



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

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

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