



JOINT PROJECTS TEAM

STRUCTURES A & E DEVELOPMENT PROJECT NC41 BLOCK LIBYAN OFFSHORE

Invitation for Pre-Qualification - Scope of Work

SURFACE WELLHEAD & CHRISTMAS TREE SUPPLY AND INSTALLATION SERVICES



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1. SCOPE OF DOCUMENT

Pre-Qualification tender is open for local and international vendors specializing in **SURFACE WELLHEAD AND CHRISTMAS TREE SUPPLY AND INSTALLATION SERVICES** and being strongly supported by professional crew are invited to register their interest to submit their document by providing the requested information as per following paragraphs.

DISCLAIMER:

All information specified in this document are considered by the Company to be accurate at the time of issue.

The Company does not, however, accept any liability for providing such information nor does it warrant its accuracy. They are estimates only and are not a guarantee of the volume of work.

2. INFORMATION OF THE ACTIVITY

Mellitah Oil & Gas plans to drill 31 (thirty one) offshore development wells (subsea wet & dry tree wells) in structures A & E - block NC41.

“A” Structure is about 75 km from the Libyan coast, The target depth of the deepest well is expected to be around 2690 m. TVD, in a water depth about 95 – 105 m. It has been considered to pre-drill the 8 development wells, then re-entry the same to be tied-back and completed with a work-over light rig working from the platform itself.

“E” structure is located in the NC41 Block around 31 km north east of the Sabratha Platform and about 110 km from the closest point on Libyan coast. The deepest well is expected to be approximately 2530 m, TVD, with surrounding water depth around 205 – 235 m, deviated/horizontal well type. Even in this development, the operations scenario envisages first pre-drilling campaign of 18 wells, then well re-entry, tie-back and completion with a work-over light rig once platform being installed.

The spud time of the first well is estimated to start from Q2 2021 onwards.

Company Operation Bases will be located in Malta and/or Tripoli Province.

3. SCOPE OF WORK

This document defines the requirements for A&E Structures Development Wells, Libyan Offshore NC41 Block, for the following Scope of Work:

3.1 **Surface Wellhead and Christmas Tree Equipment Supply and Installation Services**

The Tie-Back and Re-Entry operations of dry tree wells will take place after Pre-Drilling phase and Jacket installation and will require a Surface Wellhead System able to install a Surface BOP for performing Reservoir drilling and Completion running operations from a Platform Rig.

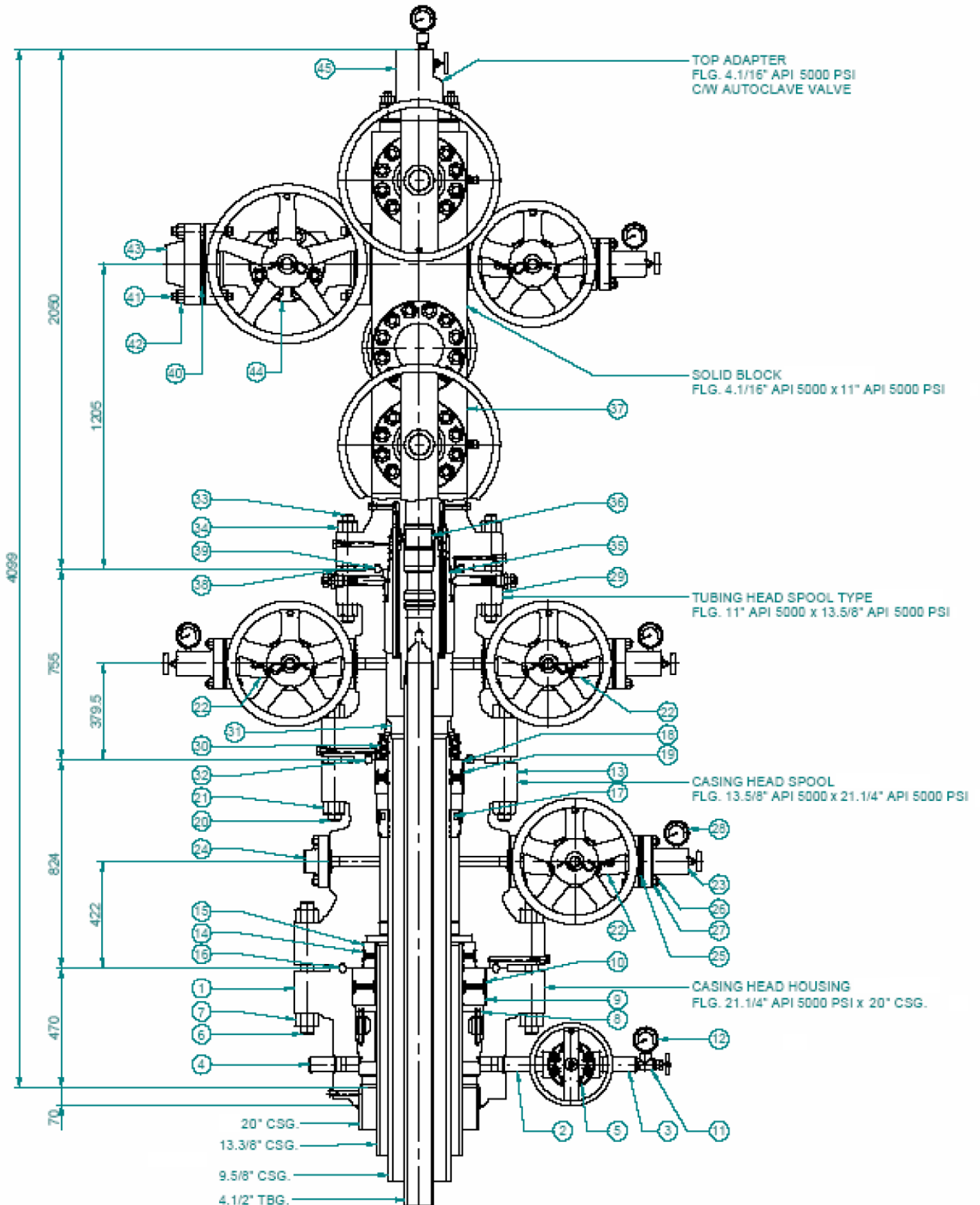
For this reason a complete set of Surface Wellhead (hereafter also specified as “Surface WH”), including Base Flanges, Casing Head Housings, Casing/Tubing Spools, Pack-Off assemblies and Gate Valves is required.

Once Completion string will be ran and set into the well, the installation of a “Solid-Blo9ck” Type Surface Christmas Tree (Surface XMT) is necessary to ensure safe hydrocarbon production.



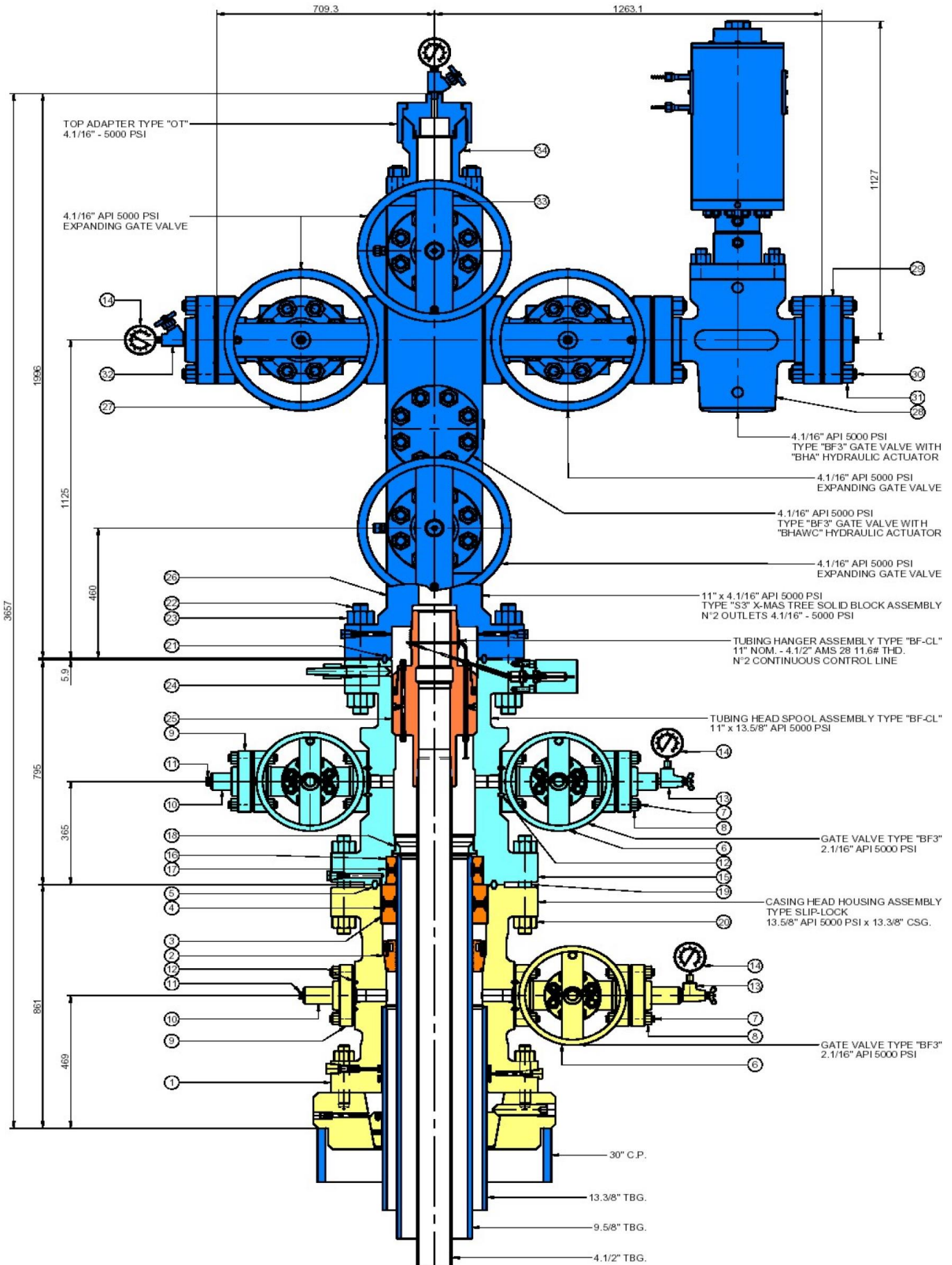
3.2 Typical Surface Wellhead and Surface Christmas Tree Stack-Up

3.2.1 Structure "A" (20" Csg – 13 3/8" Csg – 9 5/8" Csg – 4 1/2" Tbg)



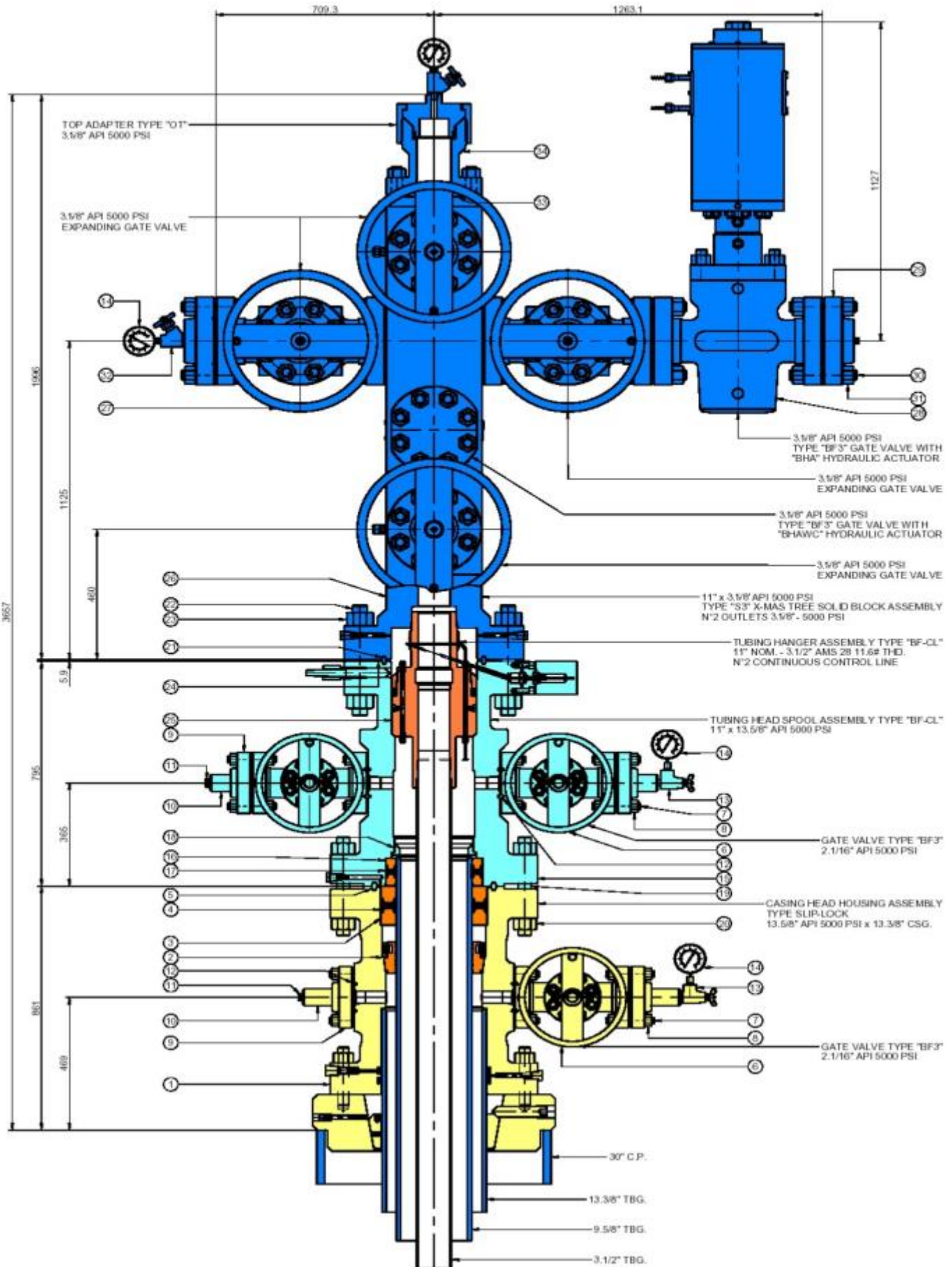


3.2.2 Structure "E" – Gas Wells (24" x 30" CP – 13 3/8" Csg – 9 5/8" Csg – 4 1/2" Tbg)





3.2.3 Structure "E" – Oil Wells (24" x 30" CP – 13 3/8" Csg – 9 5/8" Csg – 3 1/2" Tbg)





4. MAIN WELL DATA

In the following table are summed all project wells data:

Field	Reservoir	Production Wells		
		Gas	Oil	Total
Structure A	Metlaoui - Reineche	8 dry tree	None	8 dry tree
Structure E	Metlaoui	15 dry tree – 5 wet tree	3 dry tree	18 dry tree – 5 wet tree
<i>Total Wells (Structure A + Structure E)</i>		<i>23 dry tree – 5 dry tree</i>	<i>3 dry tree</i>	<i>26 dry tree – 5 wet tree</i>

4.1 Structure “A”

Field	Well		Preliminary Casing Strings	Tie-Back Strings	Tbg Size
	Name	Type			
Structure A	A01	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
	A04	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
	A05	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
	A06	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
	A07	Sub-Horizontal	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG - 7" LNR	20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
	A08	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
	A09	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
	A10	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "

4.2 Structure “E”

Field	Well		Preliminary Casing Strings	Tie-Back Strings	Tbg Size	
	Name	Type				
Structure E	Platform Wells	ES01	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES02	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES03	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES04	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES05	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES06	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES07	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES08	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES09	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES10	Mid-Deviated Slanted	30" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES11	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES12	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES13	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		ES14	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
		EN05	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	4 ¹ / ₂ "
	PO18	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG - 7" LNR	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	3 ¹ / ₂ "	
	PO22	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG - 7" LNR	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	3 ¹ / ₂ "	
	PO23	High-Deviated Slanted	30" CP - 20" CSG - 16" LNR – 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG - 7" LNR	24" x 30" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " CSG	3 ¹ / ₂ "	
Subsea Wells	EN01	Sub-Horizontal	36" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " LNR	N/A	4 ¹ / ₂ "	
	EN02	Sub-Horizontal	36" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " LNR	N/A	4 ¹ / ₂ "	
	EN03	Sub-Horizontal	36" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " LNR	N/A	4 ¹ / ₂ "	
	EN04	Sub-Horizontal	36" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " LNR	N/A	4 ¹ / ₂ "	
	EW01	Sub-Horizontal	36" CP - 20" CSG - 13 ³ / ₈ " CSG - 9 ⁵ / ₈ " LNR	N/A	4 ¹ / ₂ "	



5. SUMMARY OF PROJECT AND LOGISTIC REQUIREMENTS

Expected Operations Commencement:	Structure "A": Q3 2021 onwards Structure "E": Q2 2021 onwards
Water Depth at operations area (to be confirmed):	Structure "A": 95 m ssl Structure "E": Platform Wells: 218 m ssl Subsea Cluster: 192 m
Drilling Rigs:	Structure "A": TBN Structure "E": TBN
COMPANY'S Logistics Bases:	MedServ Base (Malta Freeport) – Malta Busetta Port, Tripoli – Libya
Distance Logistics Bases to Rig Site (nautical miles):	Structure "A" Tripoli: 55 nm Malta: 175 nm Structure "E" Tripoli: 57 nm Malta: 142 nm
COMPANY'S Heliport Locations:	Luqa Airport – Malta Mitiga Airport – Tripoli, Libya
Distance from Heliports to Rig Site (kilometres):	Structure "A" Mitiga: 102 km Luqa: 323 km Structure "E" Mitiga: 106 km Luqa: 263 km
COMPANY'S Planned Operations Office Location:	<p><u>Tripoli Offices:</u> Dat El Imad Complex Tower-1 9th Floor P.O. Box 91651 Tripoli, Libya</p> <p><u>Malta Offices:</u> Medserv Marine Base Malta Freeport Port of Marsaxlokk Birzebbugia BBG3011, Malta</p>

The map displays the geographical relationship between the project sites and the logistics hubs. Structure A is located 102 km (55 nm) from Tripoli and 323 km (175 nm) from Malta. Structure E is 106 km (57 nm) from Tripoli and 263 km (142 nm) from Malta. The map also shows the NC41 Concession area and the MedServ Base - Malta Marine Base.