



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

SOOROOSH CRUDE OIL

TABLE 1: CRUDE OIL GENERAL PROPERTIES ANALYSIS

CHARACTERISTICS	UNITS	RESULT	TEST METHOD
Specific Gravity @ 15.56 /15.56 °C	---	0.9408	ASTM D5002
API Gravity	°API	18.9	ASTM D5002
Sulfur Content (Total)	wt.%	3.88	ASTM D4294
H ₂ S Content	ppm	<1	IP 570
Mercaptan Content	ppm	13	UOP 163
Nitrogen Content (Total)	wt.%	0.18	ASTM D 5762
Water & Sediment	vol.%	0.10	ASTM D4007
Water Content	vol.%	0.1	ASTM D4006
Salt Content	PTB	22	ASTM D3230
Kinematic Viscosity @ 10 °C	mm ² /s	1815.00	ASTM D445
Kinematic Viscosity @ 20 °C	mm ² /s	742.60	
Kinematic Viscosity @ 40 °C	mm ² /s	177.200	
Pour Point (Upper)	°C	-24	ASTM D5853
Reid Vapor Pressure	psi	3.85	ASTM D323
Asphaltene Content	wt.%	10.1	IP 143
Wax Content	wt.%	3.8	BP 237
Drop Melting Point of Wax	°C	60	IP 133
Conradson Carbon Residue	wt.%	12.55	ASTM D189
Total Acid Number	mg KOH/g	0.64	UOP 565
Nickel Content	mg/kg	21	ASTM D5863
Vanadium Content	mg/kg	85	
Iron Content	mg/kg	1	
Lead Content	mg/kg	<1	
Sodium Content	mg/kg	6	
Zinc Content	mg/kg	<1	
Copper Content	mg/kg	<1	

Sampling Date: 29 Azar 1395 (19 Dec. 2016)

Report Date: 04 Bahman 1395 (23 Jan. 2017)