



DATE TEHNICE / ENGINEERING DATA			
ELEMENTE TRASEU	ORIENTARE (°N) / RAZA CURBURI (m)	ROUTE ITEMS	STRAIGHT HEADING (°N) / BEND RADIUS (m)
	TRAVERSARE CONDUCTA / CABLU		CABLE / PIPELINE CROSSING
	TIP SOL LA SUPRAFATA FUNDULUI MARII		SURFACE SEABED SOIL
	TIP OTEL / DIAM. EXT. (mm) / GROSIME PERETE (mm)		STEEL GRADE / O.D. (mm) / WALL THICKNESS (mm)
	GROS.PERETE DISP. ANTIDEFORMARE (mm)/ INTERVAL (m)		BUCKLE ARRESTOR W.T. (mm) / SPACING (m)
	STRAT ANTI-COROZIV/GROS.(mm)/DENSITATE(kg/m³)		ANTI-CORR. COAT / THICK (mm) / DENSITY (kg/m³)
	STRAT INT. PROT./ GROSIME (µm) / DENSITATE (kg/m³)		INTERNAL COAT. / THICK (µm) / DENSITY (kg/m³)
	STRAT BETON: GROSIME (mm) / DENSITATE (kg/m³)		CONCRETE COATING: THICK (mm) / DENSITY (kg/m³)
	TIP SUDURA / TIP UMPLUTURA / DENSITATE (kg/m³)		FIELD JOINT TYPE / INFILL / DENSITY (kg/m³)
	TIP ANOD / MASA (Kg) / INTERVAL MONTAJ (segmente)		ANODE BRACELETS TYPE / MASS (kg) / SPACING (joints)
DATE CONDUCTA	GREUTATE CONDUCTA (kN/m)	PIPELINE DATA	PIPELINE WEIGHT (kN/m)
	IN AER (USCATA) (kN/m)	IN AER (DRY) (kN/m)	SUBMERGED (kN/m) / SG
	IN APA	INUNDATA (kN/m) / SG	OPERATION (kN/m) / SG
	IN FUNCTIUNE (kN/m) / SG	IN FUNCTIUNE (kN/m) / SG	OTHER
LUCRARI PRE INSTALARE CONDUCTA	ADANCIME DRAGARE (m) / LATIME (m)	PRE-LAY INT. WORKS	DREDGING DEPTH (m) / WIDTH (m)
	SUPORTI / SALTILELE BETON		SLEEPERS / MATTRESSES
	ADANCIME SANT (m)	POST-LAY INT. WORKS	TRENCHING DEPTH (m)
	TIP UMPLUTURA / STRAT ACOPERITOR (m)		BACKFILLING TYPE / COVER TOP (m)
	STRAT PIETRIS		GRAVEL DUMPING
	LUNGIME TRONSON ADMISA	ALLOWABLE SPAN LENGTH	INSTALLATION (m)
	FUNCTIUNARE (m)		HYDROTEST (m)
			OPERATION (m)
	CERINTE SPECIFICE	TOLERANTA LA INSTALARE (m)	LAY TOLERANCE (m)
	ALTELE		OTHER

SE APLICA PREVEDERILE PRIVIND CONFIDENTIALITATEA DIN CONTRACTUL DE CONCESIUNE NEPTUN DEEP SI A CONTRACTULUI DE OPERATII COMUNE APERENT SI/SAU CONTRACTORUL DE CONFIDENTIALITATE APLICABIL IN NOMELE EXXONMOBIL EXPLORATION AND PRODUCTION ROMANIA LIMITED

SUBJECT TO CONFIDENTIALITY PROVISIONS OF THE NEPTUN DEEP CONCESSION AGREEMENT AND RELATED JOINT OPERATING AGREEMENT AND/OR THOSE OF THE APPLICABLE NON-DISCLOSURE AGREEMENT ON BEHALF OF EXXONMOBIL EXPLORATION AND PRODUCTION ROMANIA LIMITED.

NOTE

- DACA NU SE PRECIZEAZA ALTFEL TOATE DIMENSIUNILE SUNT EXPRIMATE IN METRI.
- TOATE COTELE DE NIVEL SUNT IN METRI, RELATIV LA NIVELUL MARII.
- DATELE BATIMETRICE PROVIN DIN BAZA DE DATE GEOTEHNICE SI GEOFIZICE GIS ACTUALIZATA IN 2014, DOCUMENT FUGRO J31135-R-001(03) ACTUALIZAT PENTRU PROIECTUL NEPTUN DEEP.
- DATELE DE SOL PROVIN DIN RAPORTUL INTEGRAT NEPTUN DEEP ROND-EW-GRRPT-00-0015-001 A SE VEDEA DOCUMENTUL CU NUMARUL ROND-EW-YBDBM-20-0002.
- DIRECTIILE SUNT INDICATE IN RAPORT CU NORDUL STERO 70.
- PENTRU DETALII PRIVIND MODUL DE CONECTARE LA LOCALITA PLATFORMEI SE VA CONSULTA PLANSA ROND-EW-YDPA-22-0011 - ARANJAMENT CONDUCTA DE ADUCTIUNE SI CONDUCTA DE GAZE NATURALE LA PLATFORMA (SWP).
- STERS.
- PENTRU DETALII PRIVIND ANOZI CONSULTATI PLANSA ROND-EW-YDCPD-24-0002 SI DOCUMENTUL ROND-EW-YRSTY-24-0002.
- CARACTERIZAREA SOLULUI ESTE BAZATA PE NOTA TEHNICA 40809-00349-TN-003 (A SE VEDEA SI NOTA 4).
- STRAT INTERIOR CONDUCTA CONFORM SPECIFICATIEI STRAT EPOXIDIC INTERN ROND-EW-YSPDS-20-0039.
- PUNCT TRAVERSARE CABLU CONFORM BAZEI DE DATE MARINE GLOBALE. CONSTRUCTORUL VA DETERMINA LOCALITA EXACTA.
- POSSIBILA TRAVERSARE A VIITORULUI CABLU HCDC ROMANIA - TURCIA. CONSTRUCTORUL VA VERIFICA DATA CONSTRUCTIEI CU DETINATORUL CABLULUI.
- TRAVERSARE CABLU CONFORM BAZEI DE DATE GIS FURNIZATA DE FUGRO.
- TRAVERSARE CABLUL CONFORM PLANSA ROND-EW-YDPLX-24-0002 SOLUTIE TIPICA TRAVERSARE CABLU
- A SE NOTA CA GROSIMEA ANOZILOR SI DISTANTA ADMISA DINTRE EI VOR FI RE-EVALUATE IN DETALII DE EXECUTIE IN BAZA GROSIMII ACTUALE A STRATULUI DE BETON.

DOCUMENTE REFERINTA

NUMAR PLANSA	DESCRIERE	DRAWING NUMBER	DESCRIPTION
ROND-EW-YDCPD-24-0002	DETALII TIPICE ANOZI CONDUCTA DE GAZE NATURALE	ROND-EW-YDCPD-24-0002	PRODUCTION PIPELINE TYPICAL ANODE DETAILS
ROND-EW-YDPLX-24-0002	SOLUTIE TIPICA TRAVERSARE CABLU	ROND-EW-YDPLX-24-0002	TYPICAL CABLE CROSSING GENERAL ARRANGEMENT

SCALA

0 200 1,000 2,000 METRI

SCALA ORIZONTALA 1:20,000 (IN FORMAT "A1")

PARAMETRI GEODEZIE SI 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 MARII)

PLAN DE REFERINTA / KEY PLAN

NOTES

- ALL DIMENSIONS ARE IN METERS, UNLESS NOTED OTHERWISE.
- ALL ELEVATIONS ARE IN METERS AND RELATIVE TO MSL.
- BATHYMETRY DATA FROM 2014, GEOTECHNICAL AND GEOPHYSICAL GIS DATABASE UPDATE, FUGRO DOCUMENT J31135-R-001(03) FOR THE NEPTUN DEEP DEVELOPMENT.
- SEABED SOIL DATA FROM NEPTUN DEEP INTEGRATED REPORT ROND-EW-GRRPT-00-0015-001, SEE DESIGN DOCUMENT NUMBER ROND-EW-YBDBM-20-0002.
- HEADINGS INDICATED ARE RELATIVE TO STERO 70 NORTH.
- FOR DETAILS OF TIE-INS AT PLATFORM LOCATION REFER TO DRAWING : ROND-EW-YDPA-22-0011 - FLOWLINE AND PRODUCTION LINE PLATFORM (SWP) APPROACH ARRANGEMENT.
- DELETED.
- FOR ANODE DETAILS REFER TO DRAWING ROND-EW-YDCPD-24-0002 & DOCUMENT ROND-EW-YRSTY-24-0002.
- SOIL CHARACTERIZATION BASED ON TECHNICAL NOTE 40809-00349-TN-003 (SEE ALSO NOTE 4).
- INTERNAL FLOW COAT AS PER INTERNAL EPOXY COATING SPECIFICATION ROND-EW-YSPDS-20-0039.
- CABLE CROSSING FROM GLOBAL MARINE DATABASE. CONTRACTOR TO DETERMINE EXACT LOCATION.
- POTENTIAL CROSSING FOR FUTURE HCDC ROMANIA TURKEY. CONTRACTOR TO CHECK WITH THE CABLE OWNER FOR THE CONSTRUCTION DATE.
- CABLE CROSSING FROM GIS DATABASE PROVIDED BY FUGRO.
- CABLE CROSSING AS PER DRAWING ROND-EW-YDPLX-24-0002 TYPICAL CABLE CROSSING G.A.
- NOTE THAT ALLOWABLE SPANS AND ANODE THICKNESSES ARE TO BE RE-ASSESSED IN DETAILED DESIGN BASED UPON ACTUAL CONCRETE COATING THICKNESSES.

REFERENCE DOCUMENTS

DRAWING NUMBER	DESCRIPTION
ROND-EW-YDCPD-24-0002	PRODUCTION PIPELINE TYPICAL ANODE DETAILS
ROND-EW-YDPLX-24-0002	TYPICAL CABLE CROSSING GENERAL ARRANGEMENT

SCALE BAR

0 200 1,000 2,000 METERS

HORIZONTAL SCALE 1:20,000 (AT "A1" SIZE)

GEODETIC & PROJECTION PARAMETERS

GEODETIC DATUM	STEREO 70
PROJECTION	Double Stereographic
Central meridian (CM)	25.0
Latitude of Origin	46.0
False Easting at origin	500,000.0
False Northing at origin	500,000.0
Scale factor at CM	0.99975
VERTICAL DATUM	MSL

PROIECT NEPTUN DEEP / NEPTUN DEEP PROJECT

REV	DATE	DESCRIPTION	ORIG	REV	APP	REV
2-D	12.03.21	EMIS PENTRU VERIFICARE	M. DUMITRU	C. STEFAN	N. EREMA	
2-D	10.02.21	EMIS PENTRU VERIFICARE	M. DUMITRU	C. STEFAN	N. EREMA	
2-B	29.05.20	EMIS PENTRU VERIFICARE	O. MORSE	C. STEFAN	N. EREMA	
2-A	04.02.20	EMIS PENTRU VERIFICARE	O. MORSE	C. STEFAN	N. EREMA	
REV	DATE	DENUMIRE, SCOPUL REVIZIEI	DESIGNAT	PROIECTAT	SEP	PROIECT
VERIFICATOR	CHECKER	NUME	NUME	SIGNATURA	SIGNATURA	DOVENIO
PROIECTANT / ENGINEERING CONTRACTOR	PROIECTANT / ENGINEERING CONTRACTOR	PROIECTANT / ENGINEERING CONTRACTOR	PROIECTANT / ENGINEERING CONTRACTOR	PROIECTANT / ENGINEERING CONTRACTOR	PROIECTANT / ENGINEERING CONTRACTOR	PROIECTANT / ENGINEERING CONTRACTOR

ACRONIME

TP - PUNCT SCHIMBARE DIRECTIE

KP - POZITIE KILOMETRICA (CONDUCTA)

IP - PUNCT INFLEXIUNE

ACRONYMS

TP - TURN POINT

KP - KILOMETRIC POINT

IP - INFLEXION POINT

Conform legislatiei romanesti, virgula si punctul sunt utilizate invers, pentru definirea zecimalor.

Dimensiunile in sistem US au fost definite astfel: Simbolul virgula a fost folosit pentru separarea cifrelor din interiorul numerelor care definesc sute, mii sau zeci in functie de caz. Subunitatile de masura (zecimalele) au fost separate prin punct. Prin urmare zecimalele vor fi citite din interiorul numerelor afiate dupa 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 accordance with the rules in Romania the coma and point are used 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.

ExxonMobil

Exploration and Production

Romania Limited

CONDUCTA DE GAZE NATURALE 30" 30-INCH PRODUCTION PIPELINE

FISA ALINIAMENT ALIGNMENT SHEET

FISA NR. 005 DIN 016 SHEET 005 OF 016

1 : 20,000 ROND-EW-YDPA-24-0007-C DTAC 2-D

SCALA / SCALE NR. PLANSA / DWS. NO. FAZA / PHASE REV. / REV.