Photo 5. December 4, 2007- Vibromax 1105 vibratory smooth drum roller used to compact test pad fill.

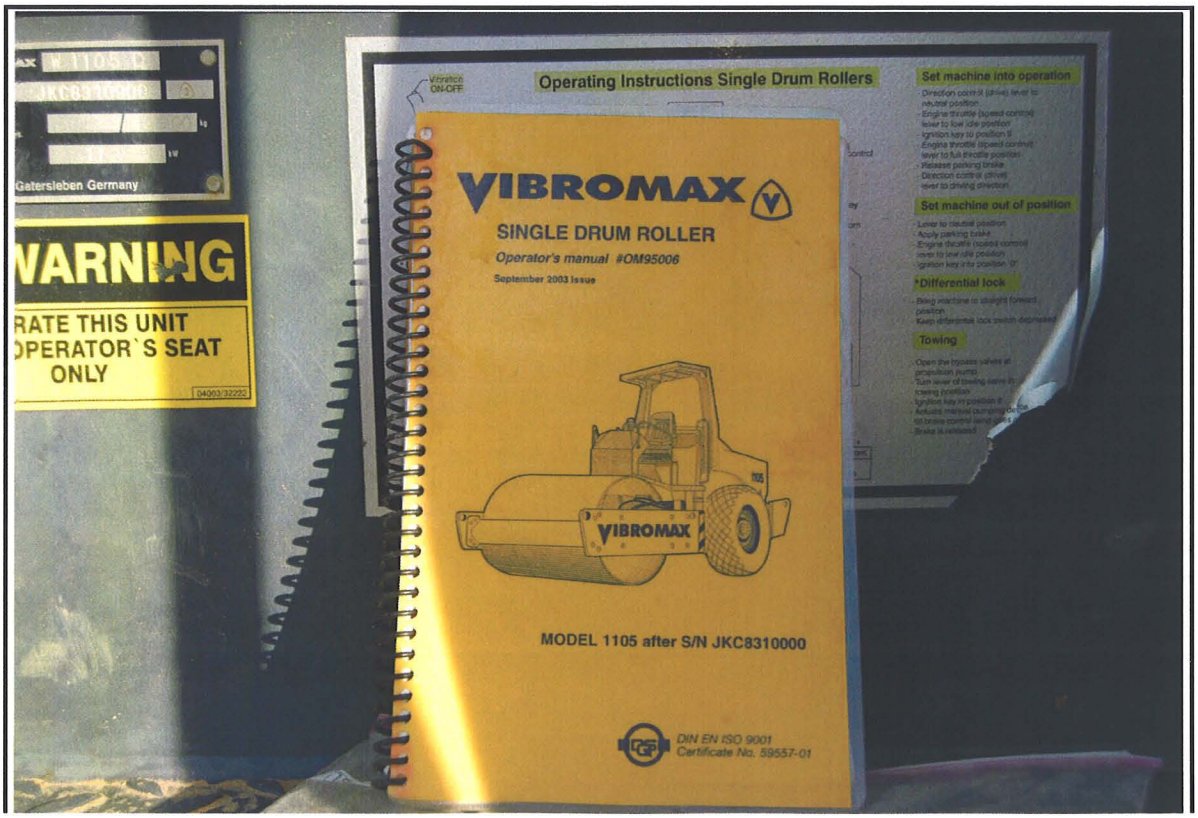
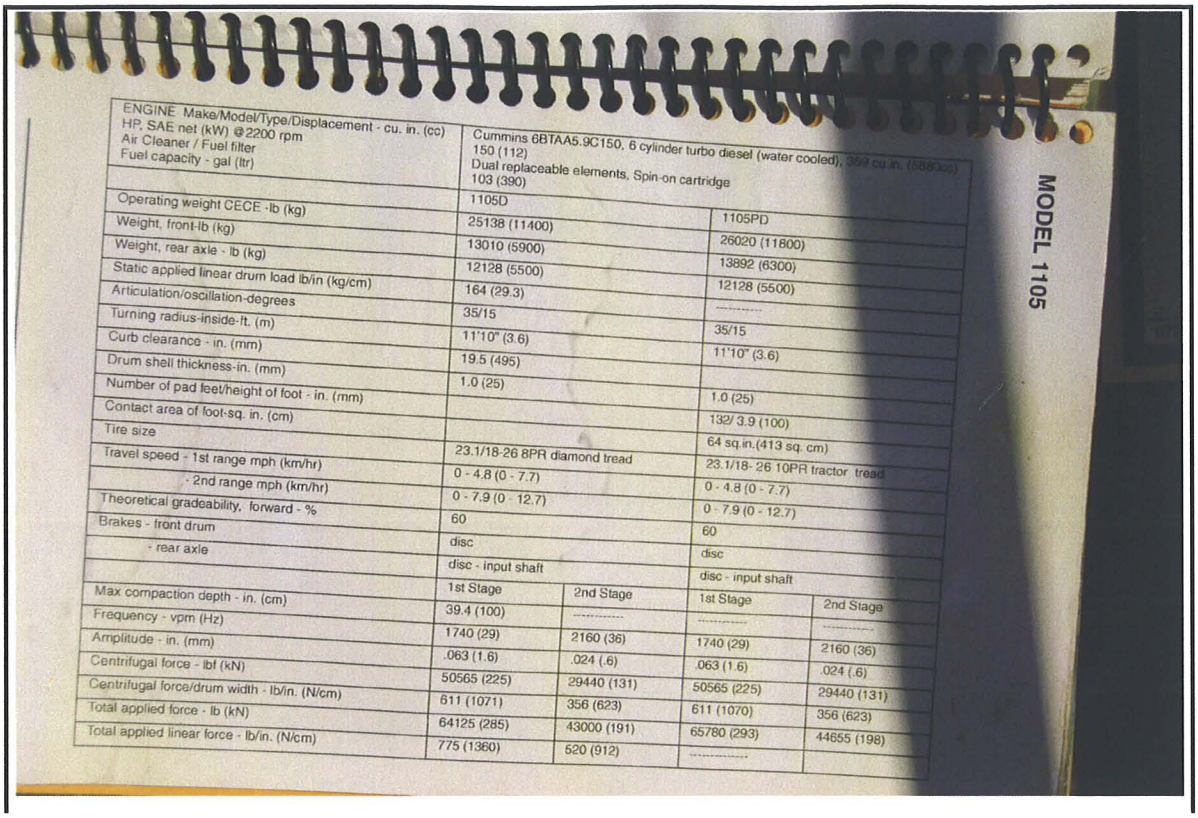


Photo 6. December 4, 2007- Cover of the Operations Manual for the Vibromax 1105 roller used during compaction of test pad fill.



MODEL 1105

ENGINE Make/Model/Type/Displacement - cu. in. (cc)	Cummins 6BTAA5.9C150, 6 cylinder turbo diesel (water cooled), 359 cu.in. (5880cc)			
HP, SAE net (kW) @2200 rpm	150 (112)			
Air Cleaner / Fuel filter	Dual replaceable elements, Spin-on cartridge			
Fuel capacity - gal (ltr)	103 (390)			
	1105D		1105PD	
Operating weight CECE -lb (kg)	25138 (11400)		26020 (11800)	
Weight, front-lb (kg)	13010 (5900)		13892 (6300)	
Weight, rear axle - lb (kg)	12128 (5500)		12128 (5500)	
Static applied linear drum load lb/in (kg/cm)	164 (29.3)		----------	
Articulation/oscillation-degrees	35/15		35/15	
Turning radius-inside-ft. (m)	11'10" (3.6)		11'10" (3.6)	
Curb clearance - in. (mm)	19.5 (495)			
Drum shell thickness-in. (mm)	1.0 (25)		1.0 (25)	
Number of pad feet/height of foot - in. (mm)			132/ 3.9 (100)	
Contact area of foot-sq. in. (cm)			64 sq.in.(413 sq. cm)	
Tire size	23.1/18-26 8PR diamond tread		23.1/18- 26 10PR tractor tread	
Travel speed - 1st range mph (km/hr)	0 - 4.8 (0 - 7.7)		0 - 4.8 (0 - 7.7)	
- 2nd range mph (km/hr)	0 - 7.9 (0 - 12.7)		0 - 7.9 (0 - 12.7)	
Theoretical gradeability, forward - %	60		60	
Brakes - front drum	disc		disc	
- rear axle	disc - input shaft		disc - input shaft	
	1st Stage	2nd Stage	1st Stage	2nd Stage
Max compaction depth - in. (cm)	39.4 (100)	----------	----------	----------
Frequency - vpm (Hz)	1740 (29)	2160 (36)	1740 (29)	2160 (36)
Amplitude - in. (mm)	.063 (1.6)	.024 (.6)	.063 (1.6)	.024 (.6)
Centrifugal force - lbf (kN)	50565 (225)	29440 (131)	50565 (225)	29440 (131)
Centrifugal force/drum width - lb/in. (N/cm)	611 (1071)	356 (623)	611 (1070)	356 (623)
Total applied force - lb (kN)	64125 (285)	43000 (191)	65780 (293)	44655 (198)
Total applied linear force - lb/in. (N/cm)	775 (1360)	520 (912)	----------	

Photo 7. December 4, 2007 – Specifications page from Vibromax 1105 Operations Manual.

Photo 8. December 4, 2007 – Sand cone density test is underway by Roger Blalock. Two 5-gallon bulk samples will be obtained from the density test layer for testing.

Photo 9. December 5, 2007- Moisture conditioning of fill layer.

Photo 10. December 5, 2007 – A sand cone density test excavation is being repaired with a "Wacker Packer".

Photo 11. December 9, 2007- Dr. Stokoe generates vibrations for Spectral Analysis of Surface Wave (SASW) testing, at shallow depth.

Photo 12. December 9, 2007- Jiabei Yuan Records SASW test data.