

ENTERED
25 SEP 12 C.D.

SHEET 16
LTPP MONITORED TRAFFIC DATA
SITE CALIBRATION SUMMARY

*STATE ASSIGNED ID [9116]
*STATE CODE [19]
*SHRP SECTION ID [9116]

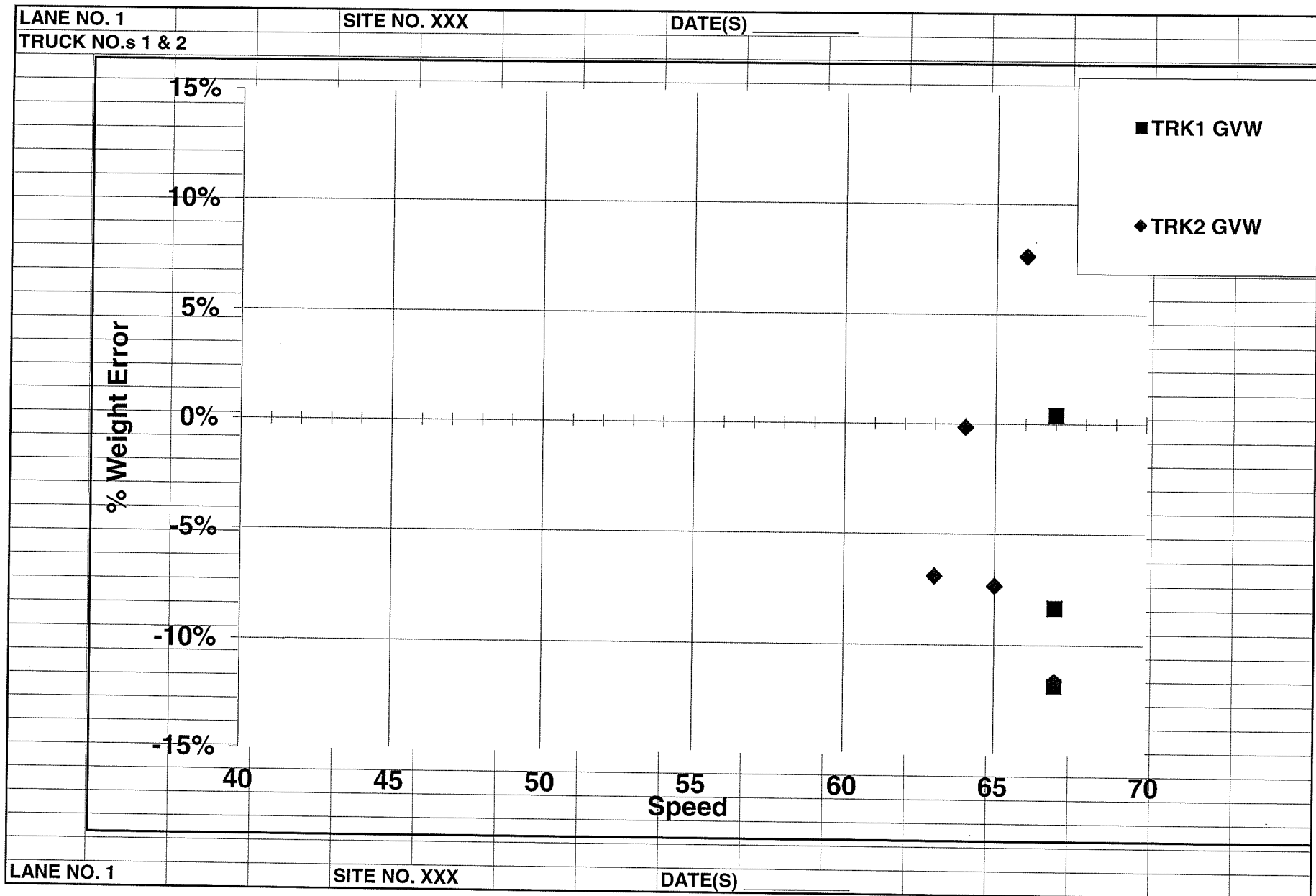
SITE CALIBRATION INFORMATION

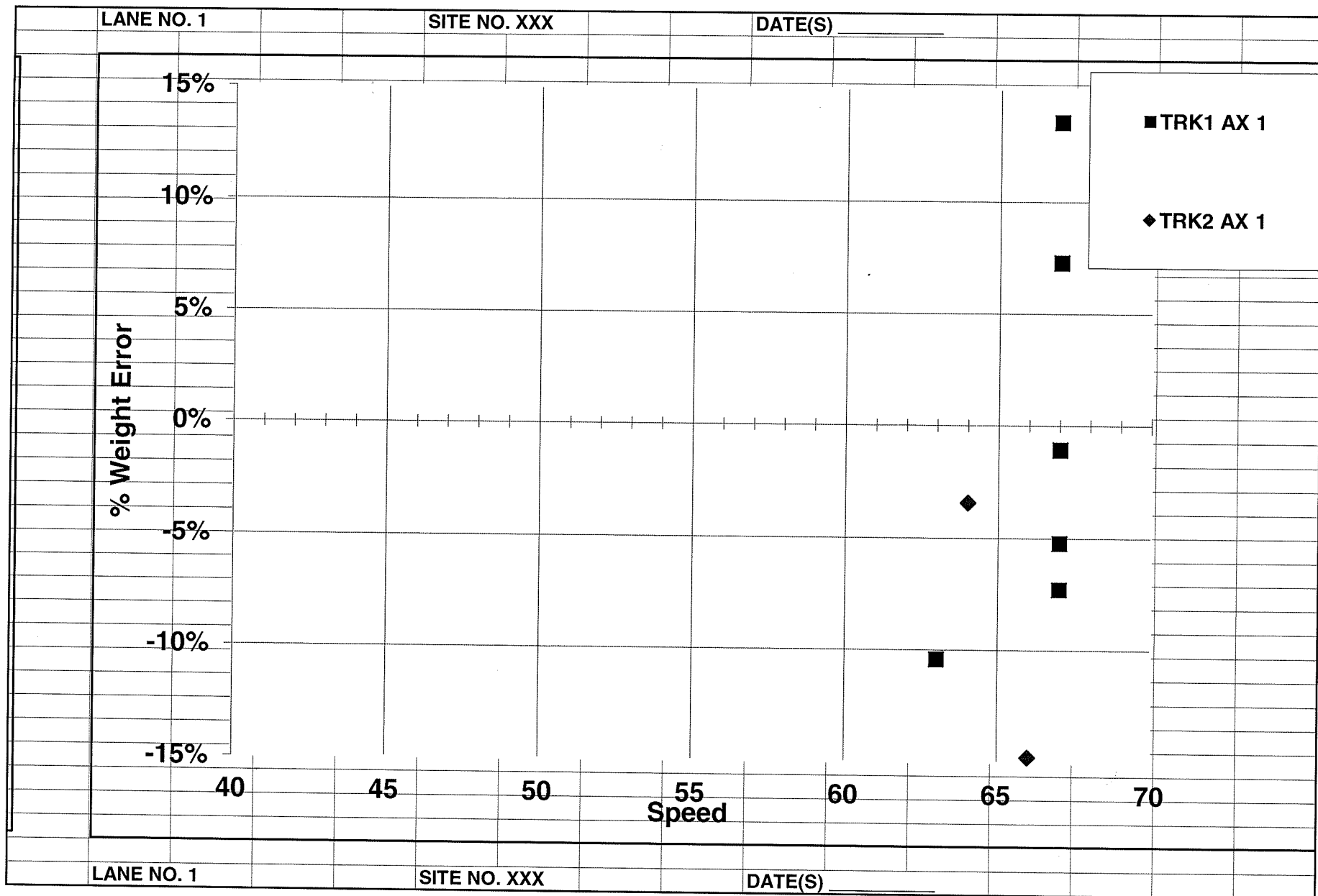
1. * DATE OF CALIBRATION (MONTH/DAY/YEAR) [11/15/2011]
2. * TYPE OF EQUIPMENT CALIBRATED ☒ WIM ☐ CLASSIFIER ☐ BOTH
3. * REASON FOR CALIBRATION
☒ REGULARLY SCHEDULED SITE VISIT ☐ RESEARCH
☐ EQUIPMENT REPLACEMENT ☐ TRAINING
☐ DATA TRIGGERED SYSTEM REVISION ☐ NEW EQUIPMENT INSTALLATION
☐ OTHER (SPECIFY) _____
4. * SENSORS INSTALLED IN LTPP LANE AT THIS SITE (CHECK ALL THAT APPLY):
☐ BARE ROUND PIEZO CERAMIC ☒ BARE FLAT PIEZO ☐ BENDING PLATES
☐ CHANNELIZED ROUND PIEZO ☐ LOAD CELLS ☐ QUARTZ PIEZO
☐ CHANNELIZED FLAT PIEZO ☒ INDUCTANCE LOOPS ☐ CAPACITANCE PADS
☐ OTHER (SPECIFY) _____
5. EQUIPMENT MANUFACTURER Measurement Specialties Inc

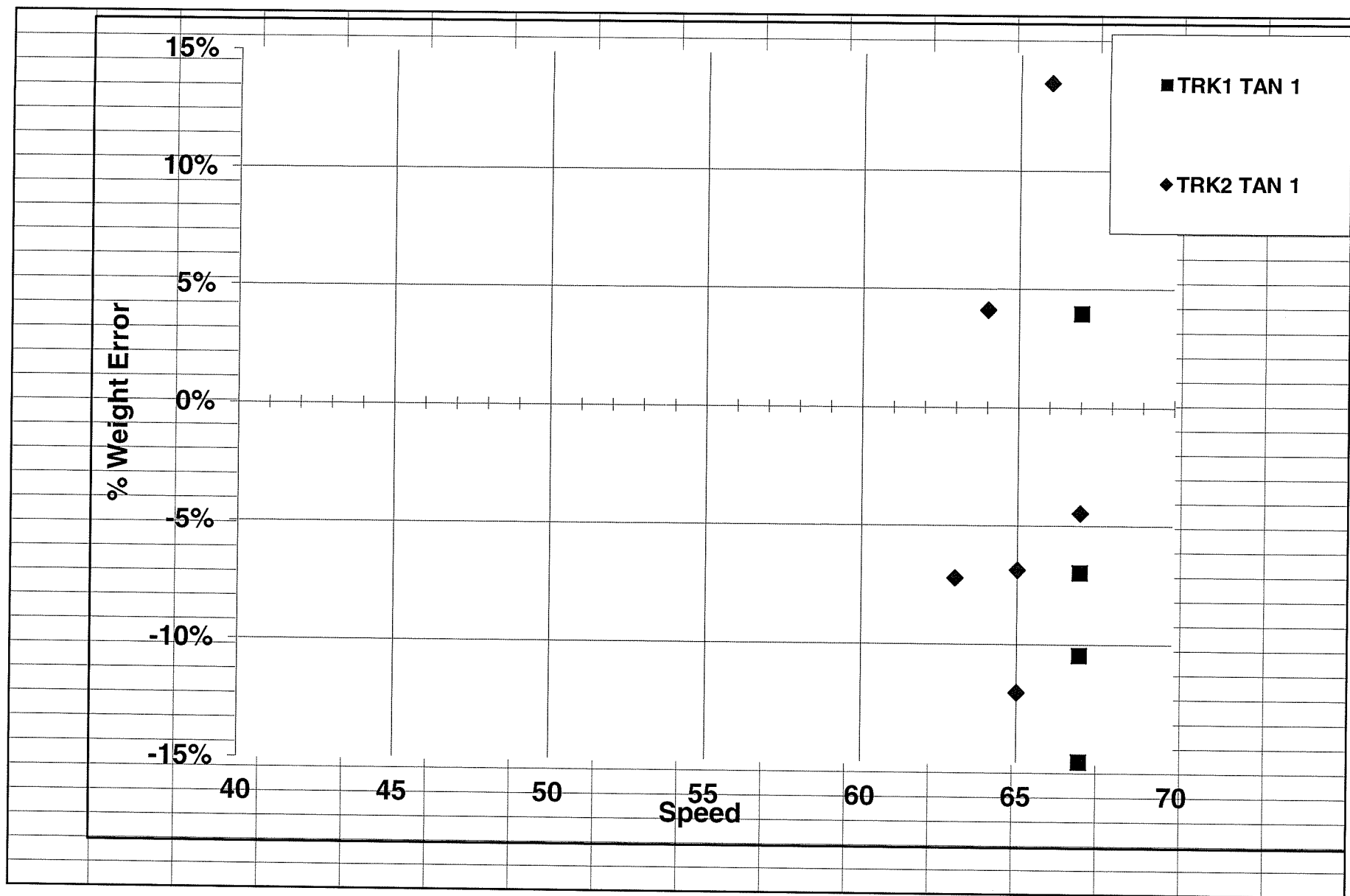
WIM SYSTEM CALIBRATION SPECIFICS**

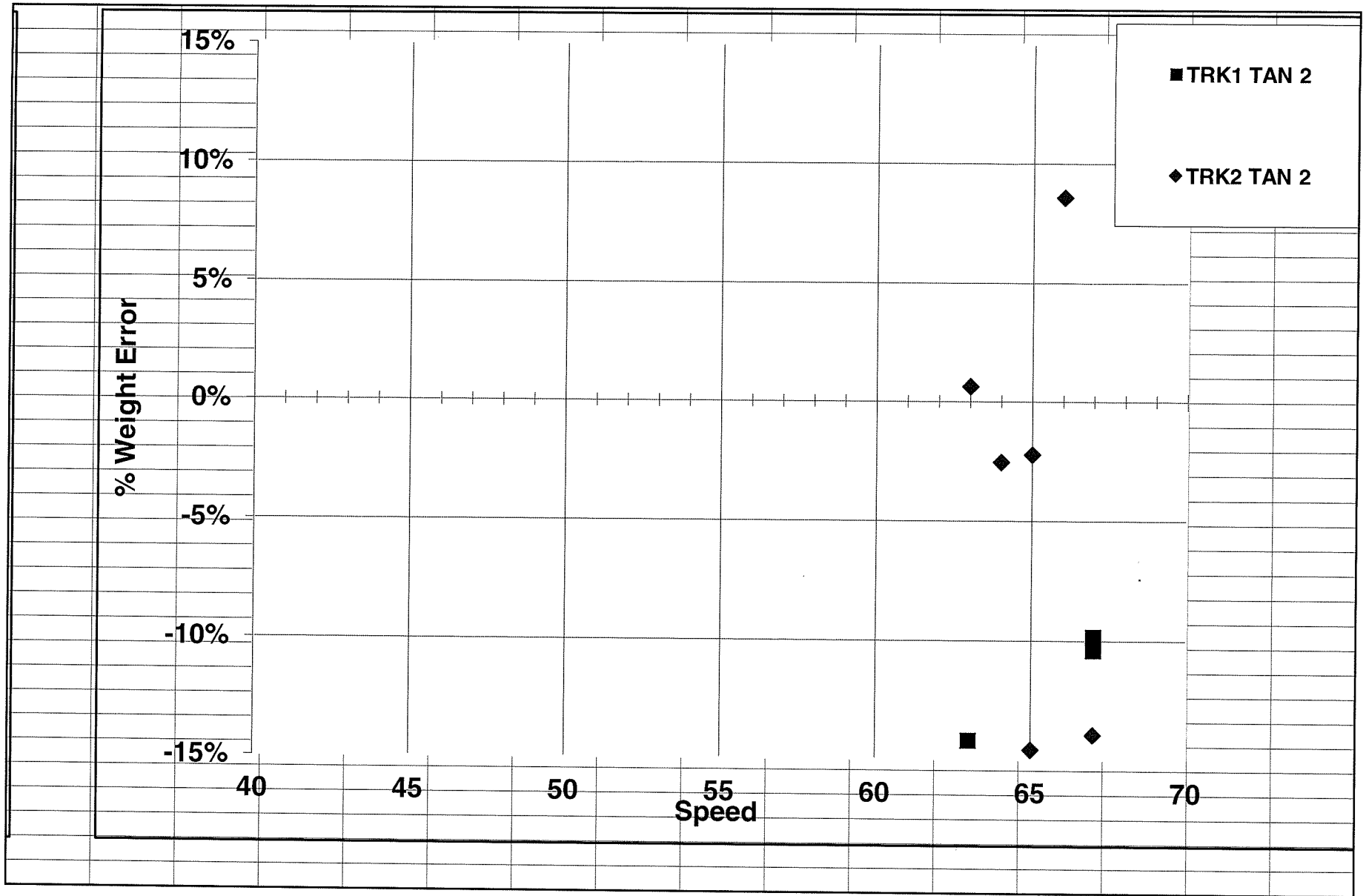
- 6.**CALIBRATION TECHNIQUE USED:
☐ TRAFFIC STREAM -- ☐ STATIC SCALE (Y/N) ☒ TEST TRUCKS
☐ NUMBER OF TRUCKS COMPARED ☐ 2 NUMBER OF TEST TRUCKS USED
☐ 8 PASSES PER TRUCK
- | TRUCK | TYPE | SUSPENSION |
|-------|------------|------------|
| 1 | <u>3S2</u> | <u>air</u> |
| 2 | <u>3S2</u> | <u>air</u> |
| 3 | _____ | _____ |
- TYPE PER FHWA 13 BIN SYSTEM
SUSPENSION: 1 - AIR; 2 - LEAF SPRING
3 - OTHER (DESCRIBE)
7. SUMMARY CALIBRATION RESULTS (EXPRESSED AS A PERCENT)
MEAN DIFFERENCE BETWEEN ---
DYNAMIC AND STATIC GVW -11.7 STANDARD DEVIATION 8.6
DYNAMIC AND STATIC SINGLE AXLES -11.7 STANDARD DEVIATION 8.6
DYNAMIC AND STATIC DOUBLE AXLES -11.7 STANDARD DEVIATION 10.6
8. ☐ NUMBER OF SPEEDS AT WHICH CALIBRATION WAS PERFORMED
9. DEFINE THE SPEED RANGES USED (MPH) _____
10. CALIBRATION FACTOR (AT EXPECTED FREE FLOW SPEED) _____
- 11.** IS AUTO-CALIBRATION USED AT THIS SITE? (Y/N) Y
IF YES, LIST AND DEFINE AUTO-CALIBRATION VALUE: Front axle of 3S2 expected to be @ 10,000 lbs

Truck 1	0														
TRUCKS 1 AND 2, COMBINED STATS					SITE NO. XXX			LANE NO. 1			DATE(S) _____				
	-----				ERROR, PERCENT						-----				
	GVW	AX 1 WT	TAN 1 WT	TAN 2 WT	TAN WT	AXSP 1-2	AXSP 2-3	AXSP 3-4	AXSP 4-5	VEH LGTH	AXSP 1-2	AXSP 2-3	AXSP 3-4	AXSP 4-5	ALL AXSP
Mean	-11.7%	-14.2%	-9.8%	-13.6%	-11.7%	-0.5%	-1.0%	-0.7%	0.3%	-8.9%	-0.1	0.0	-0.2	0.0	-0.1
StdDev	8.6%	14.3%	10.5%	10.7%	10.6%	0.6%	1.9%	0.7%	0.8%	1.0%	0.0	0.1	0.2	0.0	0.2
1.96xStd	16.9%	28.0%	20.5%	21.0%	20.8%					2.0%					0.3









STATIC DATA ENTRY SECTION										TRUCK NO. 1				SITE NO. XXX				DATE _____			
GVW	OAL		AX 1 WT	TAN 1 WT	TAN 2 WT		AX SP 1-2	AX SP 2-3	AX SP 3-4	AX SP 4-5											
48.1	55.7		9.6	20.1	18.3		11.3	4.3	31.2	4.2											
WIM DATA ENTRY SECTION										LANE NO. 1											
Run No	Veh No	Spd	OAL	GVW	AX 1 LTWT	AX 1 RTWT	AX 2 LTWT	AX 2 RTWT	AX 3 LTWT	AX 3 RTWT	AX 4 LTWT	AX 4 RTWT	AX 5 LTWT	AX 5 RTWT	AX SP 1-2	AX SP 2-3	AX SP 3-4	AX SP 4-5			
1	226	63	50.0	39.2	8.6		7.5		7.4		8.0		7.7		11.2	4.3	30.9	4.2			
2	42	67	50.9	40.3	9.5		8.0		8.9		7.6		6.2		11.2	4.4	31.2	4.2			
3	113	67	50.5	39.1	7.5		8.3		8.8		6.9		7.5		11.4	4.2	31.3	4.2			
4	181	67	49.6	44.1	8.9		9.9		8.8		8.4		8.1		11.3	4.3	31.0	4.2			
5	258	67	50.6	38.1	9.1		8.3		8.3		6.8		5.4		11.3	4.3	31.3	4.2			
6	46	67	50.6	38.8	7.8		7.9		8.6		7.3		7.3		11.3	4.3	31.2	4.2			
7	199	67	50.2	42.4	10.3		8.6		9.4		7.6		6.4		11.2	4.2	31.0	4.2			
8	116	67	50.2	48.3	10.9		9.7		11.2		8.3		8.1		11.3	4.4	31.3	4.2			
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Mean			50.3	41.3	9.1	#DIV/0!	8.5	#DIV/0!	8.9	#DIV/0!	7.6	#DIV/0!	7.1	#DIV/0!	11.3	4.3	31.2	4.2			
Std Dev			0.4	3.5	1.2	#DIV/0!	0.9	#DIV/0!	1.1	#DIV/0!	0.6	#DIV/0!	1.0	#DIV/0!	0.1	0.1	0.2	0.0			

LANE NO. 1		TRUCK NO. 1		SITE NO. XXX		DATE										
		ERROR, PERCENT									ERROR, FEET					
Run No	GVW	AX 1 WT	TAN 1 WT	TAN 2 WT	TAN WT	AXSP 1-2	AXSP 2-3	AXSP 3-4	AXSP 4-5	VEH LGTH	AXSP 1-2	AXSP 2-3	AXSP 3-4	AXSP 4-5	ALL AXLS	
1	-18.5%	-10.4%	-25.9%	-14.2%		-0.9%	0.0%	-1.0%	0.0%	-10.2%	-0.1	0.0	-0.3	0.0		
2	-16.2%	-1.0%	-15.9%	-24.6%		-0.9%	2.3%	0.0%	0.0%	-8.6%	-0.1	0.1	0.0	0.0		
3	-18.7%	-21.9%	-14.9%	-21.3%		0.9%	-2.3%	0.3%	0.0%	-9.3%	0.1	-0.1	0.1	0.0		
4	-8.3%	-7.3%	-7.0%	-9.8%		0.0%	0.0%	-0.6%	0.0%	-11.0%	0.0	0.0	-0.2	0.0		
5	-20.8%	-5.2%	-17.2%	-33.3%		0.0%	0.0%	0.3%	0.0%	-9.2%	0.0	0.0	0.1	0.0		
6	-19.3%	-18.8%	-17.9%	-20.2%		0.0%	0.0%	0.0%	0.0%	-9.2%	0.0	0.0	0.0	0.0		
7	-11.9%	7.3%	-10.4%	-23.5%		-0.9%	-2.3%	-0.6%	0.0%	-9.9%	-0.1	-0.1	-0.2	0.0		
8	0.4%	13.5%	4.0%	-10.4%		0.0%	2.3%	0.3%	0.0%	-9.9%	0.0	0.1	0.1	0.0		
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Mean	-14.2%	-5.5%	-13.2%	-19.7%	-16.4%	-0.2%	0.0%	-0.2%	0.0%	-9.6%	0.0	0.0	0.0	0.0	0.0	
StdDev	7.2%	12.1%	8.9%	7.9%	8.8%	0.6%	1.8%	0.5%	0.0%	0.7%	0.1	0.1	0.2	0.0	0.1	
1.96xStdDev	14.2%	23.6%	17.4%	15.6%	17.2%						0.1	0.1	0.3	0.0	0.2	

LANE NO. 1	TRUCK NO. 1		SITE NO. XXX		DATE _____										
					----- ERROR, PERCENT -----										
Notes	Run No	VehNo	Speed	GVW	AX 1 WT	TAN 1 WT	TAN 2 WT								
	1	226	63	-18.5%	-10.4%	-25.9%	-14.2%								
	2	42	67	-16.2%	-1.0%	-15.9%	-24.6%								
	3	113	67	-18.7%	-21.9%	-14.9%	-21.3%								
	4	181	67	-8.3%	-7.3%	-7.0%	-9.8%								
	5	258	67	-20.8%	-5.2%	-17.2%	-33.3%								
	6	46	67	-19.3%	-18.8%	-17.9%	-20.2%								
	7	199	67	-11.9%	7.3%	-10.4%	-23.5%								
	8	116	67	0.4%	13.5%	4.0%	-10.4%								
	9	-													
	10	-													
	11	-													
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LANE NO. 1

TRUCK NO. 1

SITE NO. XXX

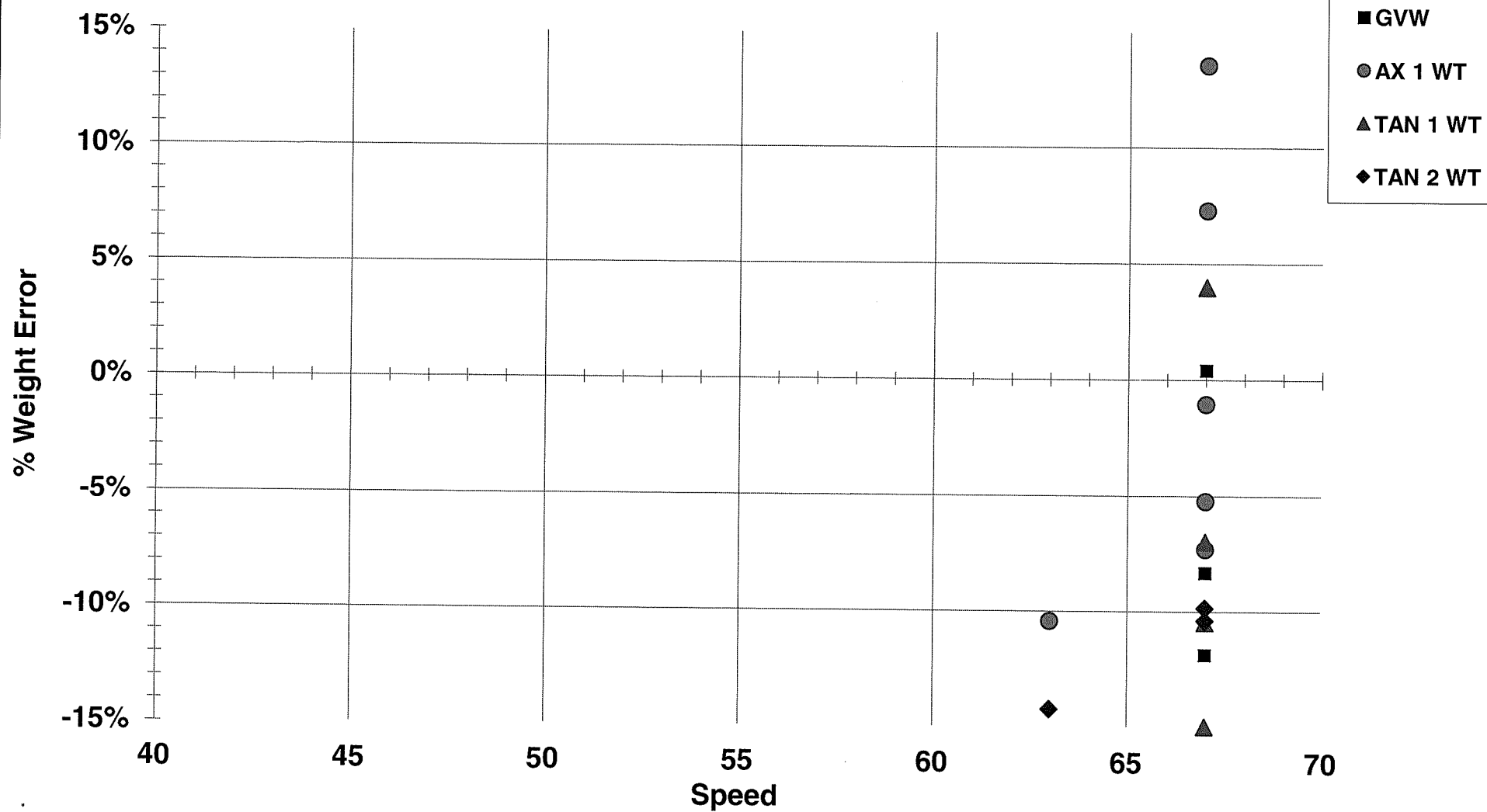
DATE _____

STATISTICAL DATA

ERROR PERCENT

ERROR FEET

	GVW	AX 1 WT	TAN 1 WT	TAN 2 WT	TAN WT	AXSP 1-2	AXSP 2-3	AXSP 3-4	AXSP 4-5	VEH LGTH	ALL AXLS
Mean	-14.2%	-5.5%	-13.2%	-19.7%	-16.4%	-0.2%	0.0%	-0.2%	0.0%	-9.6%	0.0
StdDev	7.2%	12.1%	8.9%	7.9%	8.8%	0.6%	1.8%	0.5%	0.0%	0.7%	0.1
1.96xStdDev	14.2%	23.6%	17.4%	15.6%	17.2%						0.2



STATIC DATA ENTRY SECTION					TRUCK NO. 2								SITE NO. XXX			DATE				
	GVW	OAL		AX 1 WT	TAN 1 WT	TAN 2 WT		AX SP 1-2	AX SP 2-3	AX SP 3-4	AX SP 4-5									
	69.5	60.0		8.8	29.1	31.5		10.9	4.4	34.8	4.2									
WIM DATA ENTRY SECTION					LANE NO. 1															
Run No	Veh No	Spd	OAL	GVW	AX 1 LTWT	AX 1 RTWT	AX 2 LTWT	AX 2 RTWT	AX 3 LTWT	AX 3 RTWT	AX 4 LTWT	AX 4 RTWT	AX 5 LTWT	AX 5 RTWT	AX SP 1-2	AX SP 2-3	AX SP 3-4	AX SP 4-5		
1	228	62	54.7	55.4	7.1		11.4		11.1		11.8		14.0		10.8	4.4	34.2	4.3		
2	48	65	54.5	56.4	5.3		13.0		12.6		12.2		13.4		10.9	4.3	34.3	4.2		
3	124	65	55.4	64.4	6.6		13.0		14.1		15.7		15.1		10.8	4.3	34.5	4.2		
4	198	65	55.0	57.9	6.7		11.9		12.4		14.7		12.2		10.8	4.3	34.4	4.2		
5	280	63	54.7	64.7	6.0		13.3		13.7		16.1		15.6		10.8	4.2	34.2	4.2		
6	247	67	55.3	61.4	6.6		14.0		13.8		11.9		15.2		10.8	4.4	34.5	4.2		
7	75	66	55.6	74.8	7.5		16.0		17.1		17.5		16.7		10.9	4.3	34.7	4.3		
8	153	64	55.5	69.4	8.5		15.4		14.9		15.6		15.1		10.8	4.3	34.4	4.2		
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	Mean		55.1	63.1	6.8	#DIV/0!	13.5	#DIV/0!	13.7	#DIV/0!	14.4	#DIV/0!	14.7	#DIV/0!	10.8	4.3	34.4	4.2		
-	Std Dev		0.4	6.7	1.0	#DIV/0!	1.6	#DIV/0!	1.8	#DIV/0!	2.2	#DIV/0!	1.4	#DIV/0!	0.0	0.1	0.2	0.0		

LANE NO. 1		TRUCK NO. 2			SITE NO. XXX			DATE								
			</													

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LANE NO. 1

TRUCK NO. 2

SITE NO. XXX

DATE _____

STATISTICAL DATA

ERROR, PERCENT

ERROR, FEET

	GVW	AX 1 WT	TAN 1 WT	TAN 2 WT	TAN WT	AXSP 1-2	AXSP 2-3	AXSP 3-4	AXSP 4-5	VEH LGTH	ALL AXLS
Mean	-9.3%	-22.9%	-6.5%	-7.6%	-7.1%	-0.7%	-2.0%	-1.1%	0.6%	-8.2%	-0.2
StdDev	9.7%	10.9%	11.5%	10.1%	10.4%	0.4%	1.5%	0.5%	1.1%	0.7%	0.2
1.96xStdDev	18.9%	21.4%	22.5%	19.7%	20.4%						0.4

