



PROIECTIE IN PLAN / PLAN VIEW (Scala / Scale 1:10,000)

DODC-2 FLET		MATCH POINT END	
X	Y	X	Y
279,025.23	959,218.52	276,593.26	963,589.91

PUNCT REPER DODC-2		PUNCT LEGATURA DE FINAL	
X	Y	X	Y
279,025.23	959,218.52	276,593.26	963,589.91

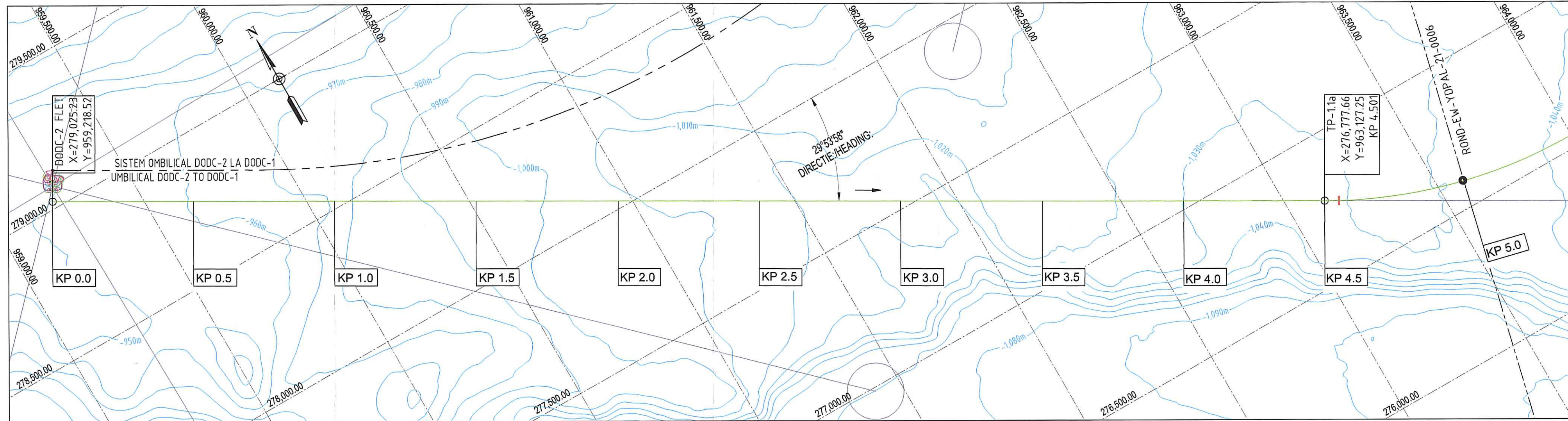
LEGENDA / LEGEND

 CONDUCTA DE ADUCTIUNE DOMINO / DOMINO FLOWLINE
 SISTEM OMBILICAL DOMINO / DOMINO UMBILICAL
 PROFIL FUNDUL MARII / SEABED PROFILE
 SUPPORT CONDUCTA / SLEEPER
 CABLURI ANCORAJ SI ZONA EXCLUDERE ANCORA / MOORING LINES & ANCHOR EXCLUSION ZONE

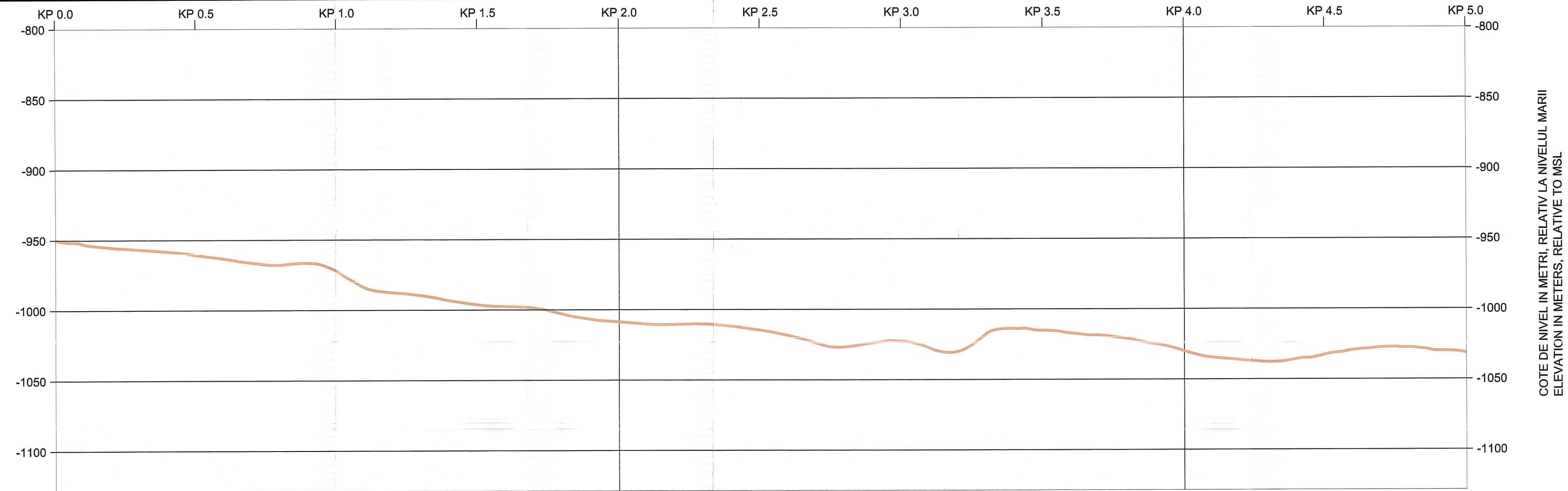
NOTA:

Sistem Ombilical - Ansamblu de conductori electrici, fibra optica, conducte hidraulice, conducte injectie chimicale, etc. intr-un invelis metalic comun.

NOTE:
Umbilical - Assembly of electrical conductors, fiber optics, hydraulic lines, chemical injection pipes, etc. in a common metallic coating.



PROFIL LONGITUDINAL CONDUCTA / LONGITUDINAL PROFILE ALONG PIPELINE



ACRONIME

TP - PUNCT SCHIMBARE DIRECTIE
KP - POZITIE KILOMETRICA (CONDUCTA)

ACRONYMS

TP - TURN POINT
KP - KILOMETRIC POINT

SCALA ORIZZONTALE / HORIZONTAL SCALE	1:10,000
SCALA VERTICALE / VERTICAL SCALE	1:1,000
EXAGERARE VERTICALE / VERTICAL EXAGGERATION	5

DATE TEHNICE / ENGINEERING DATA

ELEMENTE TRASEU		ROUTE ITEMS	STRAIGHT HEADING (°N) / BEND RADIUS (m)		29° 53' 58"		1,750	
TRAVERSARE CABLU / CONDUCTA			CABLE / PIPELINE CROSSING		NU EXISTA / NONE			
TIP SOL LA SUPRAFATA FUNDULUI MARI			SURFACE SEABED SOIL		ZONA 1 - ARGILA VERZUI-INCHIS CU REZISTENTA FOARTE SCAZUTA (NOTA 4) / ZONE 1 - EXTREMELY LOW STRENGTH DARK GREENISH CLAY (NOTE 4)			
TIP DTCL / D. EXT. (mm) / GROSIME PERETE (mm)			STEEL GRADE / O.D. (mm) / WALL THICKNESS (mm)		DNV SMLS 450 SFDPU / 355.6 / 218			
GROSIME PERETE DISP. ANTIDEFORMARE(mm)/ INTERVAL (m)			BUCKLE ARRESTOR W.T. (mm) / SPACING (m)		NU EXISTA / NONE			
STRAT ANTI-COROZIV/GROSIME(mm)/DENSITATE(kg/m³)			ANTI-CORR. COAT / THICK (mm) / DENSITY (kg/m³)		NU SE APLICA / N/A			
STRAT TERMOIZOLANT/GROSIME (mm)/DENSITATE (kg/m³)			EXT. THER. INS. COAT./THICK (mm)/DENSITY (kg/m³)		FBE + POLIPROPILENA SINTETICA / 75 / 790 (NOTA 11) / FBE + SYNTACTIC POLYPROPYLENE / 75 / 790 (NOTE 11)			
STRAT BETON / STRAT INTERIOR PROTECTIE			CONCRETE COATING / INTERNAL COATING		NU EXISTA / NONE			
TIP SUDURA/TIP UMPLUTURA/DENSITATE (kg/m³)			FIELD JOINT TYPE / INFILL / DENSITY (kg/m³)		IMBINARE ANOD DOBLA / DOUBLE ANODE JOINT			
TIP ANOD PROTECTIE / INTERVAL PLASARE (NR. DE SEGMENTE)			ANODE BRACELETS TYPE / SPACING (joints)		POLIURETAN / POLYURETHANE / 950 (TIP / TYP)			
GREUTATE CONDUCTA (kN/m)			PIPELINE WEIGHT (kN/m)		ALUMINIU (300mm x 50mm) 1 LA 24 SEGMENTE / AL (300mm x 50mm) 1 EVRY 24 JOINTS			
IN AER (USCATA) (kN/m)			IN AIR (DRY) (kN/m)		2.5459			
GOALA (kN/m) / SG			EMPTY (kN/m) / SG		0.5278 / 1.26			
IN APA (kN/m) / SG			SUBMERGED FLOODED (kN/m) / SG		1.2963 / 1.64			
FUNCTIONARE (kN/m) / SG			OPERATION (kN/m) / SG		0.6050 (IN MEDIE / AVERAGE) / 1.30			
D. EXT. (mm)			O.D. (mm)		125			
IN AER (USCATA) (kg/m)			IN AIR (DRY) (kg/m)		43			
IN APA (kg/m) / SG			SUBMERGED (kg/m) / SG		32 / 3.9			
TIP LEGATUR/NR. DE LEGATURI PE SEGMENT			TYPE OF STRAP/No. OF STRAPS PER JOINT		VA FI CONFIRMAT / T.B.D.			
ADANCIME DRAGARE (m) / LATIME (m)			DREDGING DEPTH (m) / WIDTH (m)		NU EXISTA / NONE			
SUPPORTI			SLEEPERS		INITIATOR FLAMBAJ BI-14-01 (NOTA 9) / BUCKLE INITIATOR BI-14-01 (NOTE 9)			
ADANCIME SANT (m)			TRENCHING DEPTH (m)		NU SE APLICA / N/A			
TIP UMPLUTURA / INALTIME STRAT ACOPERIRE (m)			BACKFILLING TYPE / COVER TOP (m)		NU SE APLICA / N/A			
DEPNERE AGREGAT/PIETRIS			GRAVEL DUMPING		NU SE APLICA / N/A			
INSTALARE (m)			INSTALLATION (m)		43.5			
HYDRO-TEST (m)			HYDROTEST (m)		17.0			
FUNCTIONARE (m)			OPERATION (m)		32.5			
TOLERANTA LA INSTALARE (+/-) (m)			LAY TOLERANCE (+/-) (m)		±10			
ALTELE			OTHER		-			
DATE CONDUCTA		PIPELINE DATA	IMBINARE ANOD DOBLA / DOUBLE ANODE JOINT		POLIURETAN / POLYURETHANE / 950 (TIP / TYP)			
GREUTATE CONDUCTA (kN/m)		PIPELINE WEIGHT (kN/m)	EMPTY (kN/m) / SG		0.5278 / 1.26			
IN AER (USCATA) (kN/m)		IN AIR (DRY) (kN/m)	SUBMERGED FLOODED (kN/m) / SG		1.2963 / 1.64			
GOALA (kN/m) / SG		EMPTY (kN/m) / SG	OPERATION (kN/m) / SG		0.6050 (IN MEDIE / AVERAGE) / 1.30			
IN APA (kN/m) / SG		SUBMERGED FLOODED (kN/m) / SG						
FUNCTIONARE (kN/m) / SG		OPERATION (kN/m) / SG						
DATE INCALZIRE ELECTRICA DIRECTA (NOTE 13)		DEH DATA (NOTE 13)	O.D. (mm)		125			
TIP LEGATUR/NR. DE LEGATURI PE SEGMENT		DEH CABLE WEIGHT (kN/m)	IN AIR (DRY) (kg/m)		43			
ADANCIME DRAGARE (m) / LATIME (m)		DEH CABLE WEIGHT (kg/m)	SUBMERGED (kg/m) / SG		32 / 3.9			
SUPPORTI		TYPE OF STRAP/No. OF STRAPS PER JOINT			VA FI CONFIRMAT / T.B.D.			
ADANCIME DRAGARE (m) / LATIME (m)		DREDGING DEPTH (m) / WIDTH (m)			NU EXISTA / NONE			
SUPPORTI		SLEEPERS			INITIATOR FLAMBAJ BI-14-01 (NOTA 9) / BUCKLE INITIATOR BI-14-01 (NOTE 9)			
ADANCIME SANT (m)		TRENCHING DEPTH (m)			NU SE APLICA / N/A			
TIP UMPLUTURA / INALTIME STRAT ACOPERIRE (m)		BACKFILLING TYPE / COVER TOP (m)			NU SE APLICA / N/A			
DEPNERE AGREGAT/PIETRIS		GRAVEL DUMPING			NU SE APLICA / N/A			
INSTALARE (m)		INSTALLATION (m)			43.5			
HYDRO-TEST (m)		HYDROTEST (m)			17.0			
FUNCTIONARE (m)		OPERATION (m)			32.5			
TOLERANTA LA INSTALARE (+/-) (m)		LAY TOLERANCE (+/-) (m)			±10			
ALTELE		OTHER			-			

NOTA / NOTE:

Planşa este întocmită în sistemul de coordonate WGS 84. Coordonatele STEREO 70 au fost obţinute prin conversie, folosind metode electronice de calcul şi parametri specifici. Conversia presupune transformări (translatări, rotaţii şi/sau scalări) ale coordonatelor WGS 84. Definitorii sunt documentele realizate în sistemul WGS 84. Acestea vor fi utilizate în scopul punerii în opera a proiectului. Documentele emise în sistemul STEREO 70 reprezintă răspunsul la cerinţele autorităţilor şi legislaţiei româneşti.

The plan is prepared in WGS 84 coordinate system. The STEREO 70 coordinates were obtained by conversion, using electronic calculation methods and specific parameters. The conversion involves transformations (translations, rotations and/or scaling) of the WGS 84 coordinates. The defining are the documents made in the WGS 84 system. These will be used for the purpose of implementing the project. The documents issued in the STEREO 70 system represent the answer to the requirements of the Romanian authorities and legislation.

Conform legislației românești, virgula și punctul sunt utilizate invers, pentru definirea zecimalelor.

Dimensiunile în sistem US au fost definite astfel: Simbolul virgula a fost folosit pentru separarea cifrelor din interiorul numerelor care definesc sute, mii sau zeci în funcție de caz. Subunitățile de măsură (zecimalele) au fost separate prin punct. Prin urmare zecimalele vor fi cifrele din interiorul numerelor aflate după simbolul punct.

According to the Romanian legislation the comma and the point are used in reverse, for the definition of decimals.

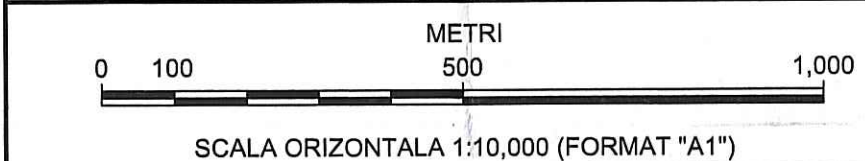
The dimensions in the US system have been defined as follows: The comma symbol has been used to separate digit inside the numbers when the digit define hundreds, thousands or tens depending on the case. The digit of decimals are separated by a point. In according with the rules in Romania the coma and point are use in opposite way for defined the digit inside of number. For this reason all the digit inside of number after point will be read like decimals.

ACPLA PREVEDERILE PRIVIND CONFIDENTIALITATEA DIN CONTRACTUL DE CONCESIUNE NEPTUN DEEP SA A CONTRACTULUI DE OPERATII COMUNE AFERENT SIVAUZ CONTRACTUL DE CONFIDENTIALITATE APLICABIL IN NIMELC EXONOMIBL EXPLORATION AND PRODUCTION ROMANIA LIMITED.	SUBJECT TO CONFIDENTIALITY PROVISIONS OF THE NEPTUN DEEP CONCESSION AGREEMENT AND RELATED JOINT OPERATIONS AGREEMENT AND/OR BOTH OF THE APPLICABLE NON-DISCLOSURE AGREEMENT ON BEHALF OF EXONOMIBL EXPLORATION AND PRODUCTION ROMANIA LIMITED.
NOTE	NOTES
<p>1. DACA NU SE SPECIFICEAZA ALTEL TOATE DIMENSIUNILE SUNT EXPRIMATE IN METRI.</p> <p>2. DATELE COATE DE NIVEL SUNT IN METRI, RELATIV LA NIVELUL MARI.</p> <p>3. DATELE BATIMETRIC PROVIN DIN BAZA DE DATE GEOTEHNIC SI GEOFIZICE SI ACTUALIZATA PRIN DOCUMENTUL FIGURO 160424.V3 (2017).</p> <p>4. DATELE DESPRE SOLUL DE PE FUNDUL MARI PROVIN DIN RAPORTUL INTEGRAT REPTUW-DEP-RGRPT-00-0015-001. A SE VEDEA DOCUMENTUL CU NUMARUL RNDW-EW-YBDM-20-0002 PENTRU DATE DESPRE SOL. LA LOCATIA PLATFORMEI ACTUALIZATI CU MASURATORILE FIGURO 2017.</p> <p>5. ORIENTARILE INDICATE DUPA NORDUL STEREO 70.</p> <p>6. PORTIUNILE SUBMAREE TRENCHING, JOLTS CU LA PLATFORMA SI LA LOCATIA SONDELOR REFERIR DETALIATE: RNDW-EW-YOLAY-22-0012, RNDW-EW-YOLAY-22-0005 SI RNDW-EW-YOPAL-22-0031.</p> <p>7. PORTIUNILE CONDUCTE DE ADUCTIUNE SITUATE IN AFARA SANTURIOR SI IN APROPEREA MOSORULUI PLAFORMEI DE PRODUCTIE VU FI PROTEJATE CU SALTELE.</p> <p>8. DISTANTA MINIMA INTRE CONDUCTA DE ADUCTIUNE SI SISTEMUL UMBILICAL ESTE DE 100m.(NOMINAL 120m, INCLUZAND TOLERANTE) DATORIA CERINTELOR INCALZIRI ELECTRICE DIRECTE IDEH).</p> <p>9. PENTRU POZITIA SI CONFIGURAREA INITIATORULUI DE CURBURA VEZI DOC. RNDW-EW-YLAY-21-0012 / 0013.</p> <p>10. PENTRU DATELE DE PRE-INTERVENTIE, LEGATE DE PROFILUL SANTELUI VEZI DOC. RNDW-EW-YDPLX-21-0003/0004.</p> <p>11. SE VA CONFIRMA GROSIMEA NECESARA PENTRU IZOLATIE CONFORM FISA DE DATE TEHNICE PENTRU IZOLATIE RNDW-EW-YSTDS-20-0031.</p> <p>12. A SE CONSULTA RNDW-EW-YRSTS-21-0002, RAPORT TRONSON.</p> <p>13. A SE CONFIRMA PROPRIETATE INCALZIRI ELECTRICE DIRECTE IDEH IN PROIECTUL DETALIAT.</p>	<p>1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.</p> <p>2. ALL ELEVATIONS ARE IN METERS AND RELATIVE TO MSL.</p> <p>3. BATHYMETRY DATA FROM 2014. GEOTECHNICAL AND GEOPHYSICAL GIS DATABASE UPDATED. FIGURO DOCUMENT 13135-R-001(03) FOR THE NEPTUN DEEP DEVELOPMENT. PLATFORM LOCATION APPROACH BATHYMETRY UPDATED BY FIGURO DOCUMENT 160424.V3 (2017).</p> <p>4. SEALED SOIL DATA FROM NEPTUN DEEP INTEGRATED REPORT RNDW-EW-GRRPT-00-0015-001.</p> <p>SEE DESIGN DOCUMENT NUMBER RNDW-EW-YBDM-20-0002 FOR PLATFORM LOCATION DATA UPDATED BY FIGURO SURVEY 2017.</p> <p>5. HEADINGS INDICATED ARE RELATIVE TO STEREO 70 NORTH.</p> <p>6. FOR DETAILS OF THE INS AT PLATFORM AND SUBSEA WELL PLATFORM REFER TO DRAWING: RNDW-EW-YOLAY-22-0012, RNDW-EW-YOLAY-22-0005 AND RNDW-EW-YOPAL-22-0011.</p> <p>7. AT SHALLOW WATER PLATFORM SPPOOL AND NO TRENCHED FLOWLINE SECTION WILL BE PROTECTED BY MATTRESSES.</p> <p>8. MINIMUM DISTANCE OF 100m BETWEEN FLOWLINE AND UMBILICAL (120m NOMINAL INCLUDING TOLERANCES) DUO DEEH REQUIREMENTS.</p> <p>9. FOR BUCKLE INITIATOR POSITION AND CONFIGURATION REFER TO RNDW-EW-YLAY-21-0012 / 2013.</p> <p>10. PRE-INTERVENTION WORKS FOR TRENCING PROFILE DETAILS REFER TO RNDW-EW-YDPLX-21-0003/0004.</p> <p>11. THICKNESS TO BE CONFIRMED WHILE MEETING INSULATION REQUIREMENTS IN RNDW-EW-YSTDS-20-0031, TECHNICAL DATA SHEET FOR INSULATION.</p> <p>12. REFERENCE RNDW-EW-YRSTS-21-0002, SPAN REPORT.</p> <p>13. DEH PROPERTIES TO BE CONFIRMED DURING DETAIL DESIGN.</p>

DOCUMENTE DE REFERINTA

NUMAR PLANSA	DESCRIERE	DRAWING NUMBER	DESCRIPTION
ROND-EW-YDLA-22-0002	PLAN ACCES SISTEM OMBICAL LA DOMINO D00C1	ROND-EW-YDLA-22-0002	DOMINO FLOWLINE WELL APPROACH LAYOUT D00C-1
ROND-EW-YDLA-22-0005	PLAN ACCES SISTEM OMBICAL LA DOMINO D00C2	ROND-EW-YDLA-22-0005	DOMINO FLOWLINE WELL APPROACH LAYOUT D00C-2
ROND-EW-YDLA-22-0011	ARANJAMENT ACSES CONDUCTA DE ADUCTIUNE SI CONDUCTA GAZE NATURALE LA PLATFORMA (SWP)	ROND-EW-YDLA-22-0011	FLOWLINE AND PRODUCTION LINE PLATFORM (SWP) APPROACH ARRANGEMENT
ROND-EW-YDPA-22-0003/0008	FIESE ALIMENTAT SISTEM OMBICAL DOMINO	ROND-EW-YDPA-22-0003/0008	DOMINO UMBICAL ALIGNMENT SHEETS
ROND-EW-YDLA-21-0012/0013	PLAN LUCRARI ATENIERE DEFORMARE LATERALA CONDUCTA DE ADUCTIUNE DOMINO	ROND-EW-YDLA-21-0012/0013	DOMINO LATERAL BUCKLING MITIGATION WORKS LAYOUT
ROND-EW-YDPLX-21-0003/0004	LUCRARI INTERVENTIE PRE-INSTALARE	ROND-EW-YDPLX-21-0003/0004	DOMINO PRE-LAY INTERVENTION WORKS

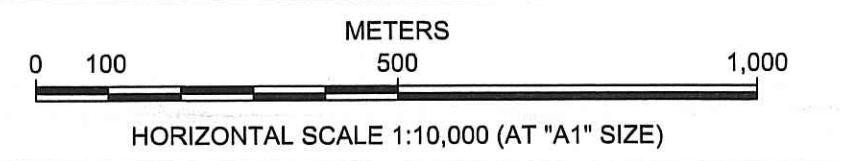
SCALA





PARAMETRI GEODEZIE SI DE PROIECTIE

DATE GEODEZICE	:	STEREO 70
PROIECTIE	:	Dublu Stereografica
Meridianul central (MC)	:	25.0
Latitudine Origine	:	46.0
Falsa origine estica	:	500,000.0
Falsa origine nordica	:	500,000.0
Factor de scala la MC	:	0.99975
DATE VERTICALE	:	MSL (NIVELUL MARIII)

SCALE BAR



PROJECT NEPTUN DEEP /
NEPTUN DEEP PROJECT

1-0	15.03.21	EMS PENDING VERIFICARE ISSUED FOR REVIEW	M. GUMTRU	C. STEFAN	N. EREMA
1-0	15.03.21	EMS PENDING VERIFICARE ISSUED FOR REVIEW	M. GUMTRU	C. STEFAN	N. EREMA
1-0	29.01.21	EMS PENDING VERIFICARE ISSUED FOR REVIEW	O. MOISE	C. STEFAN	N. EREMA
1-0	03.02.21	EMS PENDING VERIFICARE ISSUED FOR REVIEW	O. MOISE	C. STEFAN	N. EREMA
REV DATA		DENUNȚIE, SCOPUL REVIZUII	DENUNȚAT	PROTECTOR DESIGNAT	REF PROJECT APPROVED
VERIFICATOR CHECKER		SCOPUL REVIZUII	L. BURTHARI		ANRE
RECEIVED DECEMBER		REFERTAT NR. / EXPERTIZA NR. DATA CHECKER REPORT / EXPERTISE NR. (DATE)	NUME	SEMNATURA	DOMENIU EXIGENȚE
<p>PROSECUTOR GENERAL ILF CONSULTING ENGINEERING ROMANIA STR. NEGRUZI VLADE I. NR. 100/149, POBOSHI JILOVOTI 100170, NR. 20200401 S.C. JEREMY PROMASTER S.R.L. STR. COTEI DE VLADE I. NR. 14A, POBOSHI JILOVOTI 100170, NR. 20200401</p>					
					

1	16OCT17	RE-ISSUED FOR IFD	RO	EP	SS	JC
0	07JUL17	ISSUE FOR IFD	RO	EP	SS	JC
REV.	REV. DATE	REV. DESCRIPTION	ORIG	REV	APP	PRG APP

ExxonMobil
Exploration and Production
Romania Limited

CONDUCTA DE ADUCTIUNE DOMINO DOMINO FLOWLINE

FISA ALINIAMENT ALIGNMENT SHEET

FISA NR. 1 DIN 8
SHEET 1 OF 8

1:10,000	ROND-EW-YDPAL-21-0005-C	DTAC	1-D
SCALE / SCALE	NR. PLANSA / DWG. NO.	FAZA / PHASE	REV. / RE
16	17	A1+ (1092x59	