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.
### ENGINEERING CHANGE NOTICE

**Page 2 of 3**

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### 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.

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<tr>
<th>SDD/DD</th>
<th>Seismic/Stress Analysis</th>
<th>Tank Calibration Manual</th>
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<td>Functional Design Criteria</td>
<td>Stress/Design Report</td>
<td>Health Physics Procedure</td>
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<td>Operating Specification</td>
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<td>Installation Procedure</td>
<td>Component Index</td>
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<td>Essential Material Specification</td>
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### Other Affected Documents

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.

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### Approvals

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<td>G.P. Janicek</td>
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Other

| Informal Rev. B. L Coverdell | 12/10/96 | DEPARTMENT OF ENERGY |
| Proj. Mgr. J. L. Smalley | 12/10/96 | Signature or a Control Number that tracks the Approval Signature |

A-7900-013-3 (05/96) GEF096
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

A-7900-013-4 (05/96) GEF094
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

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Approved for Public Release

A-6400-073 (01/97) GEF321
### RECORD OF REVISION

**Title**: Characterization Equipment Essential Drawing Plan

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<td>R. Freeman 09/25/98 J.S. Schofield 09/25/98</td>
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<td>RS 2</td>
<td>Incorporate ECN-651156 to revise all pages to update document to include drawings identified in HNF-2305, Drawing Evaluation Report for Sampling Equipment.</td>
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**CHANGE CONTROL RECORD**

**Description of Change**: Replace, Add, and Delete Pages

**HNF-3240 RO "Characterization Equipment Essential Drawing Plan", EDT-622087, 08/20/98**

**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**

**Incorporate ECN-651156 to revise all pages to update document to include drawings identified in HNF-2305, Drawing Evaluation Report for Sampling Equipment.**

CHARACTERIZATION EQUIPMENT

ESSENTIAL/SUPPORT DRAWING PLAN

Prepared for Lockheed Martin Hanford Corporation

By

G. W. Wilson

COGEMA Engineering Corp.
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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.
<table>
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<td>RMCST Truck 3 &amp; 4 Assembly</td>
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<td>H-2-690001/1-2</td>
<td>RMCST Truck 3 &amp; 4 Drawing Index</td>
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<td>Purge Gas Piping &amp; Hose Installation</td>
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<td>Drill Head Hydraulic Piping Installation</td>
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<td>Hydraulic Controls Installation</td>
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<td>H-2-690062/1-4</td>
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<td>H-2-38079/1-6</td>
<td>On-Site Transfer Cask Assembly</td>
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<td>Transfer Cask NCAW</td>
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<td>H-2-690140/1-6</td>
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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

