ENGINEERING CHANGE NOTICE

Page 1 of 3

1. ECN 651156

Proj. ECN

2. ECN Category (mark one)	3. Originator's Name, Organization, MSIN, and Telephone No.	4. USQ Required?	5. Date
Supplemental [] Direct Revision [X] Change ECN [] Temporary [] Standby [] Supersedure [] Cancel/Void []	GW Wilson, S1800,S7-12, 373-1340	[X] Yes [] No	12/07/1998
	6. Project Title/No./Work Order No. Characterization Project / CACN: 1022245 COA: E100	7. Bldg./Sys./Fac. No. 200 G	8. Approval Designator N/A
	9. Document Numbers Changed by this ECN (includes sheet no. and rev.) HNF-3240, Rev 1	10. Related ECN No(s). N/A	11. Related PO No. N/A

12a. Modification Work	12b. Work Package No.	12c. Modification Work Complete	12d. Restored to Original Condition (Temp. or Standby ECN only)
[] Yes (fill out Blk. 12b) [X] No (NA Blks. 12b, 12c, 12d)	N/A	N/A Design Authority/Cog. Engineer Signature & Date	N/A Design Authority/Cog. Engineer Signature & Date

13a. Description of Change

13b. Design Baseline Document? [] Yes [X] No

This ECN revises all pages of HNF-3240 to include Essential and Support drawings that were identified in the drawing evaluation report (HNF-2305). Trucks 1 & 2 are not included in this revision due to uncertainty about future use.

*page 3
For additions to Essential List

14a. Justification (mark one)

Criteria Change	[X]	Design Improvement	[]	Environmental	[]	Facility Deactivation	[]
As-Found	[]	Facilitate Const	[]	Const. Error/Omission	[]	Design Error/Omission	[]

14b. Justification Details

Changes are required to comply with Engineering Drawing Requirements (HNF-PRO-242).
This ECN is covered by USQ TF-96-0690, Rev 2. (Revises non-technical information)
Design verification performed by informal review per HNF-PRO-445.
This modification will not change collective dose since it has no impact on radiological sources, contamination control, or shielding.

15. Distribution (include name, MSIN, and no. of copies)

M.E. Beaver	S7-12	1 COPY	E. E. Salinas	S7-12	1 COPY
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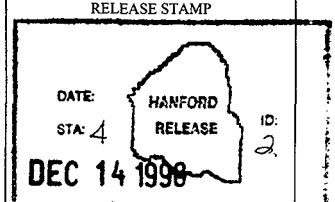
G. P. Janicek	S7-12	1 COPY			

RELEASE STAMP



ENGINEERING CHANGE NOTICE

1. ECN (use no. from pg. 1): 651156

16. Design Verification Required	17. Cost Impact						18. Schedule Impact (days)	
	ENGINEERING			CONSTRUCTION				
[X] Yes	Additional	[N/A]	$	Additional	[N/A]	$	Improvement	[N/A]
[] No	Savings	[]	$	Savings	[]	$	Delay	[]

19. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 13. Enter the affected document number in Block 20.

SDD/DD	[]	Seismic/Stress Analysis	[]	Tank Calibration Manual	[]
Functional Design Criteria	[]	Stress/Design Report	[]	Health Physics Procedure	[]
Operating Specification	[]	Interface Control Drawing	[]	Spares Multiple Unit Listing	[]
Criticality Specification	[]	Calibration Procedure	[]	Test Procedures/Specification	[]
Conceptual Design Report	[]	Installation Procedure	[]	Component Index	[]
Equipment Spec.	[]	Maintenance Procedure	[]	ASME Coded Item	[]
Const. Spec.	[]	Engineering Procedure	[]	Human Factor Consideration	[]
Procurement Spec.	[]	Operating Instruction	[]	Computer Software	[]
Vendor Information	[]	Operating Procedure	[]	Electric Circuit Schedule	[]
OM Manual	[]	Operational Safety Requirement	[]	ICRS Procedure	[]
FSAR/SAR	[]	IEFD Drawing	[]	Process Control Manual/Plan	[]
Safety Equipment List	[]	Cell Arrangement Drawing	[]	Process Flow Chart	[]
Radiation Work Permit	[]	Essential Material Specification	[]	Purchase Requisition	[]
Environmental Impact Statement	[]	Fac. Proc. Samp. Schedule	[]	Tickler File	[]
Environmental Report	[]	Inspection Plan	[]		[]
Environmental Permit	[]	Inventory Adjustment Request	[]	None	[X]

20. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision	Document Number/Revision	Document Number Revision
N/A	N/A	N/A

21. Approvals

	Signature	Date		Signature	Date
Design Authority G..P. Janicek	G.P. Janicek	12/10/98	Design Agent		
Cog. Eng. ~~C. A. Esvelt~~ E. J. Waldo	E. J. Waldo	12/8/98	PE		
Cog. Mgr. J.S. Schofield	J. S. Schofield	12/10/98	QA		
QA			Safety		
Safety			Design		
Environ.			Environ.		
Other			Other		
Informal Rev. B. L Coverdell	B. L Coverdell	12/8/98			
Proj. Mgr. J. L. Smalley	J. L. Smalley	12/9/98	DEPARTMENT OF ENERGY		
			Signature or a Control Number that tracks the Approval Signature		
			ADDITIONAL		

UPGRADE THE FOLLOWING DRAWING TO ESSENTIAL DRAWING STATUS

H-2-85340 Sh 1, Rev 1
H-2-690008 Sh 1, Rev 3
H-2-690008 Sh 2, Rev 2
H-2-690008 Sh 3, Rev 2
H-2-690009 Sh 1, Rev 2
H-2-690009 Sh 2, Rev 2
H-2-690069 Sh 1, Rev 1
H-2-690069 Sh 2, Rev 1
H-2-690069 Sh 3, Rev 1
H-2-690069 Sh 4, Rev 1
H-2-690069 Sh 5, Rev 2
H-2-690069 Sh 6, Rev 1
H-2-690069 Sh 7, Rev 1
H-2-690069 Sh 8, Rev 1
H-2-690069 Sh 9, Rev 1
H-2-690069 Sh 10, Rev 1
H-2-690069 Sh 11, Rev 2
H-2-690069 Sh 12, Rev 2
H-2-690069 Sh 13, Rev 1
H-2-690069 Sh 14, Rev 0
H-2-690069 Sh 15, Rev 0
H-2-690069 Sh 16, Rev 0
H-2-690069 Sh 17, Rev 0
H-2-690069 Sh 18, Rev 0
H-2-690070 Sh 1, Rev 2
H-2-690070 Sh 2, Rev 3
H-2-690070 Sh 3, Rev 2
H-2-690070 Sh 4, Rev 2
H-2-690070 Sh 5, Rev 2
H-2-690070 Sh 6, Rev 2
H-2-690070 Sh 7, Rev 2
H-2-827188 Sh 1, Rev 0
H-2-827188 Sh 2, Rev 0
H-2-827188 Sh 3, Rev 0
H-2-827188 Sh 4, Rev 1
H-2-827188 Sh 5, Rev 0
H-2-827188 Sh 6, Rev 1
H-2-827188 Sh 7, Rev 0

H-2-827189 Sh 1, Rev 0
H-2-827189 Sh 2, Rev 0
H-2-827189 Sh 3, Rev 0
H-2-827189 Sh 4, Rev 1
H-2-827189 Sh 5, Rev 0
H-2-827189 Sh 6, Rev 1
H-2-827189 Sh 7, Rev 0
H-2-827192 Sh 1, Rev 0
H-2-827193 Sh 1, Rev 0
H-2-829106 Sh 1, Rev 0
H-2-829110 Sh 1, Rev 1
H-2-829110 Sh 2, Rev 1
H-2-829110 Sh 3, Rev 1
H-14-021922 Sh 1,Rev 0
H-14-021922 Sh 2, Rev 1
H-2-85601 SH1, Rev 2
H-2-85601 SH2, Rev 0

CHARACTERIZATION EQUIPMENT ESSENTIAL/SUPPORT DRAWING PLAN

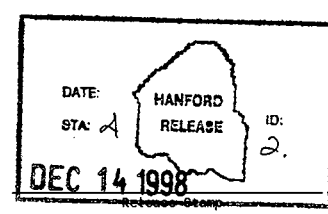
G.W. Wilson
COGEMA Engineering Corp., Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

EDT/ECN: 651156 UC: 2070
Org Code: S1800 Charge Code: 102245/E100
B&R Code: EW3120074 Total Pages: 10

Key Words: Essential, Support, Characterization, Sample, Essential Drawing List

Abstract: This supporting document provides a detailed list of the Essential and support drawings for Characterization equipment drawings

12/14/98
Release Approval Date



Approved for Public Release

RECORD OF REVISION	(1) Document Number HNF-3240	Page 1

(2) Title
Characterization Equipment Essential Drawing Plan

CHANGE CONTROL RECORD

(3) Revision	(4) Description of Change - Replace, Add, and Delete Pages	Authorized for Release	
		(5) Cog. Engr.	(6) Cog. Mgr. Date
	(7) HNF-3240 R0 "Characterization Equipment Essential Drawing Plan", EDT-622087, 08/20/98	R.N. Dale 08/18/98	J.S. Schofield 08/18/98
1	Incorporate ECN-650108 to change Page 2, Section 5.1, ADD drawings H-2-690134/1-5, H-2-821457/1-6, H-2-829134/1, and H-2-829139/1-3	R. Freeman 09/25/98	J.S. Schofield 09/25/98
RS 2	Incorporate ECN-651156 to revise all pages to update document to include drawings identified in HNF-2305, *Drawing Evaluation Report for Sampling Equipment*.	Eric Waldo 12/10/98	12/10/98

HNF-3240, Rev 2

CHARACTERIZATION EQUIPMENT ESSENTIAL/SUPPORT DRAWING PLAN

Prepared for Lockheed Martin Hanford Corporation

By

G. W. Wilson

COGEMA Engineering Corp.

CONTENTS

1.0 PURPOSE

The purpose of this document is to list the Characterization equipment drawings that are classified as Essential Drawings and Support Drawings.

2.0 DEFINITION

Essential Drawings: Are those drawings identified by the facility staff as necessary to directly support the safe operation of the facility or equipment (HNF 1997a).

Support Drawings: Are those drawings identified by facility staff that further describe the design details of structures, systems, or components shown on essential drawings. (HNF 1997a)

3.0 DRAWINGS

The Characterization equipment drawings identified in this report are deemed essential drawings as defined in HNF-PRO-242, Engineering Drawing Requirements (HNF 1997a). These drawings will be prepared, revised, and maintained per HNF-PRO-440, Engineering Document Change Control (HNF 1997b). All other Characterization equipment drawings not identified in this document will be considered General drawings until the Characterization Equipment Drawing Evaluation Report (Wilson 1998) is updated during fiscal year 1999. Trucks 1 & 2 drawings are not included in this revision of the essential drawing list due to uncertainty about future use.

4.0 REVISION

This drawing list is required to be updated when new, modified, or deleted safety systems and/or equipment are identified. The original vellums shall be identified as Essential Drawings during any subsequent revision.

5.0 CHARACTERIZATION EQUIPMENT ESSENTIAL DRAWINGS

CORE SAMPLING TRUCKS 1 & 2 ESSENTIAL DRAWINGS

H-2-85327/4	Panelboard Schedule, Electrical Distribution Trailer #1
H-2-85327/5	Panelboard Schedule, Electrical Distribution Trailer #2

CORE SAMPLING TRUCKS 3 & 4 ESSENTIAL DRAWINGS

H-2-690008/1-3	Hydraulic Flow Diagram
H-2-690009/1-2	Purge Gas Pneumatic Diagram
H-2-690069/1-18	Alarm & Control Diagram
H-2-690070/1-7	Elementary Diagram
H-2-827188/1-7	Electrical Truck 3 Connection Diagram
H-2-827189/1-7	Electrical Truck 4 Connection Diagram
H-2-827192/1	Electrical Truck 3 One Line Diagram
H-2-827193/1	Electrical Truck 4 One Line Diagram

CORE SAMPL. SUPPORT EQUIPMENT ESSENTIALS DRAWINGS

H-2-85340/1	Distribution Trailer One Line Diagram
H-2-85601/1-2	Breathing Air Compressor Electrical One-Line Diagram
H-2-690134/1-5	Drill String Arrangement
H-2-821457/1-6	Drill String Arrangement
H-14-021922/1-2	Breathing Air Compressor P& ID

RMCST EXHAUSTER ESSENTIAL DRAWINGS

H-2-829106/1	Piping and Instrumentation Diagram Exhauster C
H-2-829110/1-3	Exhauster Electrical Interconnect Exhauster C
H-2-829134/1	Piping and Instrumentation Diagram Exhauster B
H-2-829139/1-3	Exhauster Electrical Interconnect Exhauster B

LIGHT DUTY UTILITY ARM (LDUA) ESSENTIAL DRAWINGS

H-6-14055/1	LDUA System Block Diagram
H-6-14109/1	LDUA System Power Distribution One-Line Diagram
H-6-14111/1	LDUA System Power Distribution Skid One-Line Diagram & Details
H-6-14126/1-2	ATIE Elementary Diagram and Panelboard Schedule
H-6-14131/1-2	At-Tank Instrument Enclosure (ATIE) Interconnection Diagram
H-6-14150/1-2	Pneumatic System P&ID (LDUA)
H-6-14172/3	Power Interface Module (LDUA), One Line Diagram
H-6-14175/1-2	LDUA Truck Power Purge Elementary
H-6-14176/1-2	LDUA In Tank Materials
H-6-14177/1-2	LDUA Outrigger Hydraulic Schematic
H-6-14340/1-13	Decon Module Assembly

OTHER SAMPLING EQUIPMENT ESSENTIAL DRAWINGS

None

6.0 CHARACTERIZATION EQUIPMENT SUPPORT DRAWINGS

CORE SAMPLING TRUCKS 1 & 2 SUPPORT DRAWINGS

Trucks 1 & 2 drawings are not included in this revision of the essential drawing list due to uncertainty about future use.

CORE SAMPLING TRUCKS 3 & 4 SUPPORT DRAWINGS

H-2-690000/1-2	RMCST Truck 3 & 4 Assembly
H-2-690001/1-2	RMCST Truck 3 & 4 Drawing Index
H-2-690012/1-6	Purge Gas Piping & Hose Installation
H-2-690014/1-3	Drill Head Hydraulic Piping Installation
H-2-690015/1-8	Hydraulic Controls Installation
H-2-690020/1-4	Shielded Receiver Assembly
H-2-690026/1-2	Shielded Receiver Electrical Installation
H-2-690030/1-4	Sampler Hoist Assembly
H-2-690055/1-5	Grapple Hoist Installation
H-2-690057/1-7	Grapple Hoist Assembly
H-2-690059/1-6	Inner/Outer Bellow Assembly
H-2-690060/1-4	Purge Gas Assembly
H-2-690062/1-4	Purge Gas Piping Assembly
H-2-690068/1-7	Instrument Enclosure Assembly
H-2-690071/1-17	Electrical Connection Diagram
H-2-690073/1-7	Electrical Installation
H-2-690080/1-3	Rotary Platform Assembly
H-2-690143/1-2	Mechanical Remote Latch Unit

CORE SAMPLING SUPPORT EQUIPMENT SUPPORT DRAWINGS

H-2-38078/1-2	On-Site Transfer Cask Stand
H-2-38079/1/6	On-Site Transfer Cask Assembly
H-2-99725/1-5	Transfer Cask NCAW
H-2-690140/1-6	Universal Core Sampler Assembly

RMCST EXHAUSTER SUPPORT DRAWINGS

H-2-829081/1-2	Overall Assembly Exhauster C
H-2-829082/1-6	Mechanical Installation Exhauster C
H-2-829083/1-3	Stack Monitoring Installation Exhauster C
H-2-829084/1-3	Sampling Exhauster Heater Assembly Exhauster C
H-2-829086/1-4	Instrument & Control Panel Assembly Exhauster C
H-2-829100/1	Drawing Tree Exhauster C
H-2-829105/1-5	Electrical Installation Exhauster C
H-2-829108/1-5	Instrument Enclosure Connection Diagram Exhauster C
H-2-829109/1-7	Exhauster Electrical Elementary Diagram Exhauster C
H-2-829120/1-2	Overall Assembly Exhauster B
H-2-829121/1-6	Mechanical Installation Exhauster B
H-2-829122/1-3	Stack Monitoring Installation Exhauster B
H-2-829123/1-3	Sampling Exhauster Heater Assembly Exhauster B
H-2-829125/1-4	Instrument & Control Panel Assembly Exhauster B
H-2-829135/1-5	Electrical Installation Exhauster B
H-2-829137/1-5	Instrument Enclosure Connection Diagram Exhauster B
H-2-829138/1-7	Exhauster Electrical Elementary Diagram Exhauster B
H-2-829141/1	Drawing Tree Exhauster B

LIGHT DUTY UTILITY ARM (LDUA) SUPPORT DRAWINGS

An evaluation of LDUA drawings to determine drawing category has not been completed at this time and is scheduled to be included when the Characterization Equipment Drawing Evaluation Report (Wilson 1998) is updated in fiscal year 1999.

OTHER SAMPLING EQUIPMENT SUPPORT DRAWINGS

H-2-37844/1-3	Grab Sampler Instrumentation Installation Details
H-2-79960/1-7	Surface Sampler Auger Assembly
H-2-85602/1-5	Supernatant and Sludge Sampler Assembly
H-2-85645/1-2	Tri-Pod and Bottle Hoist for Supernatant and Sludge Sampler
H-2-825301/1	In-Situ Sample Head Assembly & Details
H-2-825313/1-7	Vapor Sampling Cart Assembly & Details
H-2-825314/1-2	Vapor Sampling Cart Electrical Installation and Interconnect Diagram
H-2-826321/1-2	Auger Bit Assembly
H-2-826597/1-2	Table Assembly For Supernatant and Sludge Sampler

7.0 REFERENCES

HNF 1997a, HNF-PRO-242, Rev. 1, *Engineering Drawing Requirements*, Fluor Daniel Hanford, Inc., Richland, WA.

HNF 1997b, HNF-PRO-440, Rev. 1, *Engineering Document Change Control Requirements*, Fluor Daniel Hanford, Inc., Richland, WA.

Wilson 1998, HNF-2305, Rev. 0, *Drawing Evaluation Report For Sampling Equipment,* Lockheed Martin Hanford Corporation, Richland, WA