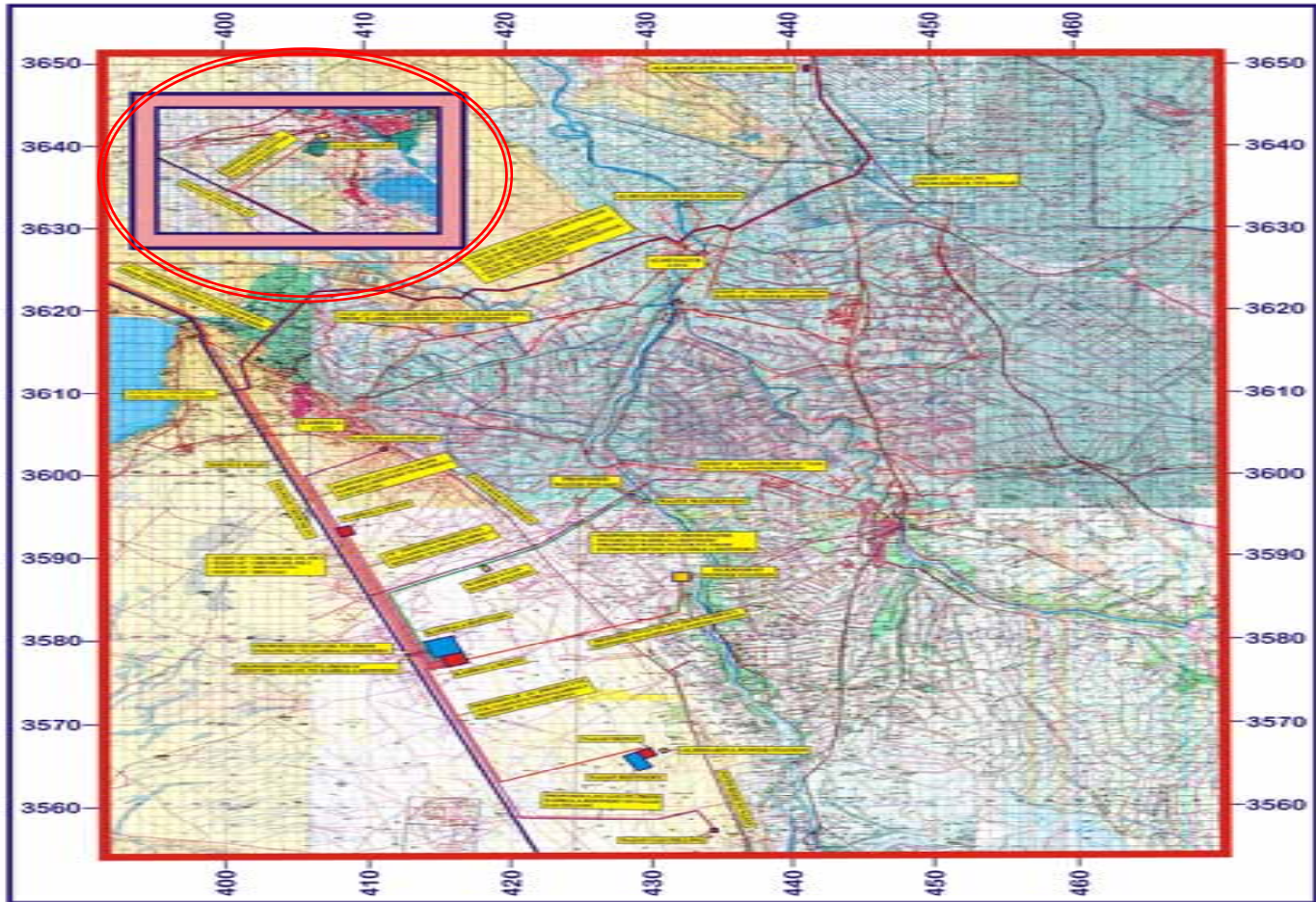




Karbala Refinery
Capacity 140 000 BPSD





KARBALA REFINERY



- CRUDE OIL P/L —————
- GAS P/L —————
- PRODUCT P/L —————
- WATER P/L —————

GENERAL REV. ISSUED FOR CONSTRUCTION		DATE	BY	CHKD.	APPD.
		STATE COMPANY FOR OIL PRODUCTS BAGHDAD BRANCH		CLASS: P.L.C. PROJECT: KARBALA REFINERY SITE: KARBALA	
KARBALA REFINERY PIPE LINE ROUTES					
DESIGNED	BY: A. ALI	SCALE: 1:50,000		DATE: 08/08/00	
CHECKED	BY: A. ALI	PROJECT NO.		1 2 3 4 5 6 7 8 9 10	
APPROVED	BY: A. ALI	DSCM NO. 00.00.00 - SG-40		REV. No.	
APPROVED	BY: N. KADAN				

SITE INFORMATION:

- Kerbala Refinery is located about (110) KM South west Of Baghdad.
- Area : 4 X 3 Km²
- Coordinate U.T.M. :
N : 3580000
E : 415000

Grass root Refinery for Domestic & Exporting Including Depot and Pipelines

Refinery Crude :

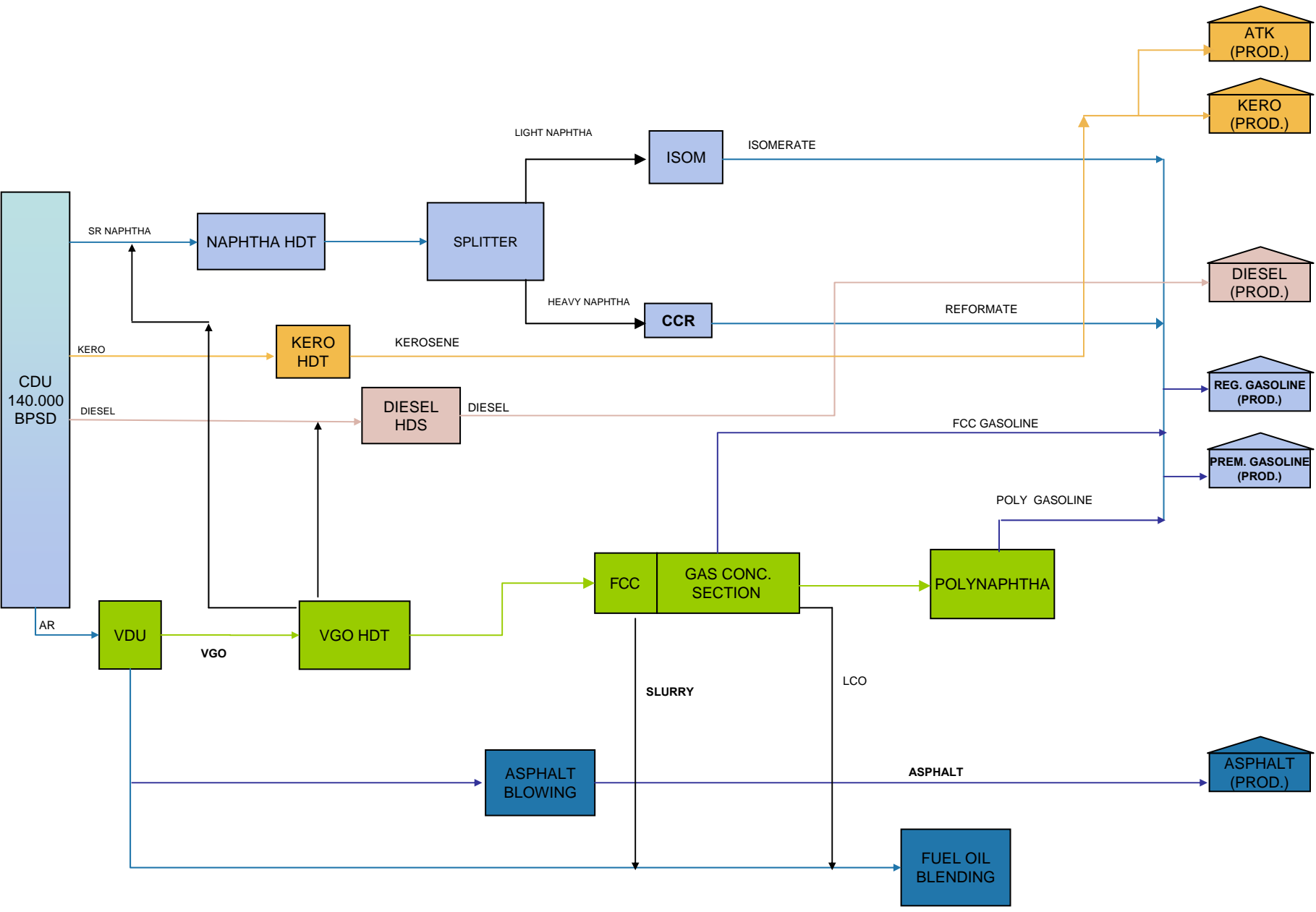
100% Basrah Regular (34°API)

100% Basrah Mishrif(28°API)

OR any mixture of them

- **FEED Contract of the project has been signed with TECHNIP Company.**
- **The Project is at the final stage of FEED phase.**
- **It is expected that the FEED activities will be finalized at Q4 2010.**
- **The Pre-Cost Estimated \approx 5 B\$**

REFINERY CONFIGURATION AS FOLLOW :-



PROCESS UNITS

1- Atmospheric Distillation Unit (140.000 BPSD)

2- Vacuum Distillation Unit (72.000 BPSD)

3- Naphtha HDS Unit (41.500 BPSD)

4- Reforming Unit (CCR) (25.500 BPSD)

5- C5/C6 Isomerization Unit (12.500 BPSD)

6- Kerosene HDS Unit (20.000 BPSD)

7- Gas Oil Hydro-Treating Unit (28.000 BPSD)

8- Vacuum Gas Oil Hydrotreater Unit (36.000 BPSD)

9- Fluid Catalytic Cracking Unit (FCC) (31.500 BPSD)

10- Polynaphtha Unit (11.500 BPSD)

11- Hydrogen Production Unit (2X36000 M3/HR)

12- Sulphur Recovery Unit (2 X 180 TPSD)

13- Blown Asphalt Unit (1000 TPSD)

PRODUCTS

LPG

GASOLINE (Unleaded Premium, Regular)

KEROSENE & ATK

GAS OIL (Diesel)

HEAVY GAS OIL (Heavy Diesel)

SULPHUR

BLOWN ASPHALT (Paving & Many Types of Industrial Blown Asphalt)

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

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	90
Premium	95
Benzene Content	< 1% (Vo.l %)
Aromatic	(35-40)% (Vo.l %)
Olefin	<18% (Vo.l %)

Expected Product Quantities :

PRODUCTS	Th.M3/SD
LPG	160 T/SD
GASOLINE	8.750
ATK/KEROSENE	3.000
DIESEL	3.85
HEAVY DIESEL	0
FUEL OIL	3.7
ASPHALT	1000 T/SD
SULPHUR	175 T/SD
ELECTRICITY	100 MW

Turkey

Ormiah

Dohuk

Mosul

Erbil

Kirkuk

Sulaymaniyah

Sanndaj

Hamdin

Tikrit

Kirminshah

Iran

Ramadi

Ba'aqubah

Baghdad

Karbala

Hilla

Kut

Najaf

Diwaniya

Amarah

Samawah

Nassriyah

Basrah

Sriya Arab Repuplic

Kingdom Of Saudi Arbia

kuwait

