START

0022622

AUG 05 1992

Sta. 21 (20)

ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT 156730

2. To: (Receiving Organization) Distribution	3. From: (Originating Organization) 200/300 Area Remedial Investigation Group	4. Related EDT No.: N/A
5. Proj./Prog./Dept./Div.: ER	6. Cog. Engr.: S. J. Trent	7. Purchase Order No.: N/A
8. Originator Remarks: Document for review/release.		9. Equip./Component No.: N/A
		10. System/Bldg./Facility: N/A
11. Receiver Remarks:		12. Major Assm. Dwg. No.: N/A
		13. Permit/Permit Application No.: N/A
		14. Required Response Date: N/A

15. DATA TRANSMITTED

(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Impact Level	(G) Reason for Transmittal	(H) Originator Disposition	(I) Receiver Disposition
1	WHC-SD-EN-DP-027	N/A	0	200 North Geologic and Geophysics Data Package for the 200 Aggregate Area Management Study	4			

16. KEY

Impact Level (F)	Reason for Transmittal (G)		Disposition (H) & (I)	
1, 2, 3, or 4 (see MRP 5.43)	1. Approval	4. Review	1. Approved	4. Reviewed no/comment
	2. Release	5. Post-Review	2. Approved w/comment	5. Reviewed w/comment
	3. Information	6. Dist. (Receipt Acknow. Required)	3. Disapproved w/comment	6. Receipt acknowledged

17. SIGNATURE/DISTRIBUTION (See Impact Level for required signatures)

(G) Reason	(H) Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date	(M) MSIN	(G) Reason	(H) Disp.
1	1	Cog.Eng. S. J. Trent	SJ Trent	8/4/92	H4-56						
1	1	Cog. Mgr. R. A. Carlson	RACarlson	8/4/92	H4-55						
		QA									
		Safety									
		Env.									
1	1	C. D. Wittreich			H4-55						

AUG 1992 RECEIVED EDMC

18.	19.	20.	21. DOE APPROVAL (if required)
SJ Trent S. J. Trent Signature of EDT Originator — Date 8-5-92	Authorized Representative for Receiving Organization — Date	RACarlson R. A. Carlson Cognizant/Project Engineer's Manager — Date 8/4/92	Ltr. No. [] Approved [] Approved w/comments [] Disapproved w/comments

BD-7400-172-2 (07/89) (EF) GEF097

BD-7400-172-1 (02/89)

SUPPORTING DOCUMENT

1. Total Pages 20

2. Title	3. Number	4. Rev No.
200 North Geologic and Geophysics Data Package for the 200 Aggregate Area Management Study	WHC-SD-EN-DP-027	0

5. Key Words

Geophysics, Data Package, 200 North, AAMS, Geology

APPROVED FOR PUBLIC RELEASE
V. Buckland 8/5/92

6. Author

Name: S. J. Trent

S. J. Trent 8/4/92
Signature

Organization/Charge Code 81232/PH22A

7. Abstract

WHC, 1992, *200 North Geologic and Geophysics Data Package for the 200 Aggregate Area Management Study*, WHC-SD-EN-DP-027, Rev. 0, prepared by M. A. Chamness, D. L. McAlister, J. P. McDonald, A. W. Pearson, and R. E. Lewis, Pacific Northwest Laboratory for Westinghouse Hanford Company, Richland, Washington.

8. PURPOSE AND USE OF DOCUMENT - This document was prepared for use within the U.S. Department of Energy and its contractors. It is to be used only to perform, direct, or integrate work under U.S. Department of Energy contracts. This document is not approved for public release until reviewed.

PATENT STATUS - This document copy, since it is transmitted in advance of patent clearance, is made available in confidence solely for use in performance of work under contracts with the U.S. Department of Energy. This document is not to be published nor its contents otherwise disseminated or used for purposes other than specified above before patent approval for such release or use has been secured, upon request, from the Patent Counsel, U.S. Department of Energy Field Office, Richland, WA.

DISCLAIMER - This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

9. Impact Level 4

10. RELEASE STAMP

OFFICIAL RELEASE BY WHC (20)
DATE AUG 05 1992
Sta. 21

9412205.1139

INTRODUCTION

This data package includes all of the geologic and geophysical information requested by the Westinghouse Hanford Company (WHC) for the 200 North aggregate area. This information includes a listing of all of the boreholes within this aggregate area as defined by WHC and amended by the Pacific Northwest Laboratory. Geophysical data (Table 1) includes the type of log, date, and interval logged for each of the above wells, as well as the location where these data are stored. Table 2 includes the types of geologic data available for each of these wells (i.e., driller's log, geologist's log) and any other related data (sieve, $CaCO_3$ content, moisture content, and chemical analyses). Table 3 provides a summary of the well construction information for each well including drill depth, completion depth, screened interval, and coordinates. As-built diagrams for the following wells are provided in the Appendix.

299-E32-2
299-E33-30
699-36-61B
699-40-62
699-44-64
699-47-60
699-48-71
699-51-63
699-55-55
699-55-57
699-55-60A
699-55-60B

9413203.0131

TABLE 1. GEOPHYSICAL LOGS FOR 200N AAMS

AAMS	WELL	LOG RUN	DATE	TOP	BOTTOM	LOGGED BY	LOGGER	PROBE #	LOG LOCATION
200N	699-55-60A	NOT LOGGED							
200N	699-55-60B	TEMP.	1/23/74	170	286	PNL			LOG MISSING
200N	699-55-60B	TEMP.	12/2/80	173	273	PNL	V.L. McGHAN		å
200N	699-55-60B	NAT. GAMMA	12/2/80	4	284	PNL	V.L. McGHAN		ß
200N	699-55-60B	NEUTRON	12/2/80	7	284	PNL	V.L. McGHAN		ß
200N	699-55-60B	DENSITY	12/2/80	4	284	PNL	V.L. McGHAN		∂
	å	Temperature Logs		Large Notebook					
		600 Area		PNL					
		699-50-28B to		Sigma V					
		699-97-51		Room 2606					
	ß	Filed Logs		PNL					
				Sigma V					
				Room 2606					
	∂	600 Area (Density)		Large Notebook					
		600-40-1 to		PNL					
		699-97-51A		Sigma V					
				Room 2606					

TABLE 2. SAMPLE DATA FOR 200 NORTH AGGREGATE AREA

Well	Log Type	Sieved	CaCO3	Moisture	Chemistry	Archived	Source/Comments
299-E32-2	D,G	Y		Y	TOC, VOC, A, B, AN	Y	Barton et al. 1990 / AQUIFER TEST
299-E33-30	D,G	Y		Y	TOC, VOC, A, B, AN	Y	Barton et al. 1990 / AQUIFER TEST
699-36-61B	D	Y	Y			Y	
699-40-62	D	YL	YL	N		Y	
699-44-64	D	Y	Y			Y	
699-47-60	D	Y	Y			Y	
699-48-71	D	Y	Y			Y	
699-51-63	D	Y	Y			Y	
699-55-55	G	YL	YL	Y		Y	
699-55-57	D	Y	Y			Y	
699-55-60A	D						AQUIFER TEST
699-55-60B	D						AQUIFER TEST

Notes

G--Geologic Logs

D--Drillers Logs

(Logs are contained in PNL files unless otherwise noted)

Y--Data Available

YL--Data are available but is limited (gaps of 10ft or more)

All sieve/CaCO3 data are from the ROCSAN data base unless another source is indicated

Archive lithologic samples are stored in the 2101-M Sample Library

VOC = volatile organic compounds

TOC = total o tile organic compounds

A = gross alpl total organic carbon

B = beta

AN = anions

(Reference citations are shown on page 5)

TABLE 3. 200 NORTH AGGREGATE AREA WELL CONSTRUCTION DATA

Well	Drill Depth	Completed Depth	Screen Top	Screen Bottom	Date Started	Date Completed	Casing Elevation	Hanford Coordinates North	Hanford Coordinates West
299-E32-2	289.06	277.75	257.75	277.75	8/14/87	9/30/87	670.06	45904	56565
299-E33-30	280.1	275	255	275	8/29/87	9/30/87	663.7	45903	55660
699-36-61B	568	380	330	400	11/30/59	2/4/60	749.26	36463	60685
699-40-62	384	369	335	374	12/14/48	1/17/49	747.78	40300	61500
699-44-64	452	357	316	442	10/22/59	1/27/60	725.6	44053	63751
699-47-60	287	273	235	277	6/23/48	7/20/48	649.84	47137	60286
699-48-71	305	285	239	302	8/4/56	9/26/56	688.15	47838	70660
699-51-63	184.5	183	157	183	9/27/56	11/6/56	571.84	51449	63060
699-55-55	312	169.58	148.35	169.3	9/28/90	12/3/91	563.32	54669	54641
699-55-57	180	180	139	169	5/15/75	5/16/75	566.66	54608	57208
699-55-60A	233	231	190	230	8/16/43	12/15/43	572.89	55100	60100
699-55-60B	288	288	230	285	6/8/44	7/20/44	573.68	55425	60140

REFERENCES FOR GEOLOGIC INFORMATION

Barton, K. R. O., L. A. Doremus, T. J. Gilmore, G. V. Last, and J. V. Borghese. 1990. Borehole Completion Data Package for Low-Level Burial Grounds - 1990. WHC-MR-0205, prepared by Pacific Northwest Laboratory for Westinghouse Hanford Company, Richland, Washington.

9413203.0135

APPENDIX

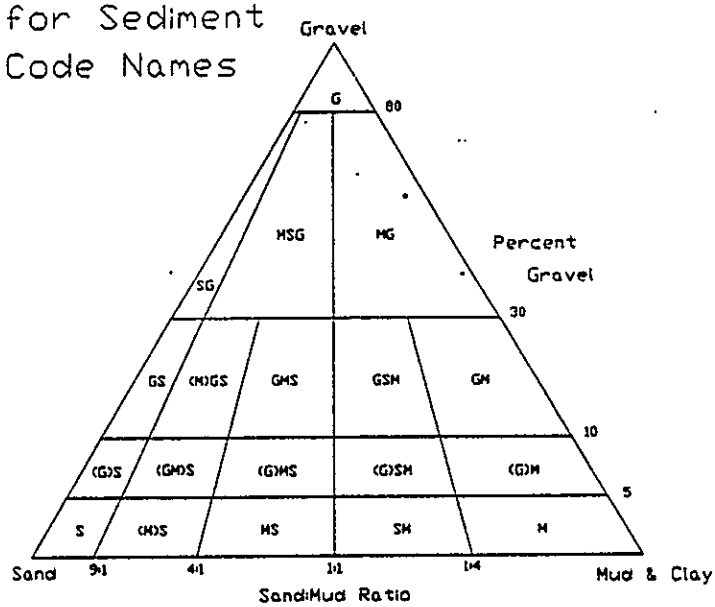
AS-BUILT DIAGRAMS

9412203.1137

Lithology Classification Pattern Key

M	Mud	G	Gravel	GS	Gravelly Sand
SM	Sandy Mud	SG	Sandy Gravel	(G)S	Slightly Gravelly Sand
GM	Gravelly Mud	MG	Muddy Gravel	GMS	Gravelly Muddy Sand
(G)M	Slightly Gravelly Mud	MSG	Muddy Sandy Gravel	(G)MS	Slightly Gravelly Muddy Sand
GSM	Gravelly Sandy Mud	S	Sand	(M)GS	Slightly Muddy Gravelly Sand
(G)SM	Slightly Gravelly Sandy Mud	MS	Muddy Sand	(GM)S	Slightly Gravelly Slightly Muddy Sand
MISSING	Data Unknown	(M)S	Slightly Muddy Sand	B	Basalt
				CA	Caliche

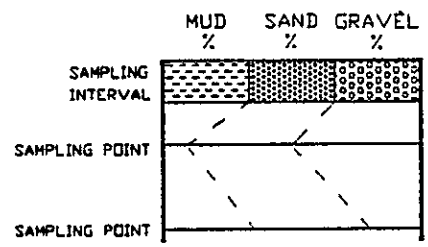
Ternary Diagram for Sediment Code Names



* Sampling Method Column

R	Rotary	H	Hard Tool
AR	Air Rotary	D	Drive Barrel
MR	Mud Rotary	S	Split Spoon
B	Back Hoe	A	Auger
AP	Air Percussion		Other Method

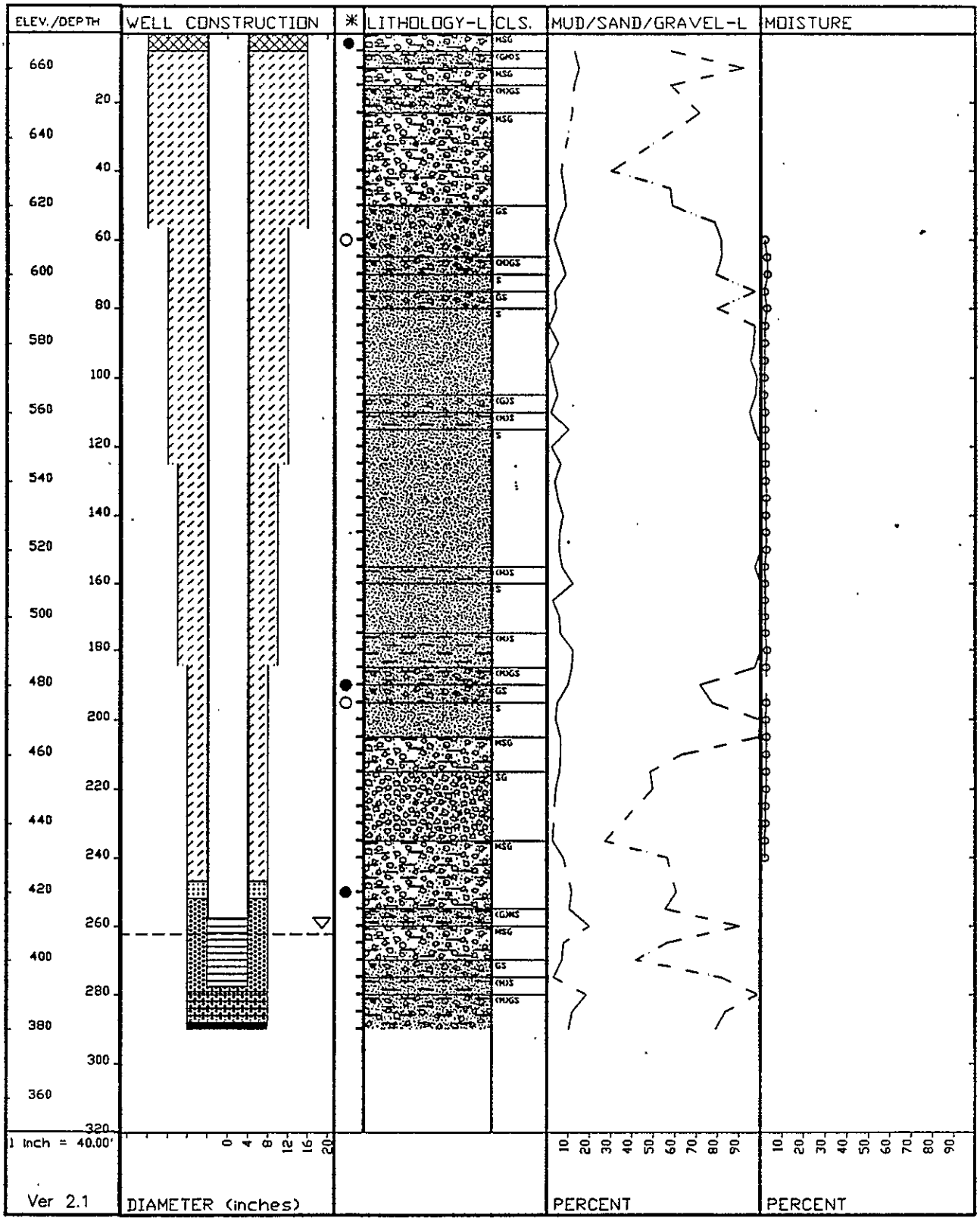
Mud/Sand/Gravel Column



Well Construction Pattern Key

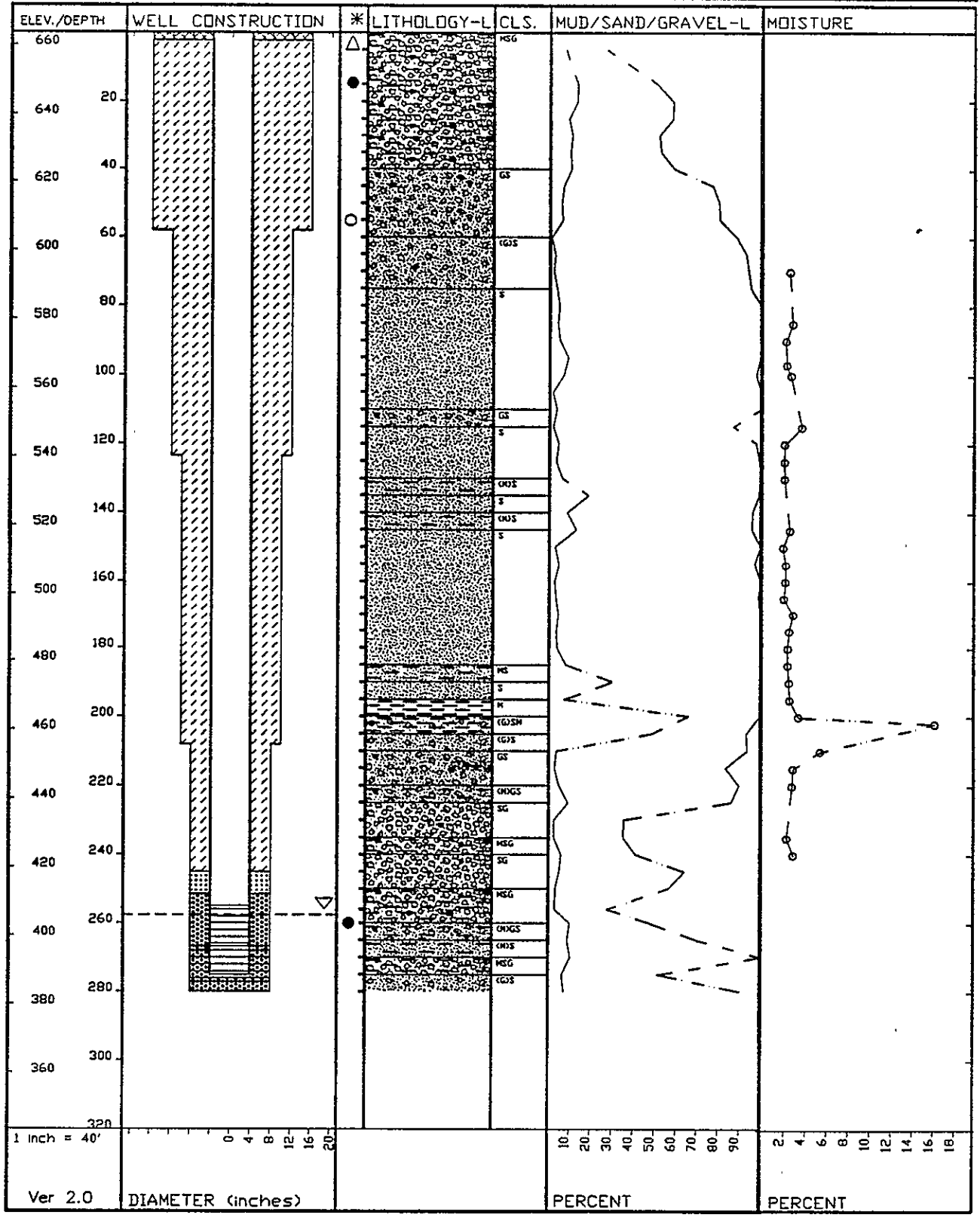
CG	Cement Grout	BP	Bentonite Pellets		Perforated Permanent Casing
GB	Granular Bentonite	CE	Chemical Grout		
GP	Gravel Pack	SP	Sand Pack	P	Pump Location
BF	Backfill	CO	Concrete	DATE	Most Recent Water Level
BE	Bentonite Slurry	VG	Volclay Grout		Initial Water Level
	Other Fill Type		Screen		

WELL NAME	299-E32-2	COMPLETION DATE	09/30/87
CASING ELEV.	670.06 Feet	INITIAL	
WELL DEPTH	277.75 Feet	DEPTH TO WATER	262.33 ft
DRILL DEPTH	290.00 Feet		
COORDINATES N-S	45904 P		
E-W	-56565 P	PAGE	1 of 1

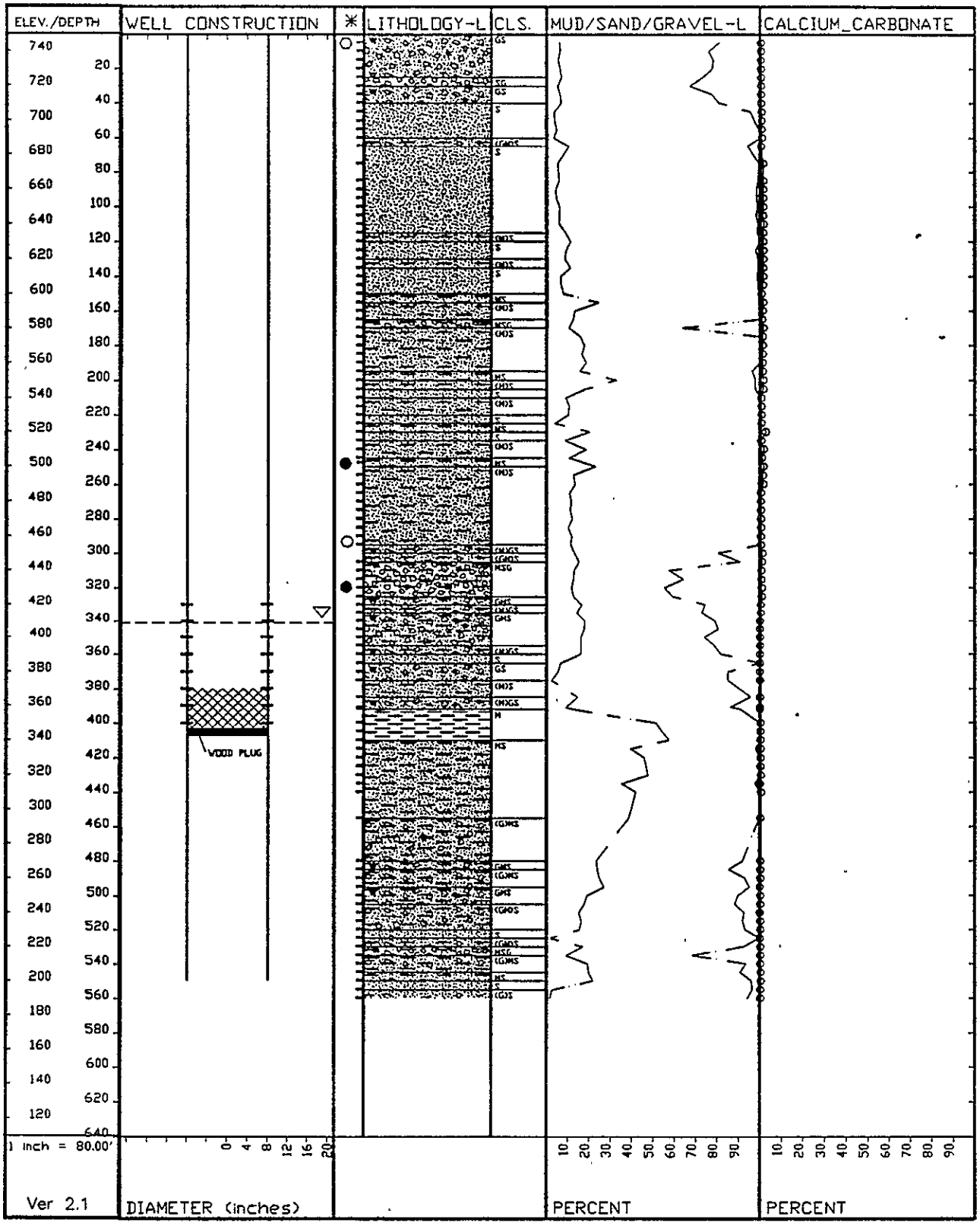


WELL NAME	299-E33-30	COMPLETION DATE	09/30/87
CASING ELEV.	663.70 Feet	INITIAL DEPTH TO WATER	257.57 ft
WELL DEPTH	275.00 Feet		
DRILL DEPTH	280.10 Feet		
COORDINATES N-S	45903 P		
E-W	-55660 P		

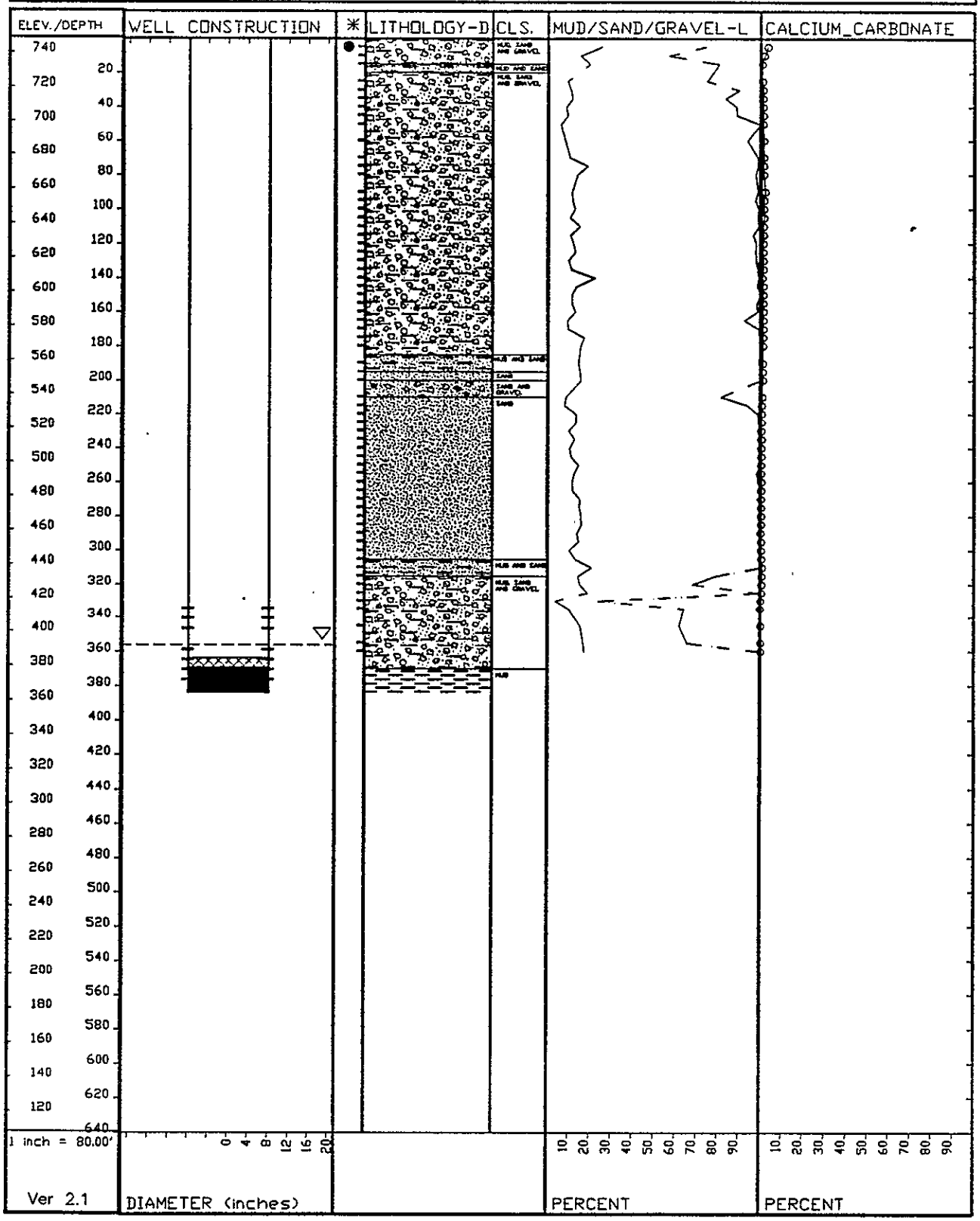
PAGE 1 of 1



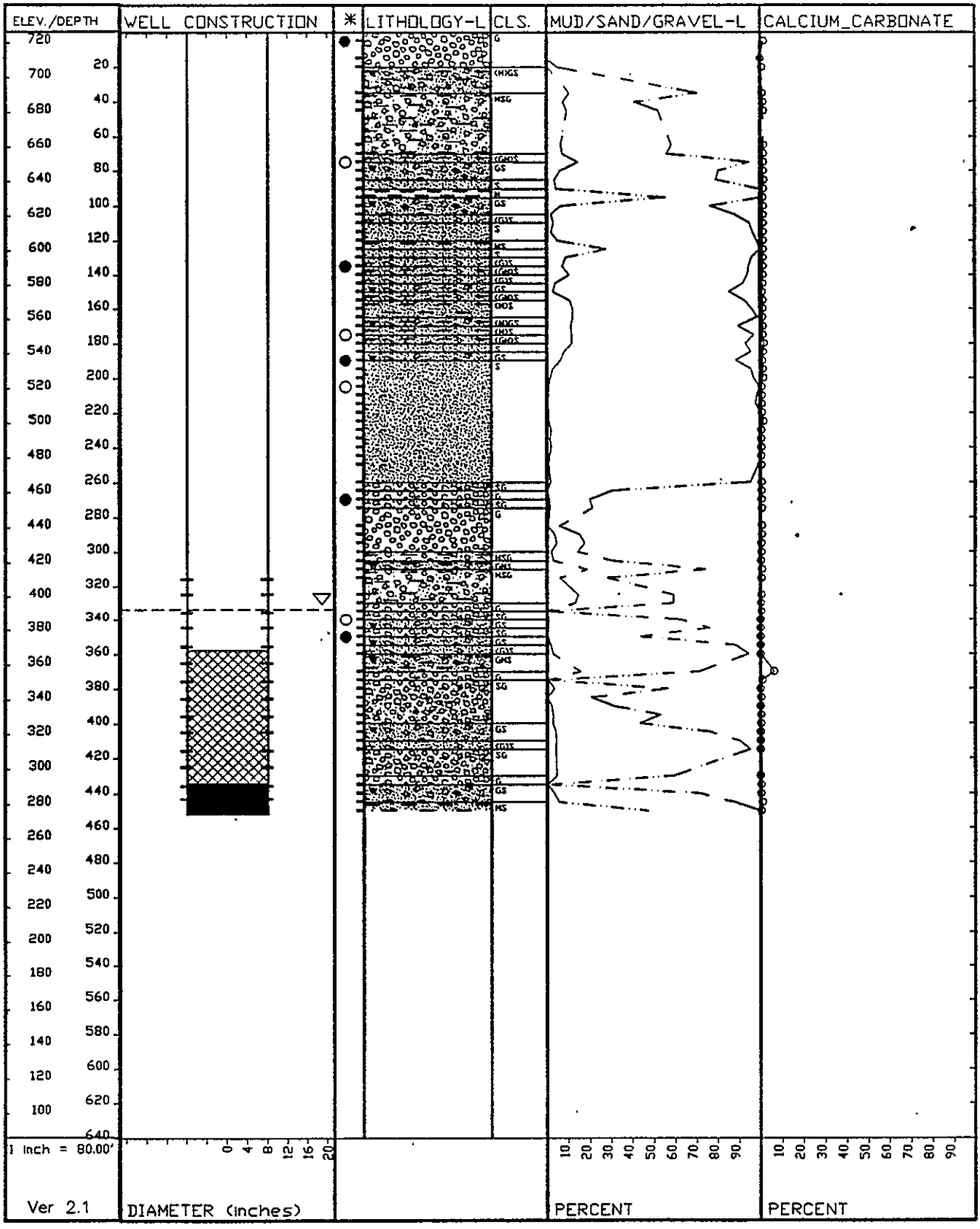
WELL NAME	699-36-61B	COMPLETION DATE	02/04/60
CASING ELEV.	749.26 Feet	INITIAL	
WELL DEPTH	380.00 Feet	DEPTH TO WATER	341.0 ft
DRILL DEPTH	568.00 Feet		
COORDINATES N-S	36463 P		
E-W	-60685 P	PAGE	1 of 1



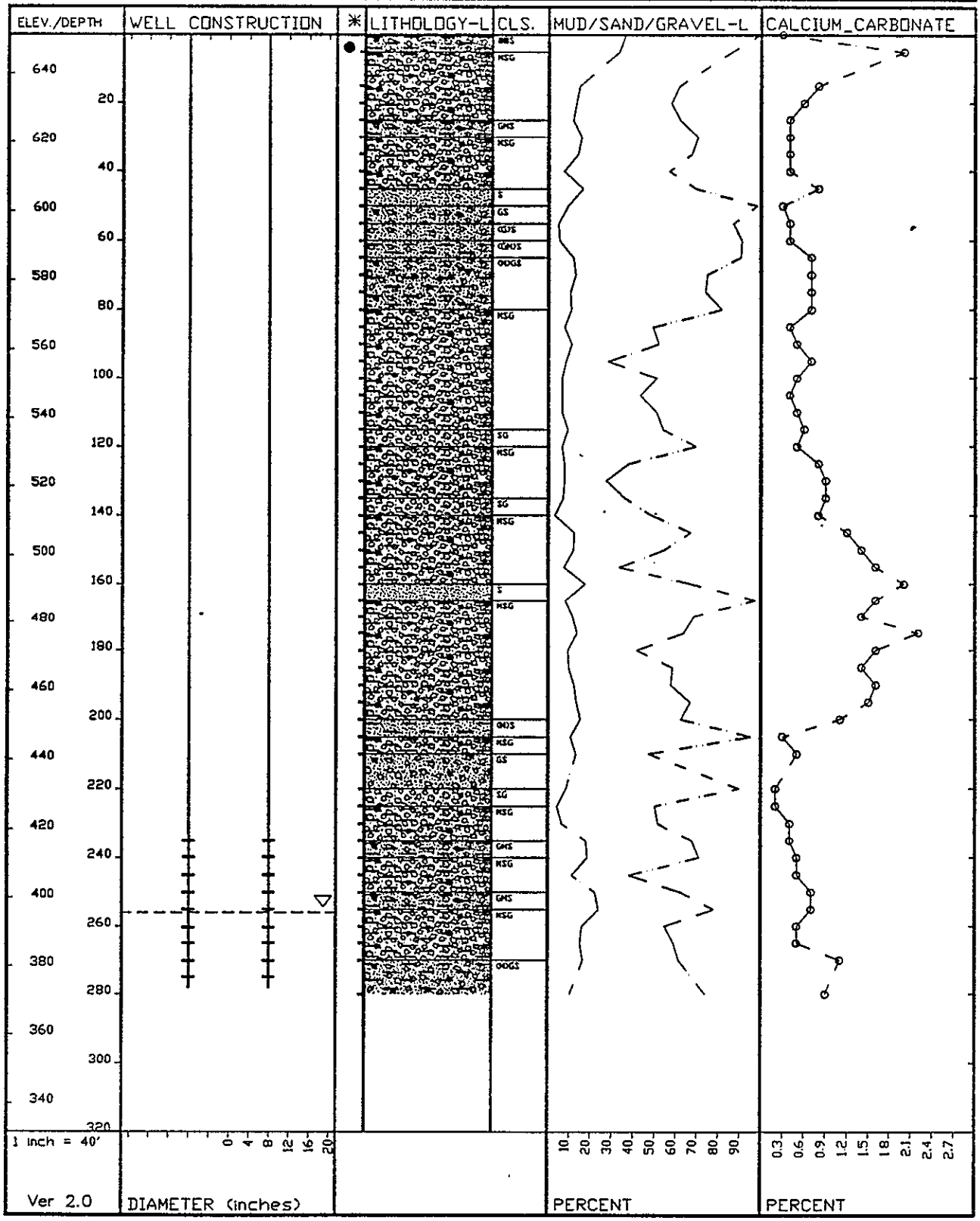
WELL NAME	699-40-62	COMPLETION DATE	01/17/49
CASING ELEV.	747.78 Feet	INITIAL	
WELL DEPTH	364.00 Feet	DEPTH TO WATER	356.0 ft
DRILL DEPTH	384.00 Feet		
COORDINATES N-S	40300 P		
E-W	-61500 P	PAGE	1 of 1



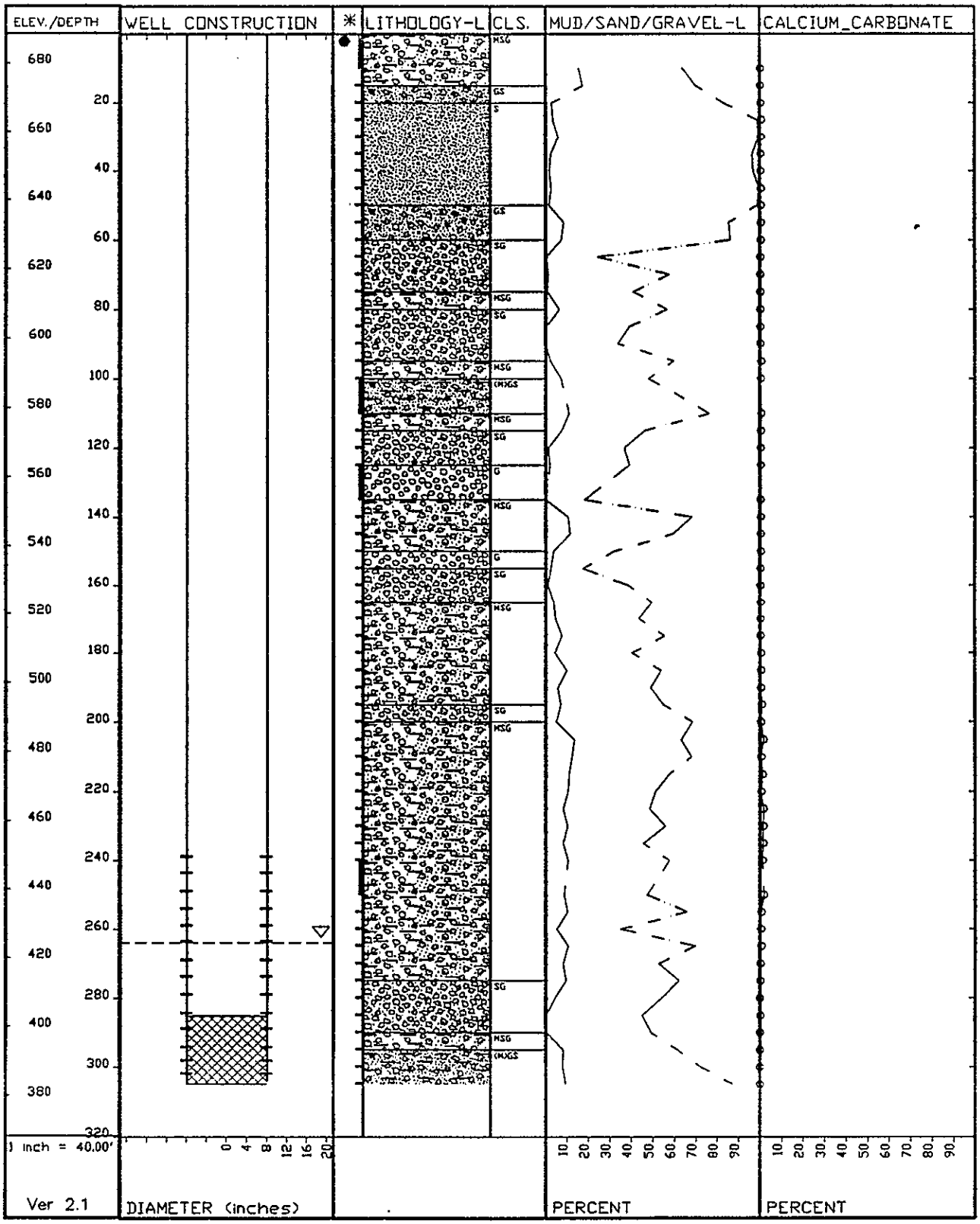
WELL NAME	699-44-64	COMPLETION DATE	01/31/60
CASING ELEV.	725.60 Feet	INITIAL DEPTH TO WATER	334.0 ft
WELL DEPTH	358.00 Feet		
DRILL DEPTH	452.00 Feet		
COORDINATES N-S	44053 P		
E-W	-63751 P	PAGE	1 of 1



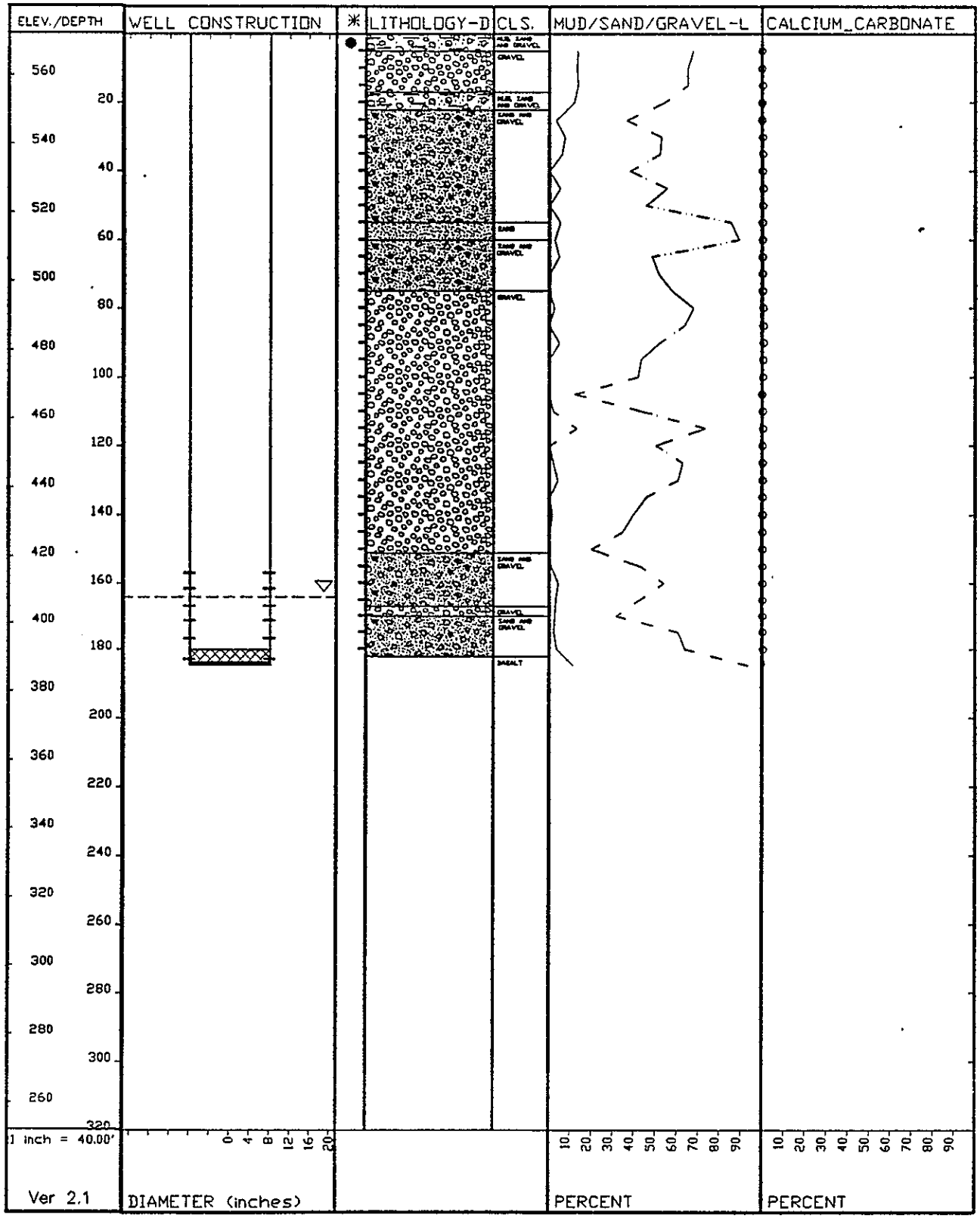
WELL NAME	699-47-60	COMPLETION DATE	07/20/48
CASING ELEV.	651.52 Feet	INITIAL DEPTH TO WATER	256 ft
WELL DEPTH	278.00 Feet		
DRILL DEPTH	287.00 Feet		
COORDINATES N-S	47137 P		
E-W	-60286 P	PAGE	1 of 1



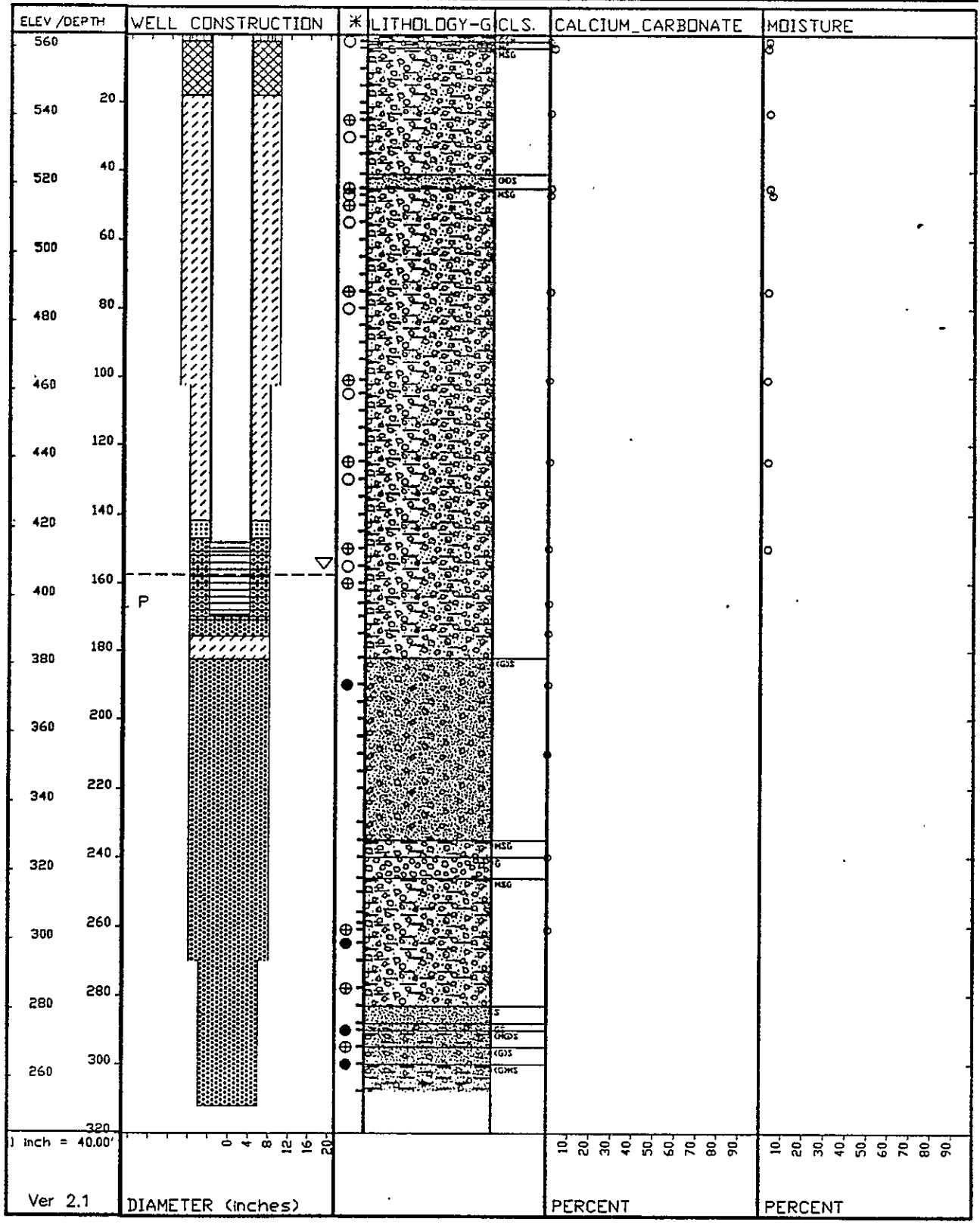
WELL NAME	699-48-71	COMPLETION DATE	09/26/56
CASING ELEV.	688.15 Feet	INITIAL DEPTH TO WATER	264.0 ft
WELL DEPTH	285.00 Feet		
DRILL DEPTH	305.00 Feet		
COORDINATES N-S	47838 P		
E-W	-70660 P	PAGE	1 of 1



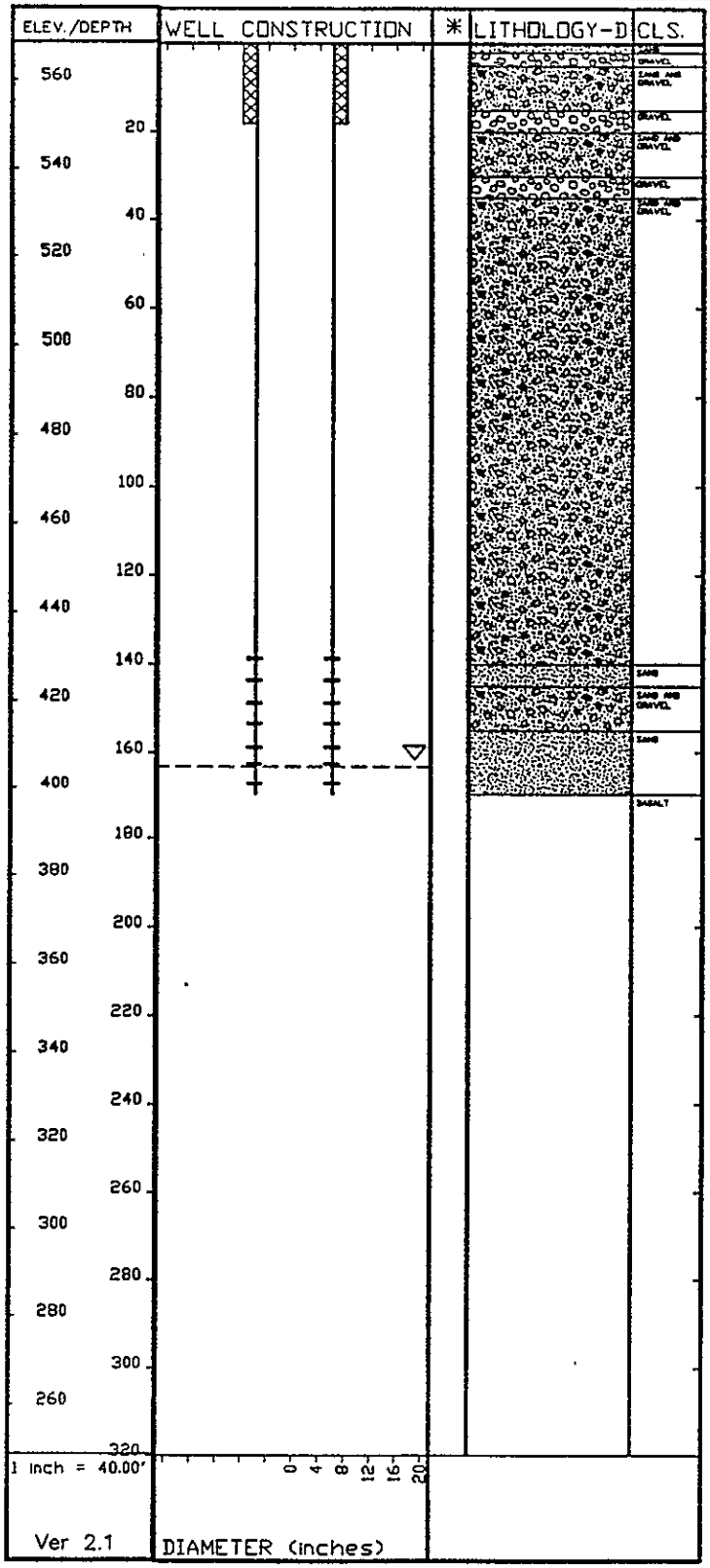
WELL NAME	699-51-63	COMPLETION DATE	11/06/56
CASING ELEV.	571.84 Feet	INITIAL	
WELL DEPTH	183.50 Feet	DEPTH TO WATER	164.0 ft
DRILL DEPTH	184.60 Feet		
COORDINATES N-S	51449 P		
E-W	-63060 P	PAGE	1 of 1



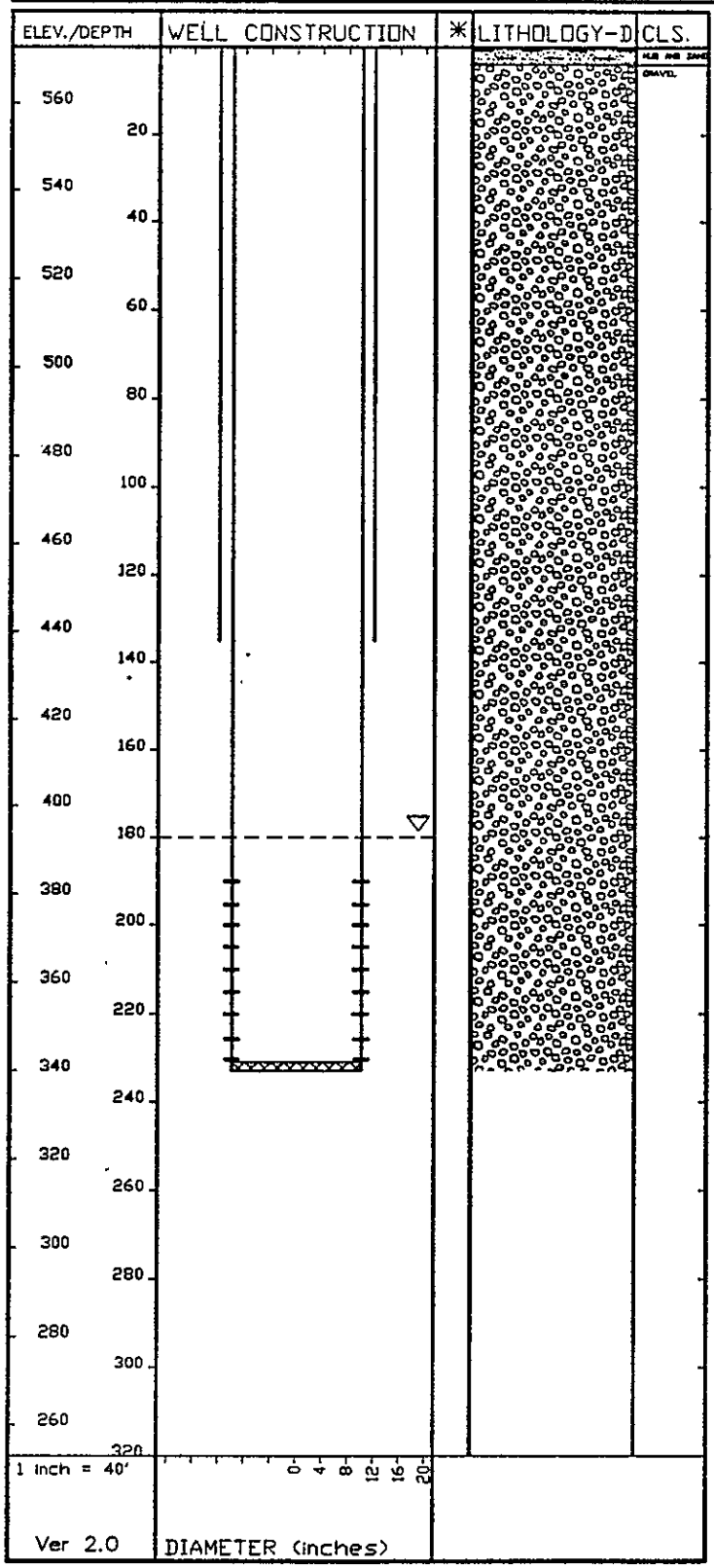
WELL NAME	699-55-55	COMPLETION DATE	12/03/91
CASING ELEV.	563.58 Feet	INITIAL	
WELL DEPTH	169.58 Feet	DEPTH TO WATER	157.45 ft
DRILL DEPTH	312.00 Feet		
COORDINATES N-S	140150 LAMBERT NAD83		
E-W	573227.1 LAMBERT NAD83	PAGE	1 of 1



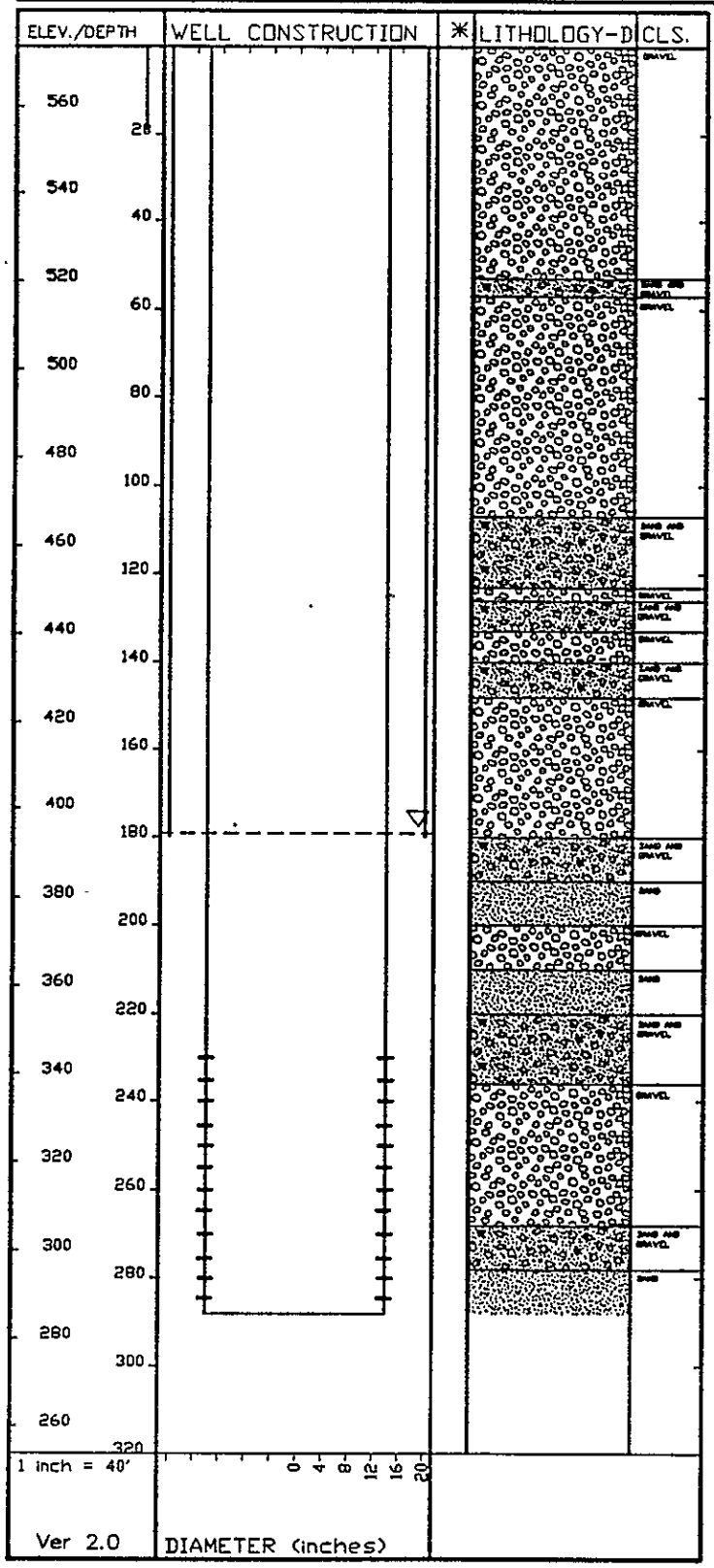
WELL NAME	699-55-57	COMPLETION DATE	05/16/75
CASING ELEV.	568.22 Feet	INITIAL DEPTH TO WATER	163.2 ft
WELL DEPTH	180.00 Feet		
DRILL DEPTH	180.00 Feet		
COORDINATES N-S	54608 P		
E-W	-57208 P	PAGE	1 of 1



WELL NAME	699-55-60A	COMPLETION DATE	12/15/43
CASING ELEV.	572.89 Feet	INITIAL DEPTH TO WATER	180 ft
WELL DEPTH	231.00 Feet		
DRILL DEPTH	233.00 Feet		
COORDINATES N-S	55100 P		
E-W	-60100 P	PAGE	1 of 1



WELL NAME	699-55-60B	COMPLETION DATE	07/20/44
CASING ELEV.	573.68 Feet	INITIAL DEPTH TO WATER	179.07 ft
WELL DEPTH	288.00 Feet		
DRILL DEPTH	288.00 Feet		
COORDINATES N-S	55425 P		
E-W	-60140 P	PAGE	1 of 1



Date Received: 8/5/92 ZB

INFORMATION RELEASE REQUEST

Reference: WHC-CM-3-4

Complete for all Types of Release

Purpose

[] Speech or Presentation
- [] Full Paper
- [] Summary
- [] Abstract
- [] Visual Aid

(Check only one suffix)

[] Speakers Bureau
[] Poster Session
[] Videotape

[] Reference
[X] Technical Report
[] Thesis or Dissertation
[] Manual
[] Brochure/Flier
[] Software/Database
[] Controlled Document
[] Other

ID Number (include revision, volume, etc.)
WHC-SD-EN-DP-027, Rev. 0

List attachments.

Date Release Required
August 7, 1992

Title: 200 North Geologic and Geophysics Data Package for the 200 Aggregate Area Management Study

Unclassified Category UC- N/A

Impact Level 4

New or novel (patentable) subject matter? [X] No [] Yes
If "Yes", has disclosure been submitted by WHC or other company?
[] No [] Yes Disclosure No(s).

Information received from others in confidence, such as proprietary data, trade secrets, and/or inventions?
[X] No [] Yes (Identify)

Copyrights? [X] No [] Yes
If "Yes", has written permission been granted?
[] No [] Yes (Attach Permission)

Trademarks?
[X] No [] Yes (Identify)

Complete for Speech or Presentation

Title of Conference or Meeting
N/A

Group or Society Sponsoring

Date(s) of Conference or Meeting
N/A

City/State
N/A

Will proceedings be published? [] Yes [] No
Will material be handed out? [] Yes [] No

Title of Journal
N/A

CHECKLIST FOR SIGNATORIES

Review Required per WHC-CM-3-4	Yes	No	Reviewer - Signature Indicates Approval: Name (printed) / Signature / Date
Classification/Unclassified Controlled Nuclear Information	[]	[X]	
Patent - General Counsel	[]	[X]	Legal/Patent not required - per Barbara
Legal - General Counsel	[]	[X]	Williamson 8/5/92 Z.B.
Applied Technology/Export Controlled Information or International Program	[]	[X]	
WHC Program/Project	[]	[X]	
Communications	[]	[X]	
RL Program/Project	[]	[X]	
Publication Services	[X]	[]	
Other Program/Project	[]	[X]	

Information conforms to all applicable requirements. The above information is certified to be correct.

	Yes	No
References Available to Intended Audience	[X]	[]
Transmit to DOE-HQ/Office of Scientific and Technical Information	[]	[X]

Author/Requestor (Printed/Signature) Date
S. J. Trent 8/4/92

Intended Audience
[] Internal [] Sponsor [X] External

Responsible Manager (Printed/Signature) Date
R. A. Carlson R A Carlson 8/5/92

INFORMATION RELEASE ADMINISTRATION APPROVAL STAMP

Stamp is required before release. Release is contingent upon resolution of mandatory comments.

APPROVED FOR RELEASE OFFICIAL DOCUMENT Z.B. 8/5/92

Date Cancelled | Date Disapproved

BD-7600-062 (08/91) WEF074

Part 1

DISTRIBUTION SHEET

To:	From:	Date:
Distribution	200/300 Area Remedial Investigation Group	August 3, 1992

Project Title/Work Order:

200 North Geologic and Geophysics Data Package for the 200 Aggregate Area Management Study WHC-SD-EN-DP-027, Rev. 0

EDT No.: 156730 ECN No.: N/A

Name	MSIN	With Attachment	EDT/ECN & Comment	EDT/ECN Only
R. W. Bryce	K6-96	X		
R. A. Carlson	H4-55	X		
M. A. Chamness	K6-96	X		
D. B. Erb	H4-55	X		
J. W. Fassett	G6-50	X		
M. J. Galgoul	H4-55	X		
D. G. Horton	H4-56	X		
R. L. Jackson	H4-56	X		
A. J. Knepp	H4-56	X		
G. J. Koizumi	G6-50	X		
S. E. Kos	H4-56	X		
G. V. Last	K6-96	X		
R. E. Lewis	K6-96	X		
D. L. McAlister	K6-96	X		
J. P. McDonald	K6-96	X		
D. L. Parker	H4-55	X		
A. W. Pearson	K6-96	X		
R. K. Price	G6-50	X		
G. D. Spice	H4-56	X		
S. S. Teel	K6-96	X		
S. J. Trent (10)	H4-56	X		
M. A. Wasemiller	H4-55	X		
C. D. Wittreich (5)	H4-55	X		
Central Files	L8-04	X		
EDMC (2)	H4-22	X		
IRM Clearance	H4-17	X		

A-6400-073 (11/91) (EF) WEF124