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1.- REGASIFICATION PLANTS

1.1. BILBAO PLANT – BBG

Date Period	Maintenance	Limitations	Refer. Numb.
From 2nd to 4th march	Corrective maintenance on VAM valve	Corrective maintenance on VAM valve. Without affection. If it is necessary, they would use the VCS. Completed	270
13th May	Preventive Maintenance Secondary Pump Safety Valves	Maximum production 540.000 Nm ³ /h, from 6 a.m. to 2 p.m. Completed	294
May	Preventive inspection of the High Voltage installation	No emission limitations. Completed	308
29th July 4 hours	Annual preventive review of the relicuador	From 8 a.m. to 12 p.m. Maximum production 560.000 Nm ³ /h. Completed	151
26th August	Maintenance of the sea water catchment system CCGN BBE	Regasification by submerged combustion vaporizer. Maximum production 200.000 Nm ³ /h, from 9 a.m. to 2 p.m. Completed.	329
From 11th to 24th September	Maintenance, revision and cleaning of the sea water catchment system.	Regasification by submerged combustion vaporizer. Maximum production 200.000 Nm ³ /h. No unloading of LNG carriers. Dates coincide with the stop of the CCGN BBE. Completed	150
Throughout the year	Preventive maintenance of unloading arms	No emission limitations. It will be coordinated to prioritize loading or unloading scheduled operations of vessels. Completed.	152



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1.- REGASIFICATION PLANTS

1.1. BILBAO PLANT – BBG

Date Period	Maintenance	Limitations	Refer. Numb.
From 7th to 11th June	Preventive maintenance of boil-off compressors GB-103 C	No emission limitations. It will be coordinated to prioritize loading or unloading scheduled operations of vessels. Completed.	153
Throughout the year	Preventive maintenance at LNG trucks loading dock	No emission limitations. It will be coordinated to prioritize the LNG trucks operations. Completed.	154
Throughout the year	Preventive maintenance secondary pumps	No emission limitations. Completed.	309
Throughout the year	Preventive maintenance primary pumps	No emission limitations. Completed.	155
From 11th to 24th September	Vaporizers coating maintenance	No emission limitations. It will be coordinated to prioritize scheduled productions. If it's necessary, the submerged combustion vaporizer will be used. Completed.	156
16th November	Maintenance of the sea water catchment system CCGN BBE	From 10 a.m to 6 p.m. Regasification by submerged combustion vaporizer. Maximum production 180.000 Nm3/h. Completed.	337

1.- REGASIFICATION PLANTS

1.2. MUGARDOS PLANT – REGANOSA

Date Period	Maintenance	Limitations	Refer. Numb.
24th and 25th February	Maintenance at LNG trucks loading dock	One of the two bays will stand inoperative. Completed	132
From 22th February to 13th May	Upgrade L-A UM Guitiriz turbine	L-A inoperative. Completed	262
23th March	ORV E410 Inspection	One ORV will stand inoperative from 7 a.m. to 7 p.m. Maximum emission in that time slot aprox. 210.000 Nm3/h. Completed.	134
24th March	ORV E420 Inspection	One ORV will stand inoperative from 7 a.m. to 7 p.m. Maximum emission in that time slot aprox. 210.000 Nm3/h. Completed.	135
28th and 29th April	Maintenance at LNG trucks loading dock	One day; from 06:00 a.m. to 3:00 p.m.; during this time the two bays will stand inoperative. Completed.	133
18th May	ORV E410 Inspection	One ORV will stand inoperative from 7 a.m. to 7 p.m. Maximum emission in that time slot aprox. 210.000 Nm3/h. Completed.	137
19th May	ORV E420 Inspection	One ORV will stand inoperative from 7 a.m. to 7 p.m. Maximum emission in that time slot aprox. 210.000 Nm3/h. Completed.	138
19th and 20th May	Maintenance at LNG trucks loading dock	One day; from 06:00 a.m. to 3:00 p.m.; during this time the two bays will stand inoperative. Completed.	136

1.- REGASIFICATION PLANTS

1.2. MUGARDOS PLANT – REGANOSA

Date Period	Maintenance	Limitations	Refer. Numb.
11th June	Review of power lines.	From 7 a.m. to 3 p.m. Maximum emission in that time slot aprox. 210.000 Nm3/h. Completed.	304
From 15th to 17th June	Quarterly maintenance of unloading arms	Without LNG loading/unloading. Completed	305
16th and 17th June	Maintenance at LNG trucks loading dock	One day, from 06:00 a.m. to 3 p.m.; during this time one of the two bays will stand inoperative. Completed.	141
From 5th July to 1st August	Predictive maintenance of secondary plumb	Maximum emission aprox. 210.000 Nm3/h. Completed.	315
From 18th to 22th July	Predictive maintenance of unloading arms	Without LNG loading/unloading. Completed.	306
From 7th to 13th August	Hydraulic sistem of unloading arms maintenance	Without LNG loading/unloading. Completed.	312
From 2nd to 6th August	Seawater system review Safety ties test Maintenance of power supply line	Plant stops for 12 hours_day. Minimum emission during production hours: aprox. 210.000 Nm3/h. Completed.	142
From 1st to 15th October	SCV inspection	SCV legal inspection. 2 weeks. During this period it will occur with the ORVs. Completed.	140

1.- REGASIFICATION PLANTS

1.2. MUGARDOS PLANT – REGANOSA

Date Period	Maintenance	Limitations	Refer. Numb.
2nd and 3rd August	Maintenance at LNG trucks loading dock	From 07 a.m. to 07 p.m.; during this time the two bays will stand inoperative. Completed.	143
28th August	Maintenance at LNG trucks loading dock	From 09:30 a.m. to 3:00 p.m.; during this time the two bays will stand inoperative. Completed	144
From 15th to 20th September	Preventive Maintenance of unloading arms	Without LNG loading/unloading. Completed.	314
19th October	ORV E410 Inspection	One ORV will stand inoperative from 7 a.m. to 7 p.m. Maximum emission in that time slot aprox. 210.000 Nm ³ /h. Completed.	145
20th October	ORV E420 Inspection	One ORV will stand inoperative from 7 a.m. to 7 p.m. Maximum emission in that time slot aprox. 210.000 Nm ³ /h. Completed.	146
From 25th to 31st October.	Works to adapt the jetty for the supply of LNG to small-scale ships	Without LNG loading/unloading. Completed.	297
13th and 14th October	Maintenance at LNG trucks loading dock	From 5 p.m. 10/13 to 7 a.m. 10/14; during this time the two bays will stand inoperative. Completed.	147

1.- REGASIFICATION PLANTS

1.2. MUGARDOS PLANT – REGANOSA

Date Period	Maintenance	Limitations	Refer. Numb.
11th November	Maintenance at LNG trucks loading dock	One of the two bays will stand inoperative, from 6 a.m. to 10 a.m. Completed.	298
21st and 22th December	Maintenance at LNG trucks loading dock	From 06 a.m. to 3 p.m.; during this time one of the two bays will stand inoperative. Completed	148
27th and 28th October	Maintenance at LNG trucks loading dock	One of the two bays will stand inoperative, from 6 a.m. to 3 p.m. Completed.	149
7th September	Maintenance at LNG trucks loading dock	From 9:30 a.m. to 3 p.m.; during this time the two bays will stand inoperative. Completed	139
15th September	Maintenance at LNG trucks loading dock	From 10 a.m. to 3 p.m.; during this time the two bays will stand inoperative. Completed	335
From 19th December 2021 to the end of January	Maintenance works	Maximum emission aprox. 210.000 Nm ³ /h.	231



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1.- REGASIFICATION PLANTS

1.3. SAGUNTO PLANT – SAGGAS

Date Period	Maintenance	Limitations	Refer. Numb.
From 2nd to 20th May	Annual unloading arms revision	Loading/unloading ships unavailable. It will be coordinated to prioritize loading or unloading scheduled operations of vessels. Completed.	157
17th May	Torch maintenance	From 8 a.m. to 3 p.m. Emission corresponding to the compressor sent to the grid. Loading/unloading ships unavailable. Completed.	289
From 13th to 28th September	Maintenance of dock protection elements and SeaTechnik cabinet update.	Loading/unloading ships unavailable. It will be coordinated to prioritize loading or unloading scheduled operations of vessels. Completed.	158
24th November	Periodic Tests ESD Matrix	From 8 a.m. to 2 p.m. without LNG loading/unloading; without LNG trucks loading; without emission. Completed.	159
3rd quarter Two months	Overhaul unloading arm 10-J-01B	Unloading rate limited to 8.000 m3gnl / h. Completed	160
3rd quarter	Cleaning of catchment pool	2 discontinuous days maximum emission 400.000 Nm3/h. During a month maximum emission 800.000 Nm3/h. Completed.	161
24th November	Control System Update Drivers	From 8 a.m. to 6 p.m. without LNG loading/unloading; without LNG trucks loading; without emission. Completed.	162



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1.- PLANTAS DE REGASIFICACIÓN

1.3. PLANTA SAGUNTO - SAGGAS

Fecha Periodo	Mantenimiento	Implicaciones Operativas	Nº Ref.
3rd quarter Two months	Overhaul unloading arm 10-J-02	Unloading rate limited to 8.000 m3gnl / h Completed.	163
From 31st October to 15th November	LNG trucks loading dock A, scale failure	LNG trucks loading dock A unavailable LNG trucks loading dock B operative Completed.	334

1.- REGASIFICATION PLANTS

1.4. BARCELONA PLANT – ENAGAS

Date Period	Maintenance	Limitations	Refer. Numb.
From 24th May 2020 to 13th July 2021	Compressor Replacement 35 Bar network C2002A with the new C6000	No reloading and cooling of L and XL ships. Completed.	165
From 1st June 2020 to 3rd June 2021	Revamping SUB 3	Maximum emission 1.500.000 Nm3/h. Intermittent affection with dates that will be informed in advance. Completed.	166
From 15th to 30th March	Pool cleaning Nº 3 South	Maximum emission 1.800.000 Nm3/h. Completed	169
From 20th to 27th March.	Replacement of the MOV 6010 Seawater Circuit Valve	Maximum emission 1.500.000 Nm3/h. Completed.	271
10th and 11th August	Seawater filter replacement C6000	Out of service the refrigeration line of b.o.g. compressors. Minimum emission 300.000 Nm3/h. Completed	264
From 15th to 25th May	Plant outlet pressure controlling valve replacement to R72: PIC 2261.2 (back up)	Duration: 7 days. Maximum emission 1.500.000 Nm3/h. Completed.	167
From 24th April to 1st May	Replacement of MOV 3916 water inlet valve to E2200 E (ORV)	Maximum emission 1.050.000 Nm3/h. Completed.	168
From 20th to 22th April	Lines isolation works and civil works of the C LNG trucks loading dock	Without reserve LNG trucks loading dock; 2 LNG trucks loading dock available. (04/20, from 8:00 a.m. to 6:00 p.m.; 4/21, from 8:00 a.m. to 11:59 p.m.; 04/22, from 00:00 a.m. to 6:00 p.m.). Completed.	278

1.- REGASIFICATION PLANTS

1.4. BARCELONA PLANT – ENAGAS

Date Period	Maintenance	Limitations	Refer. Numb.
From 17th May to 3rd June	Pool cleaning Nº 2	Duration: 18 days. Maximum emission 1.800.000 Nm3/h. Completed.	174
From 25th September to 16th October	Pool cleaning Nº 5	Maximum emission 1.500.000 Nm3/h. Completed.	178
From 5th to 12th June	Seawater line expansion joint repair PISC 3	Maximum emission 1.500.000 Nm3/h. Completed.	303
From 25th September to 2nd October	Replacement of water inlet valve to E2200 H	Maximum emission 1.050.000 Nm3/h. Completed.	317
From 14th July to 12th November	Resolution of incidents in the C6000 compressor	Minimum emission 300.000 Nm3/h during loading and unloading of L and XL vessels in berth A263. Completed.	323
21st and 22th October	Blind disc removal from Agua Mar section to E2200 HI	Maximum emission 450.000 Nm3/h. Completed	340
From 16th to 19th November	Seawater catchment collector flange repair number 3	Maximum emission 1.050.000 Nm3/h. Completed.	342



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1.- REGASIFICATION PLANTS

1.5. CARTAGENA PLANT – ENAGAS

Date Period	Maintenance	Limitations	Refer. Numb.
From 11th May 2020 to January 2022	40 M dock arms repair and completion of bunkering installation	Unavailable 40 M dock	265
9th March	LNG trucks loading dock PLC program update	Without LNG trucks loading from 09:00 a.m. to 01:00 p.m. Completed	180
From 1st to 5th March	seawater filter maintenance	Duration: 5 days. Maximum emission 900.000 Nm3/h. Completed	183
From 7th to 9th April	LNG trucks loading dock PLC program update and preventive maintenance	Without reserve LNG trucks loading dock (2 LNG trucks loading dock available) from 7:00 a.m. to 3:00 p.m. Completed.	279
From 8th to 21st June	Seawater return: Shipment / Return of water to / from CTCC: Phase 1 Collector A	Maximum emission 750.000 Nm3/h. Completed.	184
F1: From 30th August to 3rd September F2: From 13th to 17th September F3: From 22th to 24th September F4: 2nd and 3rd November F5: 22th December	Loop 3: Extension and adaptation of the Rotork actuator control loop system.	Whithout loading/unloading of vessels at both berths. Maximum emission 300.000 Nm3/h. Completed	185



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1.- REGASIFICATION PLANTS

1.5. CARTAGENA PLANT – ENAGAS

Date Period	Maintenance	Limitations	Refer. Numb.
From 19th to 23th June	263 M dock arms repair: change of hydraulic control unit and preventive maintenance. Phase 1	Without ship unloading. It will be coordinated to prioritize loading or unloading scheduled operations of vessels. Completed.	186
From 30th June to 4th July	263 M dock arms repair: change of hydraulic control unit and preventive maintenance. Phase 1	Without ship unloading. It will be coordinated to prioritize loading or unloading scheduled operations of vessels. Completed.	318
From 17th to 21st May	Unloading arms maintenance	Unloading ships unavailable. It will be coordinated to prioritize loading or unloading scheduled operations of vessels. Completed.	300
23 th and 24 th June	Emergency electric generator tests (Deutz groups)	From 07:00 a.m. to 03:00 p.m. Minimum emission 300.000 Nm3/h. Completed.	181
From 22th June to 2nd July	Seawater return: Shipment / Return of water to / from CTCC: Phase 2 Collector B	Maximum emission 1.150.000 Nm3/h. Completed.	188
From 26th to 30th April	Vaporizers and ERM maintenance	Maximum emission 1.050.000 Nm3/h. Completed	189
From 6th to 9th September	Compressors GB-223 maintenance	Without ship unloading_loading. Minimum emission 150.000 Nm3/h. Completed.	322



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1.- REGASIFICATION PLANTS

1.5. CARTAGENA PLANT – ENAGAS

Date Period	Maintenance	Limitations	Refer. Numb.
From 22th to 24th September	Cleaning seawater collectors	Without loading/unloading of vessels at both berths. Maximum emission 300.000 Nm3/h. Completed	337
From November 1, 2020 to March 2022	Adaptation and Improvement of Escombreras Dock. Port of Cartagena.	Specific periods of unavailability of the 40M dock (without loading / unloading) to be defined by the Port of Cartagena.	194
28th September	Plant shutdown due to programmed power supply cut-off (supplier company intervention)	From 8 a.m. to 4 p.m. Without emission during the first and last hour. Rest of hours approx. 100,000 Nm3 / h. Without ship unloading_loading. Completed.	331
13th May	LNG trucks loading dock preventive maintenance	From 6 a.m. to 2 p.m. Without LNG trucks loading. Completed.	284
From 3rd to 16th July	Seawater return: Shipment / Return of water to / from CTCC: Phase 2. Vaporizers entry intervention	From 5th to 9th, and from 14th to 16th July, maximum emission 450.000 Nm3/h. Rest of period, emission max. 900.000 Nm3/h. Completed.	293
From 22th to 26th November	Substitution of the Vessel Approach System.	Without loading / unloading of ships. Completed	332
15th and 16th December	Replacing the claws of the A263 Dock Arm + solenoid valve revision	Unavailable dock A263 Without loading / unloading of ships. Completed	347

1.- REGASIFICATION PLANTS

1.6. HUELVA PLANT – ENAGAS

Date Period	Maintenance	Limitations	Refer. Numb.
Fron 25th January to 3rd February	Renewal of electrical panels and switches in Substation I, II and III.	Maximum emission 1.050.000 Nm3/h. Completed.	196
7th April	LNG trucks loading dock software update.	Unavailable LNG trucks loading dock from 10:30 a.m. to 11:30 a.m. Completed.	266
19th June	Replacement of automatic valve FV-2111 of the LNG trucks loading dock "B"	From 00:00 h. to 24:00 h. Unavailable LNG trucks loading dock. Completed.	197
From 27th March to 9th April	Bunkering interconnections.	No ship unloading. No small scale charges. It will adapt to dates without scheduled downloads. Completed.	198
From 8th to 13th June	Cleaning of emissary I and corrective repair of the crack in the collector	Maximum emission 1.050.000 Nm3/h. Completed.	199
From 14th to 16th September	Cleaning of emissary II	Maximum emission 650.000 Nm3/h. Completed	200



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1.- REGASIFICATION PLANTS

1.6. HUELVA PLANT – ENAGAS

Date Period	Maintenance	Limitations	Refer. Numb.
9th September	Cleaning of emissary III	Maximum emission 1.050.000 Nm3/h. Completed.	201
From 19th April to 2nd May	Sub I electrical panel renovation. Work on electrical panels NC-101	GB-103-A compressor unavailable. LNG cargo flow would be reduced to 2,800 / 3,000 m3 / h maximum. It doesn't affect downloads. Completed.	202
12th April (14 hrs) 27th April (8 hrs)	Sea water circuit I repair	Maximum emission 1.050.000 Nm3/h. Completed.	285
4 to 8/10 2 to 6/11 11/28 to 12/4	Project to improve maritime civil works and dock hooks	No loading / unloading of ships. Completed	336
From 10/5/2021 to 04/30/2022	Small scale maritime civil works	Barge / feeder loading availability depending on its configuration, upon request.	339

2.- TRANSPORT PIPELINES - DISTRIBUTION NETWORKS

2.1. TRANSPORT PIPELINES

Date Period	Maintenance	Limitations	Refer. Numb.
From 08th to 10th January	Repair pore in gas pipeline in section 10 "between pos. D15.02 Sariego and pos. D15.03 Villaviciosa.	Plidco welding repair. No impact on customers. Control of the pressure of the section during the works. Completed.	203
9th June	Pos. 20.05 Altorricón (Huesca): HV-7 valve replacement	Duration: 1 day. Redexis delivery. Domestic consumption is supplied with hoses. It is necessary to coordinate with the Industrial Client its stop during the works. Completed.	204
From 26th March to 7th April	Repair of defects in section 26 "pos. 30A Calahorra- pos. 30 Aldeanueva de Ebro	Temporary repair with plidco. No impact on customers. Control of the pressure of the section during the works. Completed.	280
From 12th to 14th May	Repair of defects in section 26 "pos. 30A Calahorra- pos. 30 Aldeanueva de Ebro	Definitive repair. No impact on customers. Control of the pressure of the section during the works. Completed	290

2.- TRANSPORT PIPELINES - DISTRIBUTION NETWORKS

2.2. DISTRIBUTION NETWORKS

Date Period	Maintenance	Limitations	Refer. Numb.
From 17th to 24th August	Valve replacement in network. Nedgia. Position Network. R06 Almazán	Precise shut-off of ERM outlet valve. Dates coincide with the customer's scheduled stop. Completed.	327
September November	Nedgia intervention in ERM "Caja Mágica" knot (Head position B22.01 Getafe)	The contribution in other ERMs head to the distribution network of Nedgia is reorganized. Completed.	333
Throughout the year	Inlet valve Maintenance to ERM Torrejón I. Madrileña Red de Gas.	One week. Without any planned limitation. Completed	208
Throughout the year	Valve Maintenance on RAB-00. Nedgia. EM-14A position network	15 days (approx.). Without any planned limitation. Completed.	210
From 11th to 15th October	ERP-07-01 Inquitasa. Nedgia. 12 (EM-07) position network	Without any planned limitation. Completed.	211

2.- OPERACIONES EN TRANSPORTE - DISTRIBUCION

2.2. OPERACIONES EN DISTRIBUCIÓN

Fecha Periodo	Mantenimiento	Implicaciones Operativas	Nº Ref.
November 2 weeks	Redexis: load welding in ERM distribution network pos. 15.31 Los Beatos	Without affection. Load welding of the accessories for the insertion of the ERM G1000 in the MOP 16 network for the SABIC industrial complex. Completed.	343
November 2 weeks	Redexis: load welding in ERM distribution network pos. 15.32 Valle de Escombreras.	Without affection. Load welding of the load tap tee with full circular reinforcement for the new MOP 59 secondary transport for the Ecocarburantes and Repsol industrial complexes. Completed.	344



2.- TRANSPORT PIPELINES - DISTRIBUTION NETWORKS

2.3. COMPRESSION STATIONS

Date Period	Maintenance	Limitations	Refer. Numb.
3rd February	EC Lumbier. Venting recovery system. Phase 1	EC Lumbier unavailable. Completed.	263
8th and 9th March	EC Lumbier. Venting recovery system. Phase 2	EC Lumbier unavailable or without reserve TC. Completed.	267
From 10th to 26th May	EC Lumbier. Venting recovery system. Phase 3	Without any planned limitation. Completed	292
From 16th November to 16th December	EC Villar de Arnedo: TC-103. Replacement of the seals. Resolution to high machine vibrations.	TC-103 unavailable. Two TCs available. Completed.	215

2.- TRANSPORT PIPELINES - DISTRIBUTION NETWORKS

2.4. IN LINE INSPECTIONS (ILI)

Date Period	Maintenance	Limitations	Refer. Numb.
4th and 9th February	Yela - Algete 26": In Line Inspection (ILI)	Optimum speed 1 - 3 m/s. Completed	216
From 15th to 18th February	Salsadella - Puzol 26": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. Completed	217
22th and 23th February	Sentmenat - San Adrià del Besós 26": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. Linked to the consumption of CCGN of the route. Completed	218
From 2nd to 5th March	Castelnou - Tivissa 26": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. Completed	219
From 9th to 11th March	Pedrola - Villar de Arnedo 26": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. Linked to the consumption of CCGN of the route. Completed.	220
From 5th to 9th April	Burgos - Villapresente 16": In Line Inspection (ILI). Phase 1.	Optimum speed 1 - 3 m/s. Completed.	222
From 8th to 12th November	Campo del Gibraltar gas pipeline reinforcement 16 ": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. Linked to the consumption of CCGN of the route. Completed.	221

2.- TRANSPORT PIPELINES - DISTRIBUTION NETWORKS

2.4. IN LINE INSPECTIONS (ILI)

Date Period	Maintenance	Limitations	Refer. Numb.
19th April	Luarca - Llanera 20": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. P. Reganosa must modulate emission according to the demand associated with the inspection. Completed	225
26 April	Villalba - Luarca 20": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. P. Reganosa must modulate emission according to the demand associated with the inspection. Completed	226
3rd May	Santiago - Tuy 20": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. It is necessary flow through Tuy (Spain> Portugal, aprox. 50.000 Nm3/h). P. Reganosa will have to adapt its emission to the needs of the ILI. Completed	227
31st May	Vilanova - Tivissa 40": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. Requires modulation of East zone inputs. Completed	228
24th May	Paterna - Vilanova 40": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. Requires modulation of East zone inputs. Completed	229
7th and 8th June	Villafranca de Córdoba - Córdoba 36": In Line Inspection (ILI)	Duration: 5 days. Optimum speed 1 - 3 m/s. Possible modulation of CI Tariff during piston stroke. Completed.	230
From 24th to 30th November	Burgos - Villapresente 16": In Line Inspection (ILI). Phase 2.	Optimum speed 1 - 3 m/s. Completed	330



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2.- TRANSPORT PIPELINES - DISTRIBUTION NETWORKS

2.4. IN LINE INSPECTIONS (ILI)

Date Period	Maintenance	Limitations	Refer. Numb.
22th June	Albelda - Monzón 12 ": In Line Inspection (ILI). Transportation test.	It is necessary to exit from the Subirats network through Alfarrás and intercept the Monzón section to link demand to the ILI. Completed	224
2nd and 3rd November	UGS Gaviota. Land Plant - Offshore platform: In Line Inspection (ILI)	Extraction is required. Completed.	223

3.- UNDERGROUND GAS STORAGEES

3.1. UGS GAVIOTA

Date Period	Maintenance	Limitations	Refer. Numb.
From 18th November 2020 to 10th May 2021	Offshore platform: Overhaul compressor platform	Injection capacity max. approx. 35 GWh/day. Completed.	234
From 18th to 20th January	Land Plant: Environmental Measurements	Continuous extraction is necessary. Completed.	233
1st and 2nd February	Offshore Platform: instrumentation power supplies failure	Unavailability Extraction. Completed.	268
27th March	Land Plant: Environmental Measurements. Extraction.	Continuous extraction is necessary. Completed.	281
12th and 13th May	Offshore Platform: Tightness Testing Bottom Valves and Wellhead	Duration: 2 days. Total unavailability Injection / Extraction. Completed	235
18th and 19th May	Land Plant: Environmental Measurements	Continuous Injection is necessary. Completed	236
From 15th to 17th June	Plant: noise measurement	Continuous Injection is necessary. Completed	307

3.- UNDERGROUND GAS STORAGES

3.1. UGS GAVIOTA

Date Period	Maintenance	Limitations	Refer. Numb.
From 20th to 29th September	Offshore Platform: Replacement of fuel gas lines and valve	Total Injection / Extraction unavailability. It will be matched with operation ref. 239. Completed	238
From 20th to 29th September	Plant: Torch shutdow	Replacement of torch burner. It will be matched with operation ref. 238. Completed	239
From November 10th 2021 to 2022 March	Offshore platform: Overhaul compressor platform TC-A	Duration: 60 days. Injection not available in extraction period	240
From 20th to 22th September	Land Plant: MUS maintenance	Total unavailability Injection / Extraction. Completed	310
From 3rd to 5th August	Offshore platform: regulatory environmental measurements	Necessary injection at a rate of approx. 185.000 Nm3/h. Completed	321



3.- UNDERGROUND GAS STORAGEES

3.2. UGS SERRABLO

Date Period	Maintenance	Limitations	Refer. Numb.
From July 16th 2020 to 30th December 2021	Well Jaca 17. Corrective maintenance of the well integrity. Extraction	Well Jaca 17 unavailable. Workover phase 1 has been carried out from 8th July to 2nd August. Completed	243
From 12th to 20th April	Slick line J-17 y S-6 wells	Injection capacity max. approx. 25 GWh/day. Completed.	282
From 13th to 15th December	Replacement of direct current electrical panels	13th and 14th Dec.: UGS Serrablo unavailable 15th Dec.: Jaca 2 well unavailable. Completed.	345



3.- UNDERGROUND GAS STORAGEES

3.3. UGS YELA

Date Period	Maintenance	Limitations	Refer. Numb.
16th February	UPS maintenance	UGS Unavailable. Expected on date with no scheduled extraction. Completed	274
From 22th to 26th March	Electrical Substation Discharge	Injection not available in extraction period. Completed.	246
From 14th to 28th June	Installation and testing system of measurement of losses in compressors	It is necessary inyección of 22 GWh/day. Completed.	311
From 20 th to 27th August	Effectiveness tests of the installed supports to damp compressor vibrations	It is necessary inyección of 22 GWh/day. Completed.	328



3.- UNDERGROUND GAS STORAGES

3.4. UGS MARISMAS

Date Period	Maintenance	Limitations	Refer. Numb.
From 1st to 30th April	General maintenance.	Total unavailability Injection / Extraction. Completed	247
From 25th May from 13th July	Workover operations	Total unavailability Injection / Extraction. Completed.	248
From 13th September to 11th October	General maintenance.	Total unavailability Injection / Extraction. Completed.	291



4.- GAS FIELDS AND BIOMETHANE

4.1. VIURA FIELD

Date Period	Maintenance	Limitations	Refer. Numb.
From 18th July to 31st August	Upstream. Scheduled maintenance. Regulatory inspections. HIPPS review. Wellhead revision. Scheduled maintenance in various units. Distributed control update.	Gas field unavailable. Completed.	249



4.- GAS FIELDS AND BIOMETHANE

4.2. POSEIDÓN FIELD

Date Period	Maintenance	Limitations	Refer. Numb.
There aren't planned maintenance operations with impact on the emission.			



4.- GAS FIELDS AND BIOMETHANE

4.3. VALDEMINGÓMEZ BIOMETHANE

Date Period	Maintenance	Limitations	Refer. Numb.
From 9th to 19th January	Affection of the snowstorm	Without production. Completed.	269
From 22th to 25th February	Booster compressor and engines preventive maintenance (gas)	Without production. Completed.	250
From 7th to 9th June	Line filter and dryer maintenance	Without production. Completed.	251
From 29th September to 8th October	Preventive maintenance of air treatment and Booster compressor (over all)	Without production. Completed.	252



5.- INTERNATIONAL CONNECTIONS

5.1. C.I. TARIFA

Date Period	Maintenance	Limitations	Refer. Numb.



5.- INTERNATIONAL CONNECTIONS

5.2. C.I. ALMERIA

Date Period	Maintenance	Limitations	Refer. Numb.
5th March to 7th July	MUS L-1 calibration. URMF Almería	Without affection, as there are 3 lines available. Completed.	275
From 6th to 8th April	Work related to the expansion of transport capacity. Medgaz Terminal in Almería and EC Bení Saf.	Flow stop for 48 hours, with three days of gas affected. Completed.	253

5.- INTERNATIONAL CONNECTIONS

5.3. C.I. LARRAU

Date Period	Maintenance	Limitations	Refer. Numb.
From 26th April to 7th May	Various works of GRTGaz and Teréga in the French system.	Maximum capacity of the VIP Pyrenees in the direction France > Spain is 175 GWh/day. Completed.	254
From 7th to 9th June	C.I. Irún: FCVs obturator maintenance	C.I. Irún unavailable. Maximum capacity of the VIP Pyrenees in the directions Spain <> France is 165 GWh/day (165 GWh/day for CI Larrau and 0 GWh/day for CI Irún). Completed	295
From 7th to 13th June	Various works of GRTGaz in the French system.	Maximum capacity of the VIP Pyrenees in the direction France > Spain is 175 GWh/day. Completed	276
From 14th June to 7th July	Teréga : Pipeline Rehabilitation (Local Pirineos)	Maximum capacity of the VIP Pyrenees in the direction France <> Spain is 60 GWh/day (0 GWh/day for CI Larrau and 60 GWh/day for CI Irún). Completed	256
From 8th to 30th July	Teréga : Mont - Compression maintenance (Local Pirineos)	Maximum capacity of the VIP Pyrenees in the direction France > Spain is 175 GWh/day. Completed.	257
From 2nd to 6th August	CI. Irún: FCVs actuator change. Phase 1	C.I. Irún unavailable. Maximum capacity of the VIP Pyrenees in the directions Spain <> France is 165 GWh/day (165 GWh/day for CI Larrau and 0 GWh/day for CI Irún). Completed	319
From 23th August to 8th October	Various works of GRTGaz in the French system.	Maximum capacity of the VIP Pyrenees in the direction France > Spain is 175 GWh/day. Completed	258
From 6th to 9th September	CI. Irún: FCVs actuator change. Phase 2	C.I. Irún unavailable. Maximum capacity of the VIP Pyrenees in the directions Spain <> France is 165 GWh/day (165 GWh/day for CI Larrau and 0 GWh/day for CI Irún). Completed.	320
22th October	Various works of GRTGaz in the French system.	Maximum capacity of the VIP Pyrenees in the direction France > Spain is 175 GWh/day. Completed	277

5.- INTERNATIONAL CONNECTIONS

5.4. C.I. IRÚN

Date Period	Maintenance	Limitations	Refer. Numb.
From 26th April to 7th May	Various works of GRTGaz and Teréga in the French system.	Maximum capacity of the VIP Pyrenees in the direction France > Spain is 175 GWh/day. Completed.	254
From 7th to 9th June	C.I. Irún: FCVs obturator maintenance	C.I. Irún unavailable. Maximum capacity of the VIP Pyrenees in the directions Spain <> France is 165 GWh/day (165 GWh/day for CI Larrau and 0 GWh/day for CI Irún). Completed	295
From 7th to 13th June	Various works of GRTGaz in the French system.	Maximum capacity of the VIP Pyrenees in the direction France > Spain is 175 GWh/day. Completed	276
From 14th June to 7th July	Teréga : Pipeline Rehabilitation (Local Pirineos)	Maximum capacity of the VIP Pyrenees in the direction France <> Spain is 60 GWh/day (0 GWh/day for CI Larrau and 60 GWh/day for CI Irún). Completed	256
From 8th to 30th July	Teréga : Mont - Compression maintenance (Local Pirineos)	Maximum capacity of the VIP Pyrenees in the direction France > Spain is 175 GWh/day. Completed.	257
From 2nd to 4th August	CI. Irún: FCVs actuator change. Phase 1	C.I. Irún unavailable. Maximum capacity of the VIP Pyrenees in the directions Spain <> France is 165 GWh/day (165 GWh/day for CI Larrau and 0 GWh/day for CI Irún). Completed.	319
From 23th August to 8th October	Various works of GRTGaz in the French system.	Maximum capacity of the VIP Pyrenees in the direction France > Spain is 175 GWh/day. Completed	258
From 6th to 9th September	CI. Irún: FCVs actuator change. Phase 2	C.I. Irún unavailable. Maximum capacity of the VIP Pyrenees in the directions Spain <> France is 165 GWh/day (165 GWh/day for CI Larrau and 0 GWh/day for CI Irún). Completed	320
22th October	Various works of GRTGaz in the French system.	Maximum capacity of the VIP Pyrenees in the direction France > Spain is 175 GWh/day. Completed	277



5.- INTERNATIONAL CONNECTIONS

5.5. C.I. BADAJOZ

Date Period	Maintenance	Limitations	Refer. Numb.
30th August to 2nd September	REN. In Line Inspection (ILI). Ponte de Sôr - > Bidoeira 28"	2 pistons. 14 to 20 hours per piston. CI Badajoz. Flow direction POR > ESP aprox. 150.000 Nm3/h. Completed	324

5.- INTERNATIONAL CONNECTIONS

5.6. C.I. TUY

Date Period	Maintenance	Limitations	Refer. Numb.
15th and 29th July	Change of the actuators in the flow control FCVs POR > ESP. Pos. I025 Tuy. L-A	Without affection. The line of work will be unavailable. Real transportation tests will be required. Completed.	260
From 21st to 24th September	REN. In Line Inspection (ILI). Gondomar -> Famalicão 20"	3 pistons. 5 to 8 hours per piston. CI Tuy. Flow direction POR > ESP between 25,000 to 50,000 Nm3 / h; 6 to 10 GWh/day. Completed	325
From 28th September to 1st October	REN. In Line Inspection (ILI). Valença do Minho -Famalicão	3 pistons. 11 to 15 hours per piston. CI Tuy. Flow direction POR > ESP between 50,000 to 70,000 Nm3 / h; 10 to 15 GWh/day. Completed	326
14 th and 15th October	REN. In Line Inspection (ILI). Famalicão > Valença do Minho 20".	Repetition Combo Tool (MFL / DEF / IMU). CI Tuy. Flow POR> ESP aprox. 50,000 Nm3/h . Completed	346
19th October	REN. In Line Inspection (ILI). Gondomar -> Famalicão 20"	Repetition Combo Tool (MFL / DEF / IMU). CI Tuy. Flow POR> ESP aprox. 40,000 Nm3/h. Completed	341