

1. Coordinates of wind farm boundary (海域地質鑽探(Geotechnical Campaign)範圍與圖示)



圖 1 海龍二號及海龍三號離岸風場位置示意圖

2. Working area, (施工地點座標)
(座標系統：WGS84)

SITE 18

風場範圍之角點座標 (經緯度)					
東經			北緯		
119°	51'	26.1 "	24°	2'	38.3 "
119°	48'	49.6 "	23°	58'	8.2 "
119°	40'	34.8 "	24°	1'	49.3 "
119°	40'	53.3 "	24°	2'	33.2 "

SITE 19

風場範圍之角點座標 (經緯度)					
東經			北緯		
119°	48'	49.6 "	23°	58'	8.2 "
119°	51'	26.1 "	24°	2'	38.3 "
119°	55'	40.0 "	24°	2'	40.1 "
119°	51'	18.7 "	23°	57'	1.5 "

圖 2 風場範圍之角點座標

3. Vessel specification including vessel name, IMO, Call sign, vessel flag, Port of registry, vessel length, GT, NT (船舶規格, 包含船名, IMO, 呼號, 船舶國籍, 船籍港, 總長, 總噸位, 淨噸位)

船舶名稱 Vessel name	大地能源號 MV Geo Energy	總長 Total length	72.20 m
IMO	9297797	船舶認證	CR & DNV GL
船舶國籍 Flag	台灣 (Republic of China)	主要設備	Drilling Derrick 起重設備, Deck Crane
總噸位	2151 噸	淨噸位	1047 噸
船籍港 Registry port	高雄港 Kaohsiung		

TECHNICAL SPECIFICATIONS MV GEO ENERGY

Principle Particulars

Vessel Name..... GEO ENERGY
 Length Overall..... 72.20 m
 Beam 16.00 m
 Depth 7.00 m
 Draft Designed 5.00 m
 Draft Maximum..... 5.80 m
 Deadweight 3302 Tonnes
 Gross Tonnage..... 2151 Tonnes
 Net Tonnage..... 1047 Tonnes
 IMO Number 9297797
 MMSI No. 416253800
 Flag..... Republic of China
 Port of Registry Kaohsiung
 Call Sign..... BR4045
 Classification DNV GL & CR
 Class Notation 1A1 SF E0 DPS-2 DK(+) HL(2.5) TMON
 Reconstruction Year 2017

Machinery

Main-engines..... 2 x ROLLS-ROYCE BERGEN
 KRMB 9 Diesel Engines
 Each 2005KW, Total 4010KW
 Propellers 2 x ULSTEIN Controlled Pitch Props.
 Rudders..... 2 x ULSTEIN High Lift Rudders
 Bow Thruster..... 2 x ULSTEIN 150TV@800BHP
 Stern Thruster 1 x ULSTEIN 150TV@800BHP
 Generators 2 x 1280 KW Shaft Generators
 2 x 250 KW Diesel Generators
 1 x 48 KW Emergency Generator

Capacities

Clear Deck 690.00 M² (51.00 x 13.50 Meters)
 Deck Cargo 1600 Tonnes
 Deck Strength..... 5.0 Tonnes Per M²
 Fuel Oil 1040 M³
 Ballast Water..... 510 M³
 Potable Water 1100 M³

Deck Machinery

Anchors 2 x 2460 Kgs
 Tugger Winch..... 2 x 10 Tonnes SWL Line pull
 Capstans..... 2 x 8 Tonnes SWL Line Pull
 Crane 1 x 3 Tonnes SWL,
 At 10 to 16 Meters Radius

Life Saving and Fire Fighting

Rescue Boat 1 x Unit for 6 Persons
 ALL LSA and FFA installed are in compliance to SOLAS

Drilling System

Derrick 1 x 25 Tonnes SWL
 Hoist System 1 x 25 Tonnes SWL
 Hydraulic Power Packs 2 x 90 KW, 2 x 75 KW,
 3 x 20 KW pumps
 Power Swivel..... 1 x Max Load 30 Tonnes
 0 - 1550 DaNm @ 0 - 76 rpm
 0 - 3100 DaNm @ 0 - 38 rpm
 Pipe Handling System 1 x Pipe Crane
 1 x Pipe Grab
 1 x Cat Walk
 1 x Iron Roughneck
 Mud System 2 x 9000 Ltrs working mud tanks
 Deck Generators 1 x 545 KW CAT CAF18 Diesel Generator
 1 x 500 KW CAT CAF3412

Accommodation

01 x Bunk Cabins..... 4 x Cabins (4 person)
 02 x Bunk Cabins..... 7 x Cabins (14 person)
 04 x Bunk Cabins..... 6 x Cabins (24 person)
 Dining Saloon for 18 persons Per Meal
 Metting Room 1 x Space
 Hospital 1 x Hospital
En Suite Shower/ Toilet installed for all cabins
Air Conditioning for entire accommodation spaces

Navigation and Communication

DP System K-POS DP 21 / KONGSBERG
 Radars 1 x FURUNO FR-2135 S band
 1 x FURUNO FR-2115 X band
 GPS..... 1 x FURUNO GP-80
 1X FURUNO GP-150
 AIS 1 x FURUNO FA-100
 Echo Sounder 1 x FURUNO FC-700
 1 x KONGSBERG EA440
 Gyro Compass 1 x ANSCHUTZ, 2 x SPERRY with
 4 x Repeaters
 Auto Pilot 1 x ANSCHUTZ
 Speed Log..... 1 x FURUNO DS 80
 NAVTEX 1 x FURUNO NX 500
 ECDIS System..... 2 x TEELCHART TECDIS T-2138A
 GMDSS 2 x FURUNO FELCOM 15
 Inmarsat C; For A1-A2-A3
 VHF/DSC..... 1 x FURUNO FM 8700
 1 x FURUNO FM 8800s; 1 x FURUNO FM 2721
 VSAT 1 x SAILOR Fleet Xpress
 Fleet Broadband 1 x SAILOR FBB 500
 EPIRB..... 2 x MCMURDO E5
 SART 2 x TRON SART

4. Picture of Vessel (船舶照片)

圖 3 大地能源號 船舶照片



5. Emergency contact window, Reps from HL side will be Miguel and Gabriel
(緊急應變聯絡人)

PDE 緊急連絡窗口:

Position	Name	Contact
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海龍(Hai Long)聯絡窗口:

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