

The following examples of daily diary entries are provided to aid the NRCS quality assurance (QA) inspector when completing daily diary entries. Examples provided relate to the types of construction practices covered in NEH 645.

Each example daily diary entry is paginated. The first number corresponds to the NEH 645 chapter to which the example daily diary entry is directly associated. The second number corresponds to the number of the diary example.

This page intentionally left blank.

NEH 645 SD 4.1	Sample Diary Entry 4–1 (Safety)	C–4.1–1
NEH 645 SD 5.1	Sample Diary Entry 5.1 (Reporting Quantities of Imported Materials)	C–5.1–1
NEH 645 SD 6.1	Sample Diary Entry 6.1 (Erosion and Pollution Control)	C–6.1–1
NEH 645 SD 7.1	Sample Diary Entry 7.1 (Foundation Preparation)	C–7.1–1
NEH 645 SD 7.2	Sample Diary Entry 7.2 (Removal of Water)	C–7.2–1
NEH 645 SD 7.3	Sample Diary Entry 7.3 (Excavation)	C–7.3–1
NEH 645 SD 8.1	Sample Diary Entry 8.1 (Earthfill)	C–8.1–1
NEH 645 SD 8.2	Sample Diary Entry 8.2 (Earthfill Backfill)	C–8.2–1
NEH 645 SD 8.3	Sample Diary Entry 8.3 (Rockfill)	C–8.3–1
NEH 645 SD 9.1	Sample Diary Entry 9.1 (Soil Modification)	C–9.1–1
NEH 645 SD 12.1	Sample Diary Entry 12.1 (Concrete Placement)	C–12.1–1
NEH 645 SD 12.2	Sample Diary Entry 12.2 (Concrete Preplacement)	C–12.2–1
NEH 645 SD 12.3	Sample Diary Entry 12.3 (Concrete Postplacement)	C–12.3–1
NEH 645 SD 13.1	Sample Diary Entry 13.1 (RCC Construction)	C–13.1–1
NEH 645 SD 14.1	Sample Diary Entry 14.1 (Shotcrete)	C–14.1–1
NEH 645 SD 15.1	Sample Diary Entry 15.1 (Pipe Delivery)	C–15.1–1
NEH 645 SD 15.2	Sample Diary Entry 15.2 (Laying Pipe)	C–15.2–1
NEH 645 SD 15.3	Sample Diary Entry 15.3 (Pipe Embedment)	C–15.3–1
NEH 645 SD 17.1	Sample Diary Entry 17.1 (Brushlayers)	C–17.1–1
NEH 645 SD 18.1	Sample Diary Entry 18.1 (Pile Driving)	C–18.1–1

This page intentionally left blank.

Sample Diary Entry 4.1 (Safety)Report No. *101*Date *May 1, 2009*Weather *Partly cloudy*Min. Temp *51°*Max. Temp *63°*Precipitation *0*

Inches

Storm Period

A.M.
P.M.A.M.
P.M.Shift No. *2*

App. Time

A.M.
P.M.

To

A.M.
P.M.

Work Period

*7:30*A.M.
P.M.*5:00*A.M.
P.M.**Work Force**Superintendent *C.J. Manning*

Skilled

Laborer

Foreman *M.H. Brown**3**4***Estimated Quantities of Pay Work Accomplished**

Item No.	Item	Unit	Quantity
<i>8</i>	<i>Excavation, common, foundation</i>	<i>yd³</i>	<i>200/53500</i>
<i>9</i>	<i>Earthfill, embankment</i>	<i>yd³</i>	<i>1800/45300</i>

Narrative

I arrived on site at 7:00. Contactor excavating foundation for principal spillway conduit and placing earthfill on left half of dam. 9:00 I checked foundation of principal spillway at two locations and asked contractor's surveyor Tom Gray for a copy of his principal spillway layout notes. He said he would provide a copy of his notes to me tomorrow. 11:00 Observed Inspector Michael Aldridge checking in-place moisture and density of fill between stations 2+00 and 12+00. I discussed the need for him to pay particular attention to the moisture and density of the foundation and fill where the fill joins the abutment. He agreed and confirmed fill at abutment was not being compacted to the specified density. He discussed this with Foreman Brown and Mr. Brown

Sample Diary Entry 4.1 (Safety)—continued

directed the small compactor to the abutment area. 1:00 Mr. Aldridge informed me of the limits of non-conforming fill and that it had been removed and replaced with fill that met density and moisture requirements. 1:30 I noticed D6 dozer ran into fence at location approx. 200 feet downstream of dam Sta. 4+35. Foreman Brown and I drove to the location and Brown asked the operator to turn off the dozer and step away. Operator, Fred Jones, smelled of alcohol and was having trouble explaining what happened. His speech was slurred and he was wobbly when he walked. Superintendent Manning drove up as operator Jones was exiting dozer. Mr. Brown took Mr. Jones to the contractor's field office. 2:00 I called CO Jane Macon and was instructed to contact the landowner and ask the contractor and landowner to negotiate to have the fence repaired. 2:10 I called the landowner Graves to explain what happened. He said he would be on site tomorrow and asked me to have the contractor temporarily repair the fence. I discussed the temporary repair with Mr. Manning. Mr. Manning had two laborers begin repair at 2:45 and complete temporary repair at 3:30. Mr. Manning informed me that Mr. Jones was escorted from the site at 2:30; and the company owner had been contacted. Mr. Manning said Mr. Jones would not be returning to the site. 5:00 All work ceased and contractor personnel left site. I informed Ms. Macon. 5:00 I checked moisture and density of fill at several locations along left abutment interface and found it to be in compliance with specification. I left site at 5:30. Dale McCurry

Sample Diary Entry 5.1 (Reporting Quantities of Imported Materials)

Report No. 129	Date June 6, 2009			
Weather <i>Partly cloudy</i>	Min. Temp 71°		Max. Temp 93°	
Precipitation 0	Inches	Storm Period	A.M. P.M.	A.M. P.M.
Shift No. —	App. Time	A.M. P.M.	To	A.M. P.M.
Work Period	7:00	A.M. P.M.	5:00	A.M. P.M.
Work Force				
Superintendent <i>C.J. Manning</i>			Skilled	Laborer
Foreman <i>M.H. Brown</i>			3	4

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
19	Rock riprap (delivered)	Tons	240.2/936.1
19	Rock riprap (installed)	Tons	200/890

Narrative

Contractor servicing equipment when I arrived at 7:00 a.m. Upon my arrival, contractor's surveyor began setting blue top stakes on downstream side of dam and finished setting stakes at 9:00 a.m. Contractor resumed placing rock riprap where he left off yesterday. Rock trucks began delivering rock at 9:00 a.m. and continued delivery until the last (eleventh) truck arrived at 3:00 p.m. Contractor stopped for lunch at noon and resumed placing riprap at 1:00 p.m. Motor grader performed finish grading on back of dam from 1:00 p.m. until 5:00 p.m. Contractor ceased placing rock and left site at 5:00 p.m. I left site at 5:30 p.m. J. D. Douglas

This page intentionally left blank.

Sample Diary Entry 6.1 (Erosion and Pollution Control)

Report No.	25	Date	February 3, 2014
Weather	Partly cloudy	Min. Temp	28°
		Max. Temp	56°
Precipitation	0.8	Inches	
		Storm Period	7:30 A.M. P.M. 8:30 A.M. P.M.
Shift No.		App. Time	
			A.M. P.M. To A.M. P.M.
Work Period		7:00 A.M. P.M.	5:00 A.M. P.M.
Work Force			
Superintendent	C.J. Manning	Skilled	Laborer
Foreman	M.H. Brown		

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
10	Concrete, bedding	CY	10
9	Conduit 30"	Ft	80/120

Narrative

Contractor servicing equipment when I arrived at 7:00 a.m. Ground is wet from rain yesterday. 7:30 Began to rain. Discussed progress with Mr. Manning. He admitted being behind schedule because of failure to order pipe so that it would be available when needed as scheduled. Rainfall ceased at 8:30. Mr. Manning and I inspected the site to assess stormwater BMPs and filled out the SWPPP inspection form. Mr. Manning noted need to regrade the diversion above stockpile #1 and remove sediment from immediately upstream of the silt fence located above and to the left side of the plunge basin. Otherwise, the plan and BMPs appear to be adequate and functioning as intended. 9:00 contractor began placing principal spillway conduit at P.S. Sta. 2+30. Work ceased for lunch at noon and resumed at 1:00. Completed laying conduit at 2:00. Concrete truck #48 from Tarrant Concrete arrived with 10 CY of concrete at 2:30. CQC inspector, Edwards, checked batch ticket #30245 and batch time (1:45) and tested concrete for air (4.5%), slump (6.0"), and temperature (56 oF). Began placing concrete in cradle at P.S. Sta. 1+90 at 2:50 with 25 minutes remaining. 3:30 Completed concrete placement at P.S. Sta. 3+10. Concrete truck was emptied and cleaned out in approved waste disposal pit. Time exceeded, but hole was closing as immersion vibrator exited the concrete. 1:00 - 2:00 Motorgrader #12 regrading diversion above stockpile #1. Front end loader #315 removing silt from above silt fence left of plunge basin. Excavated silt being loaded in dumptruck #14 and transported to top of hill near Gridline C and approx. dam CL 1+00. Engineer Booth on site 1:00 to 3:00 to observe conduit placement. Contractor ceased all operations and left site at 5:00 p.m. I left site at 5:30 p.m. *J.D. Douglas*

This page intentionally left blank.

Sample Diary Entry 7.1 (Foundation Preparation)

Report No.	23	Date	June 6, 2012		
Weather	Partly cloudy	Min. Temp	28°	Max. Temp	56°
Precipitation	0	Inches		Storm Period	
Shift No.	—	App. Time	A.M. P.M.	To	A.M. P.M.
Work Period		7:30	A.M. P.M.	5:00	A.M. P.M.
Work Force					
Superintendent	C.J. Manning			Skilled	Laborer
Foreman	M.H. Brown			3	4

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
8	Excavation, foundation	yd ³	300/950
9	Earthfill, common	yd ³	250/450

Narrative

Contractor servicing equipment when I arrived at 7:00 a.m. Contractor resumed core trench excavation at Sta. 6+20. Excavated material being placed in previously excavated core trench Sta. 1+00 to 5+50. Engineer Booth arrived at 9:00 to look at potential low density material in core trench at planned grade from Sta. 5+50 to Sta. 6+20. Assisted Booth to obtain two samples of potential low density material which she transported to a soil mechanics lab. 12:00 – 1:00 lunchbreak. Contractor ceased core trench excavation at station 10+70 at 5:00 p.m. I left site at 5:30 p.m. *J.D. Douglas*

This page intentionally left blank.

Sample Diary Entry 7.2 (Removal of Water)

Report No. 34	Date June 19, 2012			
Weather Sunny	Min. Temp 58°	Max. Temp 75°		
Precipitation 0	Inches	Storm Period	A.M. P.M.	A.M. P.M.
Shift No. —	App. Time	A.M. P.M.	To	A.M. P.M.
Work Period	7:30	A.M. P.M.	5:00	A.M. P.M.
Work Force				
Superintendent C.J. Manning	Skilled		Laborer	
Foreman M.H. Brown	3		4	

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
6	Excavation, Rock, Aux Spillway	yd ³	200/650
7	Excavation, Aux Spillway	yd ³	1500/8500
9	Earthfill, common	yd ³	3000/20000

Narrative

Superintendent and I arrived at 7:00 a.m. Contractor cleaning rock surface in core trench Sta. 3+40 to 3+60. 10:15 Excavating core trench at Sta. 8+40 uncovered a seep that began flowing into the core trench. Contractor began placing a berm and sump pump to contain seep. Superintendent asked what he should do about seep. I phoned the COR who said to continue efforts to contain seep. COR plans to be on site tomorrow. Contractor decided to cease operations near seep until COR arrives tomorrow. One trackhoe (#331) and end-dump truck (#2) idled. Contractor continued cleaning rock surfaces up to Sta. 8+00 until 5:00. Superintendent and I looked at seep at 4:00. The sump pump is able to keep seep water pumped from bermed area. Sump pump

Sample Diary Entry 7.2 (Removal of Water)—continued

requires refueling every two hours. Superintendent stated he would have someone on site overnight to service sump pump to keep it working. Contractor left at 5:30 p.m. I left site at 5:30 p.m. J.D. Douglas

Sample Diary Entry 7.3 (Excavation)

Report No. 34	Date June 19, 2012			
Weather Sunny	Min. Temp 58°		Max. Temp 75°	
Precipitation 0	Inches	Storm Period	A.M. P.M.	A.M. P.M.
Shift No. —	App. Time	A.M. P.M.	To	A.M. P.M.
Work Period	7:30	A.M. P.M.	5:00	A.M. P.M.
Work Force				
Superintendent C.J. Manning			Skilled	Laborer
Foreman M.H. Brown			3	4

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
6	<i>Excavation, Rock, Aux Spillway</i>	<i>yd³</i>	<i>200/650</i>
7	<i>Excavation, Aux Spillway</i>	<i>yd³</i>	<i>1500/8500</i>
9	<i>Earthfill, common</i>	<i>yd³</i>	<i>3000/20000</i>

Narrative

Contractor and I arrived at 7:00 a.m. Contractor resumed aux spillway excavation at AS Sta. 3+40. Blaster onsite to finish loading holes and preparing for 10:00 blast. At 9:00 blaster finished loading holes. At 9:30 Contractor ceased excavation in AS. Blast performed at 10:00 (see WS 7.3 dated today). Contractor immediately resumed AS excavation, including removing blasted rock between AS Sta. 5+00 and 5+50 left of AS CL. Usable excavated SC material being transported from AS to dam at approx lift elevation 713 and placed in Zone 2 upstream of Zone 1. Rocky material being removed from AS and stockpiled upstream along planned left descending shoreline. CL material from borrow area approx 200 to 300 feet upstream of dam CL sta 6+50 to

Sample Diary Entry 7.3 (Excavation)—continued

10+50 being placed in dam Zone 1. 12:00 – 1:00 lunchbreak. Excavation and fill operations continued until 5:00. At 4:00, Contractor began shaping and smooting borrow area and building a diversion to divert water away from borrow pit in anticipation of rain. Contractor left at 5:30 p.m. I left site at 5:30 p.m. J.D. Douglas

Sample Diary Entry 8.1 (Earthfill)

Report No. <u>27</u>	Date <u>June 6, 2012</u>
Weather <u>Partly cloudy</u>	Min. Temp <u>48°</u> Max. Temp <u>66°</u>
Precipitation <u>0.1</u> Inches	Storm Period <u>8:15</u> <u>A.M.</u> <u>P.M.</u> <u>9:30</u> <u>A.M.</u> <u>P.M.</u>
Shift No. <u>—</u> App. Time	A.M. <u>P.M.</u> To A.M. <u>P.M.</u>
Work Period	<u>7:30</u> <u>A.M.</u> <u>P.M.</u> <u>5:00</u> <u>A.M.</u> <u>P.M.</u>
Work Force	
Superintendent <u>C.J. Manning</u>	Skilled Laborer
Foreman <u>M.H. Brown</u>	<u>3</u> <u>4</u>

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
7	Excavation, auxiliary spillway	C4	1,00/11,500
9	Earthfill, common	C4	2,500/19,500

Narrative

Contractor servicing equipment when I arrived at 7:00 a.m. 7:15 Contractor resumed earthfill placement from Dam CL Sta. 6+20 to Sta. 9+45 beginning at elevation 946.5. Zone 1 CL material being obtained from auxiliary spillway between AS Sta. 2+00 and 6+00. Material for Zones 2 (SM) and 3 (SP) being obtained from borrow area between Grids A and B at approximate dam CL Sta. 4+30 to 5+30 and between elevation 920 and 910. 8:00 Bill Joines (CQC) testing moisture and density with nuclear gauge. He and I discussed failed tests near abutements. I tested moisture and density near abutements with my gauge and confirmed failed tests

Sample Diary Entry 8.1 (Earthfill)—continued

(See 645 WS 8.11, Test No. 27). Joines discussed poor compaction effort near abutments with M.H. Brown.

Brown directed compactor operator to reapply compactor over low-density areas and do a better job of compact-

ing against abutment. 10:00 Joines tested compaction near abutments and confirmed density meets minimum

requirement. 2:30 Water wagon idled with engine problem. Continued plowing uncompacted lift and started

compaction of the lift El. 948.5 to 949. Able to get density above specified minimum but moisture is below

specified range. Mr. Joines informed Brown that moisture had to be within specified range. Contractor ceased

earthfill operations at 3:00 p.m. At Mr. Brown's request I assisted him with selecting a Proctor curve for soil

encountered at elevation 910 between Grids A and B. Although field classified as an SP, the soil is a different

color than the material that was being placed in Zone 3. Brown used the one-point method to choose Proctor

Curve #4 for this soil. I suggested he plot the point on the family of curves that he previously developed and

compare the maximum density and optimum moisture values using both methods. After plotting his one-point

density value on the family of curves and drawing a free-hand curve through the plotted point, he decided to use

the optimum moisture and maximum density values determined by the family of curves. I observed his work and

concur in his Proctor curve selection. I left site at 5:30 p.m. J.D. Douglas

Sample Diary Entry 8.2 (Earthfill Backfill)

Report No. 22

Date June 1, 2012

Weather *Partly cloudy*

Min. Temp 50°

Max. Temp 68°

Precipitation 0.2

Inches

Storm Period 8:00

A.M.
P.M.

9:00

A.M.
P.M.

Shift No. —

App. Time

A.M.
P.M.

To

A.M.
P.M.

Work Period

7:30

A.M.
P.M.

5:00

A.M.
P.M.**Work Force**Superintendent *C.J. Manning*

Skilled

Laborer

Foreman *M.H. Brown*

3

4

Estimated Quantities of Pay Work Accomplished

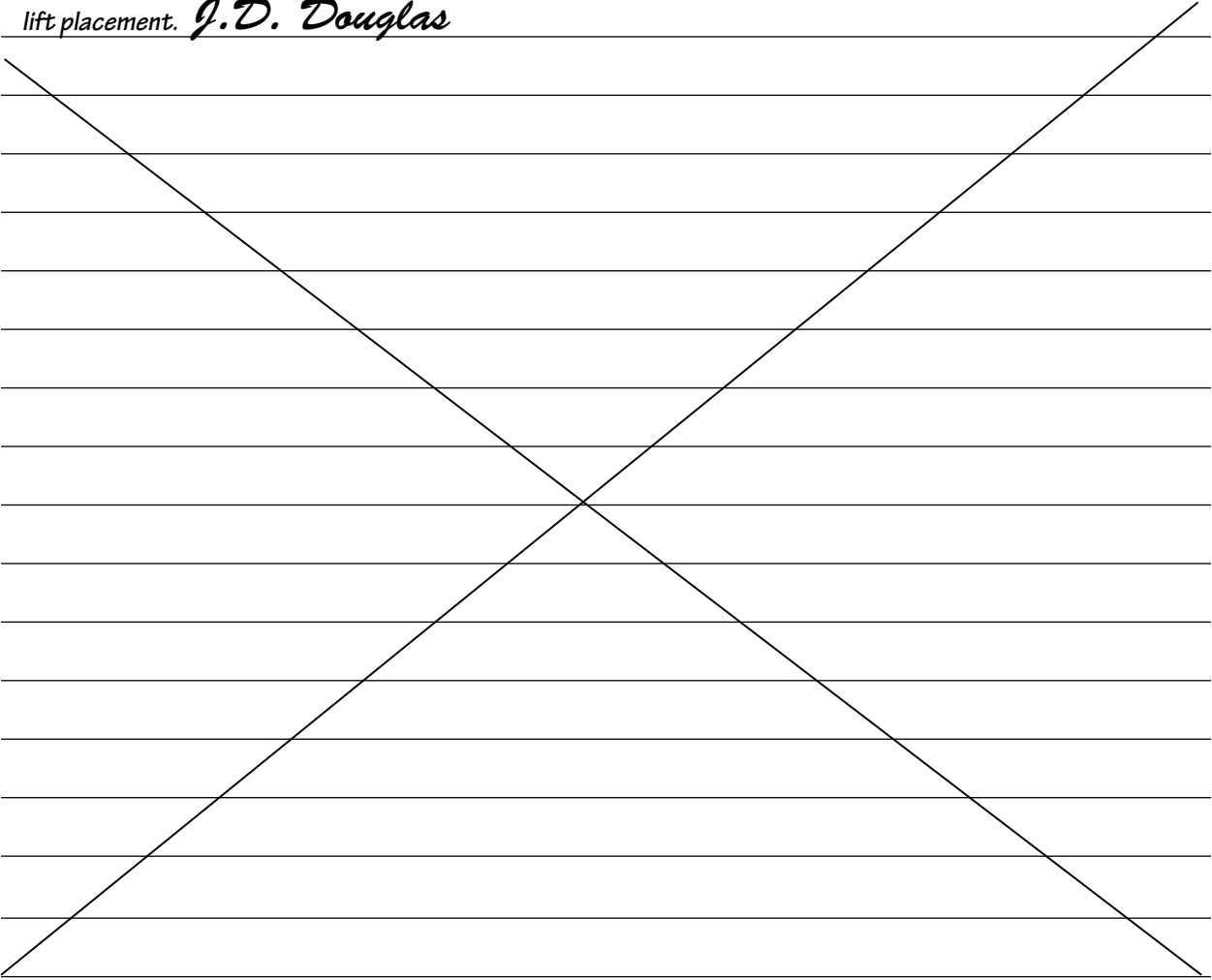
Item No.	Item	Unit	Quantity
9	<i>Earthfill, common</i>	<i>C4</i>	<i>100/11,500</i>
		<i>C4</i>	<i>2,500/19,500</i>

Narrative

I arrived at 7:00 a.m and checked moisture and density of backfill placed in area next to principal spillway conduit. Checked moisture obtained from nuclear gauge against that obtained with microwave. Performed trench correction and again checked moisture. The values obtained after making the trench correction were very near that obtained by microwave (See 645 WS 8.5, Test No. 9). 7:30 Contractor arrived and began fueling equipment. Resumed backfill operation in conduit trench. Bill Joines (CQC) testing moisture and density with nuclear gauge. I noticed contractor removing some of the backfill material after it was tested. 8:00 rain began. Backfill

Sample Diary Entry 8.2 (Earthfill Backfill)—continued

operation ceased. 9:00 Two Wacker compactors were delivered from Ace Rental. 9:30 backfill operation resumed. Two compactors were added to the effort. It appeared the backfill lift thickness was being reduced. I asked Mr. Joines if there was a problem and he said "we can't meet the density requirement without cutting the lift thickness in half and pounding the hell out of it". I checked the density with my gauge and found it was significantly more than the minimum specified density. I asked Joines if he had made a trench correction to his gauge; he had not made a trench correction. After making the trench correction, his test results began passing and the contractor was able to resume normal back fill operations without the extra compaction effort and with thicker lift placement. J.D. Douglas



Sample Diary Entry 8.3 (Rockfill)

Report No. <u>77</u>	Date <u>August 1, 2012</u>
Weather <u>Sunny</u>	Min. Temp <u>7°</u>
Precipitation <u>0.0</u>	Max. Temp <u>98°</u>
Inches	Storm Period
	<u>8:00</u> <u>A.M.</u> <u>9:00</u> <u>A.M.</u>
Shift No. <u>—</u>	App. Time
	A.M. P.M. To A.M. P.M.
Work Period	<u>7:30</u> <u>A.M.</u> <u>5:00</u> <u>A.M.</u>
Work Force	
Superintendent <u>C.J. Manning</u>	Skilled Laborer
Foreman <u>M.H. Brown</u>	<u>3</u> <u>4</u>

Estimated Quantities of Pay Work Accomplished

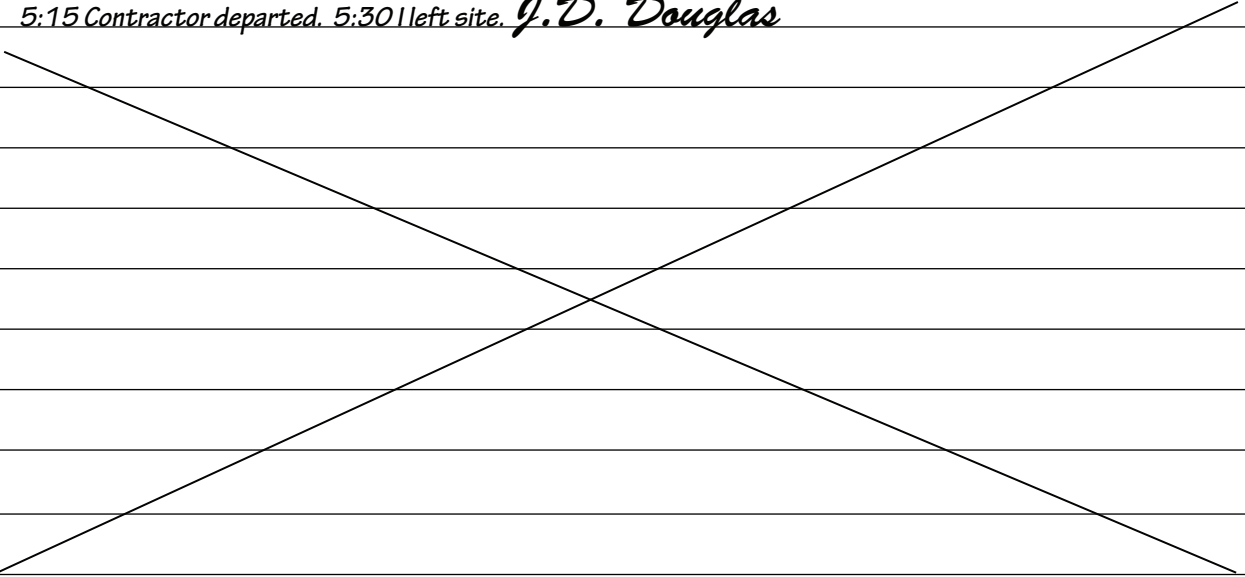
Item No.	Item	Unit	Quantity
10	Rockfill	C4	2,000/4,200

Narrative

I arrived at 7:00 a.m. Contractor arrived shortly thereafter and began servicing equipment. 8:00 Bill Joines (CQC) and I discussed previous days rockfill placement. I pointed out that the Spec 25 limits lift thickness to three feet and that better control of lift thickness was needed. Bill discussed this with Mr. Manning. Rockfill operations began at 8:00. Rockfill material being obtained from material stockpiled in borrow area during Project Phase 1. Two Acme J22 dump trucks dumping rockfill. DB dozer knocking down and spreading material and making four to six passes over lift after spreading. Dump trucks are having to wait on dozer to complete

Sample Diary Entry 8.3 (Rockfill)—continued

spreading and compaction before dumping their loads. 9:30 Truck driver Davis asked me if I was going to say something to the dozer operator about the lifts being too thick. I explained that I had mentioned it to Joines and Joines mentioned it to Manning. Then I told him that I had painted the top of the previous lift in a couple of locations and was going to ask Joines to have the contractor dig back into the lift to measure the lift thickness later today. Davis asked "what happens if the lift is too thick?". I told him some or all of the lift would have to be removed and recompacted in order to comply with the spec. He got out of his truck and motioned for Mr. Manning who drove over to talk to Davis and I. Manning appeared upset that I had let them continue placing noncompliant rockfill. 10:00 Manning, Joines, and I met to discuss Manning's concern. Joines reminded Manning of their earlier discussion about the lifts appearing too thick, then he asked Manning to have the trackhoe operator dig back into the lift where I had painted the top of the previous lift. Four foot lift thickness observed at 50 feet left of dam CL Sta 2+00 and 4.5 foot lift thickness observed at 50 feet left of Sta 8+80. Manning directed trackhoe and dozer to remove one to two feet of the lift down to elevation 881. 1:00 trackhoe and dozer began removing portion of lift, recompacting, and replacing the material removed after compaction. 2:00 Another D8 dozer was delivered to the site and began assisting with spreading and compacting rockfill. 5:00 All operations ceased. 5:15 Contractor departed. 5:30 I left site. *J.D. Douglas*



Sample Diary Entry 9.1 (Soil Modification)

Report No. 101

Date May 1, 2015

Weather *Partly cloudy*

Min. Temp 51°

Max. Temp 63°

Precipitation 0

Inches

Storm Period 8:15

A.M.
P.M.

9:30

A.M.
P.M.

Shift No. 2

App. Time

A.M.
P.M.

To

A.M.
P.M.

Work Period

6:30

A.M.
P.M.

5:15

A.M.
P.M.**Work Force**Superintendent *C.J. Manning*

Skilled

Laborer

Foreman *M.H. Brown*

3

4

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
1	<i>Soil-cement on wave berm</i>	<i>yd³</i>	<i>180</i>

Narrative

6:00 Inspector Johnson arrived on site. Cool and partly cloudy. 6:30 began placing soil-cement test cylinders taken and sent to lab. 7:35 compactor broke down after compacting from Sta. 6+25 to 7+45. Sta. 4+7+45 cut transverse vertical edge joint at the leading edge of compacted portion. Wasted uncompacted soil-cement that had been placed beyond Sta. 7+45. Quality control inspector, Joe Martin, prompted foreman Brown, to improve curing effort by immediately beginning misting soil cement after compaction. 9:30 placement operation resumed after compactor was repaired. 3:00 Ceased placement and compaction at Sta. 14+25. Cut transverse vertical

Sample Diary Entry 9.1 (Soil Modification)—continued

*edge joint at leading edge at Sta. 14+25. 3:30 ceased misting and began applying curing compound. 1,067 yd² of curing compound sprayed on completed surface. Soil-cement covered with tarpaulins from Sta. 12+00 to 14+25 in anticipation of a hard rain. 5:15 I left site just as it began to rain. **Bradly Johnson***

Sample Diary Entry 12.1 (Concrete Placement)

Report No. 101

Date May 5, 2016

Weather *Partly cloudy*

Min. Temp 55°

Max. Temp 63°

Precipitation 0

Inches

Storm Period

A.M.
P.M.A.M.
P.M.

Shift No. —

App. Time

A.M.
P.M.

To

A.M.
P.M.

Work Period

7:30

A.M.
P.M.

5:00

A.M.
P.M.**Work Force**Superintendent *L.D. Schettler*

Skilled

Laborer

Foreman *B.D. Haynie*

3

4

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
19	Excavation	CY	1,120/35,110

Narrative

Upon arrival to site at 7:00 a.m., Mr. Schettler informed me that he had ordered concrete to be delivered at 9:00.

7:30 Contractor's survey crew began setting hubs for grade control for the principal spillway conduit. D6 dozer, 225 track hoe, and two 10 CY dump trucks excavating back of dam from Sta. 0+50 to 12+60. QC Manager J. B. Thornton checking forms and steel placement for first concrete pour for base of inlet tower. He noticed some form-oil on some of the steel bars and asked me if it needed to be removed. There was a thin film of oil on a few of the bars. I told him it did not have to be removed as long as it was only a thin film. 9:15 Concrete truck arrived. J. B. looked at delivery ticket and passed it on to me. The ticket indicated the mix was the approved job mix and the

Sample Diary Entry 12.1 (Concrete Placement)—continued

slump and air was within the specified range when it left the concrete plant at 9:00. J. B. measured the slump (4 inches) and used a Chace meter to measure the air (5%). Began placing concrete at 9:30. Placed approximately 2 CY before J. B. sampled concrete for testing. He reported the slump 4 inches and air 5% by the pressure method. Made four cylinders (O11, O12, O13, and O14). Placing concrete with concrete bucket using backlift bucket. Three laborers, one using immersion vibrator to consolidate concrete. Finished placing concrete at 9:55. Contractor fine-grading subgrade of principle spillway conduit. Mr. Schettler informed me that he would place pipe tomorrow. I cautioned him about joining the conduit at the inlet tower when the concrete is only old. He agreed that it would be best to give it a couple of days to avoid damaging the concrete. Contractor continued excavating the dam from Station 0+50 to 12+60 and stopped working at 5:00 p.m. I left site at 5:30 p.m. *Dale McCurry*

Sample Diary Entry 12.2 (Concrete Preplacement)

Report No. 101

Date May 1, 2016

Weather *Partly cloudy*

Min. Temp 51°

Max. Temp 63°

Precipitation 0

Inches

Storm Period

A.M.
P.M.A.M.
P.M.

Shift No. —

App. Time

A.M.
P.M.

To

A.M.
P.M.

Work Period

7:30

A.M.
P.M.

3:30

A.M.
P.M.**Work Force**Superintendent *L.D. Schettler*

Skilled

Laborer

Foreman *B.D. Haynie*

3

4

Estimated Quantities of Pay Work Accomplished

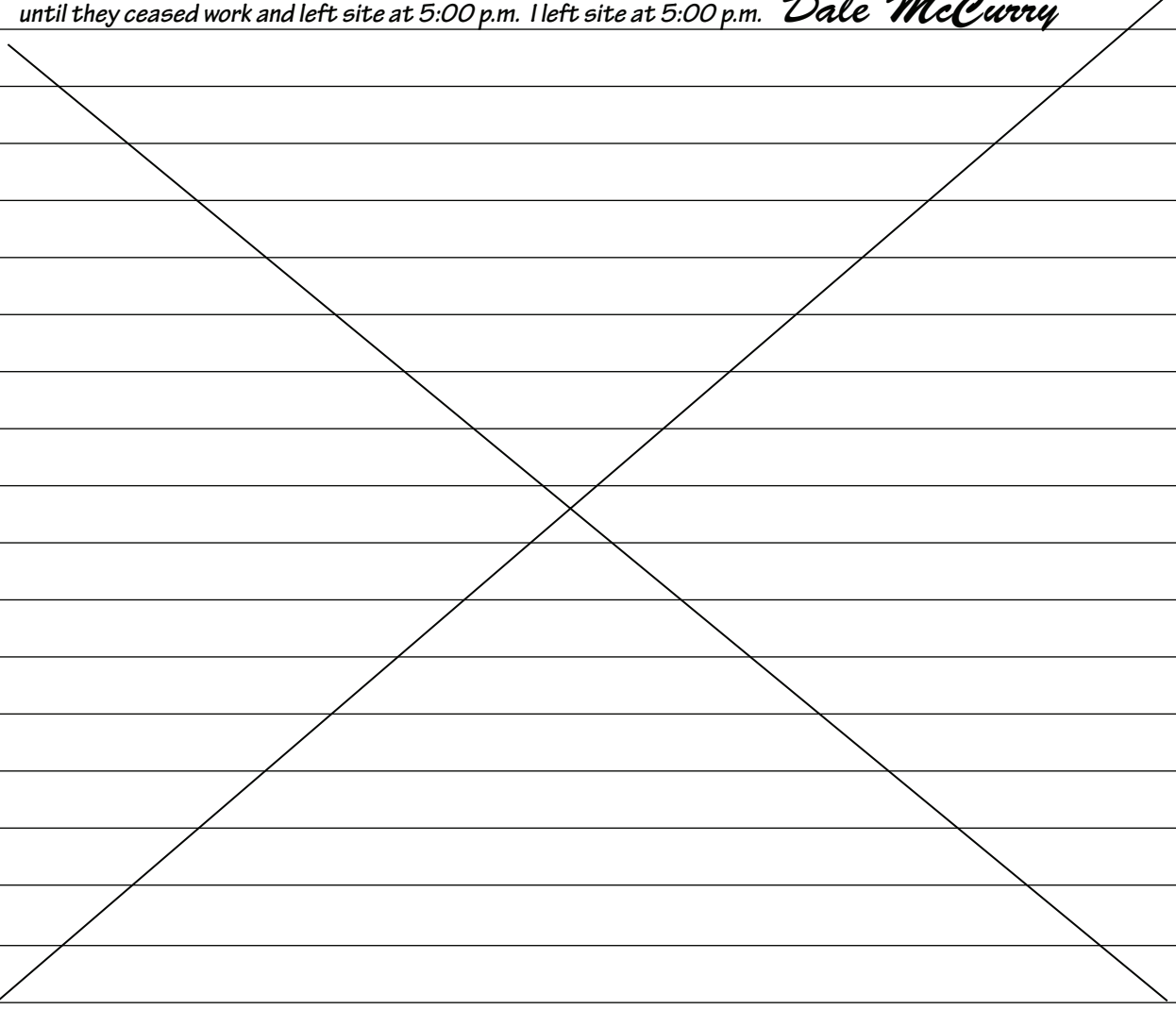
Item No.	Item	Unit	Quantity
19	<i>Excavation</i>	<i>CY</i>	<i>2,120/26,590</i>

Narrative

Upon arrival to site at 7:00 a.m., I conducted a safety walk-through of the site. Mentioned employee not wearing hard hat to Mr. Schettler. 7:30 Contractor began excavating the dam from Station 12+60 to 13+20 where the new principal spillway will be located. D6 dozer, 225 track-hoe, and two 10 yard dump trucks excavating and stockpiling material. Stockpiling excavated material upstream of the dam from approximate CL Sta. 13+20 to 15+20. Also, placing and tying steel and building forms for the inlet tower. Placed bars B1 through B6 by 9:00 a.m. I checked steel placement and found some bars were missing. I asked QC Manager J. B. Thornton to look at it. J. B. worked with concrete foreman to figure out why bars were missing. He said, "They didn't bring the bundle of B4

Sample Diary Entry 12.2 (Concrete Preplacement)—continued

*bars down from the stockpile and hadn't noticed they were missing." At 10:00 a.m. J. B. asked me to verify the missing bars had been placed. The bars had been placed but there were problems with bar spacing. J. B. said they would fix it. I inspected the work they were doing on the inlet tower while they were at lunch. 1:00 discussed steel placement and forming with J. B. Showed him that the spacing was still not right on several horizontal bars. He had them correct the spacing. 2:00 p.m. two laborers setting the form for the inside bottom of the tower. Also installing the sluice gate thimble. Contractor continued excavating embankment, tying steel and building forms until they ceased work and left site at 5:00 p.m. I left site at 5:00 p.m. **Dale McCurry***



Sample Diary Entry 12.3 (Concrete Postplacement)

Report No. <u>120</u>		Date <u>May 20, 2016</u>	
Weather <u>Partly cloudy</u>		Min. Temp <u>65°</u>	Max. Temp <u>83°</u>
Precipitation <u>1.1</u>	Inches	Storm Period <u>12:20</u>	<u>A.M.</u> <u>P.M.</u> <u>1:30</u> <u>A.M.</u> <u>P.M.</u>
Shift No. <u>—</u>	App. Time	A.M. P.M.	To A.M. P.M.
Work Period	<u>7:30</u> <u>A.M.</u> <u>P.M.</u>		<u>5:00</u> <u>A.M.</u> <u>P.M.</u>
Work Force			
Superintendent <u>L.D. Sohettler</u>		Skilled	Laborer
Foreman <u>B.D Haynie</u>		<u>3</u>	<u>4</u>

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
19	Excavation	CY	1,560/38,560

Narrative

Upon arrival to site at 7:00 a.m., inspected silt fence and hay bale filters. 7:30 Contractor continued installing principal spillway conduit. D6 dozer, 225 track hoe, and two 10 CY dump trucks excavating back of dam from Sta. 13+20 to 26+50. QC Manager J. B. Thornton checking alignment and grade of PS conduit. 8:30 Contractor began stripping forms from inlet tower. J. B. and I inspected the concrete finish. Noted some honeycombed concrete on the right (descending) side of tower from the bottom to approximately one foot above the bottom. It appears to be limited to a two foot area about the center of the tower. J. B. pounded on it with a hammer and was able to dislodge some of the aggregate. He decided to have a laborer chisel it with an air-chisel to determine the

Sample Diary Entry 12.3 (Concrete Postplacement)—continued

depth. Two laborers began cleaning cone holes and patching with cement paste. The paste was not staying in the hole. J. B. made them use a dry-pack mortar and had them pound it into the cone holes using a wooden stick and a 3-pound hammer. The air-chisel reached solid concrete at an average depth of 1 ½ inches. They were able to get good cavity geometry with the chisel and after flushing the cavity with water, they troweled in the dry-pack mortar to fill the cavity. After filling all of the cone holes and repairing the honeycomb, they rubbed the surface with a carborundum stone and used some cement paste to fill bug holes. They then sprayed the exposed surface inside and outside with a white pigmented, Type II curing compound taking care not to get any curing compound on the horizontal bonding surface at the top of the concrete. 11:00 They placed wet sand on the top bonding surface. 10:00 Installed last section of PS conduit. 12:00 finished forming for PS cradle. All operations ceased at noon for lunch. Rain began at 12:20. 1:00 Contractor sent crew home because site was too wet to work. I worked on quantity computations and organized photos until I left site at 4:00 p.m. *Dale McCurry*

Diary Entries for RCC Construction

Record a description of the RCC placed and the conditions under which the work took place. This includes the weather conditions; information about the mix including proportioning and consistency; location of RCC placement; joint maturity and treatment details; details concerning compaction, finishing and curing processes; and other descriptions of the work performed.

This page intentionally left blank.

Sample Diary Entry 13.1 (RCC Construction)

Report No. 25	Date February 3, 2014			
Weather Sunny	Min. Temp 28°		Max. Temp 56°	
Precipitation Partly cloudy	Inches	Storm Period		A.M. P.M.
Shift No. —	App. Time	A.M. P.M.	To	A.M. P.M.
Work Period	7:00	A.M. P.M.	5:00	A.M. P.M.
Work Force				
Superintendent C.J. Manning	Skilled		Laborer	
Foreman M.H. Brown	3		4	

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
10	RCC	CY	1025/5550
11	Excavation, Aux Spillway	Ton	103/555
12	Earthfill, common	Ton	51/278

Narrative

Contractor servicing equipment when I arrived at 7:00 a.m. Ground is wet from rain yesterday. 7:30 Began to rain. Discussed planned work with Mr. Manning. He said the rain is forecasted to stop later in the morning and the rate of rainfall is below 0.1 inch in 20 minutes so he is going to start RCC production at 8:00. I mentioned that he needs to do a better job of keeping the plastic sheeting down on the completed RCC; wind is getting under the plastic and drying out the surface of the RCC. He has ordered a load of bricks that are to arrive this morning; he is planning on weighting down the plastic with bricks. Began loading aggregate into pugmill at 8:00. Began placing RCC at 8:15. Using blowpipe to remove standing water ahead of RCC placement. Rainfall ceased at

Sample Diary Entry 13.1 (RCC Construction)—continued

8:30. All contractor forces devoted to RCC, no other work being conducted. Bricks arrive at 9:00. CQC checking RCC density at dam CL Sta 12+00, RCC CL Sta 2+55 (see WS 13.4, RCC Lift Summary for sketch of test location). I took measurement in the same hole. CQC measured 152.3 pcf. I measured 151.5 pcf. Both measurements exceed minimum specified density. 11:00 Engineer Booth on site to observe RCC placement. Mr. Manning asked if he could use the small compactor in lieu of the production compactor; the production compactor needs service. Agreed to allow small compactor if density can be obtained without damaging the surface. Able to get density with 6 passes of small compactor and surface is not drying out or cracking. RCC placement ceased at 1:00; lunch break. Engineer Booth left site at 1:30. Began removing and resetting RCC step forms at 2:00. CQC stopped form removal because the face of the steps was being damaged due to lack of care being taken to prevent forms from banging against the face of the steps. Mr. Manning agreed to supervise the form removal to ensure no further damage would occur. Resumed pulling and resetting forms. Plastic and soaker hoses in place for curing. Bricks seem to be doing a good job of holding down the plastic and the entire surface of the RCC under the plastic is being kept wet by the soaker hoses. Contractor finished resetting forms with no further damage. Contractor ceased all operations and left site at 5:00 p.m. I determined the RCC yield to be 0.97 CY per 300 lbs of cementitious material and plan to discuss with CQC in the morning. I left site at 5:30 p.m.

J.D. Douglas

Sample Diary Entry 14.1 (Shotcrete)

Report No. 18	Date May 31, 2017			
Weather Partly cloudy	Min. Temp 51 °F		Max. Temp 73 °F	
Precipitation 0	Inches	Storm Period	A.M. P.M.	A.M. P.M.
Shift No. —	App. Time	A.M. P.M.	To	A.M. P.M.
Work Period	7:30	A.M. P.M.	5:30	A.M. P.M.
Work Force				
Superintendent L.D. Sohettler			Skilled	Laborer
Foreman B.D. Haynie			2	4

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
10	Shotcrete	SF	280/450

Narrative

Arrived at site 7:30 a.m. Contractor is preparing for a dry-mix shotcrete placement at approximately 11:00 a.m. this morning on the repair of the exterior of the principal spillway tower. While I was checking the steel reinforcement, I noticed an area that had been identified as needing to be chipped out and replaced that had been missed. I notified the foreman. They removed the reinforcement in this area, chipped out all loose concrete, and replaced the reinforcement. I inspected the repair area and it appears to be adequate. The remainder of the reinforcement is the correct material and the spacing is correct. 11:30 a.m. The surface has been prepared for shotcrete placement and the contractor is beginning the process of moistening the receiving surface. I checked the cement and

Sample Diary Entry 14.1 (Shotcrete)—continued

aggregate and it will be the same as was approved. Sam Dickson will be the nozzleman. He has been approved by the engineer based on qualifications and experience. The contractor plans on moist curing the shotcrete area for the full 7 days. He has soaker hoses and burlap blankets on site for that purpose. Shotcrete mixing and placement started at 11:50 a.m. The nozzle operator had an issue with control of water at the gun but that quickly resolved. The remainder of the shotcrete placement appeared to go without any problems. The placement was complete by 3:15 p.m. The contractor manually misted the outside of the shotcrete for the first hour until the soaker hoses and burlap blankets could be positioned. All work was complete by 5:15 p.m. when I left the project.

Dale McCurry



Sample Diary Entry 15.1 (Pipe Delivery)

Report No.: 101 Date: May 1, 2017

Weather: Partly cloudy Min. Temp.: 51° Max. Temp.: 83°

Precipitation: 0 inches Storm Period: _____ A.M./P.M. to _____ A.M./P.M.

Shift No.: _____ App. Time: _____ A.M./P.M. to _____ A.M./P.M.

Work Period: 7:00 (A.M.)/P.M. to 6:00 A.M./P.M.

WORK FORCE

Superintendent: L.D. Moore Skilled Laborer

Foreman: B.D. Haynie 3 4

Estimated Quantities of Pay Work Accomplished

ITEM NO.	ITEM	UNIT	QUANTITY
19	Excavation	CY	2120/26590

NARRATIVE

Upon arrival to site at 7:00 a.m., I inspected the storm water practices. Mentioned to QC Manager J. B. Thornton that the silt fence on the right descending side of the creek downstream of the dam is full of silt. 7:30 Contractor excavating the core trench from Station 10+60 to 23+20. D6 dozer, 225 track-hoe, and two 10 yard dump trucks excavating and stockpiling material. Stockpiling excavated material upstream of the dam from approximate CL Sta. 13+20 to 15+20. 9:15 Semi-truck arrived hauling principal spillway pipe. Excavation and stockpiling of core trench material ceased so track-hoe could assist with unloading pipe. D6 Dozer began conduit foundation excavation. Mr. Moore handed me the pipe delivery ticket; he and Mr. Thornton climbed onto trailer to inspect pipe. Ticket showed pipe to be 230 feet of 36 inch diameter AWWA C301 pipe as specified. Checked job diary material submittal record to verify the

Sample Diary Entry 15.1 (Pipe Delivery)—continued

pipe has been approved by project engineer. Mr. Thornton noticed the mortar coating on the bell end of one of the pipes had been damaged. It is damage that can be repaired, so he plans to consult with the manufacturer after the pipe is unloaded to schedule to have the pipe repaired. Otherwise, he said the pipe looked to be undamaged so they began unloading pipe downstream of the dam near station 0+00. Unloading pipe with two cloth slings around pipe and spreader bar. Rope around one end of pipe allowed laborer to position pipe. Placed pipe on 6 x 6 timbers with 4 x 4 chocks taken from the delivery track. All of the pipe is the same except the last pipe to be installed for the outlet; it was offloaded first. Nested in the pipe were o-ring gaskets and joint lubricant. Also unloaded the thimble for the inlet tower. Finished unloading at 11:00 and truck departed. Work resumed in the core trench. 12:00 to 1:00 Work stopped for lunch. 1:00 Work resumed excavating and stockpiling core trench material. Contractor's survey crew on site setting blue-top stakes for conduit grade. Motor-grader working with survey crew to make final cut for conduit foundation. I checked the elevation of the stakes and found them to be correct. Mr. Thornton checking foundation density with his nuclear gauge. Grader was able to cut foundation to grade without requiring any fill. Checked 4-inch depth dry density in three places near front (111.8 pcf at PS 1+00), middle (110.5 pcf at PS 2+00), and near outlet end of pipe location (109.9 pcf at PS 3+20). 95% of maximum dry density for material at all three locations is 109.9 pcf (Referenced Proctor curve #3). Contractor continued excavating core trench until they ceased work and left site at 6:00 p.m. I also left site at 6:00 p.m. Dale McCurry

Sample Diary Entry 15.2 (Laying Pipe)

Report No.: 102 Date: May 2, 2017

Weather: Partly cloudy Min. Temp.: 52° Max. Temp.: 84°

Precipitation: 0 inches Storm Period: _____ A.M./P.M. to _____ A.M./P.M.

Shift No.: _____ App. Time: _____ A.M./P.M. to _____ A.M./P.M.

Work Period: 7:00 (A.M.)/P.M. to 6:00 A.M./P.M.

WORK FORCE

Superintendent: L.D. Moore Skilled Laborer

Foreman: B.D. Haynie 3 4

Estimated Quantities of Pay Work Accomplished

ITEM NO.	ITEM	UNIT	QUANTITY
	<i>None</i>		

NARRATIVE

Upon arrival to site at 7:00 a.m., 225 track-hoe and one 10 yard dump truck removing silt from above the silt fence on the right descending side of the creek downstream of the dam. 7:30 Two laborers moving pipe support wedges from campsite to conduit foundation area. Track-hoe and two laborers began transporting pipe to conduit foundation area. QCM Thornton stopped the track-hoe and asked them to replace the chains they had around the pipe with a cloth sling. Mr. Haynie arrived at 8:30 with the sling; connected first pipe to thimble at PS 1+00 at 8:50. I verified the joints were clean and well lubricated with the flax soap supplied with the pipe. Thornton set up his level to monitor grade. Foreman

Sample Diary Entry 15.2 (Laying Pipe)—continued

Hagie directed the pipe laying operation making sure the joints were clean and checking the gasket location with a feeler gauge. 9:00 Pipe manufacturer representative arrived to repair pipe that had been damaged during delivery. Used an air chisel to prepare cavity to be repaired and an epoxy grout to make the repair. She suggested the repaired portion be located at the bottom of the pipe as this part of the pipe will be embedded in the bedding concrete. Also, suggested the repaired pipe be installed later in the day to give the epoxy grout time to gain strength. Continued laying pipe to station 2+40. Using deadman and come-a-long to pull pipes together. 12:00 - 1:00 Stopped for lunch. 1:00 Resumed laying and joining pipe. Joint at 2+40 was difficult; could not pull pipe home. Hagie asked them to pull the pipes apart. When they did, they saw that the gasket had rolled out of its groove. They had forgotten the flax soap. I set up my level to check pipe grade. The pipe appeared to be a tenth of a foot high at 1+80. Mr. Thornton confirmed that it was too high. They carefully lifted the pipe joint with the track-hoe sling and adjusted the wedges to lower it to the proper grade. 1:30 Two laborers began installing bedding forms at station 1+00. Finished installing pipe at 5:20. Continued forming for bedding. All operations ceased at 6:00. Contractor left site at 6:00 p.m. I also left site at 6:00 p.m. Dale McCarry

Sample Diary Entry 15.3 (Pipe Embedment)

Report No.: 107 Date: May 8, 2017

Weather: Partly sunny Min. Temp.: 57° Max. Temp.: 88°

Precipitation: 0 inches Storm Period: _____ A.M./P.M. to _____ A.M./P.M.

Shift No.: _____ App. Time: _____ A.M./P.M. to _____ A.M./P.M.

Work Period: 7:00 (A.M.) P.M. to 6:00 A.M. (P.M.)

WORK FORCE

Superintendent: L.D. Moore Skilled Laborer

Foreman: B.D. Haynie 3 4

Estimated Quantities of Pay Work Accomplished

ITEM NO.	ITEM	UNIT	QUANTITY
20	Earthfill	CY	1500/24000

NARRATIVE

Upon arrival to site at 7:00 a.m., Contractor servicing equipment. 7:15 Toolbox safety meeting. Foreman Haynie discussed safe operation of manually-directed compaction equipment and reminded everyone to wear steel-toed boots. 7:30 RCM Thornton checking moisture and density of the soil in the bottom of the conduit excavation area in preparation for placing pipe embedment. Two test with nuclear gauge confirmed density above minimum specified value, but moisture below specified range. 8:40 Water truck and motor-grader adjusting moisture by spraying and scarifying the top two inches of soil in the area around the conduit. 9:15 225 track-hoe and one 6 CY dump truck hauling material from stockpile to conduit foundation area. D6 Dozer spreading material approximately 6 inches; water truck and plow adjusting moisture.

Sample Diary Entry 15.3 (Pipe Embedment)—continued

Bomag pad-foot compactor compacting soil up to within 2 feet of concrete bedding. Two laborers, one on each side of the pipe, compacting backfill near pipe with Wacker manually-directed compactors. 10:00 Thornton checking moisture and density of compacted backfill. PS sta. 1+20, El. 685.0 left side of pipe next to cradle ($M=16.5\%$, $DD=110.4$ pcf at 4 inch depth). (Target $M=14.5\%$ and up, $DD > 109.9$ pcf - Ref. curve #3). PS sta. 2+20 right side of pipe next to cradle ($M=15.5\%$, $DD=109.4$ pcf at 4 inch depth). (Ref. curve #3). Thornton and Haynie discussed low density test results and agreed that the operator was moving the Wacker too fast and not letting it remain in one place long enough to adequately compact the soil. 12:00 - 1:00 Work stopped for lunch. 1:00 Work resumed hauling, placing, and compacting backfill around conduit. 2:15 I noticed the loose lift thickness of the backfill material being placed near the pipe exceeded 6 inches; it looked like about 9 inches thick. I asked Thornton to take his next density tests at a 6 inch depth. PS sta. 0+80, El. 686.2 left side of pipe next to cradle ($M=16.5\%$, $DD=108.4$ pcf at 6 inch depth). PS sta. 2+60, El. 686.3 right side of pipe next to cradle ($M=15.5\%$, $DD=108.2$ pcf at 6 inch depth). (Ref. curve #3). I suggested to Mr. Thornton that they may have to shave off a couple inches of material to thin up the lift before they will be able to compact the material to the minimum specified density of 109.9 pcf. He agreed and stopped the operation to discuss lift thickness and to have them remove some of the soil and re-compact the material near the pipe. 4:00 Thornton testing moisture and density of compacted fill near pipe. PS sta. 0+60, El. 687.4 left side of pipe next to cradle ($M=16.0\%$, $DD=111.4$ pcf at 6 inch depth). PS sta. 1+60, El. 687.3 right side of pipe next to cradle ($M=15.5\%$, $DD=110.2$ pcf at 6 inch depth). (Ref. curve #3). Continued placing backfill until 6:00. Contractor left site at 6:00 p.m. I also left site at 6:00 p.m. Dale McCurry —

Sample Diary Entry 17.1 (Brushlayers)

Report No.: 3 Date: August 29, 2017

Weather: Cloudy Min. Temp.: 66° Max. Temp.: 75°

Precipitation: 0 inches Storm Period: _____ A.M./P.M. to _____ A.M./P.M.

Shift No.: _____ App. Time: _____ A.M./P.M. to _____ A.M./P.M.

Work Period: 7:00 (A.M.)/P.M. to 5:30 A.M/(P.M.)

WORK FORCE

Superintendent: L.D. Moore Skilled 2 Laborer 10

Foreman: B.D. Haynie

Estimated Quantities of Pay Work Accomplished

ITEM NO.	ITEM	UNIT	QUANTITY
10	Brushlayers	Ft.	730/730

NARRATIVE

Upon arrival to Bill Jones property at 7:00 a.m. Mr. Haynie was instructing 4 laborers where to harvest brush. Several acres of sandbar willow are located west of Big Sandy Creek. Laborers began cutting the willows in an area approximately 1/4 mile from the creek. Mr. Haynie instructed the workers not to harvest willows within 500 feet of the creek. Willow cuttings range from 5 to 6 feet in length and 1 to 1 1/2 inch diameter. Foreman Haynie discussed safety and reminded everyone to wear steel-toed boots. 7:30 left for construction site. Arrived on site at 7:45; dozer operator servicing D6 dozer. 8:30 6-C4 dump truck delivered first load of cuttings. Shortly thereafter Foreman Haynie and 10 laborers arrived.

Sample Diary Entry 17.1 (Brushlayers)—continued

9:00 Dozer began cutting a 3-ft bench (Bench 1) at the north end of the toe of the slope and spoiled material just below toe. Laborers began dragging cuttings and laying them on Bench 1. I watched them for 15 minutes then spoke to Mr. Haynie about the need to crisscross or overlap them. He spoke to one of the laborers about this and they immediately began to lay them in crisscrossed fashion as specified. Noon broke for lunch. 1:00 D-6 began cutting Bench 2 and spoiling material on top of Bench 1 to cover brush. 4:00 D-6 began cutting Bench 3. Sixth dump-truck load of brush arrived at 4:00. Laborers finished placing brush on Bench 2 at 4:45. D-6 finished cutting Bench 3 and covering Bench 2 at 5:15. Contractor left site at 5:30. I also left site at 5:30 and stopped by Jones property to inspect area where brush is being harvested. It appears contractor is operating well within the limits designated for brush harvesting. Dale McCarry

Sample Diary Entry 18.1 (Pile Driving)

Report No.: 3 Date: October 29, 2017

Weather: Cloudy Min. Temp.: 45° Max. Temp.: 65°

Precipitation: 0 inches Storm Period: _____ A.M./P.M. to _____ A.M./P.M.

Shift No.: _____ App. Time: _____ A.M./P.M. to _____ A.M./P.M.

Work Period: 7:00 (A.M.)/P.M. to 5:30 A.M./(P.M.)

WORK FORCE

Superintendent: L.D. Moore Skilled 2 Laborer 10

Foreman: B.D. Haynie

Estimated Quantities of Pay Work Accomplished

ITEM NO.	ITEM	UNIT	QUANTITY
10	<i>Piling</i>	<i>Ft.</i>	<i>35/35</i>
11	<i>Earthfill</i>	<i>CY</i>	<i>1500/24500</i>

NARRATIVE

I arrived at jobsite at 7:00 a.m. Contractor was servicing equipment. Mr. Moore said the pile driving hammer was to be delivered this morning. D-6 began constructing a pad for the 235 trackhoe to sit on for driving the piles for the principal spillway pipe support. Mr. Hardy QC inspector at dam CL Sta. 15+35 checking moisture of earthfill surface. Motor grader blading off top couple inches of previous day's earthfill in preparation for next lift of earthfill. I checked moisture of surface material with my Speedy moisture meter after top couple of inches was removed at Sta. 10+50 (M=28.5%) and it was within the specified range. 8:50 Truck delivered Vulcan #1 air/steam hammer and leads. Mr. Haynie and two

Sample Diary Entry 18.1 (Pile Driving)—continued

laborers began assembling the pile driving equipment consisting of the 235 track hoe, hammer, and swinging leads. Contractor's surveyor staked location of piles left and right of PS. Began driving first pile at 11:00. See NEH 645 WS 18.1 dated today for pile driving details. Drove pile #1 left of PS Sta. 2+36. Began driving pile #2 at 11:20. Drove down about 10 feet deep when pile dropped about a foot with one blow; it apparently broke. Mr. Moore asked if he could drive another pile next to pile #2 to replace pile #2. I called project engineer Billy Monroe who agreed to drive another pile to replace pile #2 but said to offset the pile one foot right of pile #2 and pile #2 could be removed or cut off at or below the specified elevation at the contractor's option. 12:00 earthfill operation ceased for lunch; began driving pile #3. Finished driving pile #3 at 12:15. Contractor's surveyor marked piles for cutoff. I set up my level and verified elevation marked on piles to be correct. Contractor cut piles to specified elevation by scoring to a 1/2 inch depth around the pile with a concrete saw and removing concrete above score with an air chisel exposing steel reinforcement that will be bent and tied to pipe support beam. 1:00 earthfill operation resumed. 2:15 Water wagon down for repair. Continued earthfill operation to finish lift (top elevation 155.5) All work ceased; contractor sent crew home at 3:15 and left site at 3:30. I also left site at 3:30. J. D. Douglas