TotalEnergies	Crude **DAS BLEND** Country Abu Dhabi	TBP DISTILLATION

Density at 15°C, kg/m3	829.3
°API	39.1
Bbl/mt	7.599
Acidity, mg KOH/g	0.05
Sulphur, wt%	1.140
Hydrogen Sulphide, mg/kg	<1
Mercaptan Sulphur, mg/kg	134
Viscosity, cSt at 10 °C	6.3
50 °C	2.5
Pour Point, °C	-6
Total Nitrogen, wt%	0.037
Wax, wt%	-
Wax Appearance Temperature, °C	15.0
RVP at 37.8 °C, kPa	33
Water, vol%	-
NaCl, mg/kg	-
Nickel, mg/kg	0.9
Vanadium, mg/kg	2.4
Iron, mg/kg	0.6
Mercury, µg/kg	2.2

Assay Date 21-Mar-16

	wt%	vol%
Ethane	0.01	0.03
Propane	0.26	0.42
Iso-Butane	0.26	0.38
n-Butane	1.25	1.77

°C	wt%	vol%	°C	wt%	vol%
080	8.49	11.04	460	76.88	80.14
090	9.91	12.70	480	79.49	82.49
100	11.54	14.56	500	82.06	84.80
120	15.37	18.88	520	84.51	86.97
140	19.77	23.72	540	86.78	88.97
160	24.32	28.63	560	88.83	90.76
180	28.67	33.24	580	90.66	92.34
200	32.76	37.50			
220	36.72	41.59			
240	40.71	45.65			
260	44.73	49.68			
280	48.73	53.64			
300	52.70	57.52			
320	56.63	61.32			
340	60.55	65.05			
360	64.22	68.51			
380	67.27	71.36			
400	69.69	73.60			
420	71.94	75.66			
440	74.33	77.84			

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	4.96	6.35	645	0.06	407	68.2	67.5			2.8	0.7	87.85			
	15-80	6.71	8.43	657	0.05	504	64.1	63.5			5.2	2.2	82.89			
HEAVY NAPHTHA	Cuts °C	Yield wt%	Yield vol %	Den 15°C kg/m3	S wt%	RSH mg/kg					Napht. vol%	Aro. vol%				
	80-150	13.56	15.15	740	0.03	191					19.2	14.1				
	80-175	19.12	21.08	750	0.04	163					17.9	16.6				
	100-150	10.52	11.63	748	0.03	147					19.7	15.5				
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	16.65	17.43	790	0.06	213	22	<0.1	44.0	-58		24.0	1.0			55.4
	175-230	11.10	11.50	798	0.07	272	22	<0.1	46.0	-52		24.7	1.1			68.8
	150-250	20.66	21.47	796	0.09	252	22	<0.1	45.6	-53		24.0	1.1			58.2
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	42.08	41.48	839	0.84		70		51.6	-6	-10	-14	2.4	1.2	11.9	79.6
	230-400	30.98	29.98	855	1.12		73		54.5	-1	-2	-4	3.5	1.6	11.9	105.4
	230-375	27.87	27.10	851	1.03		72		54.6	-5	-6	-7	3.2	1.4	11.9	104.2
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	21.26	19.18	917	2.03	0.3	89	0	0	0.06	195	34	7.2	2.9	12.0	0.0
	375-565	22.73	20.46	919	2.06	0.5	89	0	0	0.06	204	35	7.8	3.0	12.0	0.0
	375-580	24.08	21.63	921	2.10	0.6	90	0	0	0.06	213	36	8.3	3.2	12.0	0.0
	400-580	20.96	18.74	925	2.13	0.7	91	0	1	0.07	227	38	9.7	3.5	12.0	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	33.42	29.28	944	2.50	5.5	0.1	3	7	0.11		27	19	6	-	1.0
	> 550	12.17	10.11	996	3.31	14.4	0.1	7	19	0.19		31	275	36	991	2.7
	> 565	10.69	8.82	1002	3.41	16.1	0.1	8	22	0.20		31	421	48	772	3.0
	> 580	9.35	7.66	1009	3.51	17.9	0.1	9	24	0.21		31	676	66	620	3.4

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