

		Data	Notes	Reference ID
Origin: Indonesia				
Data from OGJ 99 were originally published in 1983 as part of a series entitled "Guide to Export Crudes for the '80s".				
API Gravity		14.3		ESD 92
		38.0		OGJ 99
Equation(s) for Predicting Evaporation				
Short term (<5 days): %Ev = $(-0.14 + 0.013T)\sqrt{t}$				ESD 99
Long term: %Ev = $(0.06 + 0.045T)\ln(t)$				
Where %Ev = weight percent evaporated; T = surface temperature (°C); t = time (minutes)				
Sulphur (weight %)		0.05		OGJ 99
		0.94		ESD 93
Water Content (weight %)		1.0		ESD 98
Flash Point (°C)		> 90		ESD 92
Reid Vapour Pressure (kPa)		0		OGJ 99
Density (g/mL)				
		<u>Temperature (°C)</u>		
		0	0.9800	ESD 92
		15	0.9701	ESD 92
Pour Point (°C)		3		ESD 92
		38		OGJ 99
Dynamic Viscosity (mPa·s or cP)				
		<u>Temperature (°C)</u>		
		0	81,890	ESD 92
		15	10,700	ESD 92
Kinematic Viscosity (mm²/s or cSt)				
		<u>Temperature (°C)</u>		
		54	9	OGJ 99
Emulsion Formation				
		Visual stability	entrained	ESD 98
		Viscosity (mPa·s)	32,000	ESD 98
		Complex modulus (mPa)	130,000	ESD 98
		Water content (wt %)	37	ESD 98
Chemical Dispersibility (volume %)				
		Corexit 9500	7	ESD 98

Udang

	Data	Notes	Reference ID
Hydrocarbon Groups (weight %)			
Saturates	32		ESD 97
Aromatics	41		ESD 97
Resins	24		ESD 97
Asphaltenes	3		ESD 97
Waxes	1		ESD 98
Adhesion (g/m²)			
	97	<i>SD = 21</i>	ESD 96
Volatile Organic Compounds (ppm)			
Benzene	0		ESD 94
Toluene	0		ESD 94
Ethylbenzene	0		ESD 94
Xylenes	0		ESD 94
C3-benzenes	0		ESD 94
Total BTEX	0		ESD 94
Total VOCs	0		ESD 94
Surface Tension (mN/m or dynes/cm)			
<u>Temperature (°C)</u>			
0	NM		ESD 92
15	32.2		ESD 92
Oil/Salt Water Interfacial Tension (mN/m or dynes/cm)			
<u>Temperature (°C)</u>			
0	NM		ESD 92
15	25.4		ESD 92
Oil/Fresh Water Interfacial Tension (mN/m or dynes/cm)			
<u>Temperature (°C)</u>			
0	NM		ESD 92
15	32.5		ESD 92

	Data	Notes	Reference ID
Boiling Point Distribution (weight %)			
<u>Boiling Point (°C)</u>			
160	1		ESD 94
180	2		ESD 94
200	3		ESD 94
250	8		ESD 94
300	15		ESD 94
350	25		ESD 94
400	35		ESD 94
450	48		ESD 94
500	59		ESD 94
550	68		ESD 94
600	76		ESD 94
650	83		ESD 94
700	89		ESD 94
Yield on Crude (volume %)			
<u>Boiling Range (°C)</u>			
C1-C4	1		OGJ 99
Naphtha (32-191)	15		OGJ 99
Kerosene (191-271)	11		OGJ 99
Heavy distillate (271-371)	19		OGJ 99
Gas oil (371-543)	35		OGJ 99
Residue (>543)	20		OGJ 99
Metals (ppm)			
Barium	1		Cao 92
Chromium	< 2		Cao 92
Copper	< 0.6		Cao 92
Iron	< 3		Cao 92
Lead	< 3		Cao 92
Magnesium	28		Cao 92
Molybdenum	< 0.6		Cao 92
Nickel	71		Cao 92
	4		OGJ 99
Titanium	0.9		Cao 92
Vanadium	27		Cao 92
	0.9		OGJ 99
Zinc	2		Cao 92

Ukalerk

		Data	Notes	Reference ID
Origin: Beaufort Sea, Canada				
Sample identified as 'Ukalerk 2C-50'.				Dome 84
API Gravity		45.7		Dome 84
Density (g/mL)				
	<u>Temperature (°C)</u>			
	21	0.7978		Dome 84
Pour Point (°C)		2		Dome 84

		Data	Notes	Reference ID
Origin: North Sea, Norway				
A paraffinic North Sea crude.				Daling 91
API Gravity		38.6		Daling 91
Flash Point (°C)				
<u>Evaporation (weight %)</u>				
18		45		Daling 91
29		84		Daling 91
37		118		Daling 91
Density (g/mL)				
<u>Evaporation (weight %)</u>	<u>Temperature (°C)</u>			
0	15	0.8320		Daling 91
18		0.8610		Daling 91
29		0.8740		Daling 91
37		0.8820		Daling 91
Pour Point (°C)				
<u>Evaporation (weight %)</u>				
0		6		Daling 91
18		21		Daling 91
29		25		Daling 91
37		30		Daling 91
Dynamic Viscosity (mPa·s or cP)				
<u>Evaporation (weight %)</u>	<u>Temperature (°C)</u>			
0	13	9		Daling 91
18		24		Daling 91
29		60		Daling 91
37		154		Daling 91
Chemical Dispersibility				
Medium chemical dispersability with Finasol OSR-5.				Daling 91
Hydrocarbon Groups (weight %)				
<u>Evaporation (weight %)</u>				
37	Saturates	62		Daling 91
	Aromatics	32		Daling 91
	Resins	5		Daling 91
	Asphaltenes	2		Daling 91
	Waxes	9		Daling 91

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		Data	Notes	Reference ID
Oil/Salt Water Interfacial Tension (mN/m or dynes/cm)				
<u>Evaporation (weight %)</u>	<u>Temperature (°C)</u>			
0	13	28.0		Daling 91
18		27.0		Daling 91
29		26.0		Daling 91
37		26.0		Daling 91
Distillation (°C)				
	<u>Total Distillate (volume %)</u>			
	21	150		Daling 91
	32	200		Daling 91
	42	250		Daling 91

	Data	Notes	Reference ID
Origin: United Arab Emirates			
Synonyms: Abu Dhabi Marine			
Data from OGJ 99 were originally published in 1983 as part of a series entitled "Guide to Export Crudes for the '80s".			
API Gravity	37.4		OGJ 99
Sulphur (weight %)	1.51		OGJ 99
Reid Vapour Pressure (kPa)	49		OGJ 99
Hydrogen Sulphide (ppm)	< 2		OGJ 99
Pour Point (°C)	-30		OGJ 99
Hydrocarbon Groups (weight %)			
Asphaltenes	0		OGJ 99
Yield on Crude (volume %)			
<u>Boiling Range (°C)</u>			
Light naphtha (C5-80)	8		OGJ 99
Heavy naphtha (80-150)	14		OGJ 99
Kerosene (150-230)	16		OGJ 99
Diesel (230-375)	26		OGJ 99
Residue (>350)	37		OGJ 99
Residue (>550)	12		OGJ 99

Uviluk

		Data	Notes	Reference ID
Origin: Beaufort Sea, Canada				
API Gravity		29.4		EETD 86
		24.9	(a)	EETD 85
(a) sample P-66				
Sulphur (weight %)				
<u>Evaporation (volume %)</u>				
0		0.24		EETD 86
10		0.17		EETD 86
20		0.24		EETD 86
Flash Point (°C)		-9		EETD 86
Density (g/mL)				
<u>Evaporation (volume %)</u>	<u>Temperature (°C)</u>			
0	0	0.8899		EETD 86
		0.9155	(a)	EETD 85
0	15	0.8787		EETD 86
		0.9040	(a)	EETD 85
	20	0.9012	(a)	EETD 85
	25	0.8972	(a)	EETD 85
10	0	0.9090		EETD 86
	15	0.8978		EETD 86
20	0	0.9244		EETD 86
	15	0.9152		EETD 86
(a) sample P-66				
Pour Point (°C)				
<u>Evaporation (volume %)</u>				
0		-12		EETD 86
10		-3		EETD 86
20		3		EETD 86
Dynamic Viscosity (mPa·s or cP)				
<u>Evaporation (volume %)</u>	<u>Temperature (°C)</u>			
0	0	32		EETD 86
	15	14		EETD 86
10	0	89		EETD 86
	15	28		EETD 86
20	0	266		EETD 86
	15	67		EETD 86

		Data	Notes	Reference ID
Surface Tension (mN/m or dynes/cm)				
<u>Evaporation (volume %)</u>	<u>Temperature (°C)</u>			
0	0	28.7		EETD 86
	15	26.7		EETD 86
		28.6	(a)	EETD 85
10	0	32.7		EETD 86
	15	28.0		EETD 86
20	0	NM		EETD 86
	15	29.8		EETD 86
(a) sample P-66				
Oil/Salt Water Interfacial Tension (mN/m or dynes/cm)				
<u>Evaporation (volume %)</u>	<u>Temperature (°C)</u>			
0	0	23.5		EETD 86
	15	12.2		EETD 86
		8.8	(a)	EETD 85
10	0	18.7		EETD 86
	15	13.8		EETD 86
20	0	NM		EETD 86
	15	13.9		EETD 86
(a) sample P-66				
Oil/Fresh Water Interfacial Tension (mN/m or dynes/cm)				
<u>Evaporation (volume %)</u>	<u>Temperature (°C)</u>			
0	0	25.2		EETD 86
	15	24.3		EETD 86
		21.4	(a)	EETD 85
10	0	24.8		EETD 86
	15	23.2		EETD 86
20	0	NM		EETD 86
	15	22.8		EETD 86
(a) sample P-66				

Uviluk

		Data	Notes	Reference ID
Distillation (°C)				
	<u>Total Distillate (volume %)</u>			
	IBP	50		EETD 86
		69	(a)	EETD 85
	5	102		EETD 86
		108	(a)	EETD 85
	10	118		EETD 86
		114	(a)	EETD 85
	15	134		EETD 86
		148	(a)	EETD 85
	20	157		EETD 86
		162	(a)	EETD 85
	25	184		EETD 86
		171	(a)	EETD 85
	30	212		EETD 86
	35	237		EETD 86
	40	259		EETD 86
	45	277		EETD 86
	50	299		EETD 86
	55	323		EETD 86

(a) sample P-66