PPS

Premier Petroleum Supplier Catalouge | | 2020 | | Issue 4| Engineering Services



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This Catalogue is limited to our Engineering Services.

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TUV NORD Projects PPS and its crew have shared in the success of many

projects.

GNN Early Production FEED CONCEPT STUDY

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Fishing Boats Fuel Station

Flare Gas Utilization



Port Said Office:

Government Employees Buildings, Building No.7, Office No.04 Port Fouad City-42523, Port Said Gocernorate.

Cairo Office:

118 Marwa Building, Office No. 21 Al Fustat City, Old Egypt -17611, Cairo, Egypt

Mail:

P.O. Box: 1339, Nine Street, El Maadi - 11728, Cairo, Egypt.

> Phone | +202-21076727 Fax | +202-21076679 Email: info@premps.com www.premps.com

About the Company

Who we are...

Premier Petroleum Supplier was founded in Port Said, Egypt, in 2018. Since its establishment, Premier petroleum supplier has provided engineering consultancy services to Oil and Gas Industry, from concept selection, detailed designs, implementation and evaluation with our teams are qualified, innovative, creative, updated technology, solid and hands-on experienced nationally and internationally.

- Onshore, Offshore, Naval & Subsea
- Engineering
- Commissioning

Premier Petroleum Supplier provide products with highest quality to supply of advanced specification products of valve, pipe, flange, fitting and related accessories on Oil & Gas.

Premier Petroleum Supplier provides customized in-house training, instructed in English, Arabic, or a combination of both by a professional instructor, which specializes with hands-on experience in the field, with the best practices in hand.

Premier Petroleum Supplier Company (PPS), registered in:

EGPC under (#82 - 2019) & (#54 - 21/5/2020) **EGAS** under (#2474 - 2019)

VISION

To be a major supplier of valves, pipes, flange and fitting-related L accessories in the Oil and Gas field around the world. We also strive to provide engineering consulting and commissioning services with the best practices in hand.

MISSION

We strive to provide products with high quality to our customers in a competitive price and timely manner, driven continuous improvement with innovation and technology. We provide engineering consultancy, full range commissioning services and training to staff members in order to support the company goal





Customize and develop in-house training with professional instructors hands-on experience in field and best practice

High quality products with competetive price to build long-lasting trusting relationships with our clients by upholding the highest standards



Engineering Partners



SCHRITECT

SCHRITEC produce active lightning conductors E.S.E. and Lightning Protection Accessories, developed with the newest available technology. Their product line allows an efficient protection of all endangered and vulnerable objects (single houses, hospitals, schools, logistic

centers, telecommunication towers, football fields, golf fields, etc.)

SCHIRTEC products are created for your safety and to fit modern architecture, and the products are shipped worldwide & lightning-fast.



Denpropress

Denpropress offer engineering, manufacturing and service support of machinery projects as well as undertaken production of wide range of replacement parts and components for equipment made by other manufacturers

The plant's technical resources enable it to conduct the full manufacturing cycle from melting to mechanical processing and assembly of large size units and machinery.

Denpropress has a full production cycle with engineering which includes: ingots casting, forging and pressing mechanical maching, welding, assembling, installation, commising, and and technical support.



HeBei Amulite Building Material Co.,Ltd is a large-scale Manufacturer of decoration material in China.producing Mineral Wool Acoustic Board, PVC Gypsum Board. Fiberglass Acoustic Ceiling.Wooden Surface Gyspum Ceilings.PVC Form Board.Glass wool Board.Rock wool board and T Grids . Our company has advanced Technology, well-equipped and skilled, standardized manage-

ment, advanced product technology indicators.

It is situated in Jinzhou, Hebei, the biggest decoration materials production base in China. The company can produce Knurling embossing, Anaglyph, Printing, Spraying, such as Three-dimensional Compression six categories dozen varieties.



Interplast manufactures plastic pipes and fittings to the very highest specifications, for use in water supply, heating and sewerage systems and covering a broad range of applications in the areas of house construction, technical projects and industrial facilities.

Interplast Company The company aims to design, develop and market products and integrated solutions that cover the needs of modern construction and improve quality of life, by building a relationship of trust between the technical world and the consumer public.



Guangdong Grand Greenbuilt technology Co.

Guangdong Grand Greenbuilt technology Co.

was Established in 1999 and it provides construction solutions services from: Project management, Design and Detailing, purchasing, Fabrication & Inspections, Packing & Logistic.

it's main products are mining & industrial, civil project, EEP Series, Building structures, and Ar-

chitecture Steel work, and B & R Construction and equipment.



After an interesting and considerable experience gained in the industrial plants (construction and installation of plants) started in 1969 up to 1986, we have ficussed out attention exclusively on the manufacturing of flanges and components for heat exchangers, boilers, plants, thermal power stations and petrolchemical plants, for both the italian and the foreign market. Their long experience, their staff's know-how and ownership in

some machining shops allow **Memit Group** to grant suppliers of both material packages and even extremely complex special pieces at very competitive prices and short lead times

Engineering

Providing highly skilled engineering team to act as client representative. Performing engineering for offshore and onshore project. Failure investigation expertise to identify the root causes and provide solutions

Project feasibility studies.

Supporting Chem's hom concept to execution phases.

Brings World class expertise and consultants to support engineering teams. Supporting Clients from concept to execution phases. Specialized numerical and analytical analysis.

Develop and manage testing programs for projects; i.e material testing.

Develop and manage testing testing. and repair plans for subsea assets. Specialized numerical and analytical analysis.

• **Develop** and manage lesung program.

Components capacity or welding testing.

Our Services cover the entire asset of life cycle.

Multi-Disciplinary Engineerign:

- Process simulation.
- Rotating equipment.
- Electrical.
- Civil and Structure.
- piping and pipelines.
- Fire Fighting & Detection

Process Safety

- Quantitative Risk Assesment.
- Safety Integrity level.
- Hazard Identification Study.
- Hazard and operability Study.

Asset Integrity, Rehabilitation

- Risk Based Inspection.
- Fitness for service assessment and life expectancy
- Online and permanent Repair.
- Rerating.
- Alterations.

Offshore platforms:

- Fixed Platforms.
- Mobile Offshore production units
- Self installed platforms



Premier petroleum supplier (PPS/Premps) services cover the entire asset life cycle (Onshore, Offshore, Naval & Subsea):

- Concept Selection.
- Feed & Detailed Engineering.
- Commissioning & Start-up support.
- Asset Integrity, Rehabilitation & Life Extension.

Concept Selection

- Identify different engineering alternatives.
- Cost estimation.
- Techno-economic studies

FEED & Detailed Engineering

- Process Simulation.
- Intelligent 3D Modelling.
- Material Selection and Cathodic Protection. Fire Fighting and Fire Detection
- Instruments and Plant Automation.
- Storage Tanks and Pressure Vessels.
- Rotating Equipment.

• Piping and Pipelines.

• Procurement Services.

• Construction Support.

• Process Safety Studies.

- Electrical.
- Civil and Structural.
- Offshore, Naval and Subsea.

Process Safety Studies

- Quantitative Risk Assessment (QRA).
- Fire and Explosion Risk assessment (FERA).
- Consequence Assessments (Gas dispersion, Jet fire, Explosion...etc.).
- Hazard Identification Study (HAZID).
- Hazard and Operability Study (HAZOP).
- Safety Integrity Level (SIL

Procurement Services

- Material requisitions.
- Technical evaluation.
- Commercial evaluation.

- Release for shipment.
- Vendor data review.
- Material receiving at site.
- Witness tests/shop inspections for main equipment and materials

Construction Support

- Technical support in all engineering disciplines.
- Conformity check with design.
- Punch lists.
- Quantity survey.
- Mechanical completion.



Commissioning & Start-up Support

- Technical support in all engineering disciplines
- Pre-commissioning, commissioning and start-up procedures.
- Operating & Start-up Guide.

Asset Integrity, Rehabilitation & Life Extension

- Risk Based Inspection.
- Fitness for Service Assessment and life expectancy.
- Online and Permanent Repairs.
- Re-rating.
- Alterations.

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Some of our Work History

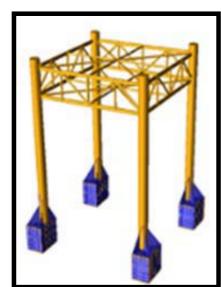
MOPU / Mini Platform

A complete Greenfield offshore project; from FEED up to detailed engineering and construction support. We supported our client with a new concept of using MOPU and Mini Platform to support gas production. We successfully performed all the structural analysis, reports, construction drawings, construction support, subsea and riser design and MOPU strengthening and checks according to ABS & DNV rules and Standards.



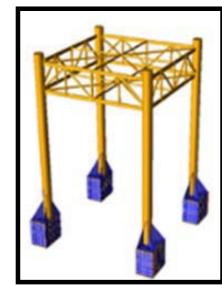
Self Installed Platform

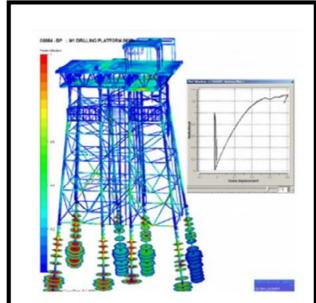
FEED study for the installation of self installed platform, including In-Place, transportation, installation & soil / foundation system.



Structural Integrity assessment for offshore platform

- Site weight assessment and data gathering
- Soil Capacity re-evaluation
- Sacs modeling for in place
- Dynamic Properties
- Wave Direction Sensitivity analysis
- USFOS modeling
- Pushover analysisi
- ANSYS modeling for falling and complex joings

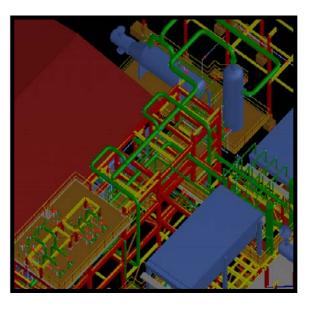




Piping Stress Analysis for Refrigeration Package

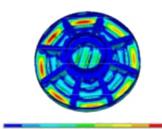
Description: Piping stress analysis for critical piping systems

Terminal points boundary conditions between our client's boundary and others were taken into consideration to ensure that the stresses due to displacements from our client's side and vice versa are within the ASME B31.3 allowable limits.



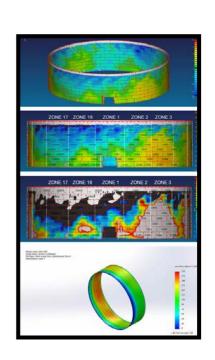
Jack-up MOPU Spud Can

Detailed Strength and stability Analysis for A Jack-up MOPU Spud Can using ANSYS to validate the capacity against new metaocean and new loading criteria



Risk Assessment, Fitness for service and Repair Study for crude oil

- Specification of non-destructive testing and verticality laser scanning requirements.
- Finite Element Analysis for the tank shell and bottom-toshell weld and juncture.
- Specification and evaluation of the various repair opti ons and assessment of the risks and mitigations of each
- Preparation, signature and UK chartered engineer's stamping/endorsement of the tank statement of fitne ss to return the tank to service after completion of the specified Fitness for Service, repair and testing scope.



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Clients



Arab Republic of Egypt



Kuwait Oil Company Kuwait







Qatar Petroleum Qatar



Badr Petroleum Company Arab Republic of Egypt



Khalda Petroleum Co Arab Republic of Egypt



Ministry of Oil (Iraq) Republic of Iraq



Uganda National Oil Company Republic of Uganda



Hassan AllAm Constructions Arab Republic of Egypt



Amal Petroleum Company (AMAPETCO)



PICO Arab Republic of Egypt



Saudi Aramco Kingdom of Saudi Arabia



Tatweer Petroleum Bahrain Kingdom of Bahrain







Apache Company



Pharaonic Petroleum Company Arab Republic of Egypt



Egyptian Maintainance Company (EMC)



Kenya Pipeline Company Limited Kenya



KNPC Kuwait



Angola LNG Limited Republic of Angola



Burullus Gas Company Arab Republic of Egypt



Shell



Missan Oil Company Republic of Iraq

Third Party Partners

BV was Created in 1828, Bureau Veritas is a global leader in Tes ting, Inspection and Certification (TIC), delivering high quality services to help clients meet the growing challenges of quality, safety, environmental protection and social responsibility.

As a trusted partner, Bureau Veritas offers innovative



solutions that go beyond simple compliance with regulations and standards, reducing risk, improving performance and promoting sustainable development.

Bureau Veritas core values include integrity and ethics, impartial counsel and validation, customer focus and safety at work.

LOC Group, founded in 1979, is the premier international marine and engineering consulting firm consisting of LOC, Longitude, Innosea and JLA (John LeBourhis). Headquartered in London, the company operates over 30 offices located worldwide in Europe, Africa, Americas, Middle East, Asia and Australia. LOC operates in the shipping, oil & gas and renewables sectors, providing loss prevention (marine warranty, surveys, inspections & audits, technical due diligence),



loss management (marine casualties, claims, disputes and litigation) and marine and engineering consultancy services. Our clients comprise P&I clubs, H&M insurers, underwriters, brokers, oil and gas companies, energy utilities, field operators, developers, EPC contractors, installation contractors, drilling contractors, lawyers, shipowners, governments, and turbine and cable manufacturers.

TUV NORD EGYPT offers our certification services under their accreditations.

They provide unique services with full of trust, confidence, integrity and international credibility to customers, TÜV NORD EGYPT has a wide range of accreditation covering all the services delivered to their clients.

1-Membership at Lifting Equipment Engineers



Association (LEEA)
2-Membership at the (

2-Membership at the Grain and Feed Association (GAFTA) as a Superintendent and Surveyor Member.

4-Accredited from local Egyptian Accreditation (EGAC) as Inspection Body Type (A) in compliance with ISO 17020:2012 in the field of Mineral Commodities, Ullage Survey and Draft Survey.



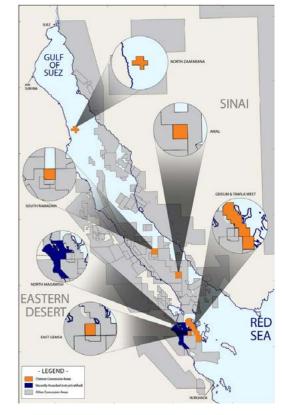




GNN Early Production FEED CONCEPT STUDY

CHEIRON co. is handling the development of GNN field at South Zeit Bay, Gulf of Suez. The development strategy split into two phases, Phase I for early production, and Phase II for permanent production facilities. The scope of work and proposal for the Feed/Concept study for Phase I, and II.





Scope of work:

Phase 1

Phase I is related to Early production (EPF), which covers Developing a subsea structural, and topside conceptual configuration that would accommodate (3) wells only out of the target final (9) wells. The subsea configuration shall be suitable to be connected to a MOPU, where all the process facilities will be located on its deck, and at the same time should be capable to safely STAND ALONE when the MOPU is removed after the early production phase, and before connection to the permanent facility.

Phase II

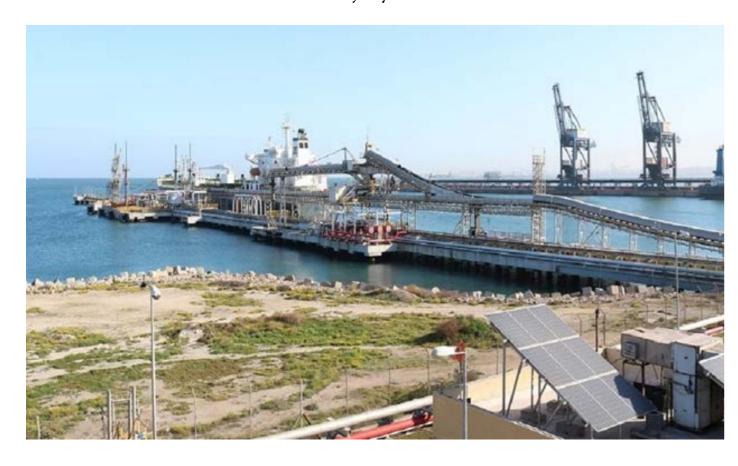
Phase II is related to the permanent operation condition after removal of the MOPU, and completing the target final (9) wells, where a self-standing platform will be installed for the remaining target life of the wells. The scope of work for such phase will be a very high-level outline as follows:

- Proposed outline sketch for connecting the permanent platform to the early phase configuration.
- List of recommended design and structural checks that should be covered during the detailed design stage.

Estimated Cost: 50,000\$

MIDTAP, EL DEKHELA JETTY UPGRADE CONCEPT SELECT STUDY

MIDTAP are planning to execute modifications to upgrade their jetty at EL DEKHELA Port in order to accommodate two (2) vessels 50,000 DWT each at a time on the jetty West side.



The following document describes the technical scope of work, and the duration for performing a concept select study between three (3) options for performing MIDTAP jetty extension as per attached conceptual overview drawings in appendix (A) as follows:

Option [1], No change in the shoreline, in addition to the modification, elongation required to accommodate additional one 50,000 DWT container at the West side.

Option [2], Dredging the shoreline, adding a vertical diaphragm, and performing the required modifications and elongation to accommodate additional one 50,000 DWT container at the West side.

Option [3], Dredging the shoreline, slope stability and shoreline protection, and performing the required modifications, and elongation to accommodate additional one 50,000 DWT container at the West side.

The scope of work covers the conceptual select study of (3) three options.

The work includes the following activities on a conceptual level:

- Process philosophy study for the extension and tie in with the existing,
- Power supply conceptual study for the extension requirements,
- Piping conceptual study for the extension and tie in with the existing,
- Instrument and control conceptual study for the extension,



- HSE conceptual study for the extension,
- Roads and maneuvering conceptual study over the jetty extension and connection with the existing,
- Cables and cable routes Conceptual study of the extension and tie in with the existing,
- New anticipated loads of the new equipment's, a new load distribution,
- Conceptual evaluation of the existing piles and soil capacity,
- Reevaluation of the pile capacity exposed to dredging,
- Conceptual evaluation of the shoreline slope stability and shore protection methodology for each of the (3) options,
- Conceptual study of the ship maneuvering and the seabed bathymetry Conceptual study of the mooring configuration and the berthing/mooring loads,
- Conceptual study of the new bulk handling system and layout configuration update.

SALAM Water Anache Flood Upgrade Project

The purpose of the project is modifying SALAM oil facility produced water system by adding New 3000 BBL Skim tank, and a new 1000 BBL Surge tank to the existing facilities. The process study shall consider operation scenarios, where both the existing tanks, and the new tanks will be running in parallel, and additional scenario, during routine maintenance, where one branch is operating, and other is in maintenance.

Project Value: 100,000\$

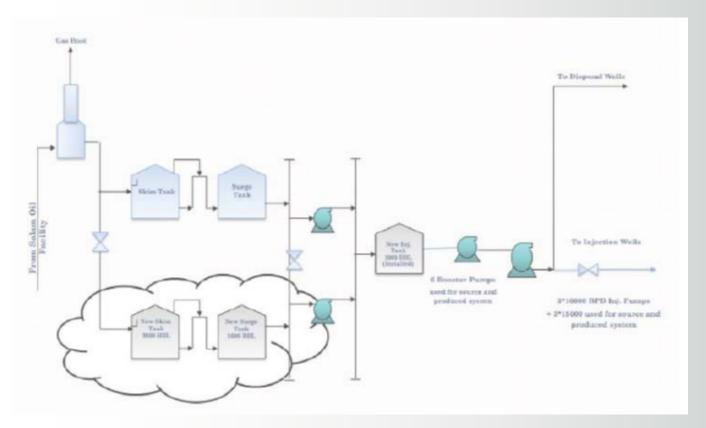
The Client: Khalda Petroleum Company

The two systems (Old & New) will be connected through the appropriate pipeline system, which is then connected to the main existing header. The process and the piping study shall consider the adequacy of the existing piping, valves, and pump systems to accommodate both Old & New systems while operating in parallel.

The study shall consider all necessary civil and steel structure works

required covering Foundations for the new tanks; concrete and steel pipe supports, service platforms, Steel Tanks design, and mechanical requirements according to the API code of standards The figure below shows the clouded area for the scope of the new modifications considered.

SALAM Water Flood Upgrade Project



Salam Plant Water Flood Modification

Scope Of Work

The scope of work shall be limited to the following:

- Review of the geotechnical and geophysical and site levels and datum data
- Site visit for collecting piping and process data and required measurements
- Process modeling and hydraulic design for the system considering two operating scenarios
- Client meetings and discussions
- P& IDs
- Piping stress analysis and modeling
- Data sheets
- Tanks Mechanical, Steel, and foundation design

SALAM Water Flood Upgrade Project

- Pipe supports and service platforms design
- Plot plans

Fishing Boats Fuel Station



The scope of work covers the detailed Engineering work for the construction of a fishing boats fuel station, the work shall include engineering activities E&I, Mechanical and Piping.



The scope of work covers two fuel stations, the first one located at Abo RAMAD at the Red Sea Cost, with an approximate jetty length of 200m from the shoreline, and the other station located at SHALATEEN, approximately 900m from the shoreline.

The second station at SHALATEEN consists of two parts, the first part consists of bed rocks and then extending with a jetty configuration until the final location in the sea.



The scope of work covers:

E&I, Mechanical and Piping related engineering work required for the jetty, excluding the portion of the rock bed path of the second location at SHALATEEN.

The conceptual idea of the seaports is using three (3) electric motor driven fuel oil transfer pumps and one (1) gasoline, which shall use to transfer the fuel from the existing storage tanks to the fishing boats.





Fishing Boats Fuel Station

Fishing Boats Fuel Station



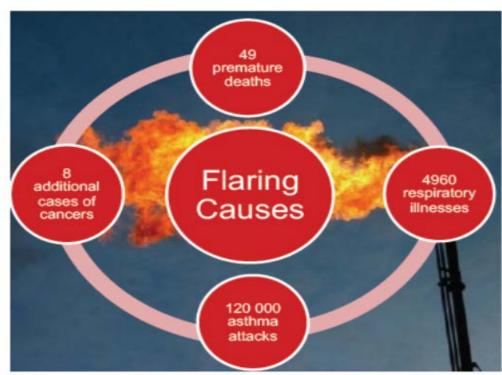
FLARE GAS UTILISATION



FLARING IMPLICATIONS



- Flaring leads to numerous health issues to the civilians close to flare sites.
- Flaring emits NOx, SO2 and CO2 which can cause health problems, climate change and acid rain.
- Burning potential energy
- Against the policy set by Global Gas Flaring Reduction (GGFR)
- Increases pollution



Source: World Bank Study on Gas Flaring – A human rights, environmental and economic monstrosity.

Project Value: 20,000,000

What is ASSOCIATED GAS FLARING?

- FLARING is the burning of wellhead gases that are by-products of oil production. Flaring takes place when gas produced in oil production is burned in the atmosphere and not used for productive/energy purposes.
- The WORLD BANK defines Flaring as "A human rights, environmental and economic monstrosity.





(Source: World Bank Study on Gas Flaring – A human rights, environmental and economic monstrosity.)

FLARE GAS UTILISATION FLARE GAS UTILISATION

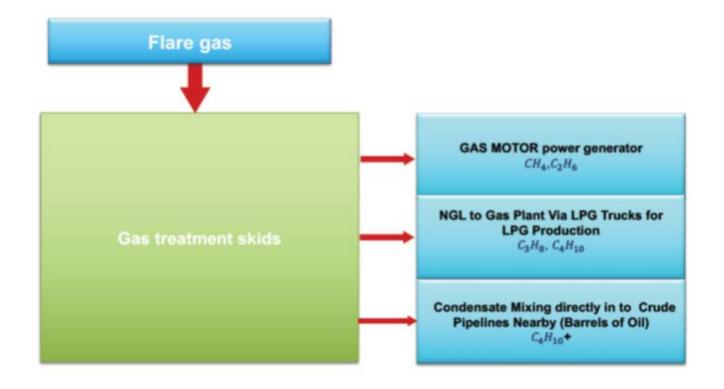
PRODUCTS FROM FLARE GAS:

The table below shows a typical composition of natural gas

	Formula	Percentage	Uses
Methane	CH4	50-70%	Pipeline Gas, Power Generation
Ethane	C ₂ H ₆	20-50%	Petrochemical Feed stocks
Propane	C₃H ₈		NGL/Condensates (C3+)
Butane (Pentane)	C4H10, C ₅ H ₁₂		
Carbon Dioxide	CO2	0-8%	-
Nitrogen	N2	0-5%	-
Hydrogen Sulphide	H ₂ S	0-5%	-

Due to the content and chemical properties of each flare composition, it is only feasible to utilize CH_4 , C_2H_6 , C_3H_8 , $C_4H_{10}C_5H_{12}$ converting to Pipeline Grade Gas (Methane min 90% + Ethane) and Condensates NGL's

SCHEMATIC DIAGRAM OF AVAILABLE SOLUTION



We ESTIMATE to be able to recover at least 50% of Energy Flares

Canadoil and its partners have developed new technologies that present opportunities to cost-effectively reduce emissions and monetize on flaring at facilities and in locations where it was previously thought to be unviable and unprofitable.

BUSINESS DESCRIPTION

- Business model based on gas processing of flared gas on a NO CURE NO PAY BASIS as a service contract. "cleaning fee"
- Company has no CAPEX.
- Canadoil Assumes all investment costs as well as OPEX.
- Contract Term is usually 5 years. If life of Flare is shorter than 5 years, system can by transferred to similar flare for re-utilization.
- NO CURE NO PAY defined as: customer only pays a service fee per unit measure (Barrel of Oil, mmscf, m3 etc.) of product delivered at the exit of the Canadoi system.
- Canadoil Systems are re-deployable.







FLARE GAS UTILISATION FLARE GAS UTILISATION



Contacting Information

Contact us for more information or to discuss your needs of valves, pipes, fittings and/or flanges, or to enquiry our engineering consultant, commissioning services, training courses, seminars and customized in-house training services.

PREMIER PETROLEUM SUPPLIER.

Port Said Office: 7 Government Employees Building, Office No. 04, Port Fouad - 42523, Port Said, Egypt.

Cairo Office: 118 Marwa Building, Office No. 21, Al Fustat City, Old Egypt - 17611, Cairo, Egypt

Mail: Box number: P.O. Box: 1339, Nine Street, El Maadi - 11728, Cairo, Egypt.

Phone | +202-21076727 Fax | +202-21076679 Email: info@premps.com www.premps.com