



NATIONAL IRANIAN OIL COMPANY (NIOC)
RESEARCH INSTITUTE OF PETROLEUM INDUSTRY (RIPI)
CRUDE OIL AND PETROLEUM PRODUCTS EVALUATION DEPARTMENT

FOROZAN ECRUDE OIL

TABLE 1: CRUDE OIL GENERAL PROPERTIES ANALYSIS

CHARACTERISTICS	UNITS	RESULT	TEST METHOD
Specific Gravity @ 15.56 /15.56 °C	---	0.8738	ASTM D5002
API Gravity	°API	30.4	ASTM D5002
Sulfur Content (Total)	wt.%	2.21	ASTM D4294
H ₂ S Content	ppm	51	IP 570
Mercaptan Content	ppm	79	UOP 163
Nitrogen Content (Total)	wt.%	0.13	ASTM D 5762
Water & Sediment	vol.%	0.15	ASTM D4007
Water Content	vol.%	0.1	ASTM D4006
Salt Content	PTB	22	ASTM D3230
Kinematic Viscosity @ 10 °C	mm ² /s	24.10	ASTM D445
Kinematic Viscosity @ 20 °C	mm ² /s	16.47	
Kinematic Viscosity @ 40 °C	mm ² /s	6.159	
Pour Point (Upper)	°C	-21	ASTM D5853
Reid Vapor Pressure	psi	5.30	ASTM D323
Asphaltene Content	wt.%	3.0	IP 143
Wax Content	wt.%	5.3	BP 237
Drop Melting Point of Wax	°C	57	IP 133
Conradson Carbon Residue	wt.%	6.00	ASTM D189
Total Acid Number	mg KOH/g	0.42	UOP 565
Nickel Content	mg/kg	12	ASTM D5863
Vanadium Content	mg/kg	36	
Iron Content	mg/kg	1	
Lead Content	mg/kg	<1	
Sodium Content	mg/kg	50	
Zinc Content	mg/kg	<1	
Copper Content	mg/kg	<1	

Sampling Date: 25 Azar 1395 (15 Dec. 2016)

Report Date: 10 Bahman 1395 (29 Jan. 2017)