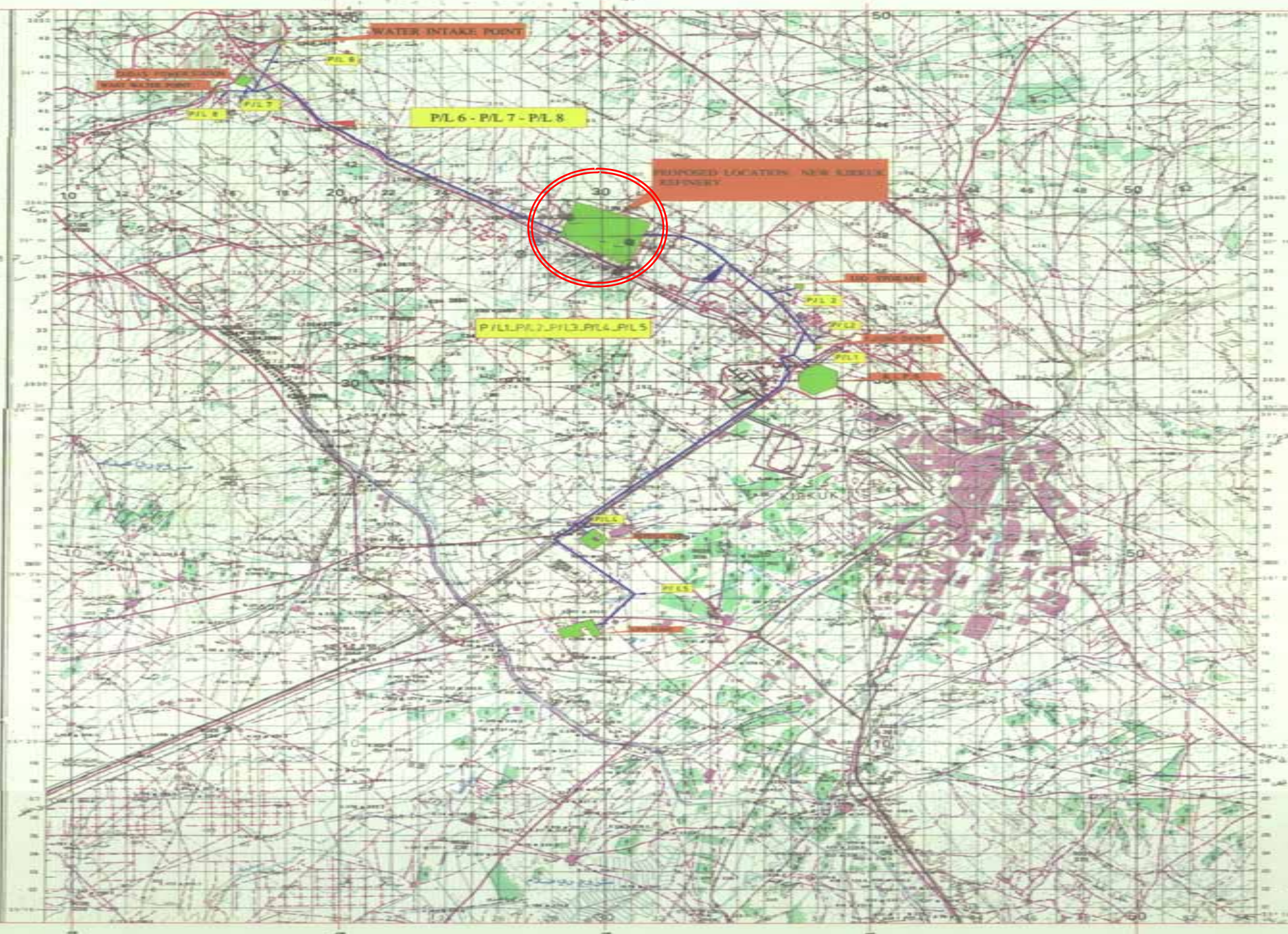




Kirkuk Refinery
Capacity 150 000 BPSD





SITE INFORMATION:

-Kirkuk Refinery is located about (300) KM North Of Baghdad.

-Area :(2 X 3) Km²

- Coordinate U.T.M. :

N : 3937794

E : 431192

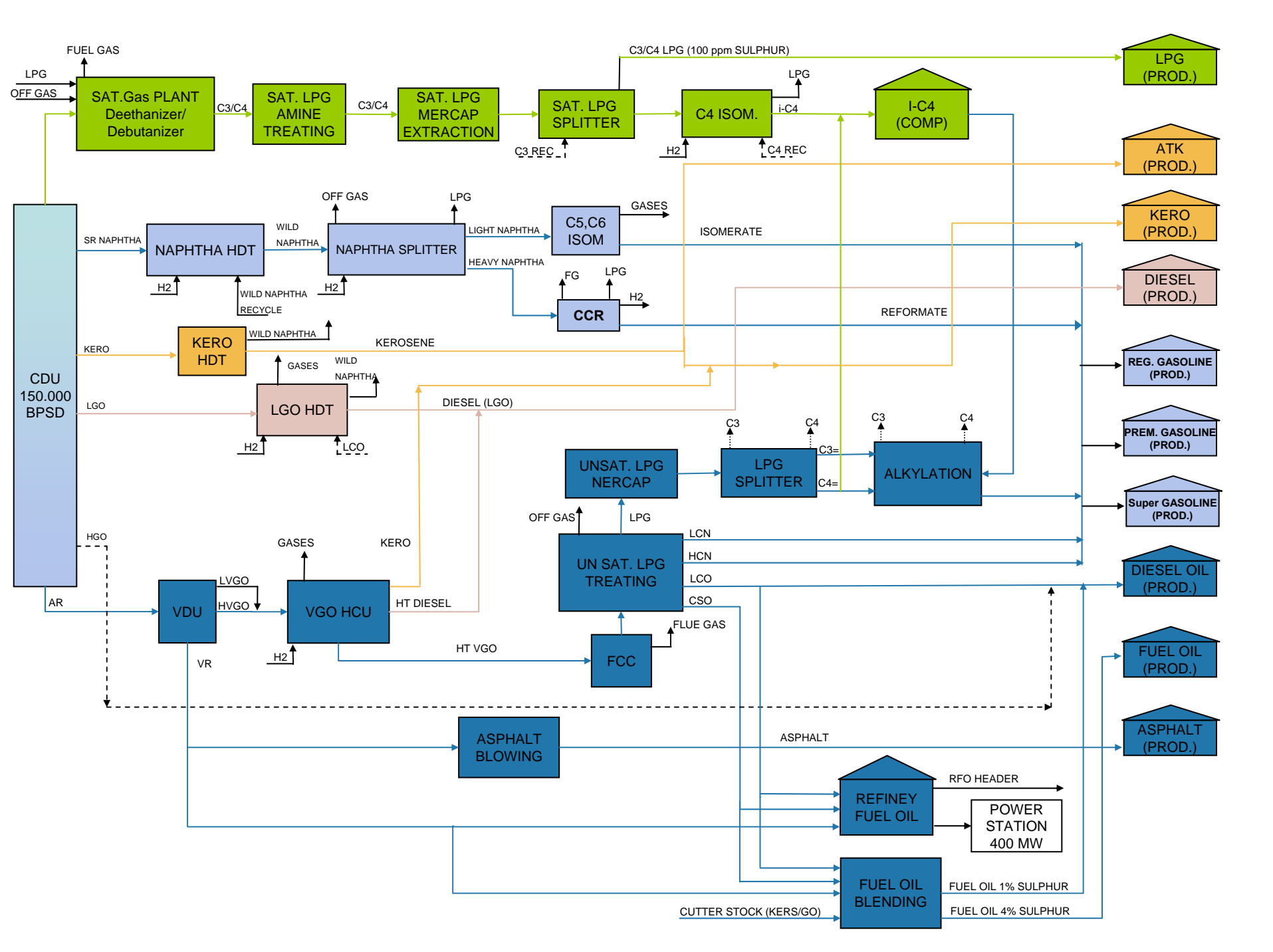
**Grass Root Refinery for Domestic & Exporting
Including Depot and Pipelines**

Refinery Crude :

**100% Kirkuk Blend crude oil
API 34-35**

- **(Feasibility Study and FEED) Contract of the project has been signed with SHAW Company.**
- **The Project is at the final stage of Feasibility Study Phase.**
- **Front End Engineering Design for open art process units are proceeding .**
- **It is expected that the FEED activities will be finalized at Q4 2011.**
- **Pre- Estimated Cost \approx 5 Billion \$**

REFINERY CONFIGURATION AS FOLLOW :-



PROCESS UNITS

1- Atmospheric Distillation Unit (150,000 BPSD)

2-Vacuum Distillation Unit (60,000 BPSD)

3- Naphtha Hydro-Treating Unit (42,900 BPSD)

4- Reforming Unit (CCR) (29,600 BPSD)

5-C5/C6 Isomerisation Unit (13,200 BPSD)

6-Saturated LPG Treatment Unit (5,000 BPSD)

7-Kerosene Hydro-Treating Unit (15,700 BPSD)

8-Gas Oil Hydro-Treating Unit (35,900 BPSD)

9-VGO Hydro-Cracking Unit (MHC) (36,300 BPSD)

10-Fluid Catalytic Cracking (FCC) (23,900 BPSD)

11-Unsaturated LPG Treatment Unit (9,100 BPSD)

12-C3/C4 Alkylation Unit (9,100 BPSD)

13-N C4 Isomerisation Unit (3,100 BPSD)

14-Hydrogen Production Unit (50,000 M3/Hr)

15-Sulphur Recovery Unit (292 TPSD)

16- Blown Asphalt Unit (490 TPSD)

PRODUCTS

LPG

GASOLINE Unleaded (Premium, Regular & Super)

KEROSENE & ATK

GAS OIL (DIESEL)

HEAVY GAS OIL (HEAVY DIESEL)

FUEL OIL (less than 15% vol . of crude)

ASPHALT (Paving & Many Types of Industrial Blown Asphalt)

SULPHUR

ELECTRICAL POWER \approx 400 MW

Products Specification will be according to EURO-4 as minimum required.
Gasoline , Kerosene & Gas oil with (10 ppm) Sulphur content .

GASOLINE:-

	<u>RON</u>
Regular	91-92
Premium	95
Super	98
Benzene Content	<1 vol.%
Aromatic	35 vol.%
Olefin	18 vol.%

Expected Product Quantities :

PRODUCTS	Th.M3 /SD
LPG	225 T/SD
GASOLINE	10.250
KEROSENE / ATK	3.450
DIESEL	6.150
HEAVY DIESEL	0.8
FUEL OIL	0.265
ASPHALT	490 T/SD
SULPHUR	292 T/SD
ELECTRICITY	400 MW

Turkey

Ormiah

Dohuk

Mosul

Erbil

Kirkuk

Sulaymaniyah

Sriya Arab Repuplic

Sanndaj

Hamdin

Tikrit

Kirminshah

Iran

Ramadi

Ba'aqubah

Baghdad

Karbala

Hilla

Kut

Kingdom Of Saudi Arbia

Najaf

Diwaniya

Amarah

Samawah

Nassriyah

Basrah

kuwait

