TotalEnergies	**Crude** BADAK **Country** Indonesia	TBP DISTILLATION

Density at 15 °C, kg/m3	830.0
° API	38.90
Bbl/mt	7.59
Viscosity, cSt at 10 °C	2.6
Viscosity cst at 50°C	1.4
Pour Point, °C	3.0
Wax content, wt%	
Wax Appearance Temp °C	
R V P at 37.8 °C, kPa	
Water %vol	
BSW %vol	
NaCl mg/kg	
Sulphur, wt %	0.06
Mercaptan sulphur, mg/kg	2
Hydrogen sulphide, mg/kg	0
Acidity mg KOH/g	0.10
Nickel, mg/kg	0
Vanadium, mg/kg	1
Nitrogen, wt%	0.0153

Assay 25-Feb-09

	wt %	vol %
Ethane	0.01	0.02
Propane	0.19	0.31
Iso-Butane	0.21	0.31
n-Butane	0.54	0.77

°C	wt %	vol %	°C	wt %	vol %
015	0.95	1.33			
095	12.11	14.18			
149	34.28	37.34			
175	41.33	44.60			
232	52.48	55.74			
342	77.18	79.09			
369	81.22	82.85			
509	97.07	97.57			
550	98.02	98.40			
585	98.53	98.84			

PROPERTIES OF TBP CUTS

LIGHT NAPHTHA	Cut °C	Yield wt %	Yield vol %	Dens 15°C kg/m3	S wt %	RSH %wt	RON clear	RON 0,15g/l	MON clear	MON 0,15g/l	Napht %vol	Aro %Vol	RVP kPa			Benz %vol
	15-65															
	15-80	9.07	10.44	721	0.0002		76.3	82.9				13.0				13.0
HEAVY NAPHTHA	Cuts °C	Yield wt %	Yield vol %	Dens 15°C kg/m3	S wt %						Napht %vol	Aro %vol				
	80-150	24.53	25.85	788	0.0009						34.9	36.3				
	80-175	31.31	32.83	792	0.0009						34.4	38.3				
	100-150	20.39	21.29	795	0.0010						34.4	37.9				
KEROSENE	Cuts °C	Yield wt %	Yield vol %	Dens 15°C kg/m3	S wt %	RSH mg/kg	Smoke Point	Acid. mg/g	Cetane Calc	Freeze Pt °C	Naphtal. %vol	Aro. %vol	Saybolt Color	Visc cst 50 °C		Flash Point
	150-230	17.54	17.73	821	0.007		16		31.9	-60.0		33.0				
	175-230	10.76	10.75	831	0.011				33.9							
	150-250	21.97	21.94	831	0.021				32.7							
GASOIL	Cuts °C	Yield wt %	Yield vol %	Dens 15°C kg/m3	S wt %		Anilin Pt C	Cetane	Cetane Calc.	Cloud Pt °C	CFPP °C	Pour Pt °C	Visc cst 50 °C	Visc cst 100 °C	KUOP	Flash Point
	175-400	43.40	41.51	868	0.075				45.7	6		6				
	230-400	32.64	30.76	881	0.096				46.0	12		12				
	230-375	29.81	28.13	879	0.094				44.7	5		5				
VACUUM DISTILLATE	Cuts °C	Yield wt %	Yield vol %	Dens 15°C kg/m3	S wt %	Conrad wt %	Anilin Pt C	Ni mg/kg	V mg/kg	Total N wt %	Bas N wt%	Pour Pt C	Visco cSt 100 °C	Visc cst 150°C	KUOP	Asp. C7 %wt
	375-550	16.12	14.92	897	0.12	0.19				0.0448	0.0173				12.29	
	375-565	16.34	15.11	898	0.12											
	375-580	16.56	15.29	899	0.12											
	400-565	13.51	12.48	898	0.12											
RESIDUE	Cuts °C	Yield wt %	Yield vol %	Dens 15°C kg/m3	S wt %	Conrad wt %	Asp C5 %wt	Ni mg/kg	V mg/kg	Total N wt %	Pene	Pour Pt °C	Visco cSt 100 °C	Visco cSt 150 °C		Asp. C7 wt %
	> 375	18.10	16.52	909	0.14							46	7	3		
	> 550	1.98	1.60	1030	0.33	14.4		16.0	47.0	0.2980		104	43947	692		5.2
	> 565	1.76	1.41	1037	0.34							114	177137	1543		
	> 580	1.54	1.22	1045	0.36											

* estimated value

Total DTS/AM Dec-10

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