



**Atlantik Finanz AG**

# **EXHIBIT-F ENVIRONMENTAL IMPACT ASSESSMENT IRAQ-ERBIL**

**Job No: 8831.503.593.89**



**110,000 bpd OIL REFINERY**

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**REV:01**

**CODE AND STANDARDS**

ASME Code Section VIII Div-I	Pressure Vessels and Exchangers
API-500A	Area Classification-Petroleum Refineries
ANSI-B31.3	Petroleum Refinery Piping
API RP 520 Part I and II	Pressure Relieving Systems
ASME Section-I	Coils
ASTM SA 335 Pg	Tubes
ASTE and ASME SA 234	Fittings
SA 182 F9	Flanges
EPA 40 CFR 70.2	ENVIRONMENTAL IMPACT ASSESMENT
EPA 33 U.S.C 1251	WATER DISCHARGE CRITERIA (Pollutants)

API-650		P	STOCK/day	No of Tanks	R(mt)	h(mt)
30,000.00	4,500.00	6.67	15.00			
450,000.00	67,500.00					
225,000.00	33,750.00			2.00		
112,500.00	16,875.00			4.00		
75,000.00	11,250.00			6.00		
120,000.00	18,000.00			4.00	41.00	14.50
480,000.00	72,000.00		16.00			Less than 120,000 m3



Water Vapor	4.625 lbs/bbl (15.5 kg/metric ton)
Co2	13.68 lbs/bbl (45.92 kg/metric ton)
NOX	57.34 lbs/bbl (192.5 kg/metric ton)
SOX	0.009 lbs/bbl (0.03 kg/metric ton) per 1/10th of 1% sulfur in the fuel

**IRAQ-ERBIL OIL REFINERY IS**  
**Category A project**

**OIL PRODUCT TANKS**



**HAZARD CLASS-II FLASH POINT 21-55 C**

CRUDE OIL TYPE	Results
<b>RUSSIAN EXPORT BLEND CRUDE OIL (REBCO)</b>	
Specifications Corresponding to GOST TU 39-1623-93:	
Density API at 30 degrees C	0.870
API Gravity	32.00
Viscosity at 80 C, Max	16.0
Flash Point (in locked cubicle) Max	35 C
Pressure of saturated vapor under 38 C kilopascal/mm mercury column	7.60
Paraffin ( contents in % ) 6.0 %	
Temperature of melting C -49	
Contents, %	
* Sulphur	1.8
* Nitrogen	0.25
* Charcoal-solids resin	0.9
* Asphaltenes	0.9
Salt	100 mg / L
Colloids	2.06
Ash	0.004
Distillate recovered	%
100°C	21.00
300°C	41.00
350°C	50.00
Slur and Sediments, Max	1.2



**CRUDE OIL TANKS**

**CRUDE OIL**

**4X200.000 bbl FLOATING ROOF CRUDE OIL TANKS**  
**R41-h14.60**

**WASH WATER AND DRAINS**



**WASH WATER AND DRAINS**

**DESALTER BRINE DISCHARGE**  
**30-130 gallons/hr/1000 bbl Crude**

**WASH WATER AND DRAINS**

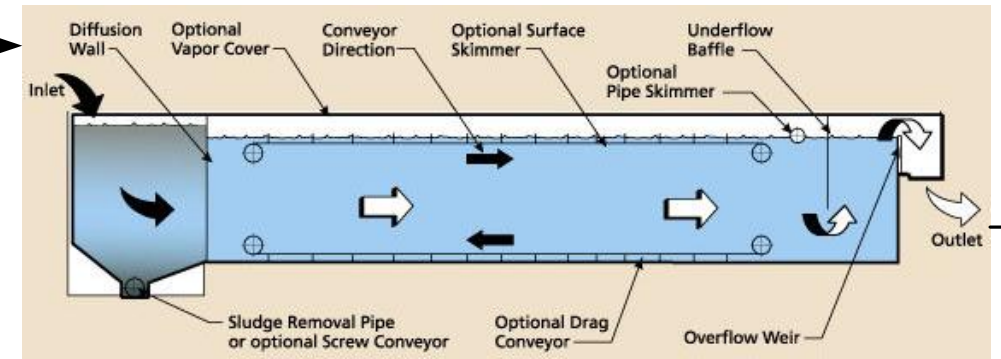
**RAIL OR PIPE LINE**



**CRUDE OIL**  
**KIRKUK OR BASRAH**

**EQUATOR PRINCIPLES**  
**Assessing and Managing Social and Environmental Risk**  
[http://www.equator-principles.com/documents/Equator\\_Principles.pdf](http://www.equator-principles.com/documents/Equator_Principles.pdf)

**API SEPERATOR**



**CITY WASTE WATER SYSTEM**



**NON SCALE**



Rev-3					
Rev-2					
Rev-1					
Rev	Description	Date	Name	Check	
	Date	Drawn	Check	Appr.	Scale
	2 Jan 2012	O.Songur	O.Songur	M.Karadeniz	NS

**ERBIL-IRAQ REFINERY**

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**ATLANTIK FINANZ AG**

**ENVIRONMENTAL IMPACT ASSESSMENT**

Job No	Page	Symbol	Unit No	Cat	Type+Format	Serial No	Rev
8831	1/1	DWG	00	A	UD	0100.01	09