

**SEASONAL MONITORING PROGRAM  
DISMANTLE REPORT  
SITE 040114, KINGMAN, ARIZONA.**

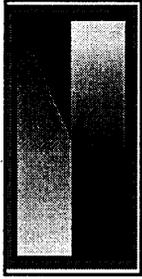
**January 1997**



**NICHOLS  
CONSULTING  
ENGINEERS, Chtd.**

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1885 S. Arlington Ave., Suite 111, Reno, Nevada 89509 Tel (702) 329-4955 Fax (702) 329-5098



# NICHOLS CONSULTING ENGINEERS, Chtd.

1885 S. Arlington Ave. Suite 111 • Reno NV 89509 • ☎ (702) 329-4955 • FAX (702) 329-5098

## MEMORANDUM

TO: Mr. Aramis Lopez, Jr.  
Long-Term Pavement Performance Division

FROM: Srikanth S. Holikatti and Douglas J. Frith

DATE: January 31, 1997

SUBJECT: **Suspension of SMP Site Monitoring Activities, Site 040114**

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This memo will serve as the SMP Site Monitoring Suspension Status Report for Site 040114 (04SB) near Kingman, Arizona. This report narrates the activities associated with the suspension of SMP site monitoring.

The site was last monitored on August 13, 1996 and de-installation occurred at this time. The following activities were performed before suspension of SMP monitoring activities and dismantling of SMP instrumentation:

- FWD testing of the section.
- Transverse profile by dipstick.
- Elevation measurements.
- Ground water table measurements.
- Automated mobile data collection.
- Downloading of Onsite data before dismantling the CR10 datalogger.

Longitudinal profile measurements were performed on August 10, 1996 using a K J Law profilometer.

The following pre-dismantle and dismantle activities were performed:

- The observation well and cap threads were thoroughly cleaned and lubricated (greased) before the well was sealed.
- The air temperature probe and rain gauge were disconnected from the steel pole and the pole was removed from the bottom joint. The pole stub, embedded in the ground, was cleaned and lubricated before capping.
- The instrumentation hole and access trench were both closely inspected and the joints were sealed with silicone sealant wherever necessary. No further patching was required.
- All TDR probes, thermistor temperature sensor unit cables and wiring were disconnected from the CR10 datalogger. These were carefully checked and labeled. Labels on each cable were scotch taped to ensure they would remain in place.
- A coat of electronics grade anti-corrosive compound was applied to all the cables and wiring connections to protect against corrosion of contact points. The cables were then put in a heavy duty plastic bag and were taped to keep out the elements and were then secured inside the equipment cabin.
- The instrument panel board containing the CR10 datalogger, the relay and the terminal strip was removed.
- The equipment cabinet was checked and adequate drainage was ensured in case of heavy precipitation.
- The equipment cabinet lock was lubricated with graphite lubricant, the lock was taped to keep out the natural elements.
- Nails were driven into the pavement at the elevation measurement and FWD test locations, the nailheads were spray painted white for easy identification
- A layout sketch of the section indicating the location of the instrumentation hole, observation well, equipment cabinet, FWD test points and elevation measurement points was drawn so that, the site can be re-established easily upon return.

The instrumentation hole is located in the outside lane, at a distance of 157.04m (section station 5.00+15'), from the section beginning, in the outer wheel path. The equipment cabinet is located 9.00m to the right of the lane edge and the pole is 0.30m behind the equipment cabinet. The observation well/piezometer is located at a distance of 121.95m from the start of section, 4.90m away from the lane edge. Please refer to the site layout schematic for the testing and monitoring Mr.

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locations within the test section.

The following are enclosed with this brief report:

- A summary table of SMP measurements over the preceding data collection cycle following the standard format.
- Section layout schematic clearly showing the location of the instrument hole, observation well, equipment cabinet, FWD and elevation measurement locations.
- Copies of photographs taken during the suspension and dismantle activities.
- TDR traces manually obtained just before the instrument panel board was dismantled.

The summary table indicates a mostly complete data set for this site. One month of precipitation, air and pavement temperatures were not collected. In addition, no TDR traces are available one month and another month received no FWD testing. From the ONSITE and SMPCheck plots, it was observed that all the installed equipments were functioning correctly at the time of de-installation.

No unusual or non-standard equipment or wiring was utilized on this site. However it should be noted, no resistivity probe was installed. Only a limited number of resistivity probes were supplied by FHWA and due to the climate, this site did not receive one.

Information in this report and the attachments are provided to document the SMP suspension and dismantle activities. Any further information about suspension/dismantle activities can be obtained by calling Nichols Consulting Engineers at (702)329-4955.

SH:DF/cac  
Attachments

cc: Gonzalo Rada  
Cal Berge

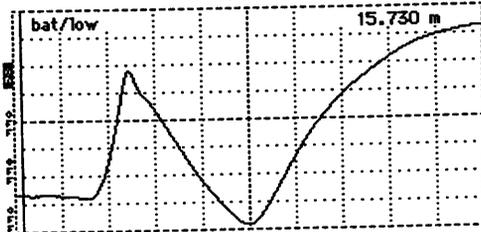
# SUMMARY of SMP DATA COLLECTED to DATE.

**Agency Code:** 04, Arizona.  
**LTPP Section Code:** 0114.

**Location:** Kingman  
**Pavement Type:** Asphalt concrete.

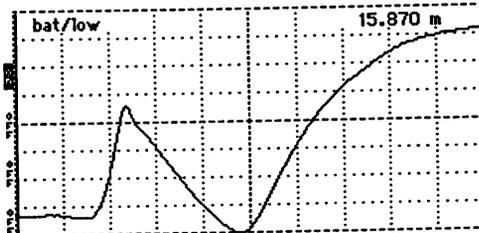
Test Date dd/mm/yy	ONSITE Data			MOBILE Data			Manual Data			FWD Data			Distress Data			Profile Data		Comments	
	Visit Identity \ Code	Pav Temp	Ambient Temp	Precphtn.	Subsurface Moisture (TDR)	Frost Depth 2-Point	Backup Pav Temp	Backup Moisture (TDR)	Water Table	Surface Elev.	Surface Layer Temp.	Surface Temp.	OWP	ML	PE	Manual	PASCO		Profiler
17-Aug, 95	NA	X	X	X	X	NA		X			X	3	3	NA	X	X			PASCO was run on 3-30-95.
12-Sep, 95	A	X	X	X		NA		X			X	4	4	NA					
10-Oct, 95	B				X	NA					X	4	4	NA					TDR traces 8,9 & 10 appear Non-Typical
07-Nov, 95	C	X	X	X	X	NA			X	X	X	4	4	NA	X			X	TDR traces 8,9 & 10 appear Non-Typical
05-Dec, 95	D	X	X	X	X	NA			X		X	4	4	NA			X		
09-Jan, 96	A	X	X	X	X	NA			X		X	5	5	NA					
05-Feb, 96	B	X	X	X	X	NA			X	X	X	5	5	NA	X			X	
05-Mar, 96	C	X	X	X	X	NA		X			X	5	5	NA	X				
02-Apr, 96	D	X	X	X	X	NA			X	X	X	3	3	NA	X			X	
08-May, 96	E	X	X	X	X	NA		X			X	4	4	NA					Partial TDR traces.
12-Jun, 96	F	X	X	X	X	NA								NA					
09-Jul, 96	G	X	X	X	X	NA			X	X	X	4	4	NA	X			X	
13-Aug, 96	H	X	X	X	X	NA			X	X	X	5	5	NA			X		

Cursor ..... 15.730 m  
Distance/Div ..... .25 m/div  
Vertical Scale..... 39.7 mP/div  
VP ..... 0.99  
Noise Filter..... 1 avs  
Power ..... bat/low



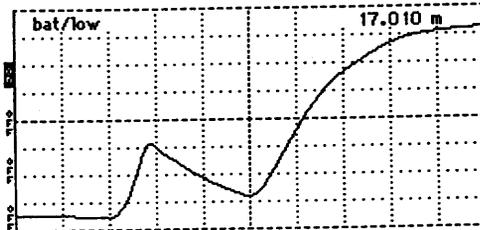
Tektronix 1502B TDR  
Date 8/13/96  
Cable # 6 040114  
Notes Looks Good  
Input Trace \_\_\_\_\_  
Stored Trace \_\_\_\_\_  
Difference Trace \_\_\_\_\_

Cursor ..... 15.870 m  
Distance/Div ..... .25 m/div  
Vertical Scale..... 44.6 mP/div  
VP ..... 0.99  
Noise Filter..... 1 avs  
Power ..... bat/low



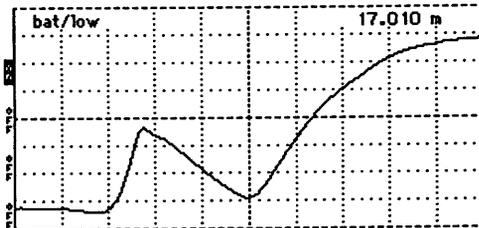
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Date 8/13/96  
Cable # 7 040114  
Notes Looks Good  
Input Trace \_\_\_\_\_  
Stored Trace \_\_\_\_\_  
Difference Trace \_\_\_\_\_

Cursor ..... 17.010 m  
Distance/Div ..... .25 m/div  
Vertical Scale..... 57.7 mP/div  
VP ..... 0.99  
Noise Filter..... 1 avs  
Power ..... bat/low



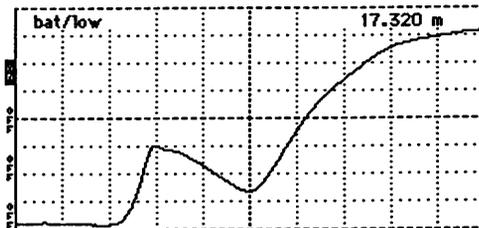
Tektronix 1502B TDR  
Date 8/13/96  
Cable # 8 040114  
Notes Looks Good  
Input Trace \_\_\_\_\_  
Stored Trace \_\_\_\_\_  
Difference Trace \_\_\_\_\_

Cursor ..... 17.010 m  
Distance/Div ..... .25 m/div  
Vertical Scale..... 57.7 mP/div  
VP ..... 0.99  
Noise Filter..... 1 avs  
Power ..... bat/low



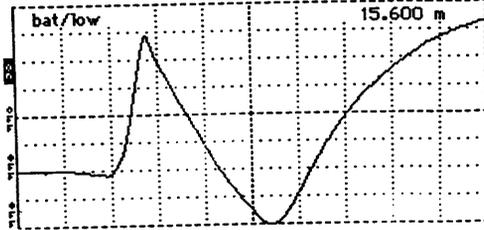
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Date 8/13/96  
Cable # 9 040114  
Notes Looks Good  
Input Trace \_\_\_\_\_  
Stored Trace \_\_\_\_\_  
Difference Trace \_\_\_\_\_

Cursor ..... 17.320 m  
Distance/Div ..... .25 m/div  
Vertical Scale..... 57.7 mP/div  
VP ..... 0.99  
Noise Filter..... 1 avs  
Power ..... bat/low



Tektronix 1502B TDR  
Date 8/13/96  
Cable # 10 040114  
Notes Looks Good  
Input Trace \_\_\_\_\_  
Stored Trace \_\_\_\_\_  
Difference Trace \_\_\_\_\_

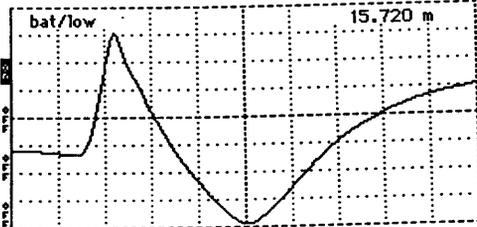
Cursor ..... 15.600 m  
Distance/Div ..... .25 m/div  
Vertical Scale..... 35.4 mP/div  
VP ..... 0.99  
Noise Filter ..... 1 avs  
Power ..... bat/low



Tektronix 1502B TDR  
Date 8/13/96  
Cable #1 040114  
Notes Looks Good

Input Trace \_\_\_\_\_  
Stored Trace \_\_\_\_\_  
Difference Trace \_\_\_\_\_

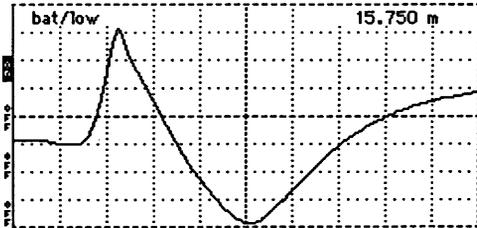
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Distance/Div ..... .25 m/div  
Vertical Scale..... 42.1 mP/div  
VP ..... 0.99  
Noise Filter ..... 1 avs  
Power ..... bat/low



Tektronix 1502B TDR  
Date 8/13/96  
Cable #2 040114  
Notes Looks Good

Input Trace \_\_\_\_\_  
Stored Trace \_\_\_\_\_  
Difference Trace \_\_\_\_\_

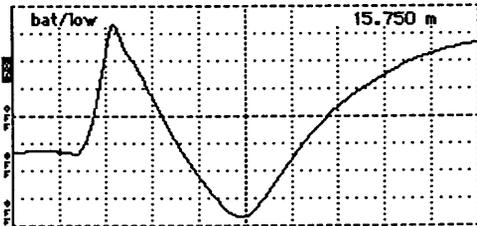
Cursor ..... 15.750 m  
Distance/Div ..... .25 m/div  
Vertical Scale..... 42.1 mP/div  
VP ..... 0.99  
Noise Filter ..... 1 avs  
Power ..... bat/low



Tektronix 1502B TDR  
Date 8/13/96  
Cable #3 040114  
Notes Looks Good

Input Trace \_\_\_\_\_  
Stored Trace \_\_\_\_\_  
Difference Trace \_\_\_\_\_

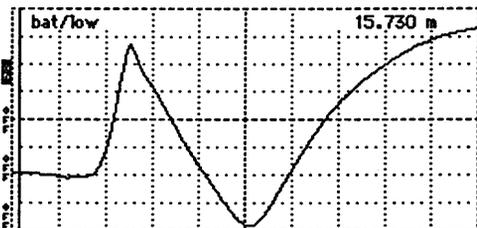
Cursor ..... 15.750 m  
Distance/Div ..... .25 m/div  
Vertical Scale..... 37.5 mP/div  
VP ..... 0.99  
Noise Filter ..... 1 avs  
Power ..... bat/low



Tektronix 1502B TDR  
Date 8/13/96  
Cable #4 040114  
Notes Looks Good

Input Trace \_\_\_\_\_  
Stored Trace \_\_\_\_\_  
Difference Trace \_\_\_\_\_

Cursor ..... 15.730 m  
Distance/Div ..... .25 m/div  
Vertical Scale..... 36.4 mP/div  
VP ..... 0.99  
Noise Filter ..... 1 avs  
Power ..... bat/low

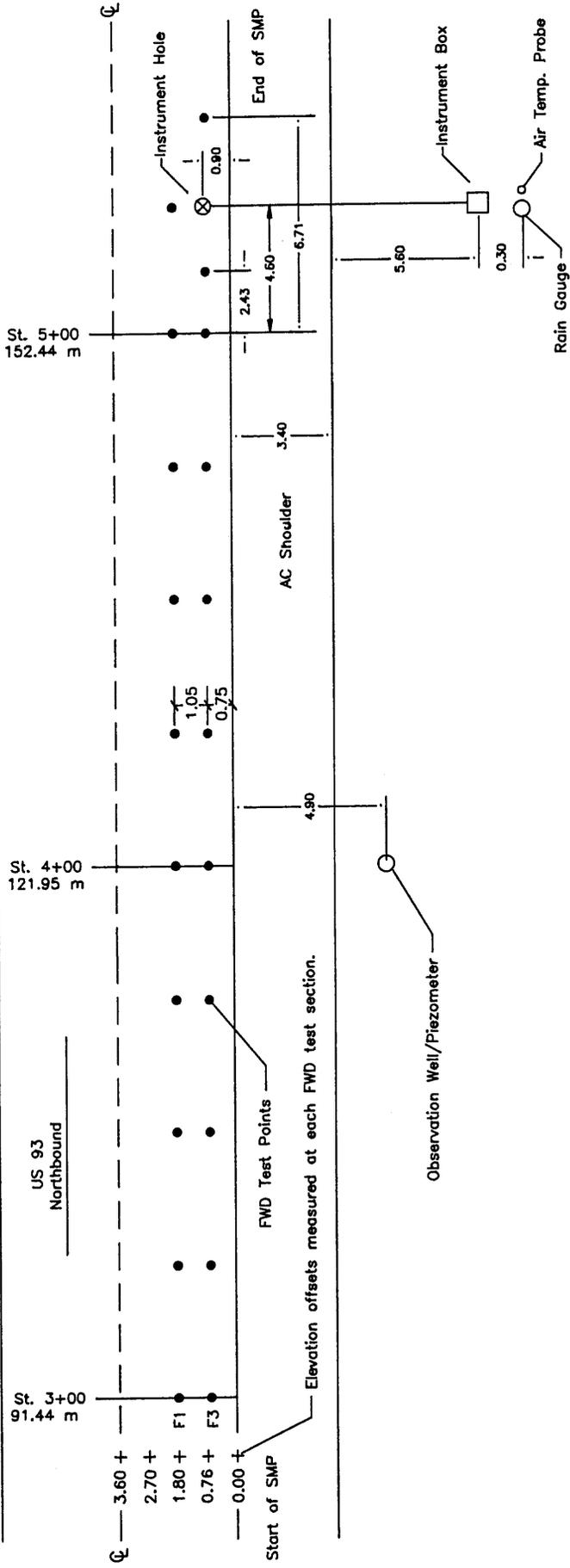


Tektronix 1502B TDR  
Date 8/13/96  
Cable #5 040114  
Notes Looks Good

Input Trace \_\_\_\_\_  
Stored Trace \_\_\_\_\_  
Difference Trace \_\_\_\_\_

SECTION 040114  
Kingman, AZ

Divided Highway



Note: All dimensions are in meters.



Taped Cable-ends.



Instrumentation Hole.



Observation Piezometer.



Equipment Cabinet.