


30.09.2016

TEMA TEHNICA DE PROIECTARE

1. DATE GENERALE:

1.1. Denumirea lucrării: Actualizare documentatie tehnica cuptor reactie 02-H1 si conducte transfer pentru functionare la o temperatura de 510°C iesire radiatie.

1.2. Instalatia (serviciul) beneficiara: Instalatia de Cocsare Intarziata - Sector 3

1.3. Amplasament: Instalatia de Cocsare Intarziata

1.4. Documente si documentatii de referinta:

1.4.1. Scheme Izometrice conducte transfer

1.4.2. Desen ansamblu cuptor 02-H1

2. NECESITATE SI OPORTUNITATE: Avand in vedere modificarile constructive (inlocuit returbenti cu coturi de intoarcere serpentine radiatie) si metalurgice (inlocuit material 5%Cr cu 9% Cr) aduse cuptorului de reactie al instalatiei de Cocsare intarziata, parametrii de lucru ai cuptorului au ramas nemodificati in documentatia tehnica (temperatura max 495°C iesire radiatie).

Intrucat din punct de vedere tehnologic se doreste functionarea cu o temperatura maxima de 510°C iesire radiatie in vederea imbunatatirii performantelor tehnologice este necesara verificarea documentatiei tehnice a cuptorului precum si a conductelor de transfer, refacere breviare de calcul pentru noile conditii luand in considerare inclusiv posibilitatea trecerii la o clasa superioara de material.

3. DESCRIEREA SOLUTIEI PROPUSE:

3.1. Tehnologie: In scopul implementarii solutiei tehnice propuse se impune verificarea si reautorizarea cuptorului de reactie 02-H1 si a conductelor de transfer in noile conditii de temperatura.
Recalculare parametrii de design si operare pe cuptor si conducte transfer pentru o temperatura de iesire din cuptor de 510 °C.

3.2. Descrierea solutiei propuse pe categorii de lucrari:

(In cazul in care sunt necesare descrieri mai ample – schite privind amplasarea, scheme tehnologica etc – este obligatorie anexarea acestora la tema)

Nr. crt.	Categorii de lucrari	Descriere sumara	Documente existente	Observatii
1	Tehnologii	DA		
2	Utilaje	DA		
3	Montaj utilaj si leg. conducte	DA		
4	Constructii beton	NU		
5	Constructii metalice	NU		
6	Instalatii apa-canal	NU		
7	Instalatii electrice ²⁾	NU		
8	Instalatii AMC ¹⁾	NU		
9	Utilitati (aer, azot, apa etc)	NU		
10	Instalatii de incalzire	NU		

11	Instalatii de ventilatie	NU		
12	Mecanizare ex:grinda monorai	NU		
13	Alte facilitati	NU		
14	Devize	DA		

1) Reglari, inregistrari, semnalizari, blocari

2) Surse de putere, blocari, iluminat, avertizare P.S.I. si paza, explozimetre, telefonie, legaturi echipotentiale etc.

3.3. Dotari: _____

3.4. Deseuri, noxe si masuri de protectie a mediului: _____

3.5. Factori de risc si propuneri de masuri de tehnica securitatii muncii: _____

4. SURSA DE FINANTARE: _____ CHELTUIELI CURENTE 2016

6. RESPONSABIL DIN PARTEA BENEFICIARULUI:

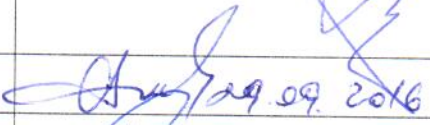
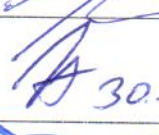
- Numele si prenumele: _____ I. Mitache

- Functia: _____ Ing.Tehnolog Sector 3

- Telefon: _____ 3750

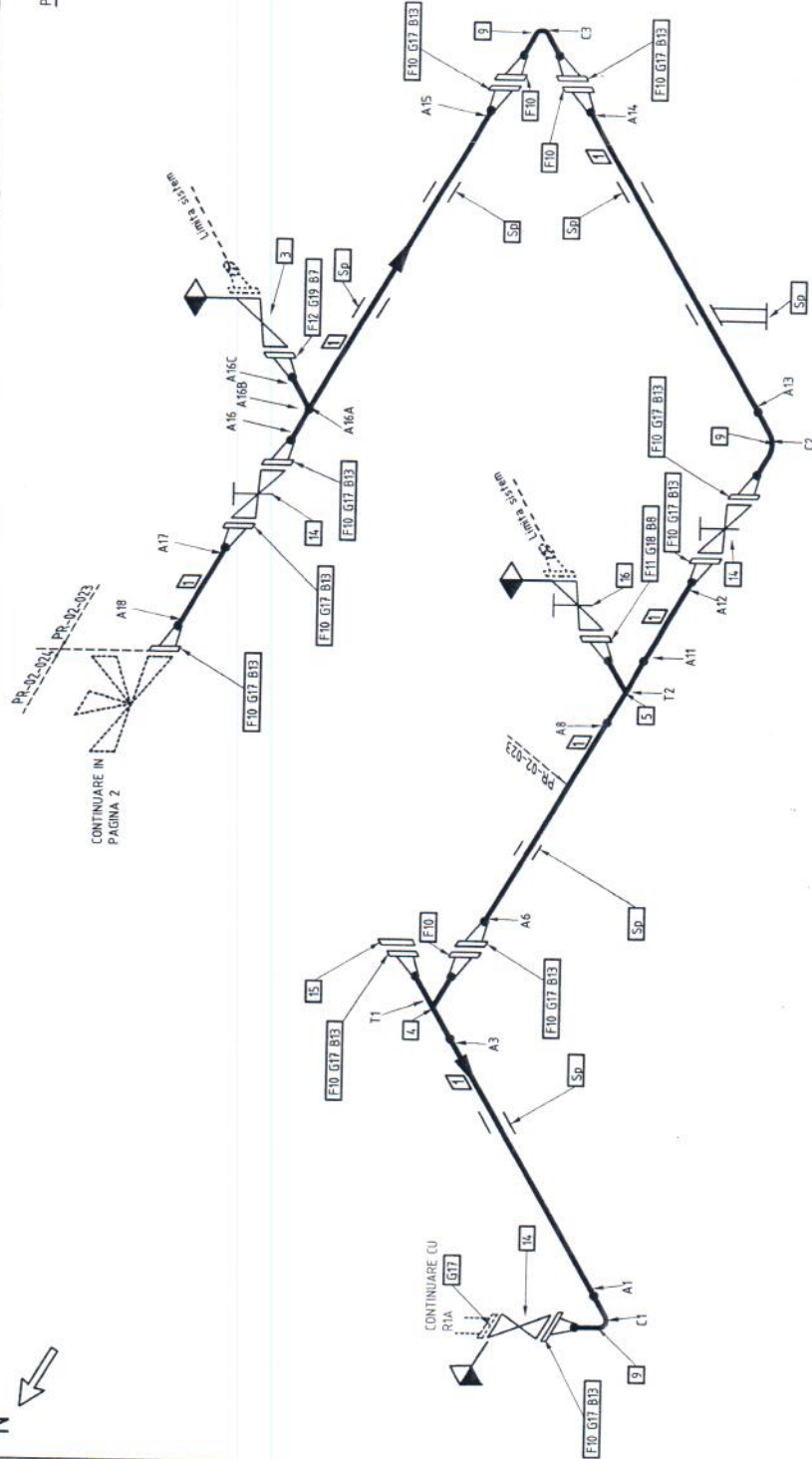
- Termen executie proiect: _____ 31.12.2016

7. AVIZARE:

FUNCTIA	NUMELE SI PRENUMELE	SEMNATURA
DIR. GEN. ADJ. REPARATII SI MENTENANTA UTILAJE	Y. I. EROGOV	
TEHNOLOG SEF	CATALIN NICULESCU	 29.09.2016
ING. SEF ADJ. PRODUCTIE	PIRNAU DANIEL	 29.09.16
SEF BIROU – SEF SERVICIU MTRU	DENYS MAKUSHEV	 29.09.2016
ING. SEF METROLOG	ION ENE	
ING. SEF INDUSTRIE PRELUCRATOARE – SEF SERVICIU	MAXIM GRECOV	 30.09.2016
SEF ARIE PRODUCTIE	GHEORGHE COMAN	 29.09.2016

PIESE DE CONDUCTE - LISTA DE PIESE

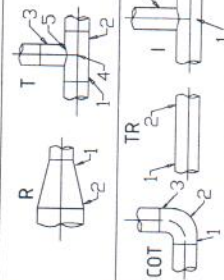
Poz	DN	Descriere	Capacitate
1	200	Teava	14 M
2	40	Teava	0.2 M
3	80	RSF Dn/Pn10/B2	1
4	200	Teu egal	1
5	200X150	Teu redus	1
6	200X80	Teu redus	1
7	M24x140	Prezoane cu 2 piulițe	8/16
8	M30x180	Prezoane cu 2 piulițe	12/24
9	200	Cot 90	3
10	200	Flansa cu gaț Dn200(Ø219.1x-)/Pn10/B2	13
11	150	Flansa cu gaț Dn150(Ø168.3x-)/Pn10/B2	1
12	80	Flansa cu gaț Dn80(Ø88.9x-)/Pn10/B2	1
13	M33x270	Prezoane cu 2 piulițe	132/264
14	200	RSF Dn/600#/B2	3
15	200	Flansa carba Dn200(Ø219.1x-)/Pn10/B2	1
16	150	RSF Dn/600#/B2	1
17	200	Garnitura Dn200/Pn10/B2	11
18	150	Garnitura Dn150/Pn10/B2	1
19	80	Garnitura Dn80/Pn10/B2	1



LEGENDA:

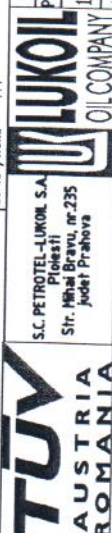
POZITIA PUNCTELOR DE CONTROL
PENTRU MASURAREA GROSIMII PERETILOR CU US

PAN LA DN 50 INCLUSIV - 2 PUNCTE DE MASURARE
PANA LA DN 200 INCLUSIV - 4 PUNCTE DE MASURARE
PESTE DN 200 - 8 PUNCTE DE MASURARE



PLAN MASURATORI GROSIMI

Temp. min lucru/Min op. temp.(°C): 15	Instalatori (nr./DN)/Tracing (nr./DN): 2x25	Temp. max lucru/Max op. temp.(°C): 495
Mediu/Medium: Reziduu	Pres. max lucru/Max. op. pressure(bar): 15	Modul/Module: —
Grupa fluid/Fluid Group: 1	Categorie/Categorie: II	Mediu proba/Test medium: Apa
Material/Material: A 335 GRAD P5	% control mediu/Nondestructive test: 20% RT/UT	Presiune proba/Test pressure(bar): —
Izolatie/Insulation (type/thick): DA/S=100mm	Test elasticitate/Elasticity Test: —	Diagrama P&ID/PAID No.: —
Protecția coroziune/Corrosion Protection: NA	Organ recepție finala/Final reception: —	Temp. de proiectare/Design temp.(°C): 495
Tratament termic/Heat Treatment: NA	Presiune proiectare/Design pressure(bar): 15	de la /from: H1
Clasa conducte/Pipe Class: —		la /to: R1,a,b,c,d



Intreprindere/Client: PETROTEL - LUKOIL

Instalatie/Plant: C.X

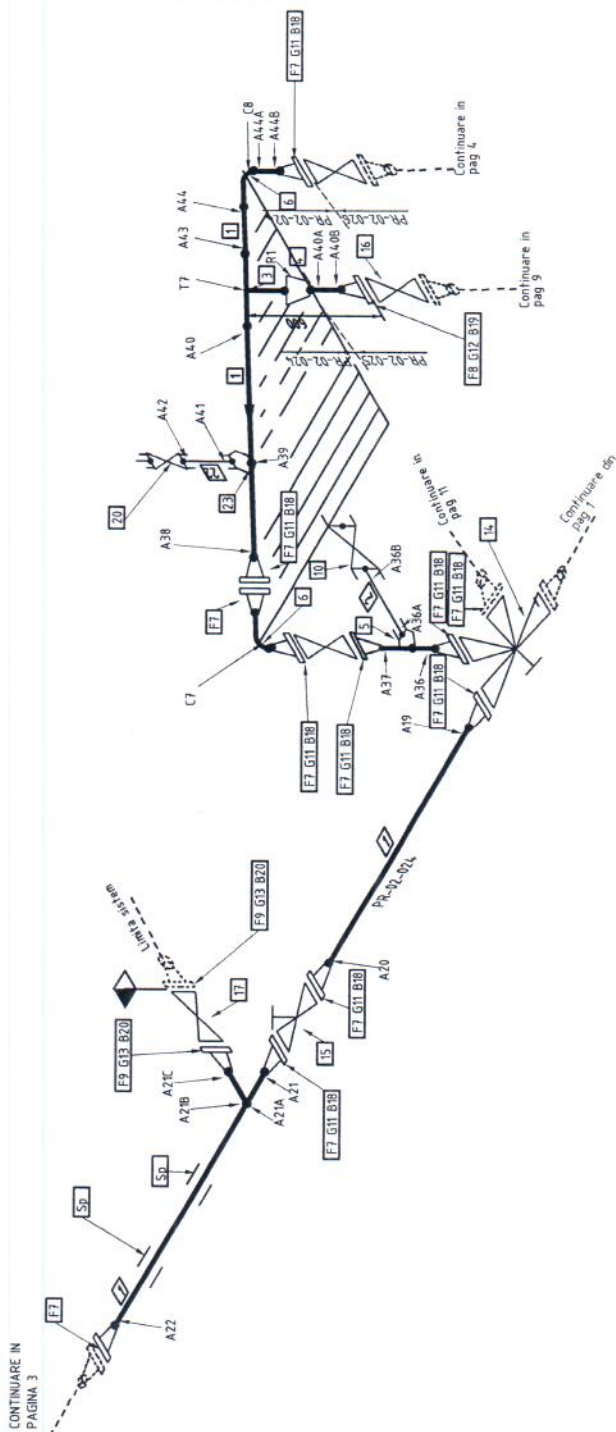
Scara/Scale: NTS

SIS 4-PR-02-021;022;023;024;025;026;027;060

Rev/Rev	Denunțarea modificării/Change description	Data/Date	Intocmit/Designer	Verificat/Checked
04				
03				
02				
01				
00	INTOCMIRE PROGRAM EXAMINARI	03.2015	Stefan A.	Ninca N.

PIESE DE CONDUITE - LISTA DE PIESE

Poz	DN	Descriere	Cantitate
1	200	Teava	4,7 M
2	25	Teava	0,1 M
3	200	Teu egal	1
4	200X150	Reductie concentrica	1
5	200X25	Socketlet	1
6	200	Col 90	2
7	200	Flansa cu gat Dn200(Ø219,1x-)/Pn10/B2	10
8	150	Flansa cu gat Dn150(Ø168,3x-)/Pn10/B2	1
9	80	Flansa cu gat Dn80(Ø88,9x-)/Pn10/B2	1
10	25	RSHS Dn25/Pn160	2
11	200	Garnitura Dn200/Pn10/B2	8
12	150	Garnitura Dn150/Pn10/B2	1
13	80	Garnitura Dn80/Pn10/B2	1
14	200	Robinet 4 cai Dn200/Pn10/B2	1
15	200	RSF Dn200/600H/B2	2
16	150	RSF Dn150/Pn10/B2	1
17	80	RSF Dn80/Pn10/B2	1
18	M33x210	Prezoane cu 2 piulite	96/192
19	M30x180	Prezoane cu 2 piulite	12/24
20	M24x140	Prezoane cu 2 piulite	8/16
21	20	RSHS Dn20/Pn160	1
22	20	Teava	0,1 M
23	200X20	Socketlet	1



LEGENDA:

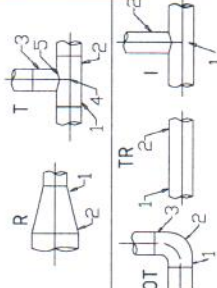


— conducta existenta supuso examinarii
 — conducta existenta in afara sistemului
 Configuratia, componenta si dimensiunile vor
 fi verificate inainte de examinarea.

PLAN MASURATORI GROSIMI

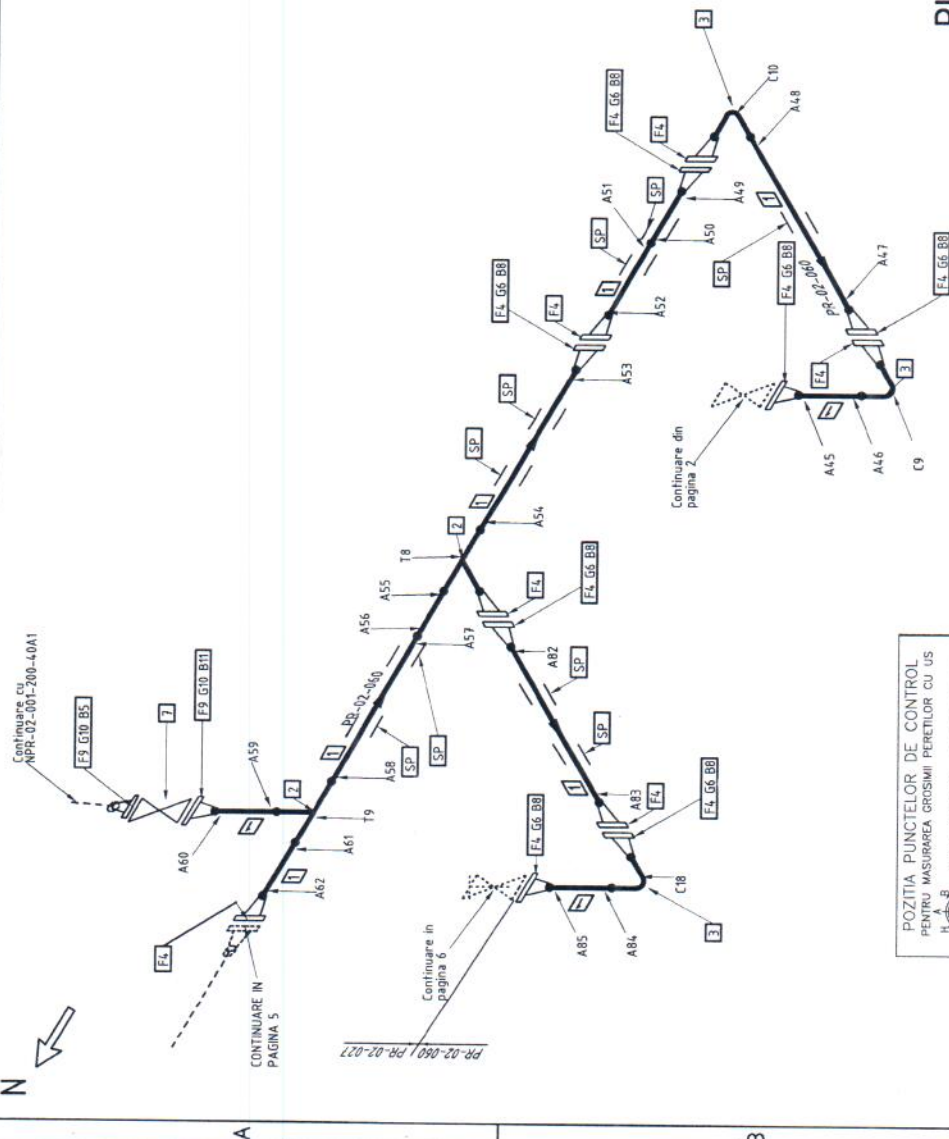
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Mediu/Medium: Reziduu	Grupa fluid/Fluid Group: 1	Categorie/Categorie: II	Modul/Module: —
Material/Material: A 335 GRAD PS	% control nedistructiv/Nondestructive test: 25% UT/15% RT	Mediu proba/Test medium: Apa	Presiune proba/Test pressure(bar): —
Isolatie/Insulation (type/thick.): DA/S=100mm	Test elasticitate/Elasticity Test: —	Diagrama P&ID/PI&ID No.: —	Temp. de protectie/Design temp.(°C): 495
Protectia corozie/Corrosion Protection: NA	Organ receptie finala/Final reception: —	Presiune protectie/Design pressure(bar): 15	la /to: RT, 0,5, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
Tratament termic/Heat Treatment: NA	Clasa conductie/Pipe Class: H1	de la /from: RT, 0,5, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	
TUV AUSTRIA ROMANIA S.C. PETROTEL-LUKOIL S.A. Piulesti Stra Mihai Bravu, nr.235 Judet Prahova LUKOIL OIL COMPANY Project-Nr./Project-No: 15-95/PEVIT Desen-Nr./Drawing-No: ANEXA 3			
Intreprindere/Cient: PETROTEL-LUKOIL			
Instalatie/Plant: C.X			
Scara/Scale: NTS			
SIS 4-PR-02-021;022;023;024;025;026;027;060			
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POZITIA PUNCTELOR DE CONTROL
 PENTRU MASURAREA GROSIMII PERETILOR CU US
 PANA LA DN 50 INCLUSIV = 2 PUNCTE DE MASURARE
 PANA LA DN 300 INCLUSIV = 4 PUNCTE DE MASURARE
 PESTE DN 300 = 8 PUNCTE DE MASURARE



04					
03					
02					
01					
00	INTOCMIRE PROGRAM EXAMINARI	03.2015	Stefan A.	Ninca N.	Verificat/Checked
Rev/Rev	Denumirea modificarii/Change description	Date/Date	Intocmit/Designed		

Poz	DN	Descriere	Capacitate
1	200	Teava	32,5 M
2	200	Teu egal	2
3	200	Cot 90	3
4	200	Fansa cu gat Dn200(Ø219,1X-)/Pn110/B2 12	14
5	M27x150	Prezoane cu 2 puiute	24/48
6	200	Garnitura Dn200/Pn110/B2	7
7	200	RSF Dn200/PN40/B2	1
8	M33x210	Prezoane cu 2 puiute	84/168
9	200	Fansa cu gat Dn200(Ø219,1X-)/Pn40/B2	2
10	200	Garnitura Dn200/Pn40/B2	2



LEGENDA:



-limita sistem

— — — — —

—conducta existenta supusa examinarilor
—conducta existenta in afara sistemului

Configuratia, componenta si dimensiunile vor
fi verificate inainte de examinare.

PLAN MASURATORI GROSIMI

Temp. min lucru/Min op. temp.(°C): 15	Insulății (nr./DN)/Tracing (nr./ND): 2x25	Temp. max lucru/Max op. temp.(°C): 495
Mediu/Medium: Reziduu	Pres. max lucru/Max. op. pressure(bar): 15	Modul/Module: —
Grupă fluid/Fluid Groups: 1	Categorie/Categories: II	Mediu proba/Test medium: Apa
Material/Material: A 335 GRAD P5	% control nedistructiv/Nondestructiv test: 20% UT	Presiune proba/Test pressure(bar): —
Isolație/Insulation (type/thick.): DA/S=100mm	Test elasticitate/Elasticity Test: —	Diagrama P&ID/P&ID No.: —
Protecția corozivă/Corrosion Protection: NA	Organ recepție finala/Final reception: —	Temp. de proiectare/Design temp.(°C):495
Treatment termic/Heat Treatment: NA	Presiune proiectare/Design pressure(bar): 15	la /to: R1,a,b,c,d
Clasa conductivă/Pipe Class: —	de la /from: H1	
		
	S.C. PETROTEL-LUKOIL S.A.	
	Sit: Mihai Bravu, nr 235	
	Județul Prahova	
Intreprindere/Client: PETROTEL-LUKOIL	Proiect-Nr/Project-No: 1 2 3 4 5 6 7 8 9 10 11 12 13 14	Desen-Nr/Drawing-No: 816/R&M
Instalatie/Plant: C.X	15-95/PEVIT	ANEXA 3
Scara/Scale: NTS	11 18 19 20 21 22 23 30 31	
	Cod Instalatie/Plant Code	Orig.Plan
SIS 4-PR-02-021;022;023;024;025;026;027;060	pag/pag 4	din/from 14

	04	03	02	01	00	INTOCMIRE PROGRAM EXAMIN	Denumirea modificării / Program
POZIȚIA PUNCTELOR DE CONTROL PENTRU MĂSURAREA GROSIMII PERITULUI CU US 	COT	TR				PANA LA 50 INCHILURI = 2 PUNCTE DE MASURARE PANA LA 200 INCHILURI = 4 PUNCTE DE MASURARE PESTE UN 200 = 8 PUNCTE DE MASURARE	

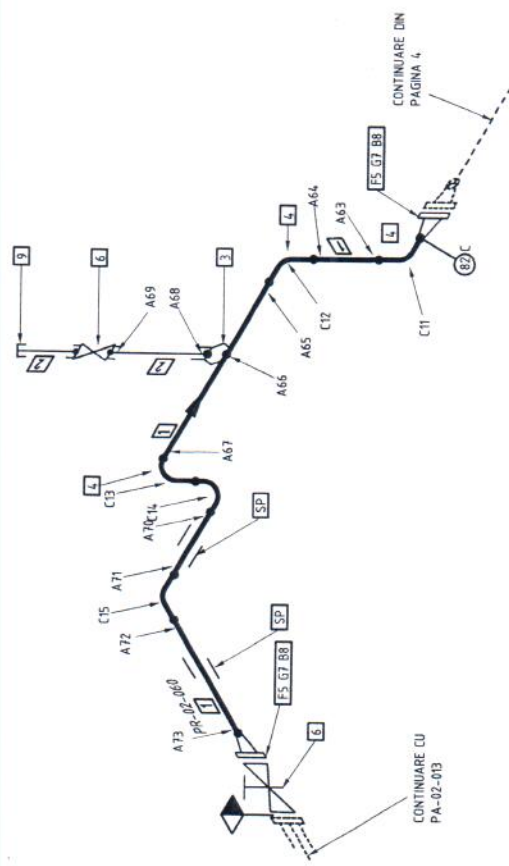


1

2

PIESE DE CONDUITE - LISTA DE PIESE

Poz	DN	Descriere	Cantitate
1	200	Teava	14,7 M
2	20	Teava	0,1 M
3	200x20	Socolelet	1
4	200	Cot 90	5
5	200	Flansa cu gat Dn200(Ø219,1x-)/Pn25/B2	2
6	200	RSF Dn200/Pn25/B2	1
7	200	Garnitura Dn200/Pn25/B2	2
8	M27x150	Prezoane cu 2 piulite	24/48
9	20	Capac filetat	1

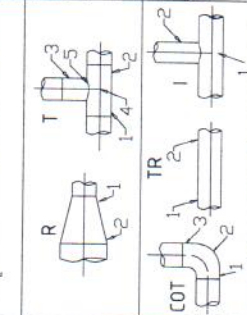


LEGENDA:



POZITIA PUNCTELOR DE CONTROL
PENTRU MASURAREA GROSIMII PERETILOR CU US

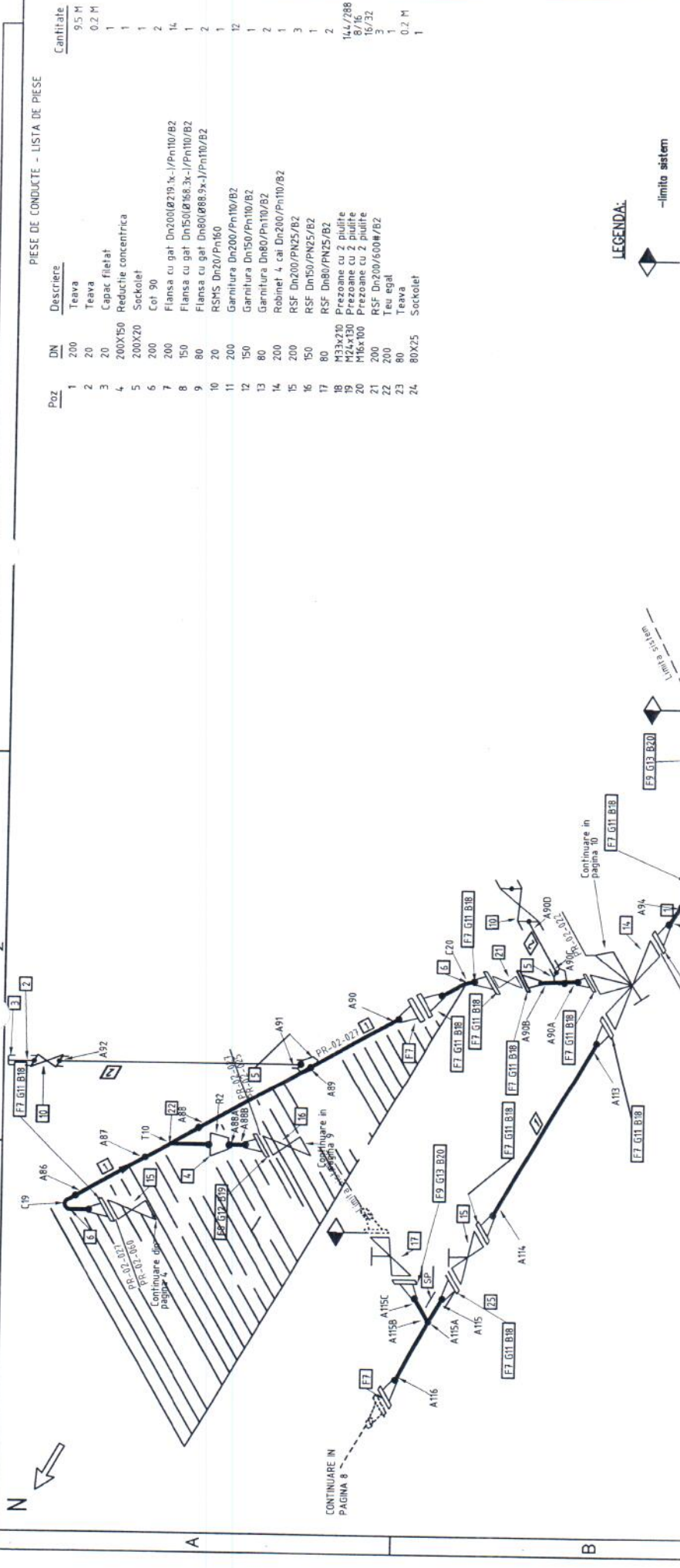
PANA LA DN 50 INCLUSIV = 2 PUNCTE DE MASURARE
PANA LA DN 300 INCLUSIV = 4 PUNCTE DE MASURARE
PESTE DN 300 = 6 PUNCTE DE MASURARE



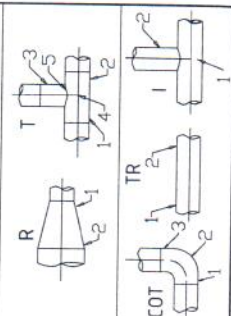
PLAN MASURATORI GROSIMI

Temp. min. lucru/Min. op. temp.(°C): 15	Insotitori (nr./DN)/Tracing (nr./DN): 2x25	Temp. max. lucru/Max. op. temp.(°C): 495
Mediu/Medium: Reziduu	Pres. max. lucru/Max. op. pressure(bar): 15	Modul/Module: —
Grupa fluid/Fluid Group: 1	Categorie/Catagory: II	Mediu proba/Test medium: Apa
Materie/Material: A 335 GRAD P5	% control nedistructiv/nondestructiv test: 25-77/100	Presiune proba/Test pressure(bar): —
Isolatie/Insulation (type/thick.): DA/S=100mm	Test elasticitate/Elasticity Test: —	Diagrama P&ID/P&ID No.: —
Protectia corozie/corrosion Protection: NA	Organ receptie finala/Final reception: —	Temp. de proiectare/Design temp.(°C): 495
Tratament termic/Heat Treatment: NA	Presiune proiectare/Design pressure(bar): 15	la /to: R1,a,b,c,d
Clasa conducte/Pipe Class: —	de la /from: H1	
S.C. PETROTEL-LUKOIL S.A. Ploiesti Str. Mihai Bravu, nr. 235 Judet Prahova		
LUKOIL OIL COMPANY		
Proiect-Nr./Project-No: 15-95/PEVIT		
Desen-Nr./Drawing-No: ANEXA 3		
Cod Instalatie/Plant Code: 31		
Intreprindere/Cient: PETROTEL-LUKOIL		
Instalatie/Plant: C.X		
Scara/Scale: NTS		
SIS 4-PR-02-021;022;023;024;025;026;027;060		
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04					
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01					
00	INTOCMIRE PROGRAM EXAMINARI	Stefan A.	Ninca N.	Verificat/Checked	
Rev/Rev	Denumirea modificarilor/Change description	Data/Date	Intocmit/Designer		



POZITIA PUNCTELOR DE CONTROL
PENTRU MASURAREA GROSIMII PERETILOR CU US
PENTRU LA UN 50 INCLUSIUN = 2 PUNCTE DE MASURARE
PENTRU LA UN 300 INCLUSIUN = 4 PUNCTE DE MASURARE
PENTRU LA UN 300 - 8 PUNCTE DE MASURARE



PLAN MASURATORI GROSIMI

Temp. min lucru/Min op. temp.(°C): 15	Insotitori (nr./Dn)/Tracing (nr./ND): 2x25	Temp. max lucru/Max op. temp.(°C): 495									
Mediu/Medium: Reziduu	Pres. max lucru/Max. op. pressure(bar): 15	Modul/Module: —									
Grupa fluid/Fluid Group: 1	Categorie/Catagory: II	Mediu proba/Test medium: Apa									
Material/Material: A 335 GRAD PS	% control nondestructive test: 25-30/100	Presiune proba/Test pressure(bar): —									
Isolat/Insulation (type/thick.): DA/S=100mm	Test elasticitate/Elasticity Test: —	Diagrama P&ID No.: —									
Protectia coroziv/Corrosion Protection: NA	Organ receptie finala/Final reception: —	Temp. de proiectare/Design temp.(°C): 495									
Tratament termic/Heat Treatment: NA	Presiune proiectare/Design pressure(bar): 15	la /to: R1,a,b,c,d									
Clasa conducte/Pipe Class: —	de la /from: H1										
<table><tr><td colspan="3">TUV</td></tr><tr><td colspan="3">AUSTRIA ROMANIA</td></tr><tr><td colspan="3">S.C. PETROTEL-LUKOIL S.A. Ploiesti Str. Mihai Bravu, nr.235 Județul Prahova</td></tr></table>			TUV			AUSTRIA ROMANIA			S.C. PETROTEL-LUKOIL S.A. Ploiesti Str. Mihai Bravu, nr.235 Județul Prahova		
TUV											
AUSTRIA ROMANIA											
S.C. PETROTEL-LUKOIL S.A. Ploiesti Str. Mihai Bravu, nr.235 Județul Prahova											
Intreprindere/Client: PETROTEL-LUKOIL											
Instalatie/Plant: C.X											
Scara/Scale: NTS											
SIS 4-PR-02-021;022;023;024;025;026;027;060											
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LEGENDA:



— conducta existenta supusa examinarii
— conducta existenta in afara sistemului
si dimensiunile vor fi verificate inainte de examinare.
Configuratia, componenta si dimensiunile vor
fi verificate inainte de examinare.

PIESE DE CONDUITE - LISTA DE PIESE

Poz	DN	Descriere	Cantitate
1	200	Teava	9.5 M
2	20	Teava	0.2 M
3	20	Capac filetat	1
4	200X150	Reductie concentrica	1
5	200X20	Socketet	1
6	200	Cot 90	1
7	200	Flansa cu gat Dn200(Ø219.1x-)/Pn10/B2	14
8	150	Flansa cu gat Dn150(Ø168.3x-)/Pn10/B2	1
9	80	Flansa cu gat Dn80(Ø88.9x-)/Pn10/B2	2
10	20	RSMS Dn20/Pn160	1
11	200	Garnitura Dn200/Pn10/B2	12
12	150	Garnitura Dn150/Pn10/B2	1
13	80	Garnitura Dn80/Pn10/B2	2
14	200	Robinet 4 cai Dn200/Pn10/B2	1
15	200	RSF Dn200/PN25/B2	3
16	150	RSF Dn150/PN25/B2	1
17	80	RSF Dn80/PN25/B2	2
18	M33-210	Prezoane cu 2 piulite	144/288
19	M24-150	Prezoane cu 2 piulite	8/16
20	M16-100	Prezoane cu 2 piulite	16/32
21	200	RSF Dn200/600H/B2	3
22	200	Teu egal	1
23	80	Teava	0.2 M
24	80X25	Socketet	1

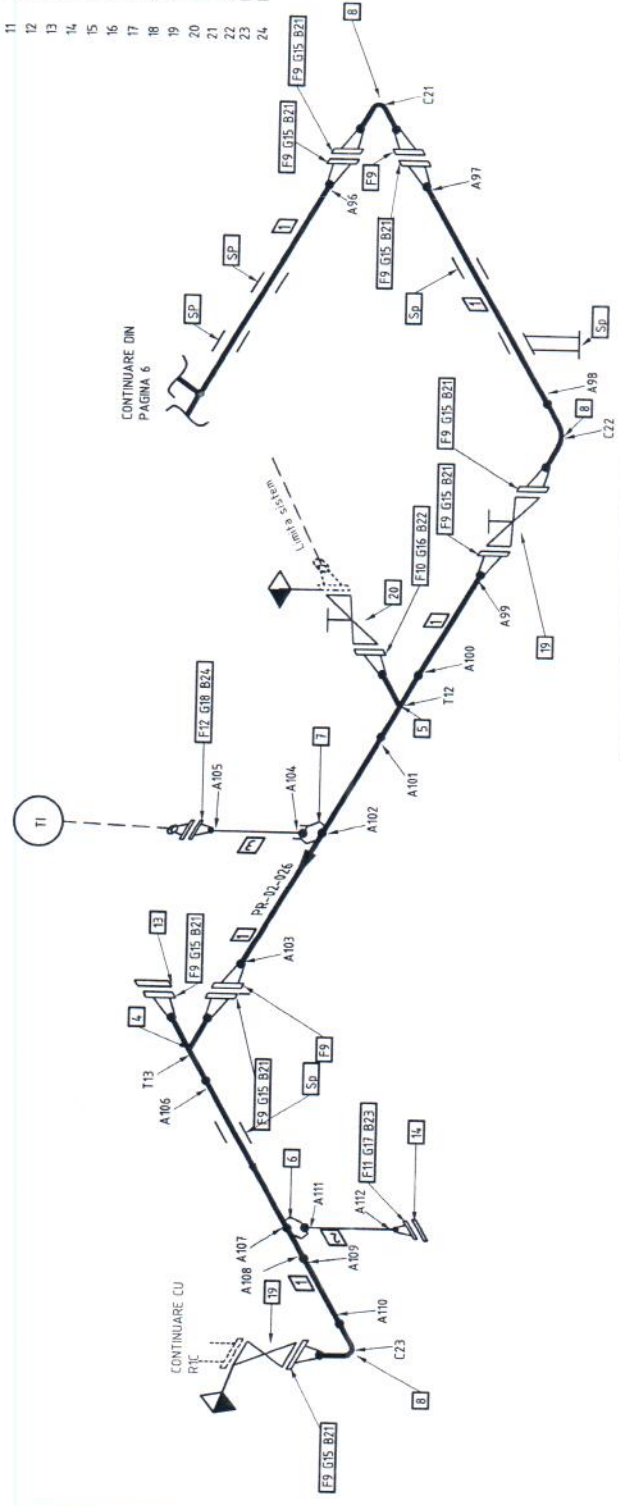
Rev/Rev	Denumirea modificarii/Change description	Data/Date	Intocmit/Designer	Verificat/Checked
04				
03				
02				
01				
00	INTOCMIRE PROGRAM EXAMINARI	03.2015	Stefan A.	Ninca N.

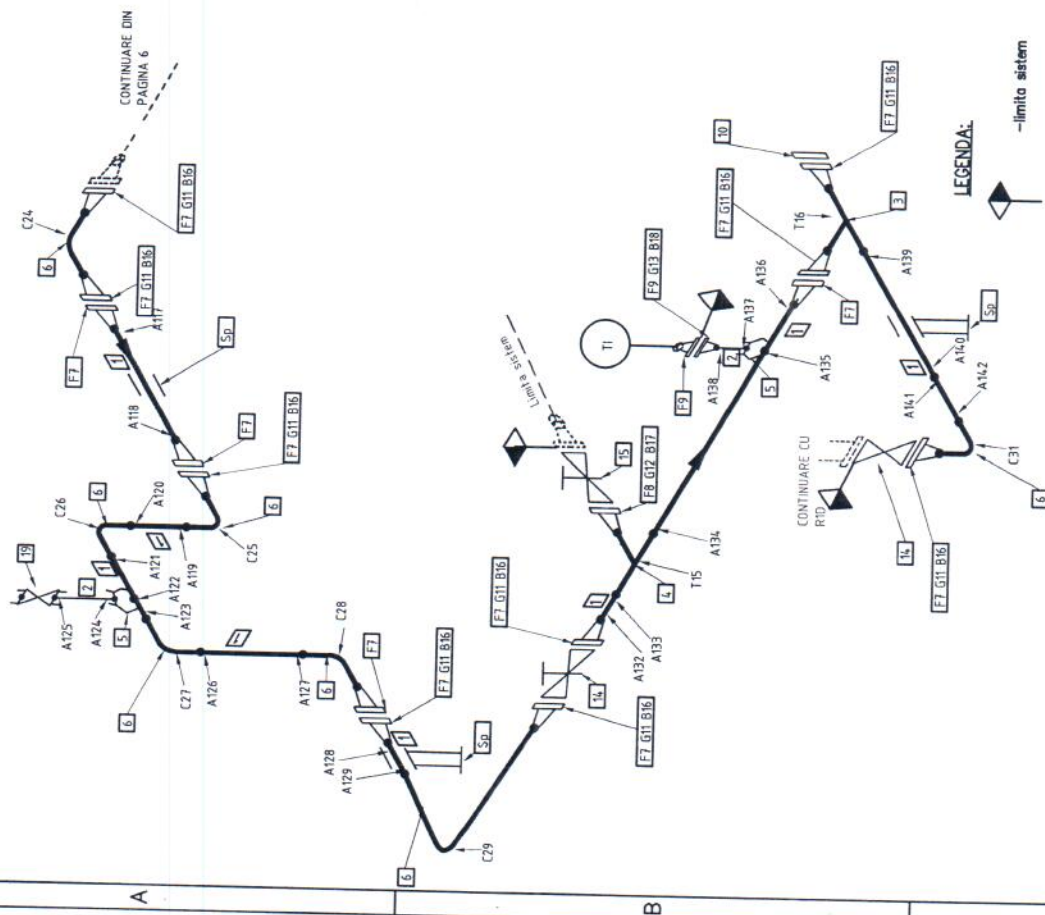


PIESE DE CONDUITE - LISTA DE PIESE

Poz	DN	Descriere	Cantitate
1	200	Teava	9.5M
2	50	Teava	0.1 M
3	25	Teava	0.1 M
4	200	Teu egal	1
5	200X150	Teu redus	1
6	200X50	Weldolet	1
7	200X25	Weldolet	1
8	200	Socket	1
9	200	Cot 90	3
10	150	Flansa cu gat Dn200/Dn150 3x-/Pn10/B2	9
11	50	Flansa cu gat Dn150/Dn50 3x-/Pn10/B2	2
12	25	Flansa cu gat Dn50/Dn25 3x-/Pn10/B2	1
13	200	Flansa oarba Dn200/Dn150 3x-/Pn10/B2	1
14	50	Flansa oarba Dn150/Dn50 3x-/Pn10/B2	1
15	200	Garnitura Dn200/Pn10/B2	7
16	150	Garnitura Dn150/Pn10/B2	1
17	50	Garnitura Dn50/Pn10/B2	1
18	25	Garnitura Dn25/Pn10/B2	1
19	200	RSF Dn200/B2	1
20	150	RSF Dn150/B2	2
21	M24x140	Prezoane cu 2 pulite	108/216
22	M24x130	Prezoane cu 2 pulite	16/32
23	M16x90	Prezoane cu 2 pulite	4/8
24	M12x80	Prezoane cu 2 pulite	4/8

CONTINUIARE DIN
PAGINA 6





— conducta existentă supusa examinării
 — conducta existentă în afara sistemului
 Configuratio, componenta si dimensiunile vor
 fi verificate înainte de examinare.

LEGENDA:

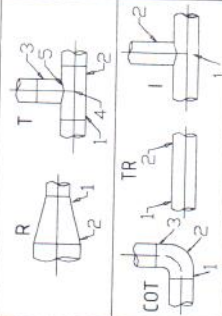
— limita sistem

Rev/Rev	Denumirea modificarii/Change description	Date/Date	Intocmit/Designer	Ninca N.	Verificat/Checked
04					
03					
02					
01					
00	INTOCMIRE PROGRAM EXAMINARI	03.2015	Stefan A.	Ninca N.	Verificat/Checked

PLAN MASURATORI GROSIMI

Temp. min lucru/Min op. temp.(°C): 15	Instalatori (nr./DN)/Tracing (nr./ND): 2x25	Temp. max lucru/Max op. temp.(°C): 495
Mediu/Medium: Reziduu	Pres. max lucru/Max. op. pressure(bar): 15	Model/Module: —
Grupa fluid/Fluid Group: 1	Categorie/Category: II	Mediu proba/Test medium: Apa
Material/Material: A 335 GRAD P5	% control nedestructiv/Nondestructive test: 25-R/115	Presiune proba/Test pressure(bar): —
Isolatie/Insulation (type/thick.): DA/S=100mm	Test elasticitate/Elasticity Test: —	Diagrama P&ID No.: —
Protectia coroziune/Corrosion Protection: NA	Organ receptie finala/Final reception: —	Temp. de proiectare/Design temp.(°C): 495
Tratament termic/Heat Treatment: NA	Presiune proiectare/Design pressure(bar): 15	la /to: R1,q,b,c,d
Clasa conducte/Pipe Class: —	de la /from: H1	
TUV AUSTRIA ROMANIA S.C. PETROTEL-LUKOIL S.A. Str. Mihail Bravu, nr.235 Județul Prahova		
LUKOIL OIL COMPANY Proiect-Nr/Project-No: 15-95/PBYVT Desen-Nr/Drawing-No: ANEXA 3		
Intreprindere/Cient: PETROTEL-LUKOIL Instalatie/Plant: C.X Scara/Scale: NTS		
SIS 4-PR-02-021;022;023;024;025;026;027;060 pag/pag 8 din/from 14		

POZITIA PUNCTELOR DE CONTROL
 PENTRU MASURAREA GROSIMII PERETILOR CU US
 PANA LA DN 50 INCLUSIV = 2 PUNCTE DE MASURARE
 PANA LA DN 300 INCLUSIV = 4 PUNCTE DE MASURARE
 PESTE DN 300 = 8 PUNCTE DE MASURARE



PIESE DE CONDUITE - LISTA DE PIESE

Poz	DN	Descriere	Cantitate
1	200	Teava	10,0 M
2	25	Teava	0,2 M
3	200	Teu egal	1
4	200X150	Teu redus	1
5	200X25	Socketet	1
6	200	Cot 90	10
7	200	Flansa cu gal. Dn200(Ø219.1x-)/Pn10/B2	11
8	150	Flansa cu gal. Dn150(Ø168.3x-)/Pn10/B2	11
9	25	Flansa cu gal. Dn25(Ø33.7x-)/Pn10/B2	2
10	200	Flansa orbea Dn200(Ø219.1x-)/Pn10/B2	1
11	200	Garnitura Dn200/Pn10/B2	9
12	150	Garnitura Dn150/Pn10/B2	1
13	25	Garnitura Dn25/Pn10/B2	1
14	200	RSF Dn200/600H/B2	2
15	150	RSF Dn150/600H/B2	2
16	M24x140	Prezoane cu 2 piulite	96/192
17	M24x130	Prezoane cu 2 piulite	8/16
18	M12x80	Prezoane cu 2 piulite	4/8
19	25	RMS Dn25/Pn160/B2	1

PIESE DE CONDUCTE - LISTA DE PIESE

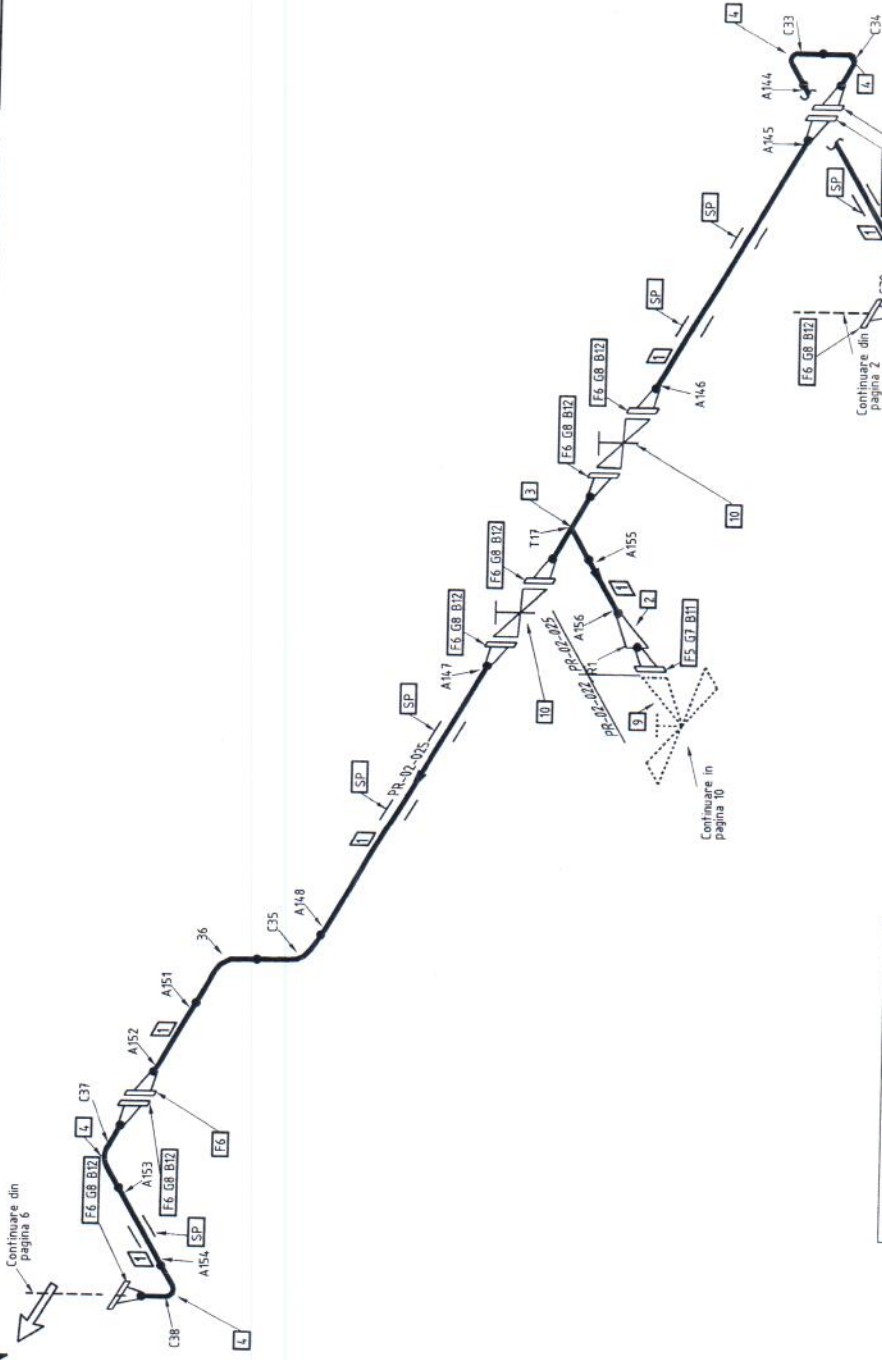
Poz	DN	Descriere	Cantitate
1	150	Teava	19,7 M
2	250x150	Reducție concentrica	1
3	150	Teu egal	1
4	150	Cot 90	7
5	250	Flansa cu gat Dn250(Ø273x-)/Pn110/B2	1
6	150	Flansa cu gat Dn150(Ø168,3x-)/Pn110/B2	10
7	250	Garnitura Dn250/Pn110/B2	1
8	150	Garnitura Dn150/Pn110/B2	8
9	250	Robinet cu 3 cai Dn250/Pn110/B2	1
10	150	RSF Dn150/600#/B2	2
11	M30x170	Prezoane cu 2 piulite	12/24
12	M24x130	Prezoane cu 2 piulite	64/128

LEGENDA:

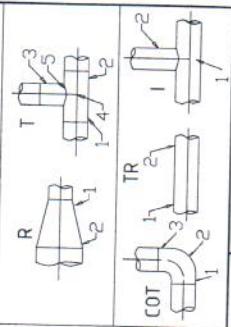
-limita sistem

- conducta existenta supuso examinarii
- conducta existenta in afara sistemului
- Configuratia, componenta si dimensiunile vor fi verificate inainte de examinare.

PLAN MASURATORI GROSIMI

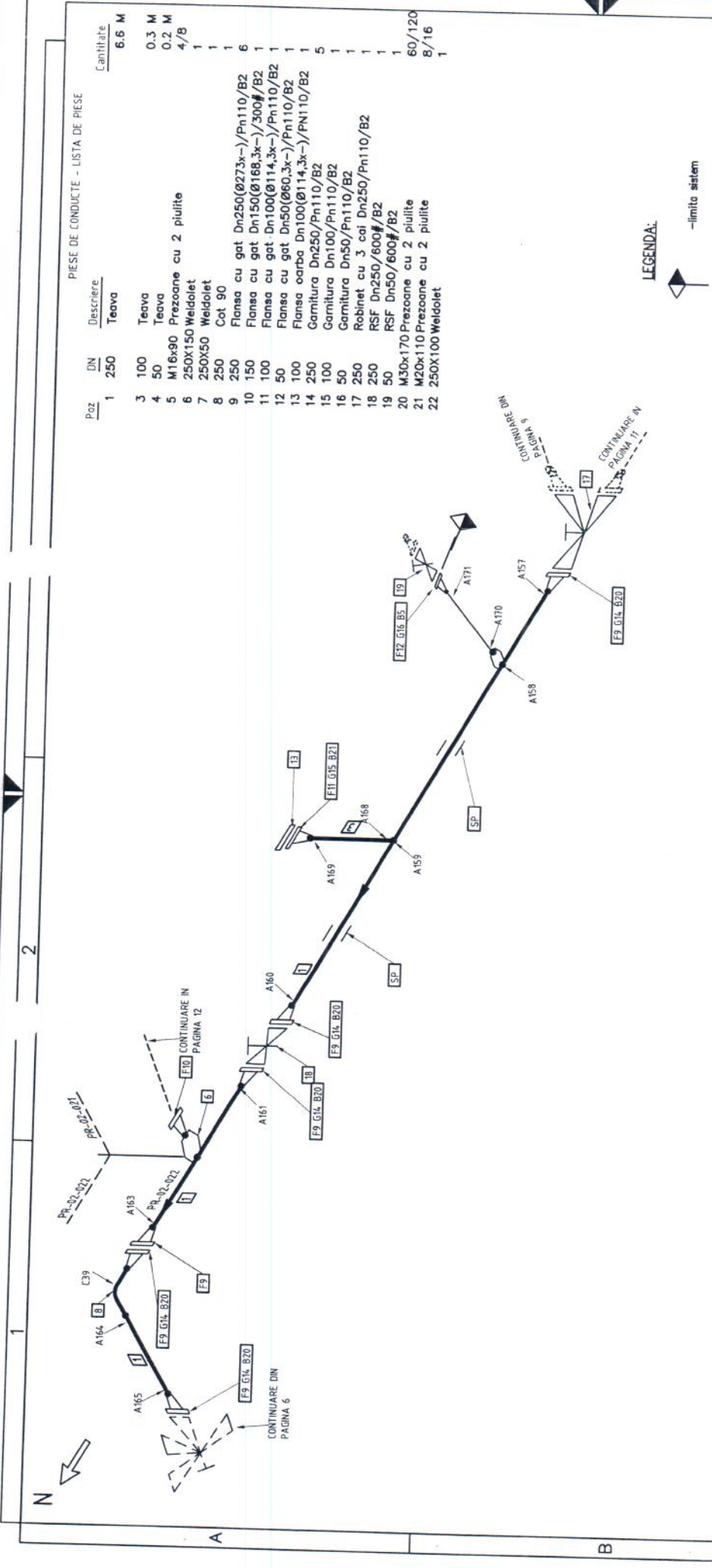


POZITIA PUNTELOR DE CONTROL
PENTRU MASURAREA GROSIMII PERETILOR CU US
PANA LA DN 50 INCLUSIV - 2 PUNCTE DE MASURARE
PANA LA DN 300 INCLUSIV - 4 PUNCTE DE MASURARE
PESTE DN 300 - 8 PUNCTE DE MASURARE



04	
03	
02	
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00	INTOCMIRE PROGRAM EXAMINARI
Rev/Rev	Denumirea modificarii/Change description

Temp. min lucru/Min op. temp.(°C): 15	Insotitori (nr./Dn)/Tracing (nr./ND): 2x25	Temp. max lucru/Max op. temp.(°C): 495
Mediu/Medium: Reziduu	Pres. max lucru/Max. op. pressure(bar): 15	Modul/Module: -
Grupa fluid/Fluid Group: 1	Categorie/Catagory: II	Mediu probe/Test medium: Apa
Material/Material: A 335 GRAD P5	% control nedistructiv/Nondestructiv test: 25% RT/UT	Presiune proba/Test pressure(bar): -
Isolatie/Insulation (type/thick.): DA/S=100mm	Test elasticitate/Elasticity Test: -	Diagrama P&ID/PI&D No.: -
Protectia coroziv/Corrosion Protection: NA	Organ receptie finala/Final reception: -	Temp. de proiectare/Design temp.(°C): 495
Tratament termic/Heat Treatment: NA	Presiune proiectare/Design pressure(bar): 15	la /to: R1,a,b,c,d
Clasa conducta/Pipe Class: -	de la /from: H1	
TUV AUSTRIA ROMANIA S.C. PETROL-UKOIL S.A. Ploiesti Str. Mihai Bravu, nr.235 Judet Prahova		
UKOIL OIL COMPANY		
Proiect-Nr/Project-No: 15-95/PEVIT		
Desen-Nr/Drawing-No: ANEXA 3		
Cod Instalatie/Plant Code: 31		
Cod Instalatie/Plant Code: 31		
Intreprindere/Cient: PETROTEL-UKOIL		
Instalatie/Plant: C.X		
Scara/Scale: NTS		
Verificat/Checked: Ninca N.		
Data/Date: 03.2015		
Intocmit/Designer: Stefan A.		
Denumirea modificarii/Change description		
pag/pag 9 din/from 14		



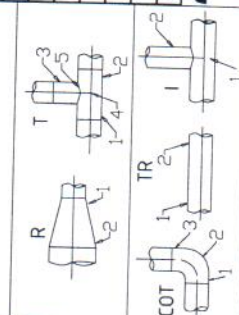
PIESE DE CONDUITE - LISTA DE PIESE

Poz	DN	Descriere	Cantitate
1	250	Teava	6.6 M
3	100	Teava	0.3 M
4	50	Teava	0.2 M
5	M16x90	Prezoane cu 2 piulite	4/8
6	250X150	Weldolet	1
7	250X50	Weldolet	1
8	250	Cot 90	1
9	250	Flansa cu gat Dn250(Ø273x-)/Pn110/B2	1
10	150	Flansa cu gat Dn150(Ø168.3x-)/300#/B2	6
11	100	Flansa cu gat Dn100(Ø114.3x-)/Pn110/B2	1
12	50	Flansa cu gat Dn50(Ø60.3x-)/Pn110/B2	1
13	100	Flansa oarba Dn100(Ø114.3x-)/Pn110/B2	1
14	250	Garnitura Dn250/Pn110/B2	5
15	100	Garnitura Dn100/Pn110/B2	1
16	50	Garnitura Dn50/Pn110/B2	1
17	250	Robinet cu 3 cai Dn250/Pn110/B2	1
18	250	RSF Dn250/600#/B2	1
19	50	RSF Dn50/600#/B2	1
20	M30x170	Prezoane cu 2 piulite	60/120
21	M20x110	Prezoane cu 2 piulite	8/16
22	250X100	Weldolet	1

LEGENDA:



POZITIA PUNTELOR DE CONTROL
PENTRU MASURAREA GROSIMII PERETILOR CU US
PANA LA 30 INCLIN - 2 PUNCTE DE MASURARE
PANA LA 45 INCLIN - 4 PUNCTE DE MASURARE
PENTRU DIN 45 - 6 PUNCTE DE MASURARE



PLAN MASURATORI GROSIMI

Temp. min lucru/Min op. temp.(°C): 15	Insolatori (nr./DN)/Tracing (nr./DN): 2x25	Temp. max lucru/Max op. temp.(°C): 495
Mediu/Medium: Reziduu	Pres. max lucru/Max. op. pressure(bar): 15	Modul/Module: --
Grupa fluid/Fluid Group: 1	Categorie/Catégorie: II	Mediu proba/Test medium: Apa
Materie/Material: A 335 GRAD P5	% control nedistructiv/Nondestructive test: 25-100%	Presiune proba/Test pressure(bar): --
Isolatie/Insulation (type/thick.): DA/S=100mm	Test elasticitate/Elasticity Test: --	Diagrama P&ID No.: --
Protectia corozivare/Corrosion Protection: NA	Organ receptie finala/Final reception: --	Temp. de proiectare/Design temp.(°C): 495
Tratament termic/Heat Treatment: NA	Presiune proiectare/Design pressure(bar): 15	la /to: R1,a,b,c,d
Clasa conductie/Pipe Class: --	de la /from: HI	
S.C. PETROTEL-LUKOIL S.A. Ploiesti Str. Mihai Bravu, nr. 235 Judet Prahova		
Proiect-Nr./Project-No: 15-05/PEVIT Desen-Nr./Drawing-No: ANEXA 3		
Cod Instalatie/Plant Code Orig.Plan: 17 18 19 20 21 22 23 30 31		
Intreprindere/Client: PETROTEL-LUKOIL		
Instalatie/Plant: C.X		
Scara/Scale: NTS		
SIS 4-PR-02-021;022;023;024;025;026;027;060		
pag/pag 10 din/from 14		

Rev/Rev	Denumirea modificarii/Change description	Data/Date	Intocmit/Designer	Verificat/Checked
04				
03				
02				
01				
00	INTOCMIRE PROGRAM EXAMINARI	03.2015	Stefan A. Ninca N.	

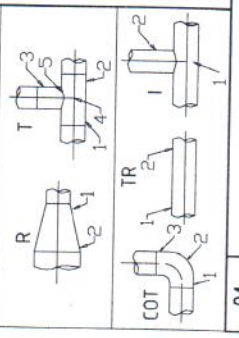
PIESE DE CONDUITE - LISTA DE PIESE

Poz	DN	Descriere	Cantitate
1	250	Teava	6.2 M
2	150	Teava	0.6 M
3	50	Teava	0.2 M
4	M16x80	Prezoane cu 2 piulite	4/8
5	M16x80	Weldolet	1
6	250X150	Weldolet	1
7	250	Cot 90	1
8	150	Cot 90	1
9	250	Flansa cu gat Dn250(Ø273x-) / Pn110/B2	6
10	150	Flansa cu gat Dn150(Ø168.3x-) / Pn110/B2	1
11	50	Flansa cu gat Dn50(Ø60.3) / Pn110/B2	1
12	250	Garnitura Dn250/Pn110/B2	5
13	50	Garnitura Dn50/Pn110/B2	1
14	250	RSF Dn250/600# / B2	1
15	50	RSF Dn50/600# / B2	1
16	M30x170	Prezoane cu 2 piulite	60/120

LEGENDA:



POZITIA PUNCTELOR DE CONTROL
PENTRU MASURAREA GROSIMII PERETILOR CU US
PANA LA DN 50 INCLUSIV - 2 PUNCTE DE MASURARE
PANA LA DN 300 INCLUSIV - 4 PUNCTE DE MASURARE
PESTE DN 300 - 8 PUNCTE DE MASURARE



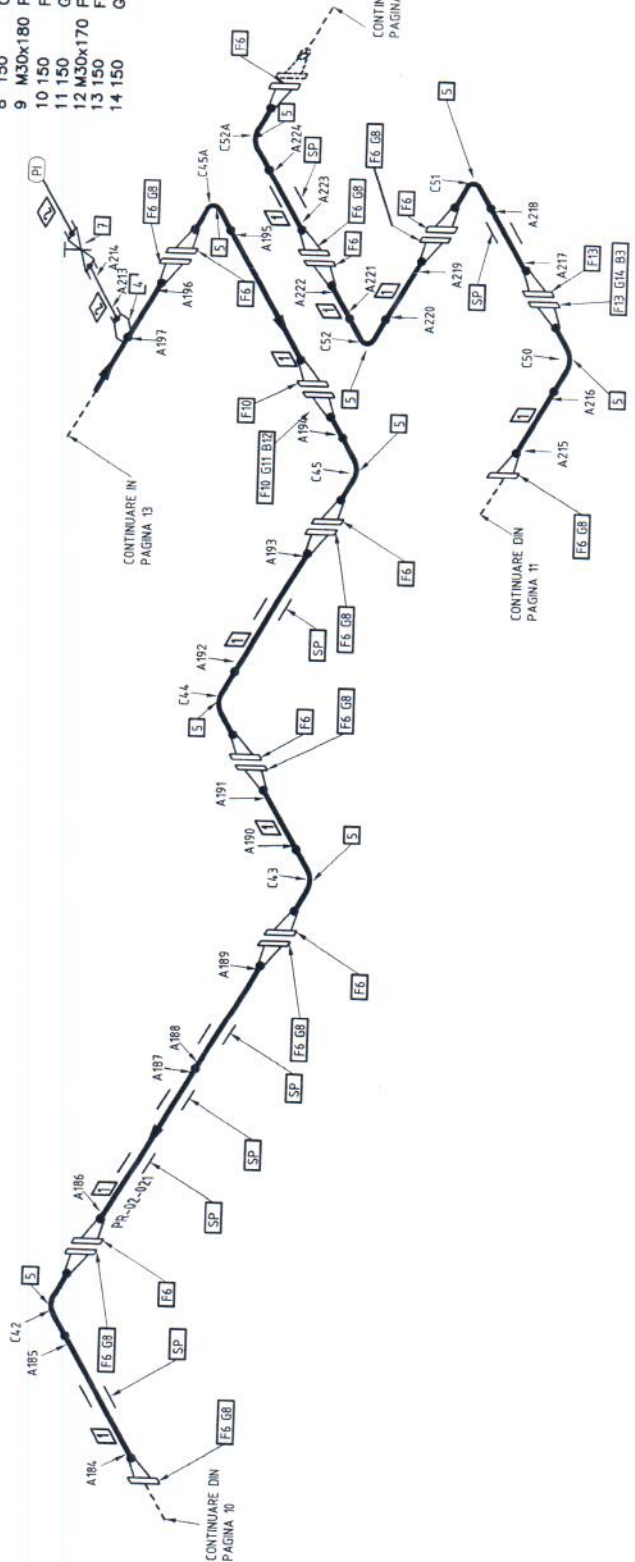
PLAN MASURATORI GROSIMI

Temp. min lucru/Min op. temp.(°C): 15	Insotitori (nr./DN)/Tracing (nr./DN): 2x25	Temp. max lucru/Max op. temp.(°C): 495
Mediu/Medium: Reziduu	Pres. max lucru/Max. op. pressure(bar): 15	Modul/Module: -
Grupa fluid/Fluid Group: 1	Categorie/Catagory: II	Mediu proba/Test medium: Apo
Material/Material: A 335 GRAD P5	% control nedistinctiv/Nondestructive test: 25%-UT/UT	Presiune proba/Test pressure(bar): -
Isolatie/Insulation (type/thick.): DA/S=100mm	Test elasticitate/Elasticity Test: -	Diagrama P&ID/P&ID No.: -
Protectia coroziv/Corrosion Protection: NA	Organ receptie finala/Final reception: -	Temp. de protectie/Design temp.(°C): 495
Tratament termic/Heat Treatment: NA	Presiune protectie/Design pressure(bar): 15	la /No: R1,a,b,c,d
Clasa conducta/Pipe Class: -	de la /from: H1	1 2 3 4 5 6 7 8 9 10 11 12 13 14
S.C. PETROTEL-LUKOIL S.A. Ploiesti		
Str. Mihai Bravu, nr.235		
Județul Prahova		
Project-Nr/Project-No: 15-05/PEVIT		
Desen-Nr/Drawing-No: ANEXA 3		
Cod Instalatie/Plant Code Orig.Plant: 17 18 19 20 21 22 23 30 31		
Intreprindere/Cient: PETROTEL-LUKOIL		
Instalatie/Plant: C.X		
Scara/Scale: NTS		

Rev/Rev	04	03	02	01	00
Denumirea modificarii/Change description					INTOCMIRE PROGRAM EXAMINARI
Data/Date	03.2015				Stefan A. Ninca N.
Intocmit/Designer					
Verificat/Checked					

PIESE DE CONDUITE - LISTA DE PIESE

Poz	DN	Descriere	Cantitate
1	150	Teava	26.2 M
2	25	Teava	0.2 M
3	M30x170	Prezoane cu 2 piulite	8/16
4	150x20	Socketet	1
5	150	Cot 90	7
6	150	Flansa cu gat Dn150(Ø168,3x-)/300#B2	17
7	20	RMS Dn20/Pn160	1
8	150	Garnitura Dn150/300#B2	9
9	M30x180	Prezoane cu 2 piulite	84/168
10	150	Flansa cu gat Dn150(Ø168,3x-)/Pn64/B2	2
11	150	Garnitura Dn150/Pn64/B2	2
12	M30x170	Prezoane cu 2 piulite	8/16
13	150	Flansa cu gat Dn150(Ø168,3x-)/900#B2	2
14	150	Garnitura Dn150/900#B2	1



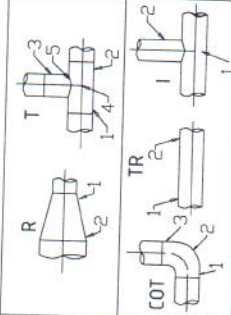
LEGENDA:



-limita sistem

PLAN MASURATORI GROSIMI

POZITIA PUNCTELOR DE CONTROL
PENTRU MASURAREA GROSIMII PERETILOR CUI US
PANA LA DN 50 INCLUSIV - 2 PUNCTE DE MASURARE
PANA LA DN 300 INCLUSIV - 4 PUNCTE DE MASURARE
PESE DIN 300 - 8 PUNCTE DE MASURARE



Temp. min lucru/min op. temp.(C): 15		Imodificari (nr./DN)/Tracing (nr./NO): 2x25		
Media/Medium: Reziduu		Pres. max lucru/Max. op. pressure(bar): 15		
Grupa fluid/Fluid Group: 1		Categorie/Categories: II		
Material/Material: A 335 GRAD P5		Temp. max lucru/Max op. temp.(C): 495		
Izolatie/Insulation (type/thick): DA/S=100mm		Mediu proba/Test medium: Apa		
Protectie coroziune/corrosion Protection: NA		Presiune proba/Test pressure(bar): -		
Tratament termic/Heat Treatment: NA		Diagrama P&ID/PAID No.: -		
Clasa conducte/Pipe Class: -		Temp. de proiectare/Design temp.(C):495		
de la /from: H1		la /to: R1,a,b,c,d		
S.C. PETROTEL-LUKOIL S.A. Ploiesti Str. Mihai Bravu, nr 235 Județul Prahova		Project-Nr/Project-No Desen-Nr/Drawing-No		
TUV AUSTRIA ROMANIA		15-95/PPVIT		
Intreprindere/Cient: PETROTEL-LUKOIL		ANEXA 3		
Instalatie/Plant: C.X		Cod Instalatie/Plant Code Orig.Plan		
Scara/Scale: NTS				
SIS 4-PR-02-021;022;023;024;025;026;027;060		pag/pag 12 din/from 14		
Rev/Rev	Denumirea modificarii/Change description	Date/date	Intocmit/Designed	Verificat/Checked
04			Ninca N.	
03				
02				
01				
00	INTOCMIRE PROGRAM EXAMINARI	03.2015	Stefan A.	Ninca N.



PIESE DE CONDUCTE - LISTA DE PIESE

Poz	DN	Descriere	Capacitate
1	150	Teava	11.0 M
2	25	Teava	0.5 M
3	150X25	Socket	
4	150	Cot 90	4
5	150	Flansa cu gat Dn150(Ø168.3x-)/Pn110/B2	8
6	25	Flansa cu gat Dn25(Ø33.7x-)/Pn110/B2	1
7	25	RSMS Dn20/Pn160	1
8	25	Flansa oarba Dn25(Ø33.7x-)/Pn110/B2	1
9	150	Garnitura Dn150/Pn110/B2	5
10	25	Garnitura Dn25/Pn110/B2	1
11	M30x180	Prezoane cu 2 piulite	60/120
12	M18x100	Prezoane cu 2 piulite	4/8
13	40	Garnitura Dn40/Pn110/B2	1
14	M20x120	Prezoane cu 2 piulite	4/8
15	40	Flansa cu gat Dn40(Ø48.3x-)/Pn110/B2	2
16	150X20	Socket	1
17	40	Teava	0.5 M

LEGENDA:



PLAN MASURATORI GROSIMI

Temp. min lucru/Min op. temp.(°C): 15	Insolatori (nr./DN)/Tracing (nr./DN): 2x25	Temp. max lucru/Max op. temp.(°C): 495
Mediu/Medium: Reziduu	Pres. max lucru/Max. op. pressure(bar): 15	Modul/Module: II
Grupa fluid/Fluid Group: 1	Categorie/Categorie: II	Mediu proba/Test medium: Apa
Materiale/Materials: A 335 GRAD P5	% control nedistructiv/Nondestructive test: 25-PT/UT	Presiune proba/Test pressure(bar): -
Isolatie/Insulation (type/thick): DA/S=100mm	Test elasticitate/Elasticity Test: -	Diagrama P&ID/PAID No.: -
Protectia coroziune/Corrosion Protection: NA	Organ receptie finala/Final reception: -	Temp. de proiectare/Design temp.(°C): 495
Tratament termic/Heat Treatment: NA	Presiune proiectare/Design pressure(bar): 15	la /to: R1 a,b,c,d
Clasa conducte/Pipe Class: -	de la /from: H1	

S.C. PETROTEL-LUKOIL S.A.
Ploiesti
Str. Mihai Bravu, nr.235
Judet Prahova

15-05/PEVIT
Desen-Nr/Project-No
Desen-Nr/Drawing-No
Cod Instalatie/Plant Code

ANEXA 3

