TotalEnergies	Crude	**GULLFAKS**	TBP DISTILLATION
	Country	Norway	

Density at 15°C, kg/m3	823.3	Assay Date	27-Oct-15	°C	wt%	vol%	°C	wt%	vol%
°API	40.3			080	9.6	12.2	460	82.1	84.4
Bbl/mt	7.654			090	11.5	14.4	480	84.5	86.6
Acidity, mg KOH/g	0.10			100	13.6	16.8	500	86.6	88.5
Sulphur, wt%	0.18			120	18.2	21.8	520	88.5	90.2
Hydrogen Sulphide, mg/kg	0			140	22.8	26.7	540	90.2	91.7
Mercaptan Sulphur, mg/kg	5			160	26.9	31.0	560	91.7	93.0
Viscosity, cSt at 10 °C	6.2			180	30.7	34.8	580	93.0	94.1
50 °C	2.5			200	34.3	38.6			
Pour Point, °C	-16			220	38.1	42.4			
Total Nitrogen, wt%	0.06			240	42.1	46.4			
Wax, wt%	-		wt% vol%	260	46.2	50.4			
Wax Appearance Temperature, °C	-			280	50.3	54.4			
RVP at 37.8 °C, kPa	51	Ethane	0.1 0.1	300	54.4	58.4			
Water, vol%	-	Propane	0.4 0.6	320	58.5	62.3			
NaCl, mg/kg	31.2	Iso-Butane	0.3 0.4	340	62.5	66.1			
Nickel, mg/kg	0.7	n-Butane	1.1 1.6	360	66.3	69.7			
Vanadium, mg/kg	0.9			380	70.0	73.2			
Iron, mg/kg	-			400	73.4	76.4			
Mercury, µg/kg	-			420	76.6	79.3			
				440	79.5	82.0			

PROPERTIES OF TBP CUTS

LIGHT NAPHTHA	Cuts °C	Yield wt%	Yield vol %	Den 15°C kg/m3	S wt%	RSH mg/kg	RON clear	MON clear			Napht. vol%	Aro. vol%	RVP kPa			
	15-65	5.3	6.6	655	0.00	0	75.6	74.5			9.4	0.2	-			
	15-80	7.7	9.5	671	0.00	0	72.7	71.8			15.3	1.1	-			
HEAVY NAPHTHA	Cuts °C	Yield wt%	Yield vol %	Den 15°C kg/m3	S wt%	RSH mg/kg					Napht. vol%	Aro. vol%				
	80-150	15.4	16.7	757	0.00	1					37.6	11.4				
	80-175	20.2	21.7	765	0.00	1					38.4	12.4				
	100-150	11.3	12.2	767	0.00	1					38.6	13.0				
KEROSENE	Cuts °C	Yield wt%	Yield vol %	Den 15°C kg/m3	S wt%	RSH mg/kg	Smoke Pt mm	Acidity mgKOH/g	Cetane Index	Freez. Pt °C		Aro. vol%	Visc cSt 50°C			Flash Point
	150-230	15.2	15.5	806	0.01	2	22	0.03	37.7	-57		17.0	1.0			56.0
	175-230	10.4	10.5	813	0.01	2	21	0.03	39.7	-51		17.7	1.1			69.4
	150-250	19.2	19.5	811	0.02	2	21	0.03	40.0	-51		17.4	1.1			59.1
GASOIL	Cuts °C	Yield wt%	Yield vol %	Den 15°C kg/m3	S wt%		Anilin Point °C		Cetane Index	Cloud Pt C	CFPP C	Pour Pt C	Visc cSt 50°C	Visc cSt 100°C	UOPK	Flash Point
	175-400	43.6	42.4	846	0.12		71		50.6	-6	-10	-14	2.8	1.3	11.8	81.9
	230-400	33.3	32.0	857	0.16		75		54.5	-2	-4	-5	4.1	1.7	11.9	106.3
	230-375	29.0	27.9	853	0.14		73		54.0	-7	-8	-10	3.5	1.6	11.8	104.6
VACUUM DISTILLATE	Cuts °C	Yield wt%	Yield vol %	Den 15°C kg/m3	S wt%	Conrad. wt%	Anilin Point °C	Ni mg/kg	Va mg/kg	Total N wt%	Bas N mg/kg	Pour Pt C	Visc cSt 100°C	Visc cSt 150°C	UOPK	Asp C7 wt %
	375-550	21.9	20.0	899	0.34	0.3	93	0	0	0.08	255	34	7.7	3.0	12.1	0.0
	375-565	22.9	21.0	901	0.34	0.4	93	0	0	0.08	273	35	8.1	3.1	12.1	0.0
	375-580	23.9	21.8	902	0.35	0.5	93	0	0	0.09	290	36	8.6	3.2	12.1	0.0
	400-580	19.6	17.8	907	0.37	0.7	95	0	0	0.10	349	39	10.4	3.7	12.2	0.0
RESIDUE	Cuts °C	Yield wt%	Yield vol %	Den 15°C kg/m3	S wt%	Conrad. wt%	Acidity mgKOH/g	Ni mg/kg	Va mg/kg	Total N wt%		Pour Pt C	Visc cSt 100°C	Visc cSt 150°C	Pene mm/10	Asp C7 wt%
	> 375	30.9	27.7	919	0.43	3.4	0.1	2	3	0.18		27	17	5	-	0.1
	> 550	9.0	7.7	971	0.66	10.9	0.1	8	10	0.42		20	324	41	1840	0.2
	> 565	8.0	6.7	977	0.68	12.0	0.1	8	11	0.45		19	485	54	1570	0.2
	> 580	7.0	5.9	982	0.71	13.2	0.0	9	12	0.48		19	755	72	1360	0.2

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