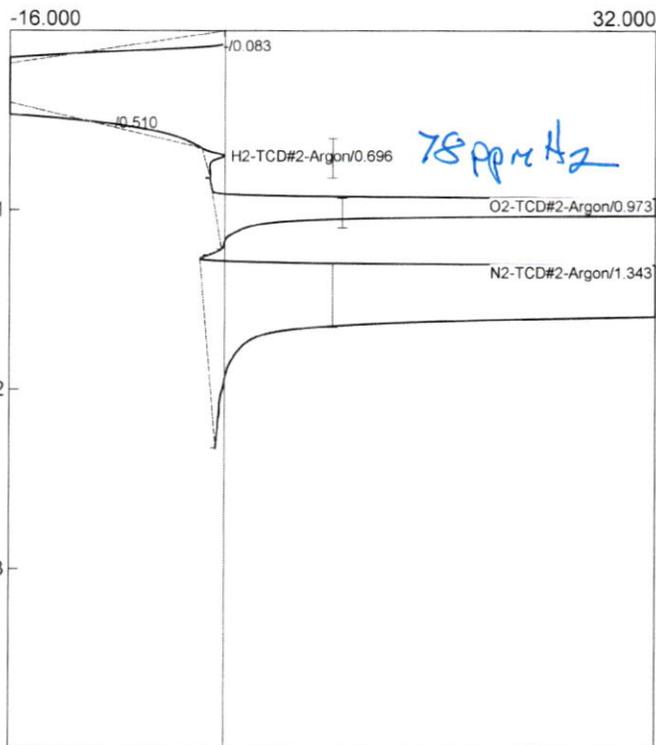
Events:

Time	Event
0.000	ZERO
0.650	INTEG BASED IMMEDIATE
0.800	INTEG BASED IMMEDIATE
1.200	INTEG BASED IMMEDIATE



Component	Retention	Area	Internal	Units
O2-TCD#1-H2	0.953	614.5394	202307.7405	ppm
N2-TCD#1-H2	1.390	2211.1090	800101.5329	ppm
H2-TCD#2-Argon	0.696	4.6362	78.2301	ppm
O2-TCD#2-Argon	0.973	1314.6346	204820.7803	ppm
N2-TCD#2-Argon	1.343	4107.8110	779671.6422	ppm

8252.7302 1986979.9260



Component	Retention	Area	Internal	Units
H2-TCD#2-Argon	0.696	4.6362	78.2301	ppm
O2-TCD#2-Argon	0.973	1314.6346	204820.7803	ppm
N2-TCD#2-Argon	1.343	4107.8110	779671.6422	ppm

5427.0818 984570.6525