1. **Material Consideration**
    - Since the inlet oil contains sand particles, the Pump should be resistant against sand corrosion.
    - Water cut percentage is up to 50%, and fluid salinity is between 50,000 (ppm) to 250,000 (ppm) resistance against corrosion should be considered in design.
    - The inlet crude oil contains a high amount of the impurity sulfur. Design criteria should be considered for toxic and corrosive inlet oil.
2. **Inlet Oil Temperature**
    - Inlet oil temperature is between 32°(c) to 88° (c) for all reservoir which Pump will be used for.
3. **Weather Condition**

Description	Quantity	Unit
Elevation from sea	0-1000	m
Maximum Environment Temperature	52	c
Minimum Environment Temperature	2	c
Sun Temperature	84	c
Maximum Humidity	90	%
Minimum Humidity	20	%
Maximum wind Velocity	130	km/hr
Wet bulb	27	c
Pressure	12.4-15.1	PSI
Maximum Annual Rainfall	372-691	mm
Mean Annual Rainfall	191-373	mm
Rainfall Intensity	25	mm/hr

4. Specification of inlet Fluid

Description	Quantity	Unit
Inlet flow rate (Q)	300-5,000	bbl/d
API Degree	24-40	API
Water Content	1	%
Salinity of Water	50,000 to 250,000	PPM
H_2S Content	0.3	Percentage by Weight
Viscosity @ 40°c	2.78	CP
Inlet Temperature	90-180	°F
Sand Content	3,000	PPMV

5. Applicable codes

- ANSI B31.3, API-610, API-682, H2S (NACE MR0175), Explosion proof: EEx-d II BT6, Zone 1 Area.

6. Specification of MOT Outlet

Description	Quantity	Unit
Salt Content	20-50	ptb
Sand Content	<10	µm
Silt Content	<10	µm
BS&W	<0.2	Percent Volume
Pressure	1000	psig
Asphaltene Content	0.1 - 7	Percent Weight