



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

IRANIAN LIGHT CRUDE OIL

TABLE 1: CRUDE OIL GENERAL PROPERTIES ANALYSIS

CHARACTERISTICS	UNITS	RESULT	TEST METHOD
Specific Gravity @ 15.56 /15.56 °C	---	0.8568	ASTM D5002
API Gravity	°API	33.6	ASTM D5002
Sulfur Content (Total)	wt.%	1.46	ASTM D4294
H ₂ S Content	ppm	86	IP 570
Mercaptan Content	ppm	60	UOP 163
Nitrogen Content (Total)	wt.%	0.13	ASTM D 5762
Water & Sediment	vol.%	< 0.05	ASTM D4007
Water Content	vol.%	< 0.025	ASTM D4006
Salt Content	PTB	7	ASTM D3230
Kinematic Viscosity @ 10 °C	mm ² /s	19.50	ASTM D445
Kinematic Viscosity @ 20 °C	mm ² /s	10.88	
Kinematic Viscosity @ 40 °C	mm ² /s	6.319	
Pour Point (Upper)	°C	-12	ASTM D5853
Reid Vapor Pressure	psi	8.95	ASTM D323
Asphaltene Content	wt.%	1.6	IP 143
Wax Content	wt.%	4.8	BP 237
Drop Melting Point of Wax	°C	57	IP 133
Conradson Carbon Residue	wt.%	4.50	ASTM D189
Total Acid Number	mg KOH/g	0.12	UOP 565
Nickel Content	mg/kg	11	ASTM D5863
Vanadium Content	mg/kg	40	
Iron Content	mg/kg	<1	
Lead Content	mg/kg	<1	
Sodium Content	mg/kg	8	
Zinc Content	mg/kg	<1	
Copper Content	mg/kg	<1	

Sampling Date: from 08 Day 1395 (28 Dec. 2016) to 12 Day 1395 (1 Jan. 2017)

Report Date: 07 Esfand 1395 (25 Feb. 2017)