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Station #21

ENGINEERING DATA TRANSMITTAL

Page 1 of 1

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1	WHC-SD-EN-DP-030	N/A	0	Unconfined Aquifer Hydrologic Test Data Package for the 200 East Groundwater Aggregate Area Management Study	4	1,2	1	

16. KEY

Impact Level (F)	Reason for Transmittal (G)		Disposition (H) & (I)	
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1	1	Cog.Eng. S. J. Trent	SJ Trent	9/22/92	H4-56						
1	1	Cog. Mgr. R. A. Carlson	RA Carlson	9/22/92	H4-55						
		QA									
		Safety									
		Env.									
1	1	C. D. Wittreich	RA Carlson for CDW	9/22/92	H4-55						

18.	19.	20.	21. DOE APPROVAL (if required) Ltr. No.
S. J. Trent MA Adams for 9/23 Signature of EDT Originator / Date	Authorized Representative for Receiving Organization / Date	R. A. Carlson RA Carlson 9/22/92 Cognizant/Project Engineer's Manager / Date	[] Approved [] Approved w/comments [] Disapproved w/comments

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APPROVED FOR PUBLIC RELEASE

9/23/92 / J. Adlis

6. Author

Name: S. J. Trent

Signature 9/22/92

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7. Abstract

WHC, 1992, *Unconfined Aquifer Hydrologic Test Data Package for the 200 East Groundwater Aggregate Area Management Study*, WHC-SD-EN-DP-030, Rev. 0, prepared by D. R. Newcomer, M. A. Chanmess, D. L. McAlister, A. W. Pearson, R. J. Brockman, S. S. Teel, and J. P. McDonald, Pacific Northwest Laboratory, for Westinghouse Hanford Company, Richland, Washington.

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9. Impact Level 4

10. RELEASE STAMP

OFFICIAL RELEASE BY WHC (11)

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INTRODUCTION

This report includes hydrologic test data, well construction, and geologic information from wells completed in the unconfined aquifer in and around the perimeter of the 200-East Area at the Hanford Site as of December 1991. This information was requested by Westinghouse Hanford Company (WHC) as part of the 200 Aggregate Area Management study. Table 1 consists of a list of all known tests for which aquifer property values were determined, or where data were not analyzed but aquifer properties could be determined. For some tests included in this list, specific capacity data are available for estimating transmissivity. Table 2 consists of a list of other tests conducted, but because of poor data quality, aquifer property values cannot be determined. This list is only intended to show where other hydrologic tests were attempted. The appendix includes well construction and geologic information for each of the wells in Table 1.

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Coverage Area

The perimeter around the 200-East Area covers an area from Gable Mountain on the north to approximately 2 miles south of the 200-East Area south fence, and from approximately 1 mile west of the western 200-East Area fence to approximately 3 miles east of the eastern 200-East Area fence.

Information Included in the Inventory

The hydrologic data inventory includes the Hanford well designation, current depth, depth of the test interval, current screen or perforated interval, current depth to water, date of test, type of test, values for transmissivity and storage coefficient, references, and any notable comments pertaining to the tests. The recovery tests, listed under the column heading "Type of Hydrologic Test," are recovery from constant discharge tests unless otherwise noted. "PNL Files" listed in the reference column refer primarily to the cabinet file in Room 2521 in the Sigma V building. "WHC Files" listed in the reference column refer to the RCRA and/or CERCLA files at Westinghouse's 450 Hills building. These files contain most of the original hydrologic test data and analyses.

Clarifications

For several tests, the depth of the test interval is not the same as the current screen or perforated interval. This is because 1) the well was tested before final completion, 2) the well screened interval was modified since the test was conducted, or 3) the screen or perforations extend above the water table. The references indicate that conventional analysis techniques (e.g., Jacob 1946; Theis 1935) were applied to the data to calculate the aquifer properties. The more recent test data from WHC files are awaiting analyses for estimates of aquifer hydraulic properties.

The current depth and current screen or perforation interval is not given for piezometers 699-28-40Q and well 699-55-50B because these have been removed since the tests were conducted.

TABLE 1. UNCONFINED AQUIFER HYDROLOGIC TEST DATA FOR THE 200 EAST AREA

Hanford Well Designation	Current Depth (a) (ft)	Depth of Test Interval (ft)	Current Screen/ Perforation Interval (a) (ft)	Current Depth to Water (d) (ft)	Date of Test	Type of Hydrologic Test	Transmissivity (ftE+2/d)	Storage Coefficient	References	Comments
299-E18-1	329	315-329	308-329	317	08/03/88	Constant Discharge	700-800		Chamness et al. (1990)	
"	329	315-329	308-329	317	08/03/88	Recovery	700		Chamness et al. (1990)	
299-E18-2	329	316-329	308-329	318	11/04/88	Constant Discharge	2000		Chamness et al. (1990)	No Recovery Data
"	329	316-329	308-329	318	08/12/88	Constant Discharge	9000	0.01	Chamness et al. (1990)	299-E18-3 is Pumping Well; Poor Data
299-E18-3	330	316-330	309-330	319	08/12/88	Constant Discharge	6000		Chamness et al. (1990)	299-E18-2 and 299-E18-4 are Observation Wells
"	330	316-330	309-330	319	08/12/88	Recovery	3000		Chamness et al. (1990)	299-E18-2 and 299-E18-4 are Observation Wells
299-E24-19	301	285-301	280-301	290	10/02/89	Slug Withdrawal	1600-1800		Newcomer et al. (1990)	2 Withdrawal Tests Conducted
299-E24-20	300	282-300	280-300	282	04/22/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E25-22	295	268-295	265-295	271	08/31/87	Constant Discharge	--		DOE (1988)	Data Not Analyzed
"	295	268-295	265-295	271	08/31/87-09/01/87	Recovery	100,000-200,000		DOE (1988)	
299-E25-32	329	265-305*	319-329	266	12/87	Constant Discharge	--		DOE (1988)	Data Not Analyzed
299-E25-33	282	285-319*	262-282	246	02/88	Constant Discharge	--		DOE (1988)	Data Not Analyzed
299-E25-34	272	255-272*	252-272	259	08/08/88	Step Drawdown	--		PNL Files	Data Not Analyzed for Transmissivity
"	272	255-272*	252-272	259	08/08/88	Constant Discharge and Recovery	>250,000		PNL Files	Well Not Stressed Sufficiently; 299-E25-28 is Observation Well
299-E25-35	281	264-283*	260-281	271	06/17/88	Constant Discharge and Recovery	>80,000		PNL Files	Well Not Stressed Sufficiently
299-E25-39	278	262-278	258-278	262	10/30/90	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E25-40	273	257-273	252-273	262	09/29/89	Slug Withdrawal	1000-1200		Newcomer et al. (1990)	2 Withdrawal Tests Conducted
299-E25-41	276	262-276	255-276	268	09/29/89	Slug Withdrawal	290-330		Newcomer et al. (1990)	2 Withdrawal Tests Conducted
"	276	262-276	255-276	268	09/29/89	Slug Injection	1100-2500		Newcomer et al. (1990)	2 Injection Tests Conducted
299-E25-42	290	277-290	270-290	277	10/04/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E25-43	260	243-260	239-260	243	10/10/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E26-8	246	228-246 (b)	326-396	196	03/23/82	Constant Discharge	6.5		Graham (1984)	
299-E26-9	201	195-201	190-201	199	08/13/90	Slug Withdrawal	2500		PNL Files	Data in Doremus and Pearson (1990)
299-E26-11	206	200-206	200-206	194	08/28/90	Slug Withdrawal	120		PNL Files	Data in Doremus and Pearson (1990)
299-E26-12	239	223-239	218-239	223	10/11/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E26-13	213	197-213	192-213	197	10/15/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E27-8	246	247-257 (b)	226-246	235	08/19/87	Constant Discharge	>68,000		Last et al. (1989)	Well Not Stressed Sufficiently
299-E27-9	239	234-244 (b)	219-239	226	08/15/87	Recovery	35,000		Last et al. (1989)	
299-E27-10	233	230-240 (b)	213-233	221	08/11/87	Recovery	35,000		Last et al. (1989)	
299-E27-13	275	261-275	254-275	266	10/20/89	Slug Withdrawal	2500-5700		Newcomer et al. (1990)	2 Withdrawal Tests Conducted
299-E27-14	267	250-267	246-267	255	10/20/89	Slug Withdrawal	2400-2900		Newcomer et al. (1990)	3 Withdrawal Tests Conducted
299-E27-15	261	245-261	241-261	250	10/19/89	Slug Withdrawal	5600		Newcomer et al. (1990)	2 Withdrawal Tests Conducted
299-E27-17	245	228-245	223-245	228	11/18/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E28-15	?	?	?	298	03/19/68	Step Drawdown	135,000		Graham (1981)	Two Adjacent Observation Wells
299-E28-27	290	291-301 (b)	270-290	277	09/29/87	Constant Discharge	>48,000		Last et al. (1989)	Well Not Stressed Sufficiently
299-E32-4	298	298-308 (b)	278-298	283	09/21/87	Constant Discharge	>9500		Last et al. (1989)	Well Not Stressed Sufficiently
299-E32-5	292	275-292	271-292	279	11/06/89	Slug Withdrawal	10,000		Borghese et al. (1990)	3 Withdrawal Tests Conducted

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299-E32-6	277	261-277	255-277	261	10/03/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E32-9	253	238-253	231-253	238	10/01/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E33-12	414	232-290? (OH)	305-385	219	05/11/82	Constant Discharge	130		Graham (1984)	
299-E33-28	276	268-278 (b)	256-276	261	10/21/87	Constant Discharge	>53,000		Last et al. (1989)	Well Not Stressed Sufficiently
299-E33-29	283	280-290 (b)	263-283	271	09/17/87	Constant Discharge	>51,000		Last et al. (1989)	Well Not Stressed Sufficiently
299-E33-30	275	267-277 (b)	255-275	260	09/24/87	Constant Discharge	>56,000		Last et al. (1989)	Well Not Stressed Sufficiently
299-E33-33	248	232-248	227-248	237	09/27/89	Slug Withdrawal	5400		Newcomer et al. (1990)	
299-E33-42	260	247-260	239-260	247	11/14/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E33-43	271	256-271	250-271	256	11/13/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E34-2	240	230-240 (b)	220-240	227	08/07/87	Constant Discharge	85,000		Last et al. (1989)	Well Not Stressed Sufficiently
"	240	230-240 (b)	220-240	227	08/07/87	Recovery	114,000		Last et al. (1989)	Well Not Stressed Sufficiently
299-E34-3	213	204-214 (b)	193-213	208	08/05/87	Constant Discharge	14,000		Last et al. (1989)	Well Not Stressed Sufficiently
"	213	204-214 (b)	193-213	208	08/05/87	Recovery	14,000		Last et al. (1989)	Well Not Stressed Sufficiently
299-E34-7	204	195-204	194-204	201	10/05/89	Slug Withdrawal	700-750		Borghese et al. (1990)	2 Withdrawal Tests Conducted
299-E34-9	234	225-234	213-234	225	11/15/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E34-10	247	237-247	225-247	237	11/16/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
299-E35-2	201	194-201	191-201	198	08/13/90	Slug Withdrawal	130		PNL Files	Data in Doremus and Pearson (1990)
699-28-40Q	--	340-350	--	--	04/20/70	Recovery	5		Brown and Steele (1970); Deju (1974)	Sand Fill in Well; 699-28-40P is Pumping Well
699-31-53A	340	303-423	301-423	302	04/22-23/59	Constant Discharge	11,200	0.06	Deju (1974); Graham (1981)	Graham (1981) Reported an Average Transmissivity of 14,000 ftE+2/d
"	340	303-423	301-423	302	04/22-23/59	Constant Discharge	14,900	0.38 (g)	PNL Files	Data Reanalyzed
699-31-53B	394	303-423*	307-430	303	04/23/59	Step Drawdown	--		PNL Files	2 Tests Conducted; Data Not Analyzed
"	394	303-423*	307-430	303	04/22-23/59	Recovery	21,000		Deju (1974); Graham (1981)	Graham (1981) Reported an Average Transmissivity of 14,000 ftE+2/d
"	394	303-423*	307-430	303	04/22-23/59	Recovery	14,200		PNL Files	Data Reanalyzed
699-33-56	440	317-440*	315-409	313	11/25/58	Recovery	21,000		Bierschenk (1959); Kipp and Mudd (1974)	
"	440	317-440*	315-409	313	11/25/58	Recovery	22,000		Deju (1974)	
699-36-61A	363	358-389*	330-389	340	07/22/69	Step Drawdown and Recovery	2800		Deju (1974), Graham (1981)	Average Transmissivity
"	363	358-389*	330-389	340	07/22/69	Step Drawdown	970		Kipp & Mudd (1973); Graham (1981)	
"	363	358-389*	330-389	340	07/22/69	Step Drawdown	730		PNL Files	Data Reanalyzed
"	363	358-389*	330-389	340	07/22/69	Step Test Recovery	40,000		Kipp & Mudd (1973)	
"	363	358-389*	330-389	340	07/22/69	Step Test Recovery	4300		PNL Files	Data Reanalyzed
699-36-61B	363	339-505?	330-505	340	07/22/69	Step Drawdown	400	0.05	Kipp & Mudd (1973); Graham (1981)	Pumping Well is 699-36-61A
"	363	339-505?	330-505	340	07/22/69	Step Drawdown	5000		PNL Files	Data Reanalyzed
"	363	339-505?	330-505	340	07/22/69	Step Test Recovery	53,000		Kipp & Mudd (1973)	Pumping Well is 699-36-61A
"	363	339-505?	330-505	340	07/22/69	Step Test Recovery	4200		PNL Files	Data Reanalyzed
699-40-39	212	202-212	202-212	128	08/04/89	Slug Injection	4.5		Borghese & Goodwin (1989)	

TABLE 1. UNCONFINED AQUIFER HYDROLOGIC TEST DATA FOR THE 200 EAST AREA

Hanford Well Designation	Current Depth (a) (ft)	Depth of Test Interval (ft)	Current Screen/ Perforation Interval (a) (ft)	Current Depth to Water (d) (ft)	Date of Test	Type of Hydrologic Test	Transmissivity (ftE+2/d)	Storage Coefficient	References	Comments
699-40-40A	226	215-226	215-226	130	11/22/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
699-41-40	174	147-158 (OH)	164-174	130	05/26/89	Slug Test Equivalent (e)	0.01		Borghese & Goodwin (1989)	Confined Aquifer Conditions
"	174	164-174	164-174	130	08/07/89	Slug Injection	2.0-3.4		Borghese & Goodwin (1989)	Confined Aquifer Conditions
699-42-39A	180	169-180	169-180	135	10/22/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
699-42-40A	173	139-171	139-171	123	01/18/82	Constant Discharge	310	0.017	Graham (1984)	Pumping Well is 699-42-40C
699-42-40B	150	130-150	130-150	124	01/18/82	Constant Discharge	360	0.0093	Graham (1984)	Pumping Well is 699-42-40C
699-42-41	155	143-155	134-155	143	10/16/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
699-42-42B	203	193-203	193-203	166	10/19/88	Constant Discharge	140		PNL Files; B Pond Characterization Report	Poor Test Data from Observation Well 699-43-42J; Poor Recovery Test (No Check Valve)
699-43-40	135	120-134	113-134	120	11/26/91	Slug Injection and Withdrawal	--		WHC Files	Analyses Pending
699-43-41E	148	138-148	138-148	129	06/29-30/89	Slug Injection	15-19		Borghese & Goodwin (1989)	Confined Aquifer Conditions
699-43-41F	176	166-176	166-176	129	05/30/89	Slug Injection	34-45		Borghese & Goodwin (1989)	Confined Aquifer Conditions
699-43-43	177	162-180*	157-177	164	09/09/88	Constant Discharge	37,000		PNL Files; B Pond Characterization Report	Poor Recovery Test (No Check Valve)
699-44-42	172	155-174*	151-172	158	09/22/88	Constant Discharge	76,000		PNL Files; B Pond Characterization Report	Poor Recovery Test (No Check Valve)
699-44-43B	176	173-176 (OH)	156-176	164	05/19/89	Slug Injection	1.2-3.3		Borghese & Goodwin (1989)	
"	176	173-176 (OH)	156-176	164	05/19/89	Slug Withdrawal	0.9-4.3		Borghese & Goodwin (1989)	
"	176	161-176	156-176	164	07/05/89	Slug Injection	5.6-71		Borghese & Goodwin (1989)	
699-47-35A	88	63-99*	75-87	62	06/14-16/79	Constant Discharge	T(early)=530 T(late)=560	0.002 0.15 (g)	Graham (1981)	Pumping Well is 699-47-35C
699-47-35B	108	75-95*	77-97	63	06/14-16/79	Constant Discharge	370-440	0.29-0.48(f)	PNL Files	Pumping Well is 699-47-35C
699-47-35C	100	68-98	65-98	63	06/13/79	Step Drawdown	--		PNL Files	Data Not Analyzed for Transmissivity
699-47-60	278	250-277*	235-277	247	09/03/69	Constant Discharge	2700		PNL Files; Deju (1974)	Deju (1974) Reported an Average Transmissivity of 3300 ftE+2/d
"	278	250-277*	235-277	247	09/03/69	Recovery	1000-3400		Kipp and Mudd (1973); Deju (1974)	Deju (1974) Reported an Average Transmissivity of 3300 ftE+2/d
699-52-54	167	152-167	157-167	162	01/21/91	Slug Test	1150 (h)		WHC Files	
"	167	152-167	157-167	162	08/31/91	Constant Discharge	2000		WHC Files	
699-52-57	161	155-159	139-159	155	01/21/91	Slug Test	40 (h)		WHC Files	
"	161	155-159	139-159	155	08/01/91	Constant Discharge	120		WHC Files	
699-53-55C	221	172-221	197-221	172	01/09/92	Constant Discharge	70,000-90,000	0.4 (g)	WHC Files	
699-55-50A	50	45-100, 101-106 (c)*	40-100	42	09/27/56	Constant Discharge and Recovery	--		PNL Files	Data Not Analyzed; 699-55-50B is Pumping Well
"	50	45-100, 101-106 (c)*	40-100	42	02/27/57	Step Drawdown	--		Bierschenk (1959)	Data Not Analyzed for Transmissivity
"	50	45-100, 101-106 (c)*	40-100	42	03/06/57	Recovery	640,000		PNL Files	699-55-50B, 699-55-50C, and 699-55-50D are Observation Wells
"	50	45-100, 101-106 (c)*	40-100	42	10/01/56	Recovery	400,000	0.19 (g)	Bierschenk (1957)	699-55-50B is Pumping Well
"	50	45-100, 101-106 (c)*	40-100	42	10/01/56	Constant Discharge and Recovery	594,000 (f)		Deju (1974); Graham (1981)	699-55-50B is Pumping Well

TABLE 1. UNCONFINED AQUIFER HYDROLOGIC TEST DATA FOR THE 200 EAST AREA

Hanford Well Designation	Current Depth (a) (ft)	Depth of Test Interval (ft)	Current Screen/ Perforation Interval (a) (ft)	Current Depth to Water (d) (ft)	Date of Test	Type of Hydrologic Test	Transmissivity (ftE+2/d)	Storage Coefficient	References	Comments
699-55-50B	--	48-85	--	--	10/01/56	Constant Discharge and Recovery	594,000 (l)		Deju (1974); Graham (1981)	699-55-50A and 699-55-50C are Observation Wells
*	--	48-85	--	--	03/06/57	Recovery	--		PNL Files	Data Plotted, But Not Analyzed; 699-55-50A is Pumping Well
*	--	48-85	--	--	09/28/56	Step Drawdown	--		Bierschenk (1959)	Data Not Analyzed for Transmissivity
*	--	48-85	--	--	09/27/56	Constant Discharge and Recovery	--		PNL Files	Data Not Analyzed; 699-55-50A and 699-55-50D are Observation Wells
699-55-50C	56	37-60	35-59	42	10/01/56	Recovery	400,000	0.21 (g)	Bierschenk (1957)	699-50-55B is Pumping Well
*	56	37-60	35-59	42	10/01/56	Constant Discharge and Recovery	594,000 (l)		Deju (1974); Graham (1981)	699-55-50B is Pumping Well
*	56	37-60	35-59	42	03/06/57	Recovery	670,000		PNL Files	699-55-50A is Pumping Well
699-55-50D	92	43-90	33-90	38	09/27/56	Constant Discharge and Recovery	--		PNL Files	699-55-50B is Pumping Well
*	92	43-90	33-90	38	10/01/56	Recovery	400,000	0.21 (g)	Bierschenk (1957)	699-55-50B is Pumping Well
*	92	43-90	33-90	38	03/06/57	Recovery	--		PNL Files	Data Plotted, But Not Analyzed; 699-55-50A is Pumping Well
699-55-60A	236	190-230	190-230	170	12/30/43	Constant Discharge	64,000		Bierschenk (1959)	Specific Capacity Data
699-55-60B	288	230-285	230-285	171	08/16/44	Constant Discharge	320,000		Bierschenk (1959)	Specific Capacity Data
*	288	230-285	230-285	171	08/16/44	Constant Discharge	400,000		Newcombe et al. (1972)	Specific Capacity Data
699-56-53	270	85-100*	190-270	31	01/11/82	Constant Discharge	240		Graham (1984)	
699-60-57	154	142-155*	55-142/ 142-155	61	08/16/78	Constant Discharge	9800		Graham (1981)	Test Interval Open to Basalt
*	154	142-155*	55-142/ 142-155	61	08/16/78	Constant Discharge	10,600-16,400		PNL Files	Test Interval Open to Basalt

* Well Recompleted Since Test Was Conducted
(a) Taken From Hanford Ground Water Data Base
(b) Temporary Screen Installed Prior to Final Well Completion
(c) Interval Completed in Basalt
(d) Measured or Estimated As of June, 1991
(e) Water Level Monitored After Confining Unit Encountered During Drilling
(l) Average Transmissivity
(g) Specific Yield
(h) Calculated by multiplying hydraulic conductivity by the test interval
OH = Open Hole

TABLE 2. Other Unconfined Aquifer Hydrologic Test Data for the 200-East Area

Hanford Well Designation	Current Depth (a) (ft)	Depth of Test Interval (ft)	Current Screen/ Perforation Interval (a) (ft)	Current Depth to Water (c) (ft)	Date of Test	Type of Hydrologic Test	References	Comments
299-E17-20	324	324-344*	303-324	316	09/20/88	Step Drawdown	PNL Files	Poor Test
"	324	324-344*	303-324	316	09/20/88	Constant Discharge and Recovery	PNL Files	Well Not Stressed Sufficiently; Transmissivity Probably >100,000 ft^2/d
299-E18-4	328	312-328	308-328	318	08/12/88	Constant Discharge	Chamness et al. (1990)	Little Drawdown Observed; 299-E18-3 is Pumping Well
"	328	312-328	308-328	318	11/02/88	Constant Discharge	Chamness et al. (1990)	Well Not Stressed Sufficiently
299-E24-18	329	313-329	308-329	316	08/10/88	Step Drawdown	PNL Files	Poor Test
"	329	313-329	308-329	316	08/18/88	Constant Discharge and Recovery	PNL Files	Well Not Stressed Sufficiently
299-E24-19	301	285-301	280-301	290	10/02/89	Slug Injection	Newcomer et al. (1990)	Data Not Analyzable; 2 Slug Injection Tests Conducted
299-E25-22	295	268-295	265-295	271	08/28/87	Step Drawdown	DOE (1988)	Well Not Stressed Sufficiently
299-E25-28	335	320-340	320-340	252	03/87	Constant Discharge	DOE (1988)	Well Not Stressed Sufficiently
299-E25-40	273	257-273	252-273	262	09/29/89	Slug Injection	Newcomer et al. (1990)	2 Injection Tests Conducted; Data Not Analyzable
299-E26-6	282	250-290	250-290	241	11/11/60	Step Drawdown	PNL Files	3-Hr Test; No Data Found
"	282	250-290	250-290	241	11/14/60	Constant Discharge	PNL Files	8-Hr Test at 200 gpm; No Data Found
299-E26-10	206	193-206	190-206	197	08/29/90	Slug Withdrawal	Doremus and Pearson (1990)	2 Tests Conducted; Rapid Recovery
299-E27-11	251	236-251	230-251	240	09/27/89	Slug Injection	Borghese (1990)	Data Not Analyzable
"	251	236-251	230-251	240	09/27/89	Slug Withdrawal	Borghese (1990)	Data Not Analyzable
299-E27-12	271	253-271	251-271	258	10/19/89	Slug Injection	Newcomer et al. (1990)	Data Not Analyzable; 2 Tests Conducted
"	271	253-271	251-271	258	0/19-20/8	Slug Withdrawal	Newcomer et al. (1990)	Data Not Analyzable; 3 Tests Conducted
299-E27-15	261	245-261	241-261	250	10/19/89	Slug Injection	Newcomer et al. (1990)	Data Not Analyzable; 2 Tests Conducted
299-E28-11	347	?	?	297	07/16/62	Step Drawdown	PNL Files	Lack of Drawdown
"	347	?	?	297	7/20-21/6	Constant Discharge and Recovery	PNL Files	Lack of Drawdown; Insufficient Data
299-E32-2	278	279-289 (b)	258-278	267	09/04/87	Step Drawdown	Last (1989)	Well Not Stressed Sufficiently
"	278	279-289 (b)	258-278	267	09/08/87	Constant Discharge	Last (1989)	Well Not Stressed Sufficiently
299-E32-3	286	291-301 (b)	266-286	273	09/01/87	Step Drawdown	Last (1989)	Well Not Stressed Sufficiently
"	286	291-301 (b)	266-286	273	09/02/87	Constant Discharge	Last (1989)	Well Not Stressed Sufficiently
299-E33-33	248	232-248	227-248	237	09/27/89	Slug Injection	Newcomer et al. (1990)	Data Not Analyzable; 2 Tests Conducted
299-E33-29	283	280-290 (b)	263-283	271	09/17/87	Step Drawdown	Last (1989)	Well Not Stressed Sufficiently
299-E33-30	275	267-277 (b)	255-275	260	09/23/87	Step Drawdown	Last (1989)	Well Not Stressed Sufficiently
299-E34-2	240	230-240 (b)	220-240	227	08/07/87	Step Drawdown	Last (1989)	Well Not Stressed Sufficiently
299-E34-5	191	181-191 (b)	171-191	187	07/20/87	Step Drawdown	Last (1989)	Well Not Stressed Sufficiently
"	191	181-191 (b)	171-191	187	07/21/87	Constant Discharge	Last (1989)	Well Not Stressed Sufficiently
699-33-56	440	317-440*	315-409	313	11/24/58	Step Drawdown	PNL Files	Poor Test Data
"	440	317-440*	315-409	313	11/25/58	Constant Discharge	PNL Files	Poor Test Data
699-36-46Q	452	440-450	440-450	301	04/21/70	Constant Discharge	Brown and Steele (1970)	Poor Test; 699-36-46P is Pumping Well
699-39-39	180	129-200*	110-194	124	07/16/74	Constant Discharge	PNL Files	Well Went Dry During Test
699-40-39	212	197-199 (OH	202-212	128	05/02/89	Slug Injection	Borghese & Goodwin (1989); B Pond Characterization Report	Confined Aquifer Conditions; Insufficient Data
699-40-62	384	359-374*	335-374	342	12/11/69	Constant Discharge and Recovery	Kipp and Mudd (1973)	Poor Test Data
699-53-55C	221	172-221	197-221	172		Slug Test	WHC Files	Poor Test Data

TABLE 2. Other Unconfined Aquifer Hydrologic Test Data for the 200-East Area

Hanford Well Designation	Current Depth (a) (ft)	Depth of Test Interval (ft)	Current Screen/ Perforation Interval (a) (ft)	Current Depth to Water (c) (ft)	Date of Test	Type of Hydrologic Test	References	Comments
699-60-57	154	142-155*	55-142/ 142-155	61	08/16/78	Recovery	PNL Files	Poor Test Data

* Well Recompleted Since Test Was Conducted
(a) Taken From Hanford Ground Water Data Base
(b) Temporary Screen Installed Prior to Final Well Completion
(c) Measured or Estimated As of June, 1991
OH = Open Hole

Data Quality

For Table 1, no attempt was made to objectively distinguish between good and poor data quality. However, after briefly reviewing the data, some initial conclusions can be made regarding the quality of the data and analytical results.

Many constant discharge pumping and slug displacement tests conducted in the Hanford or undifferentiated Ringold/Hanford formation did not stress the wells sufficiently and, consequently, may have some bearing on the values estimated for transmissivity. Data could not be analyzed for several of the tests. For the constant discharge tests, the wells could not be stressed sufficiently because of high aquifer transmissivity precluding adequate well test design.

The aquifer property values were taken from the references listed or from unpublished PNL files. Data from tests conducted in wells 699-31-53B, 699-36-61A, and 699-36-61B were re-analyzed by PNL several years ago, but not published. The analytical results of the re-analyses differ from the original analyses because of the difference in analytical methods used. No analyses were applied to any of the hydrologic test data during this inventory study.

Performance of slug displacement tests in highly-permeable zones may not have stressed wells 299-E27-13, 299-E27-14, 299-E27-15, 299-E32-5, and 299-E33-33 sufficiently and, consequently, may have some bearing on the values estimated for transmissivity. Also, some of the slug tests were conducted prior to well development.

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APPENDIX

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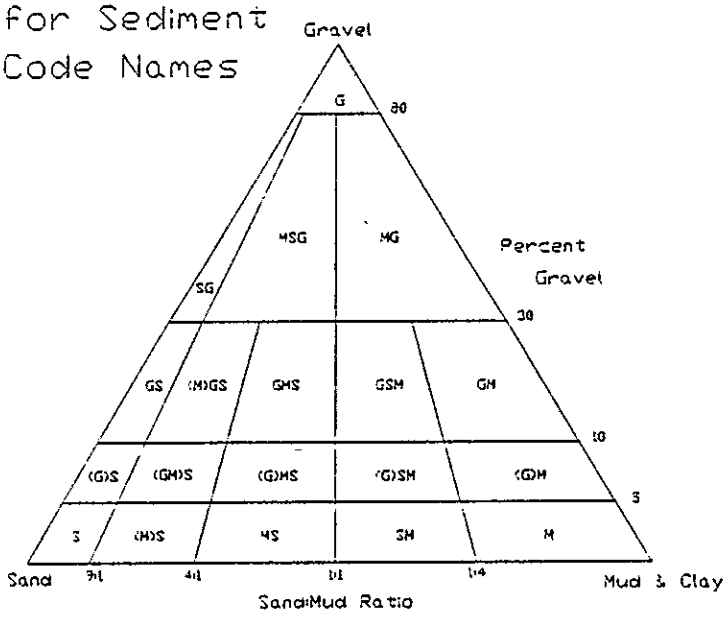
Lithology Classification Pattern Key

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

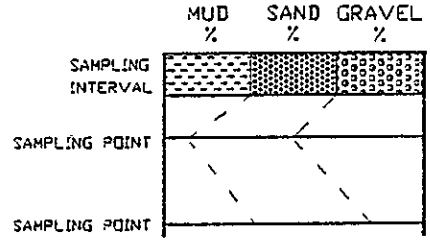
Ternary Diagram for Sediment Code Names



✳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	X		Other Method

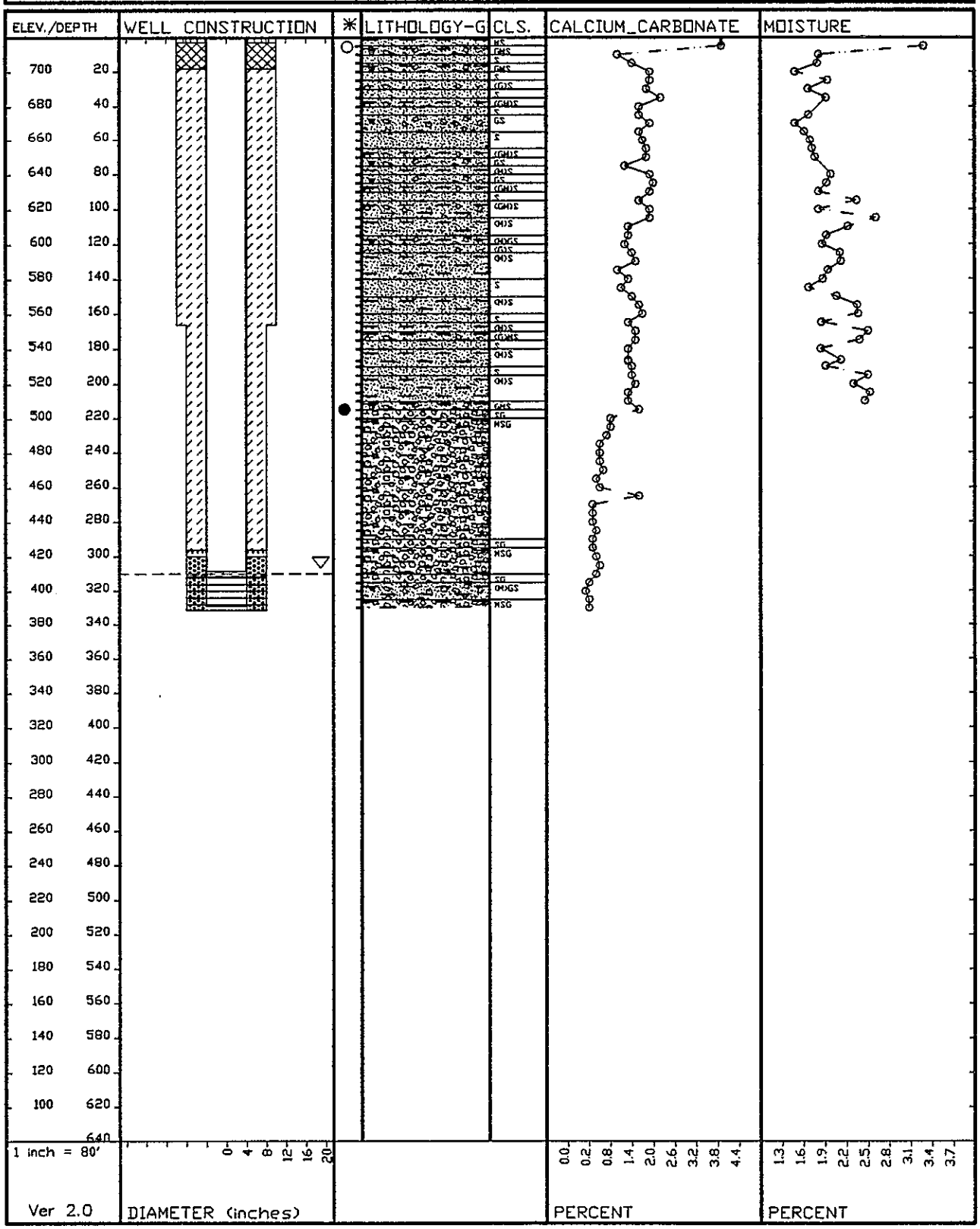
Mud/Sand/Gravel Column



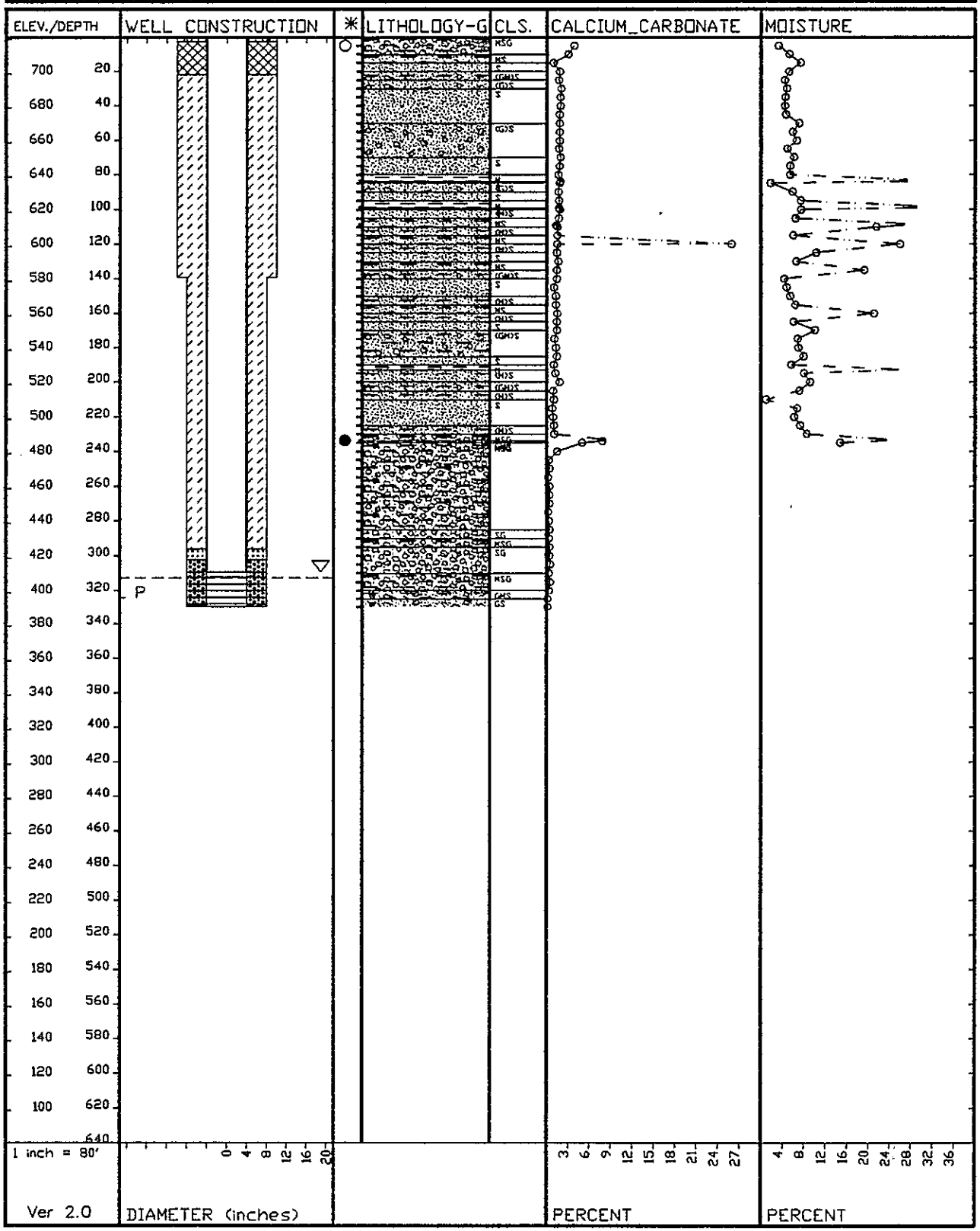
Well Construction Pattern Key

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		

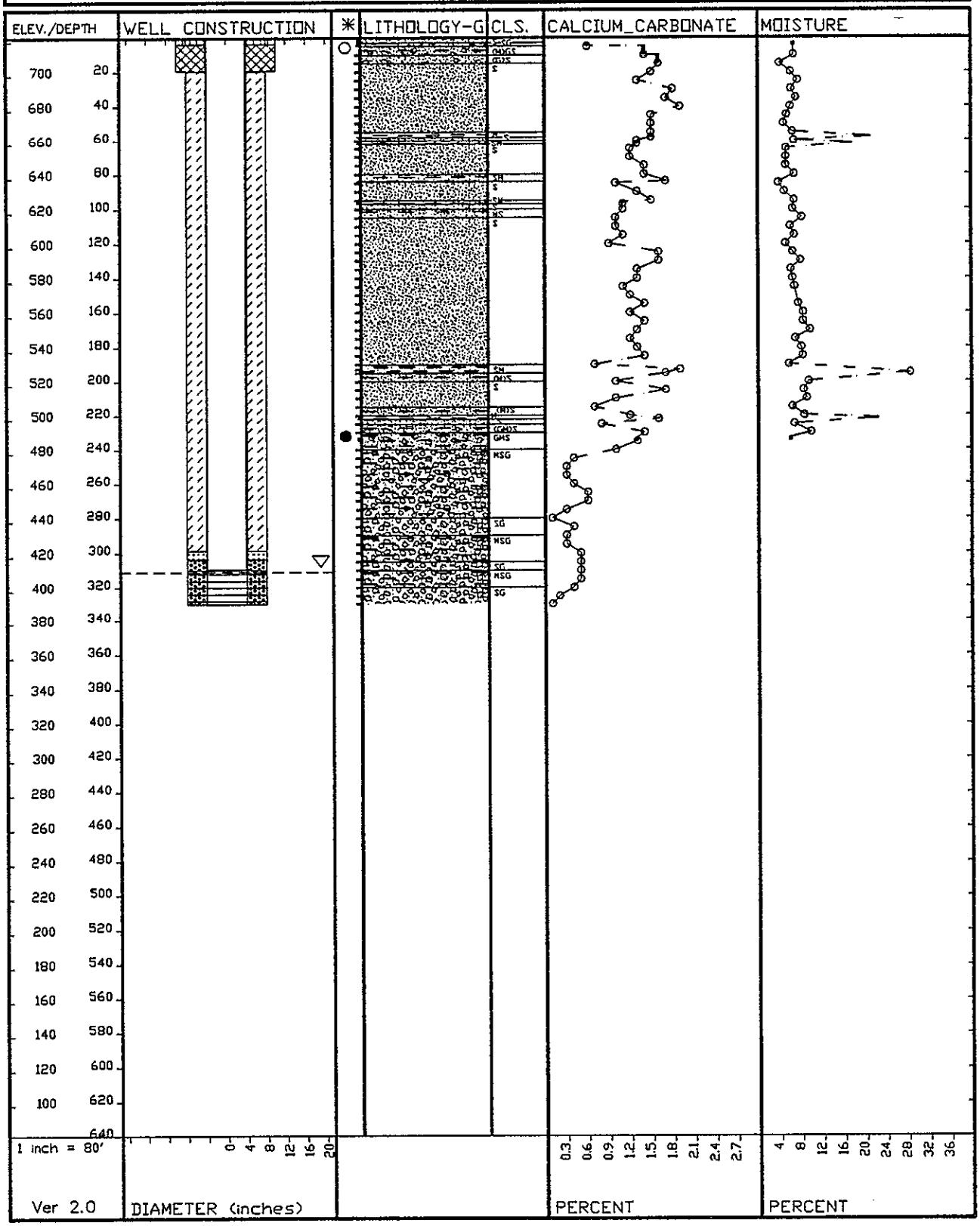
WELL NAME	299-E18-1	COMPLETION DATE	07/27/88
CASING ELEV.	720.24 Feet	INITIAL DEPTH TO WATER	309.67 ft
WELL DEPTH	329.04 Feet		
DRILL DEPTH	332.00 Feet		
COORDINATES N-S	38458.4 P		
E-W	-54458 P	PAGE	1 of 1



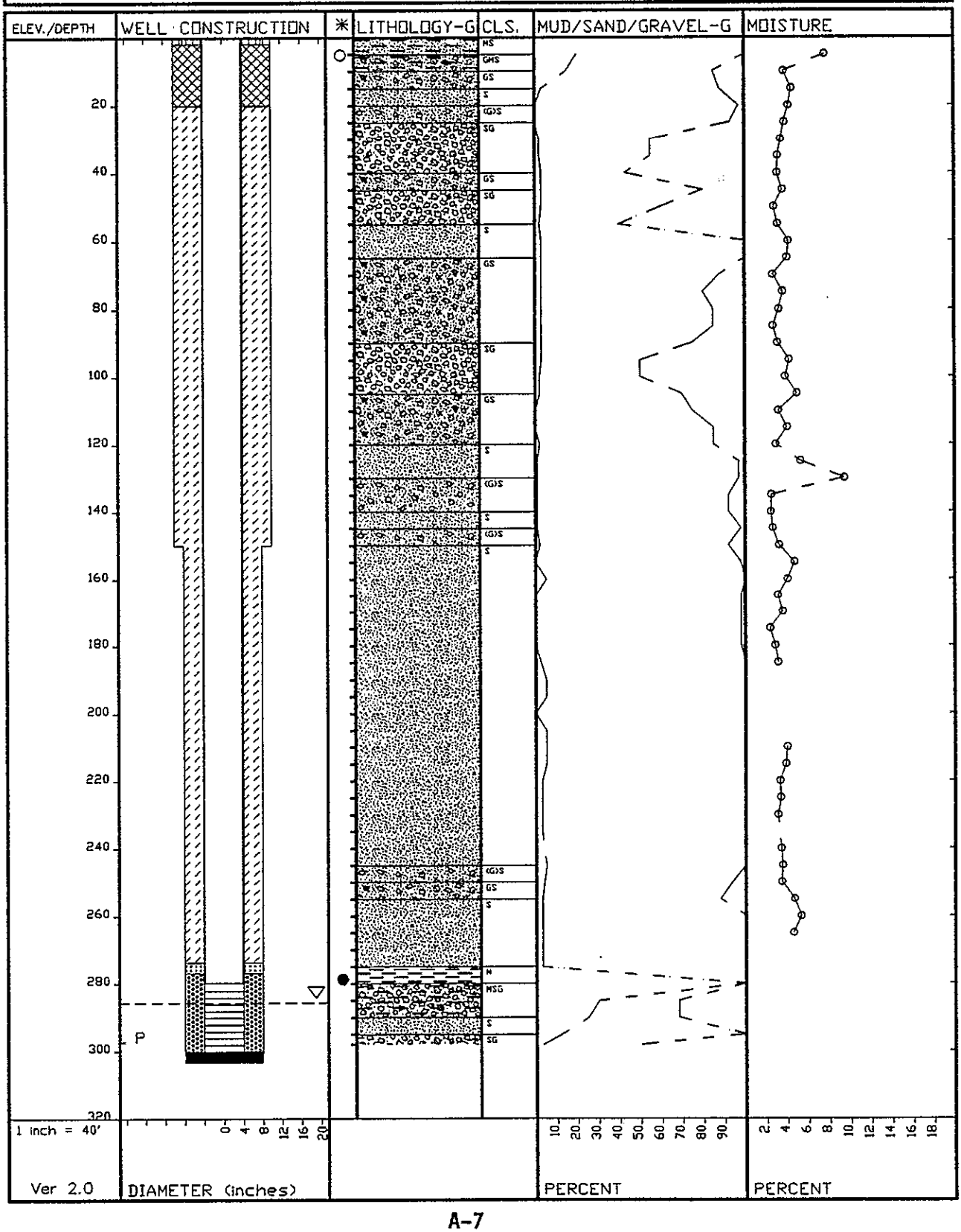
WELL NAME	299-E18-2	COMPLETION DATE	07/27/88
CASING ELEV.	721.21 Feet	INITIAL DEPTH TO WATER	312.45 ft
WELL DEPTH	329.66 Feet		
DRILL DEPTH	330.00 Feet		
COORDINATES N-S	38755.7 P		
E-W	-54143.2 P	PAGE	1 of 1



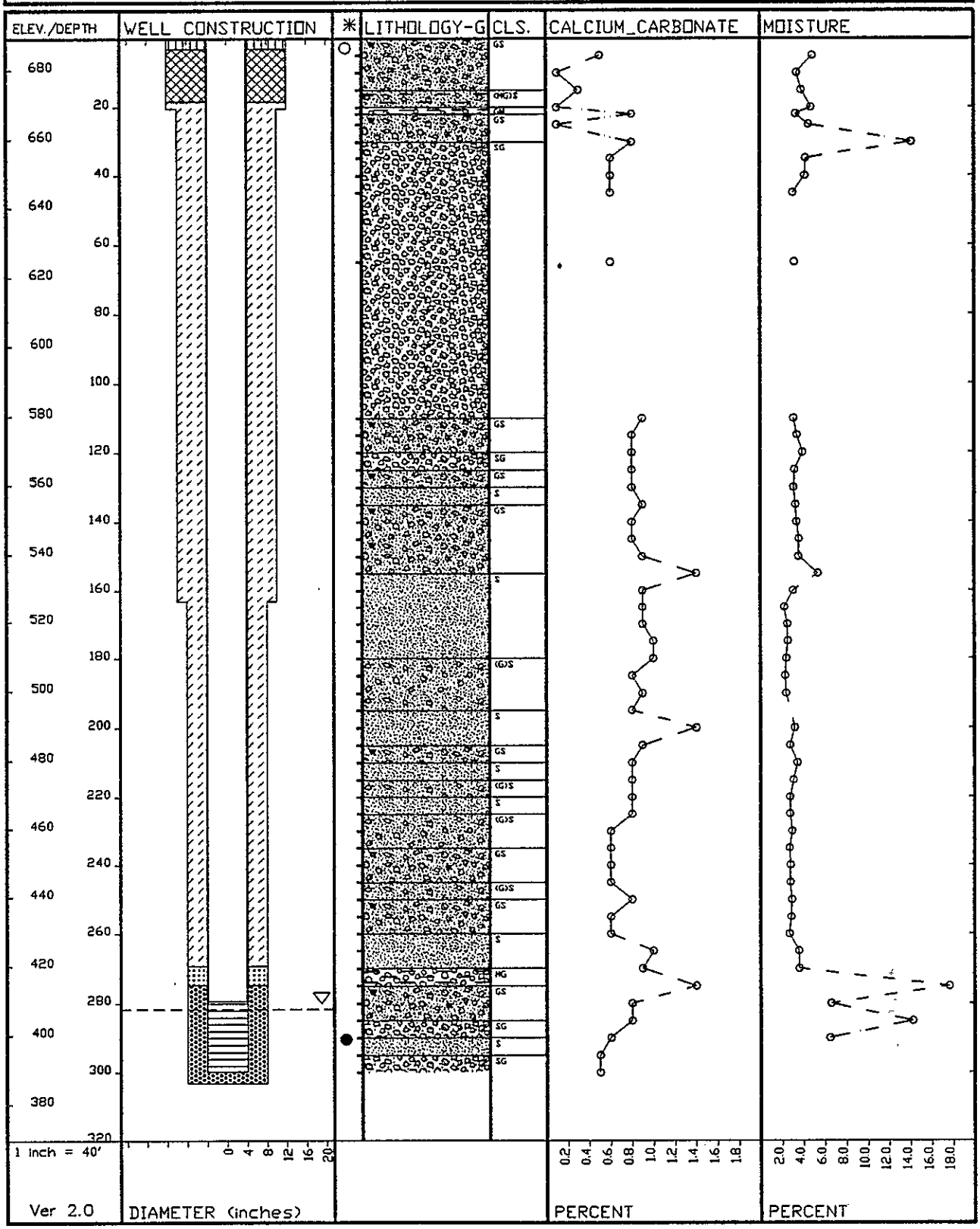
WELL NAME	299-E18-3	COMPLETION DATE	07/27/88
CASING ELEV.	722.04 Feet	INITIAL DEPTH TO WATER	311.0 ft
WELL DEPTH	330.00 Feet		
DRILL DEPTH	330.00 Feet		
COORDINATES N-S	38712.4 P		
E-W	-54022.8 P	PAGE	1 of 1



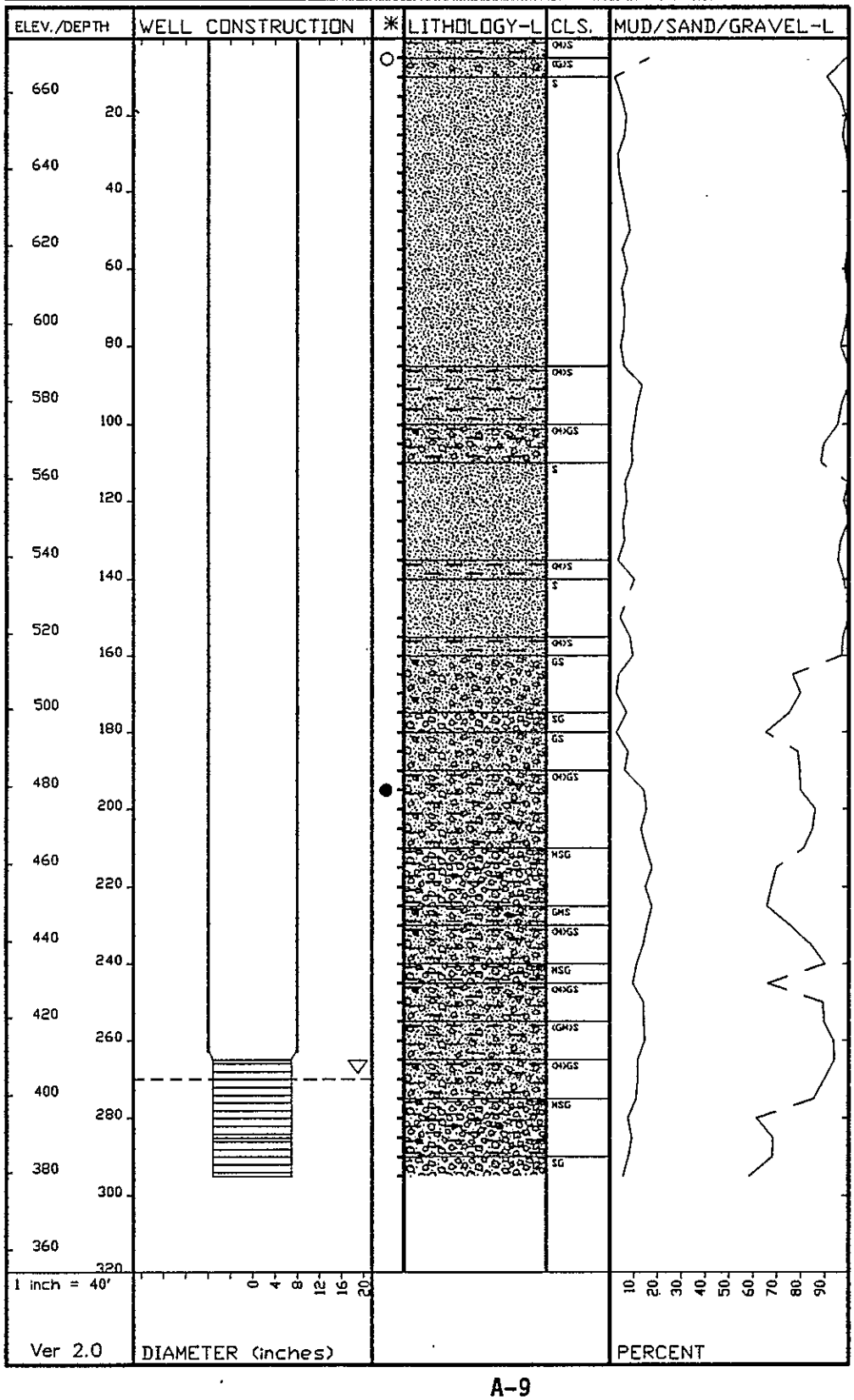
WELL NAME	299-E24-19	COMPLETION DATE	09/27/89
CASING ELEV.	693.65 Feet	INITIAL DEPTH TO WATER	285.6 ft
WELL DEPTH	300.68 Feet		
DRILL DEPTH	303.19 Feet		
COORDINATES N-S	41075.8 P		
E-W	47821.4 P	PAGE	1 of 1



WELL NAME	299-E24-20	COMPLETION DATE	03/14/91
CASING ELEV.	689.28 Feet	INITIAL DEPTH TO WATER	281.6 ft
WELL DEPTH	303.30 Feet		
DRILL DEPTH	303.80 Feet		
COORDINATES N-S	41226 P		
E-W	48038 P	PAGE	1 of 1



WELL NAME	299-E25-22	COMPLETION DATE	06/10/83
CASING ELEV.	674.02 Feet	INITIAL	
WELL DEPTH	295.00 Feet	DEPTH TO WATER	270.0 ft
DRILL DEPTH	295.00 Feet		
COORDINATES N-S	39776 P		
E-W	-45589 P	PAGE	1 of 1



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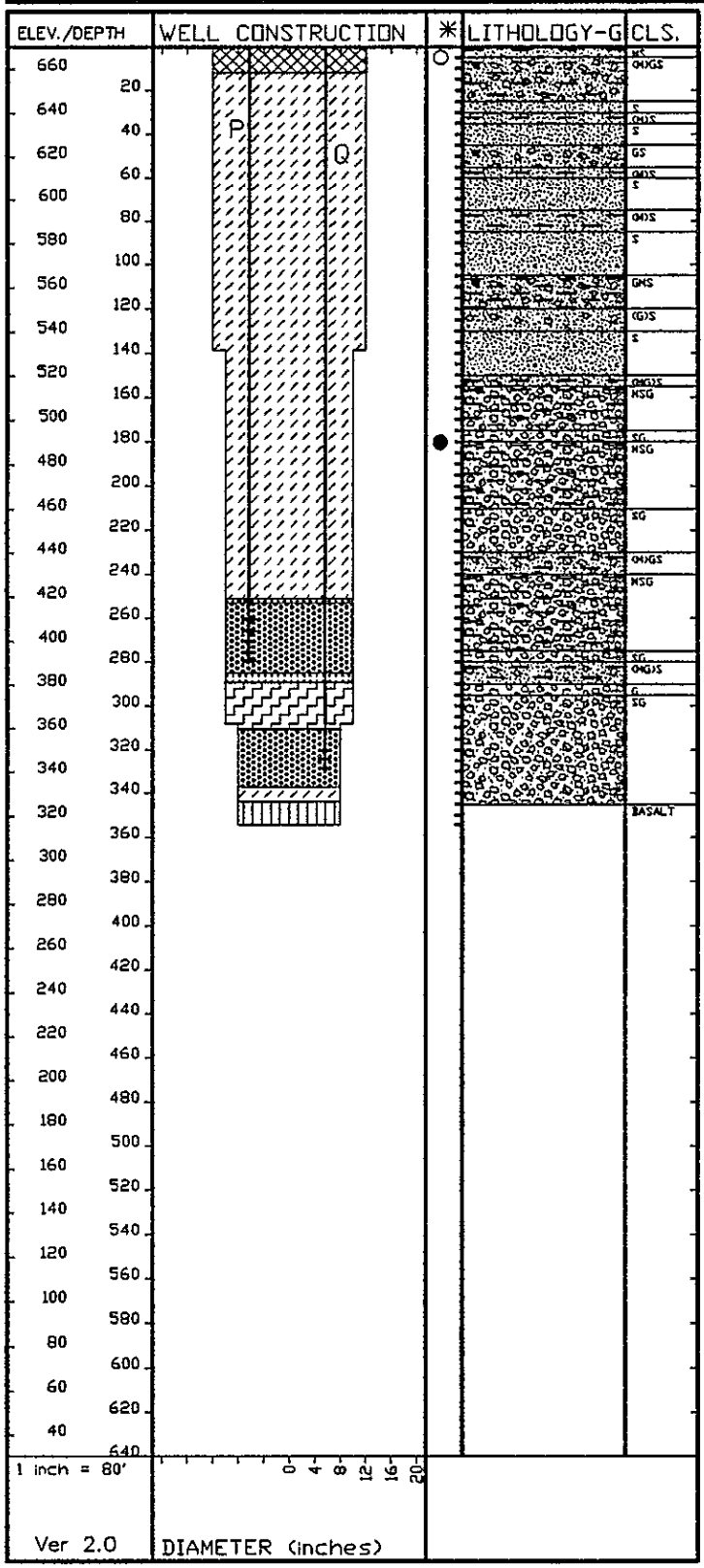
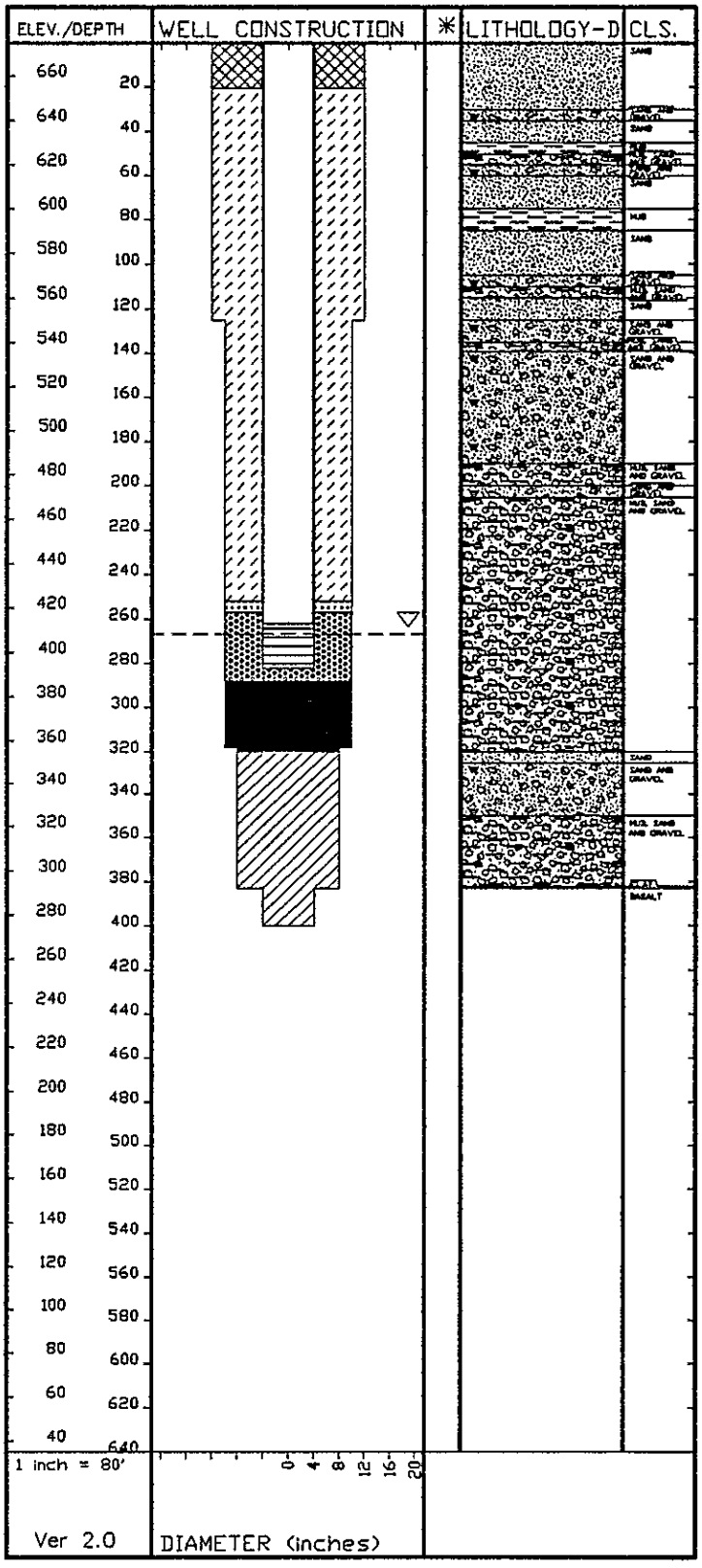
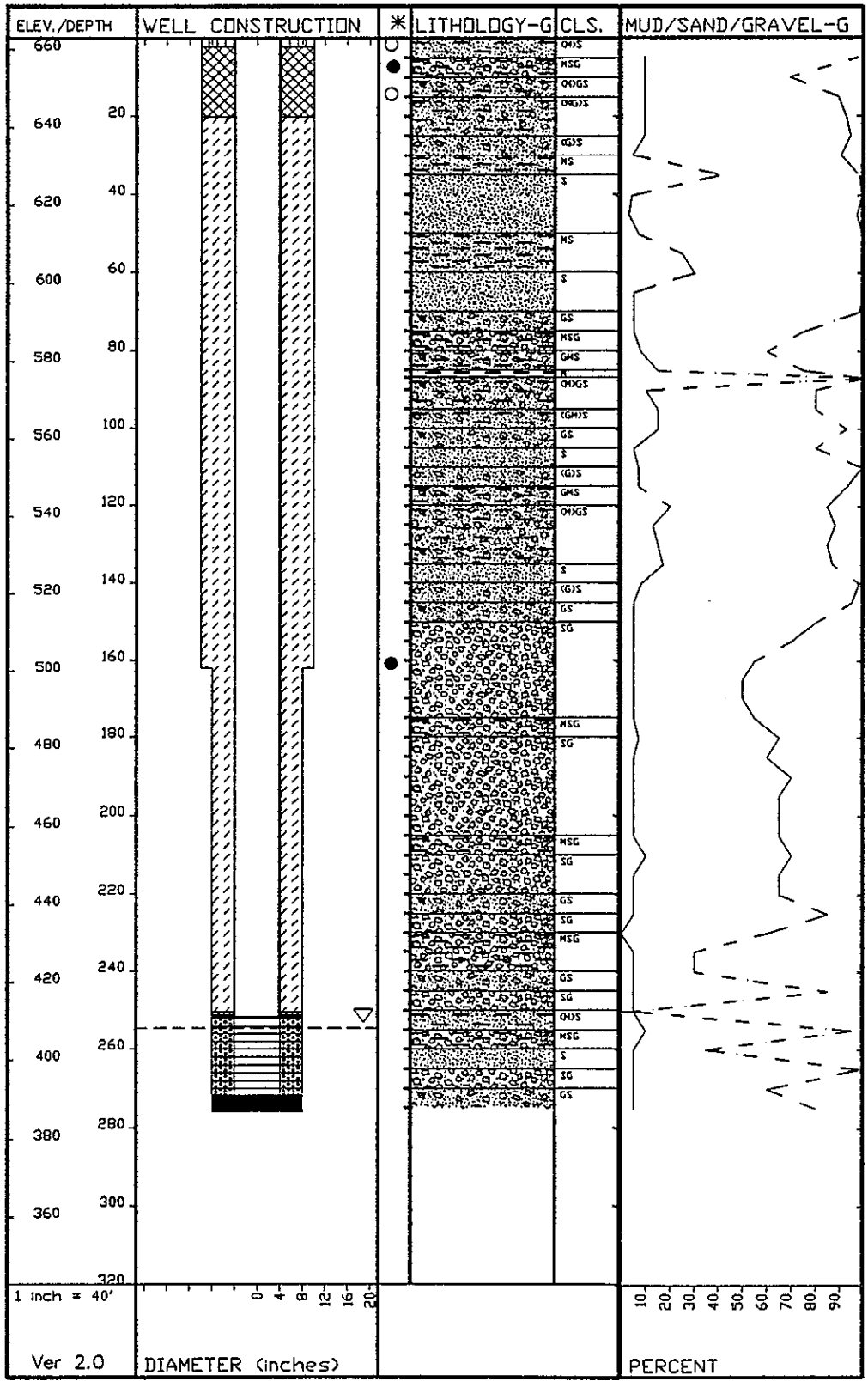
WELL NAME	299-E25-32	COMPLETION DATE	05/25/88
SURFACE ELEV.	670.38 Feet	INITIAL	
WELL DEPTH	Piezometers	DEPTH TO WATER	N/A
DRILL DEPTH	354.00 Feet		
COORDINATES N-S	41199.17 P		
E-W	-44325.6 P	PAGE	1 of 1



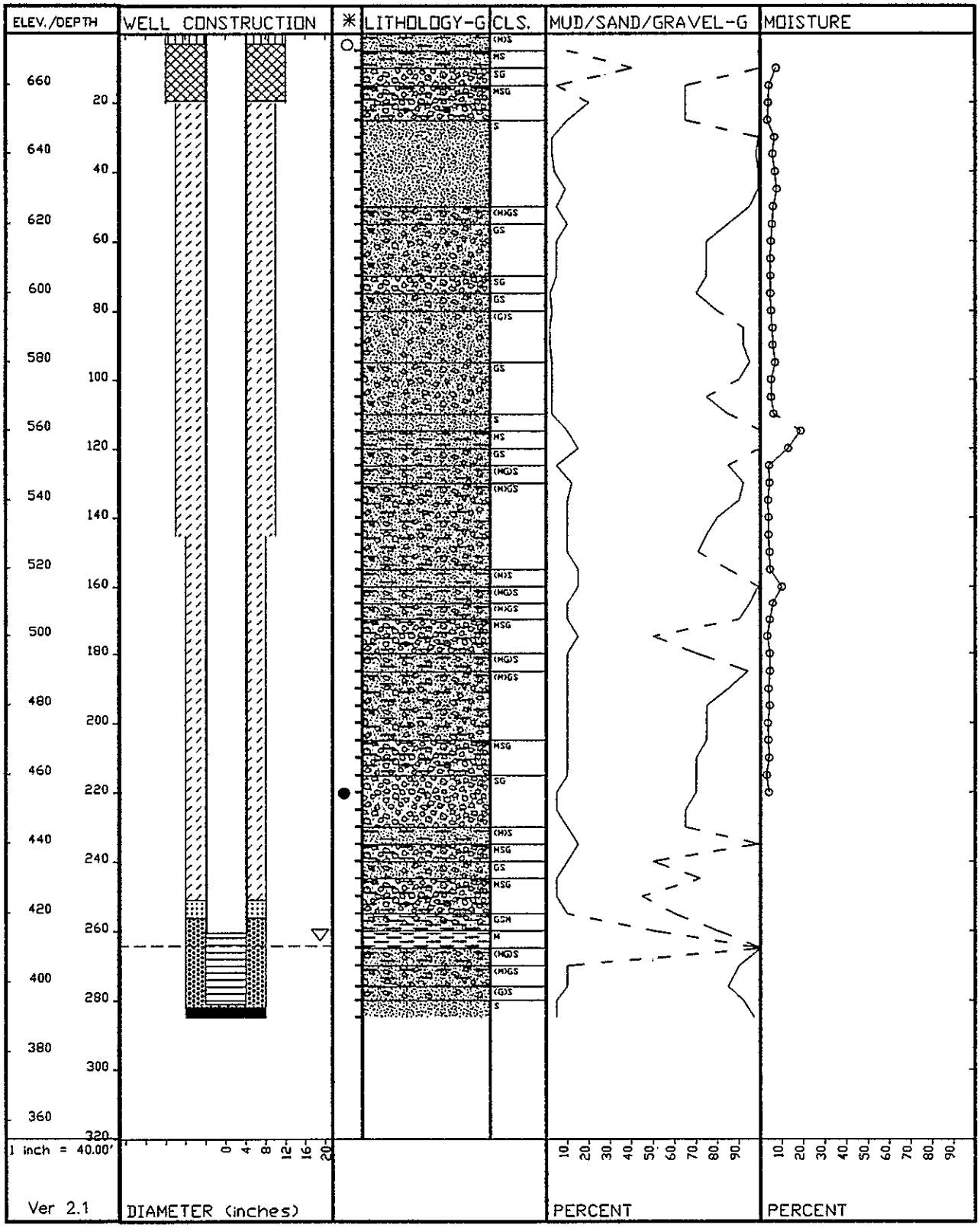
WELL NAME	299-E25-33	COMPLETION DATE	01/06/88
CASING ELEV.	674.97 Feet	INITIAL DEPTH TO WATER	266.5 ft
WELL DEPTH	282.00 Feet		
DRILL DEPTH	400.00 Feet		
COORDINATES N-S	40116.4 P		
E-W	-45609 P	PAGE	1 of 1



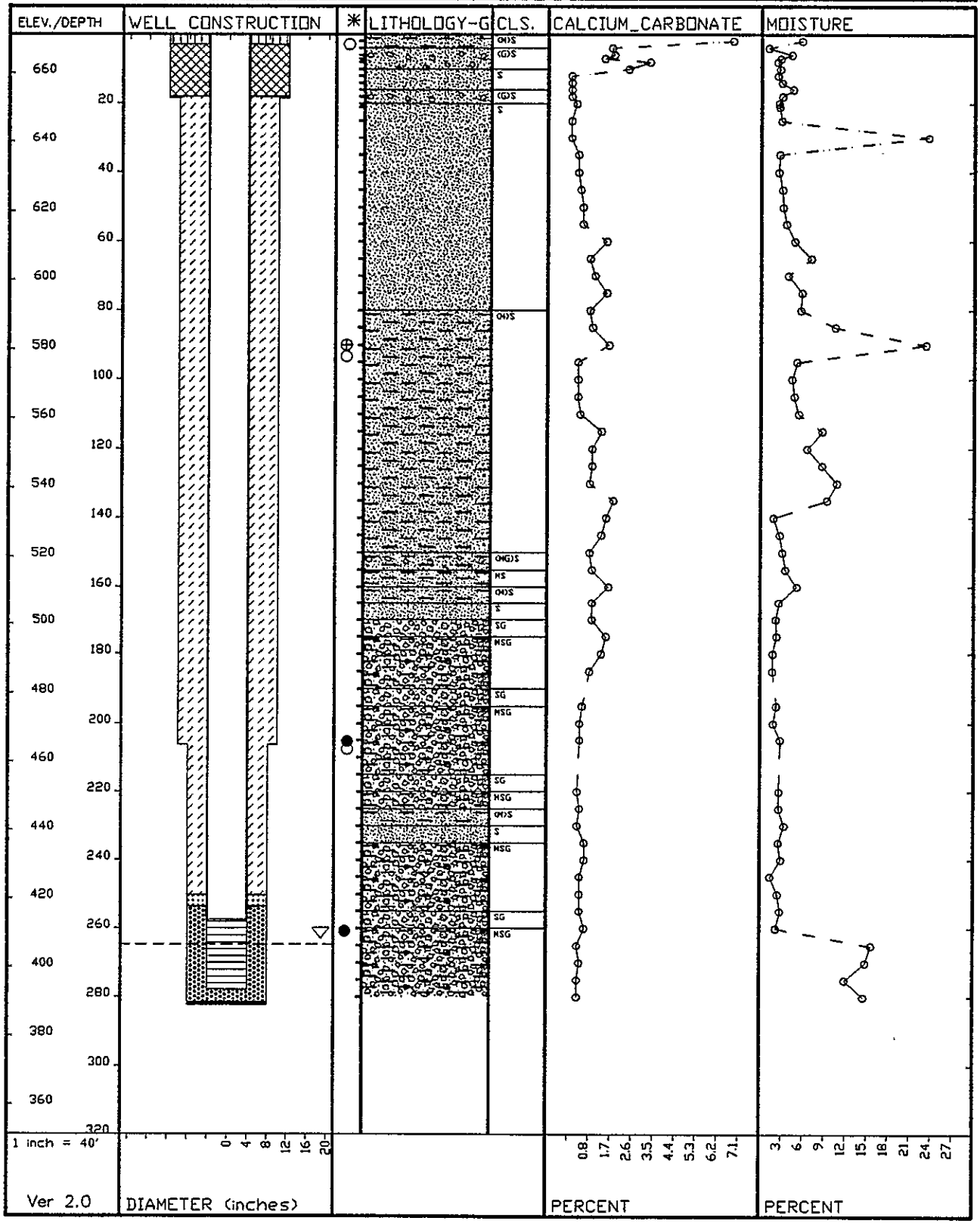
WELL NAME	299-E25-34	COMPLETION DATE	09/19/88
CASING ELEV.	662.87 Feet	INITIAL DEPTH TO WATER	254.5 ft
WELL DEPTH	271.59 Feet		
DRILL DEPTH	276.00 Feet		
COORDINATES N-S	41385.9 P		
E-W	-45516.85 P	PAGE	1 of 1



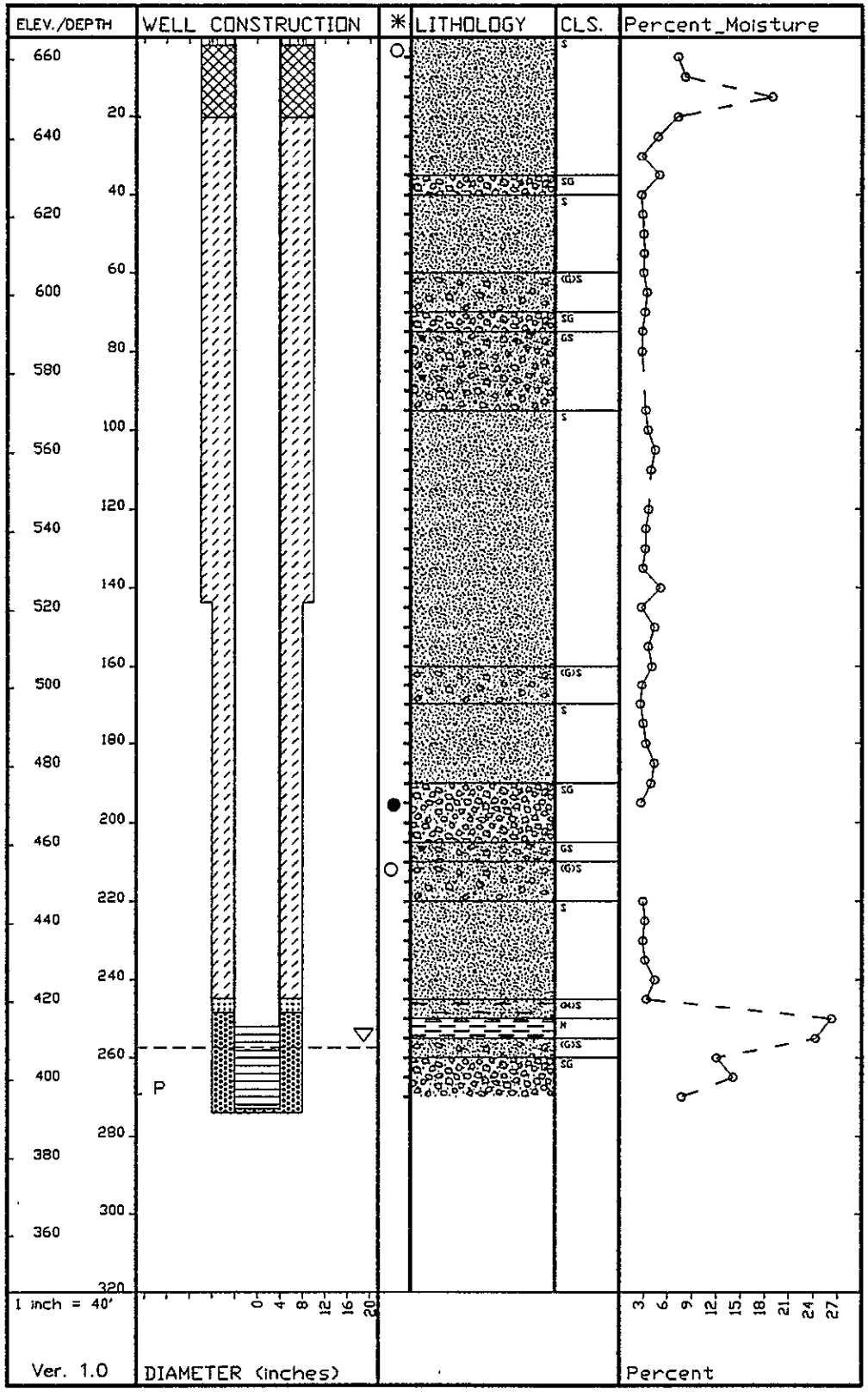
WELL NAME	299-E25-35	COMPLETION DATE	07/27/88
CASING ELEV.	674.39 Feet	INITIAL DEPTH TO WATER	264.3 ft
WELL DEPTH	281.00 Feet		
DRILL DEPTH	285.00 Feet		
COORDINATES N-S	40616.66 P		
E-W	-46538.5 P	PAGE	1 of 1



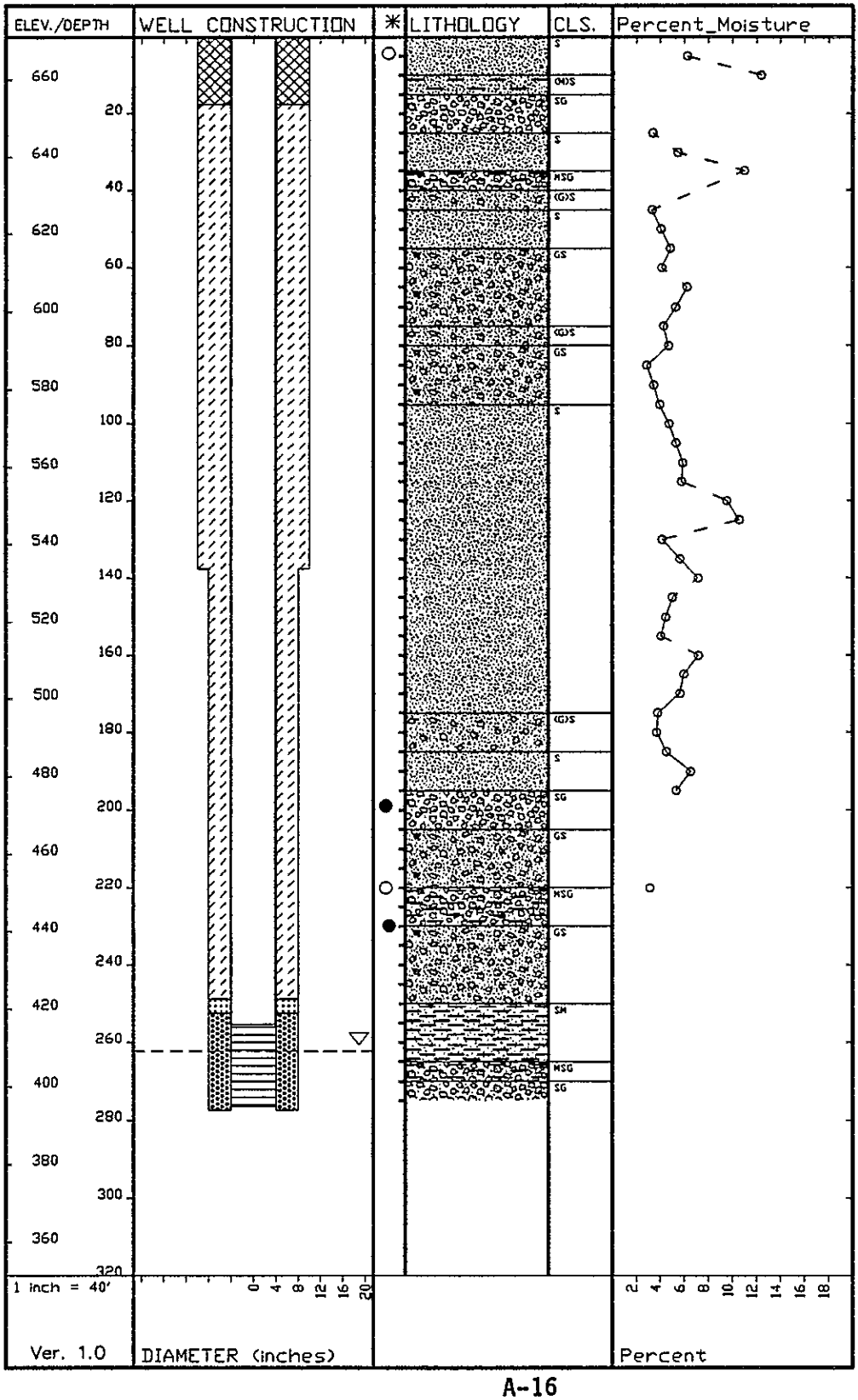
WELL NAME	299-E25-39	COMPLETION DATE	10/16/90
CASING ELEV.	671.23 Feet	INITIAL DEPTH TO WATER	264.55 ft
WELL DEPTH	277.80 Feet		
DRILL DEPTH	282.35 Feet		
COORDINATES N-S	40518 P		
E-W	-43673 P	PAGE	1 of 1



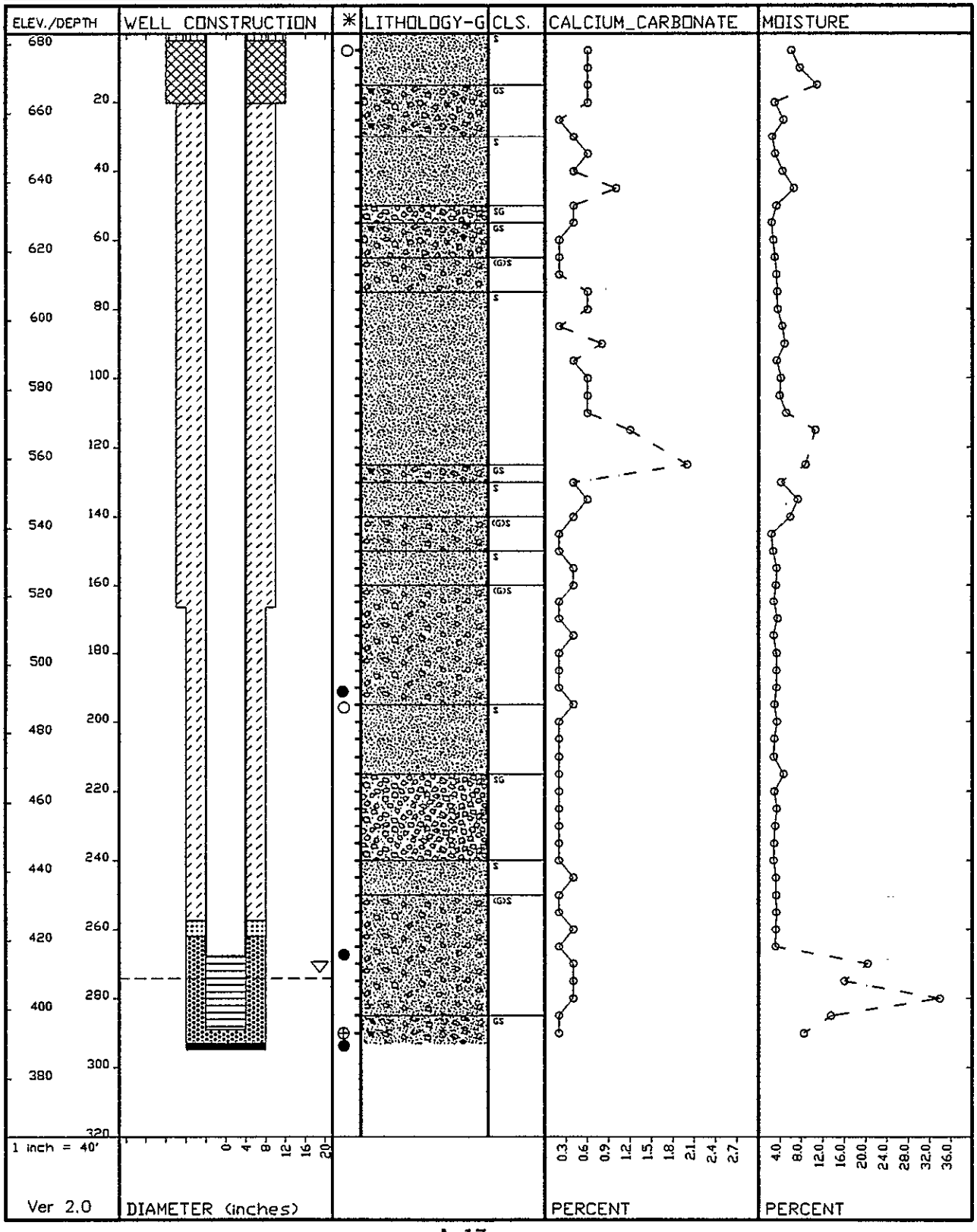
WELL NAME	299-E25-40	COMPLETION DATE	08/07/89
CASING ELEV.	665.71 Feet	INITIAL	
WELL DEPTH	273.00 Feet	DEPTH TO WATER	257.4 ft
DRILL DEPTH	274.00 Feet		
COORDINATES N-S	41759.6 P		
E-W	-47334.8 P	PAGE	1 of 1



WELL NAME	299-E25-41	COMPLETION DATE	08/08/89
CASING ELEV.	671.26 Feet	INITIAL DEPTH TO WATER	262.24 ft
WELL DEPTH	276.00 Feet		
DRILL DEPTH	279.00 Feet		
COORDINATES N-S	41541.8 P		
E-W	-47330.9 P	PAGE	1 of 1

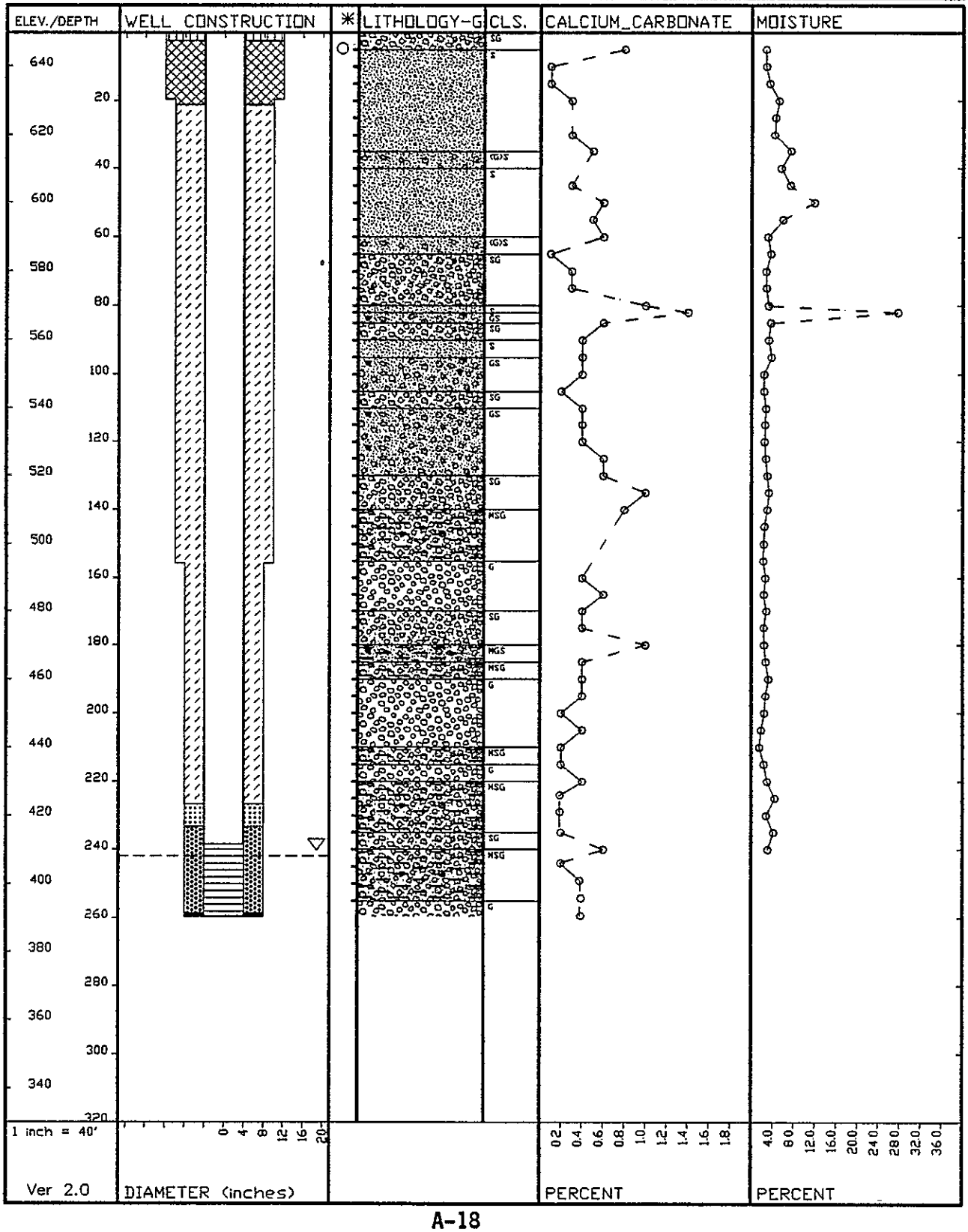


WELL NAME	299-E25-42	COMPLETION DATE	08/26/91
CASING ELEV.	683.29 Feet	INITIAL DEPTH TO WATER	274.2 ft
WELL DEPTH	292.80 Feet		
DRILL DEPTH	294.68 Feet		
COORDINATES N-S	135887.6 LAMBERT NAD83		
E-W	575622.8 LAMBERT NAD83	PAGE	1 of 1

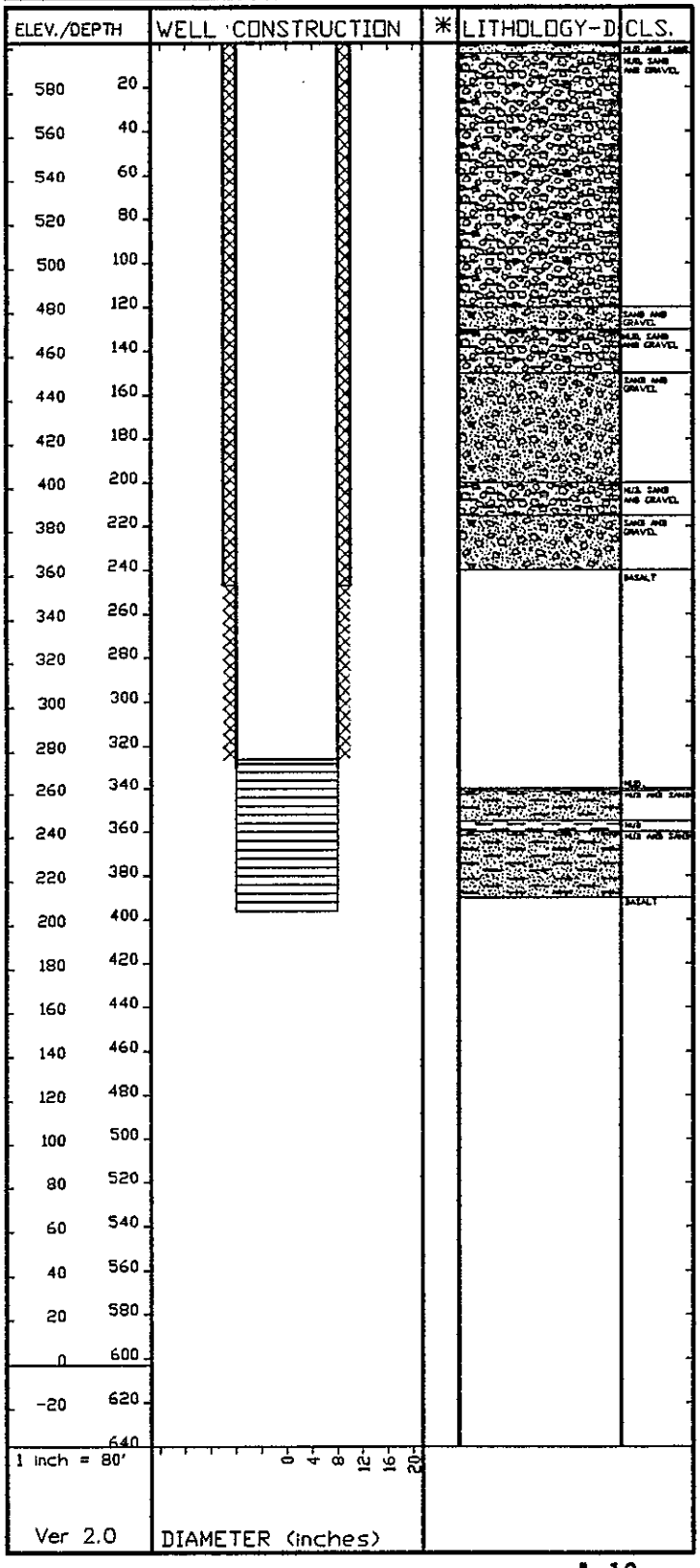


WELL NAME	299-E25-43	COMPLETION DATE	08/08/91
CASING ELEV.	649.89 Feet	INITIAL DEPTH TO WATER	241.81 ft
WELL DEPTH	259.40 Feet		
DRILL DEPTH	259.70 Feet		
COORDINATES N-S	136251.5 LAMBERT NAD83		
E-W	576132.3 LAMBERT NAD83		

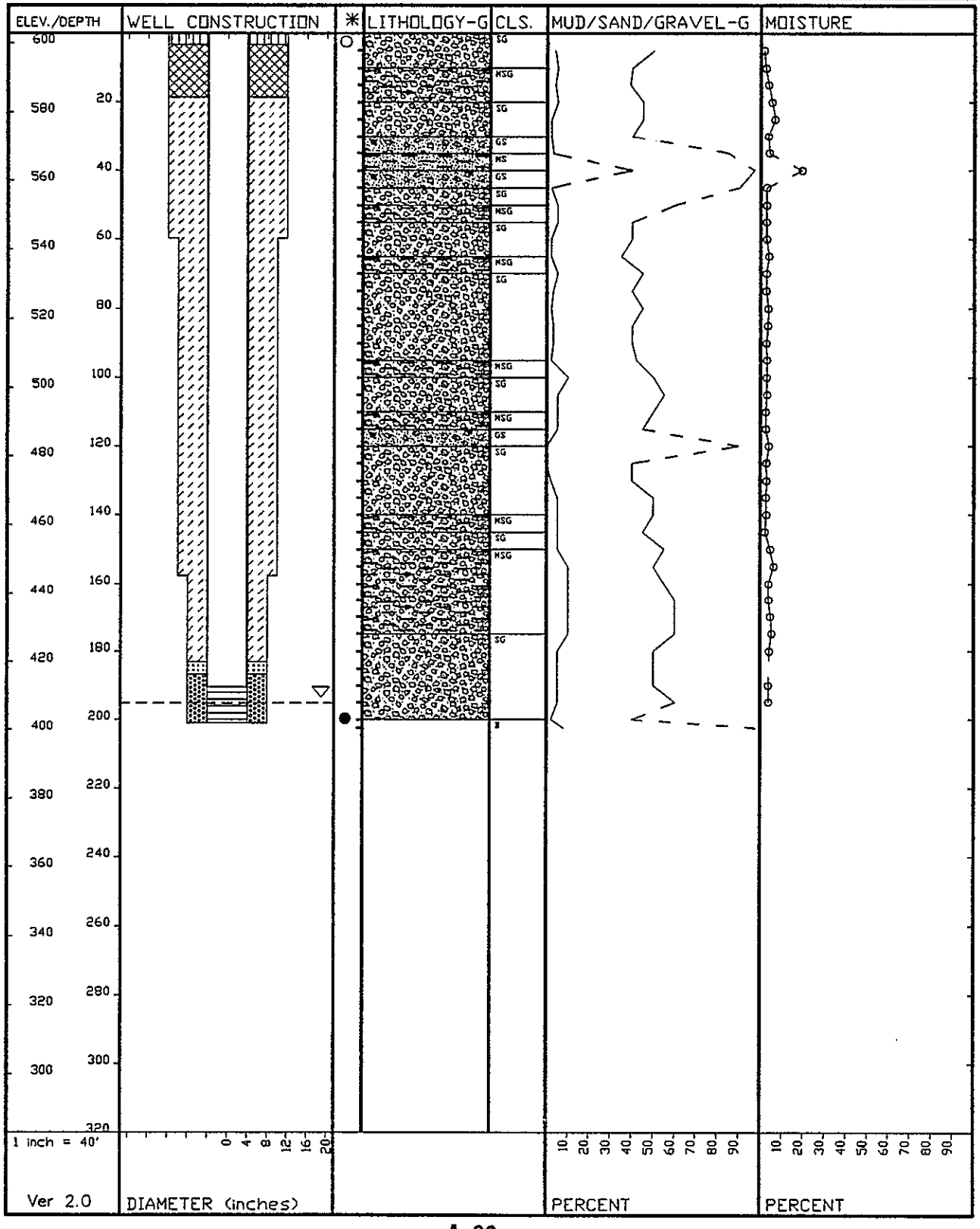
PAGE 1 of 1



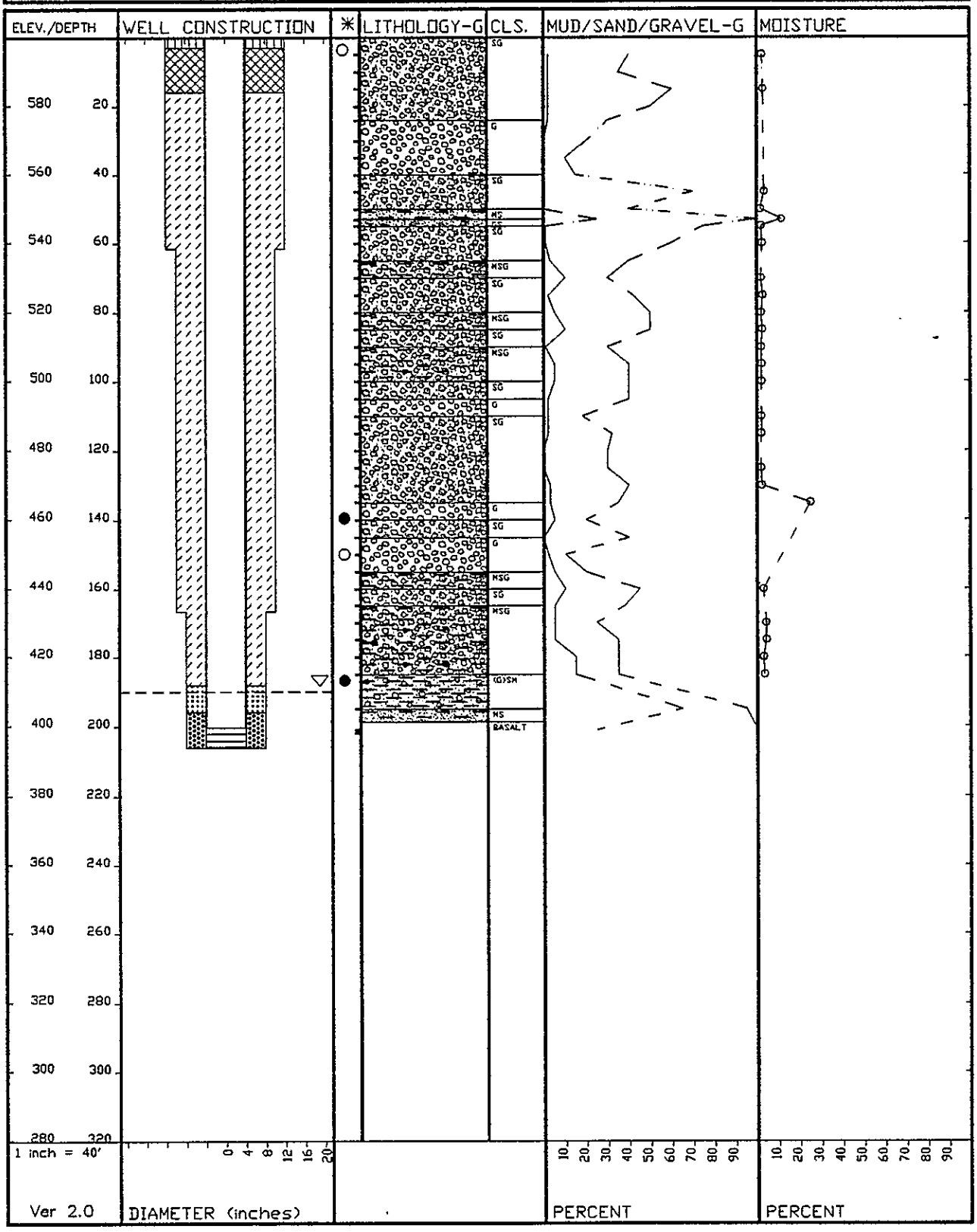
WELL NAME	299-E26-8	COMPLETION DATE	05/06/82
CASING ELEV.	602.76 Feet	INITIAL DEPTH TO WATER	unknown
WELL DEPTH	396.00 Feet		
DRILL DEPTH	400.00 Feet		
COORDINATES N-S	43317 P		
E-W	-47142 P	PAGE	1 of 1



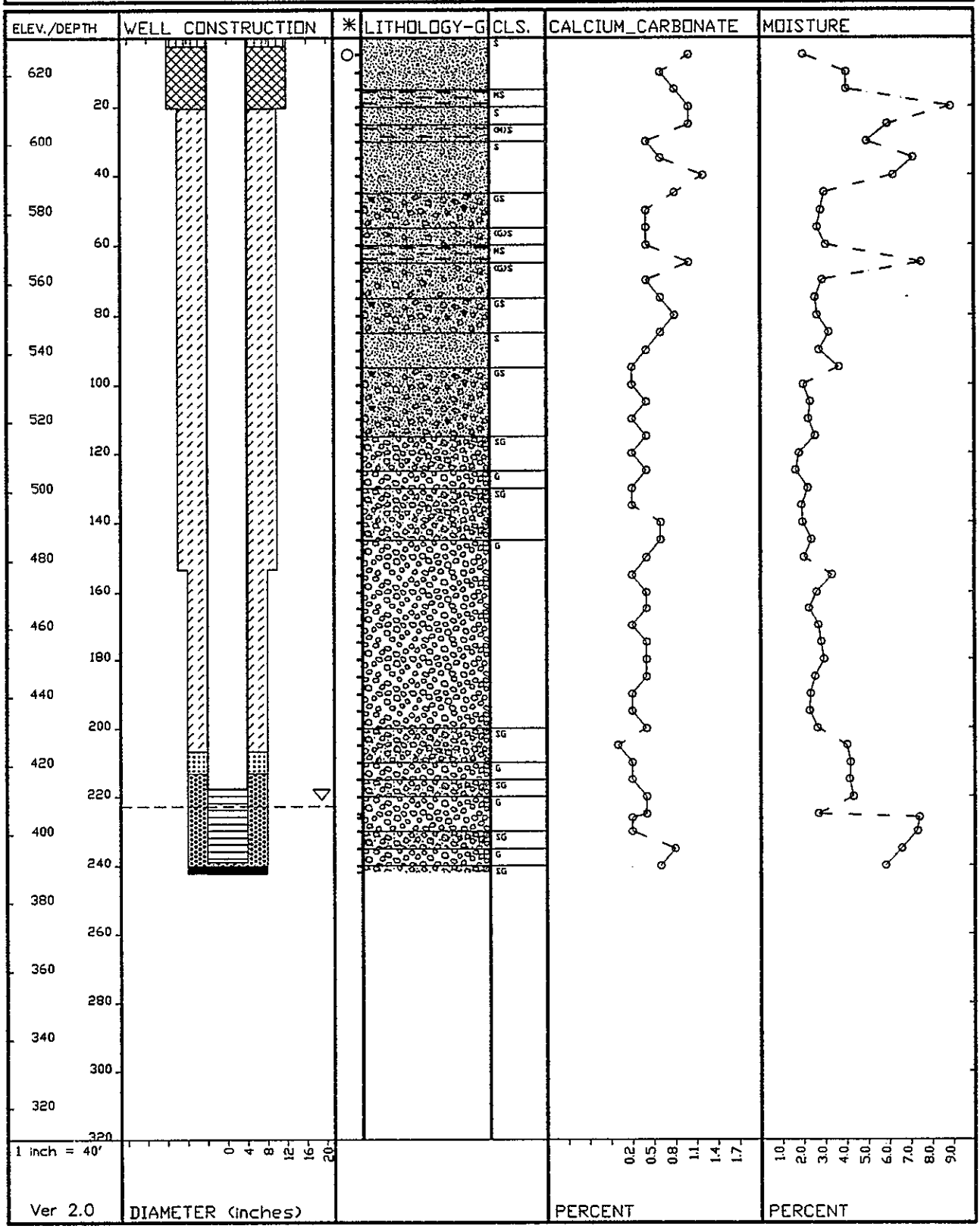
WELL NAME	299-E26-9	COMPLETION DATE	08/10/90
CASING ELEV.	602.89 Feet	INITIAL DEPTH TO WATER	195.15 ft
WELL DEPTH	200.92 Feet		
DRILL DEPTH	202.50 Feet		
COORDINATES N-S	44779.9 P		
E-W	-46960.4 P	PAGE	1 of 1



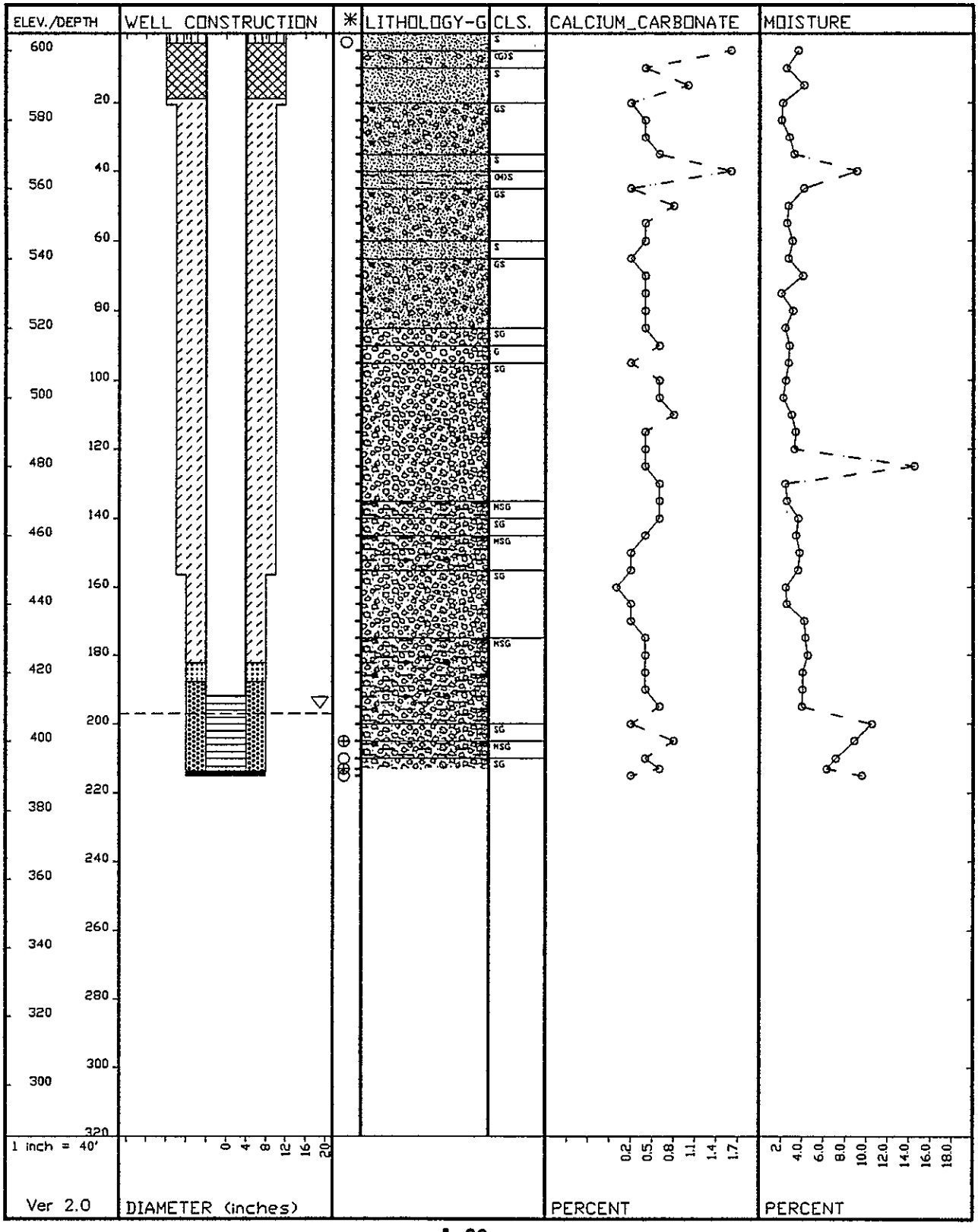
WELL NAME	299-E26-11	COMPLETION DATE	08/20/90
CASING ELEV.	599.68 Feet	INITIAL DEPTH TO WATER	189.94 ft
WELL DEPTH	205.77 Feet		
DRILL DEPTH	206.00 Feet		
COORDINATES N-S	44779.2 P		
E-W	-44979.2 P	PAGE	1 of 1



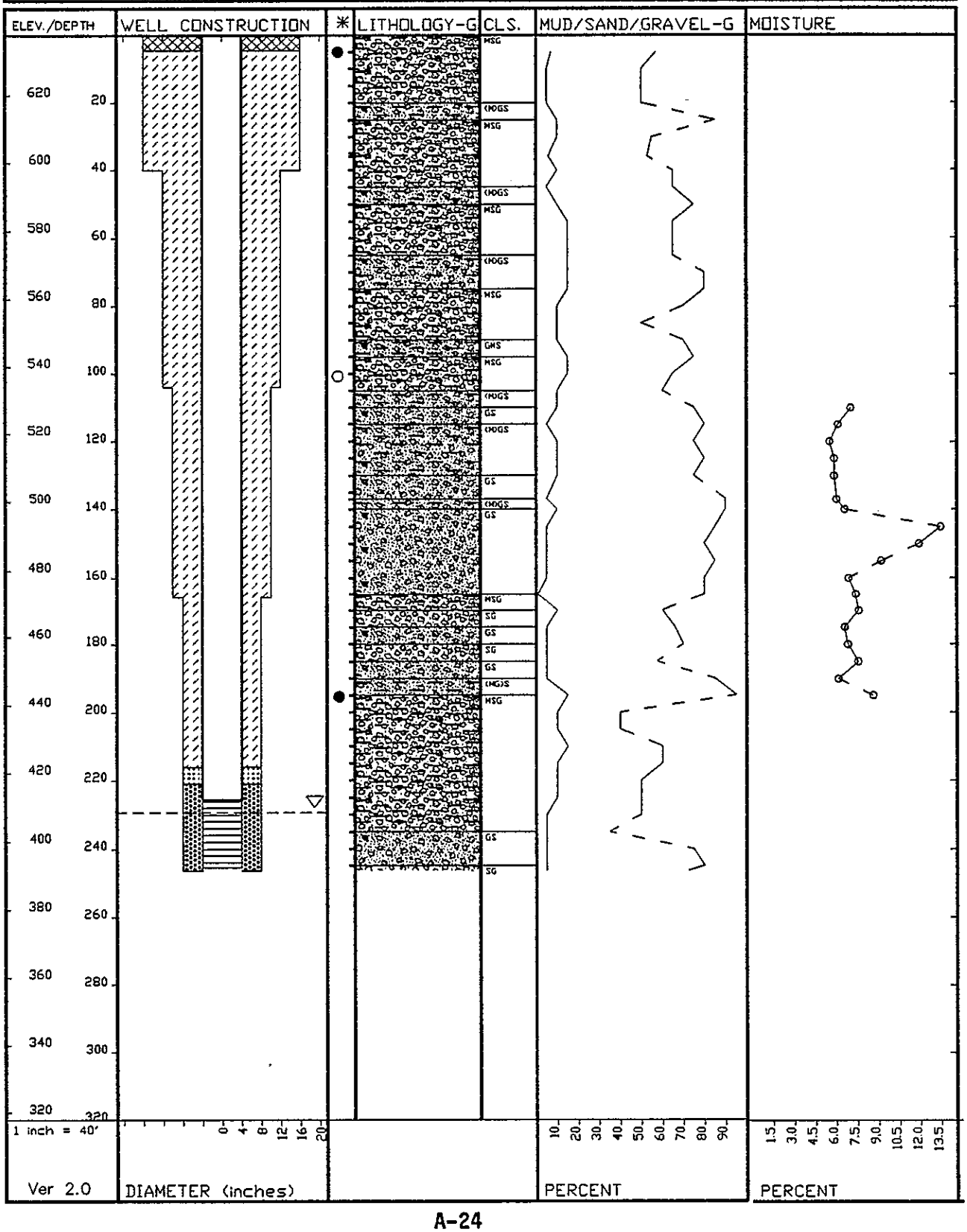
WELL NAME	299-E26-12	COMPLETION DATE	08/13/91
CASING ELEV.	630.74 Feet	INITIAL DEPTH TO WATER	222.5 ft
WELL DEPTH	240.00 Feet		
DRILL DEPTH	242.18 Feet		
COORDINATES N-S	136383.2 LAMBERT NAD83		
E-W	576197.7 LAMBERT NAD83	PAGE	1 of 1



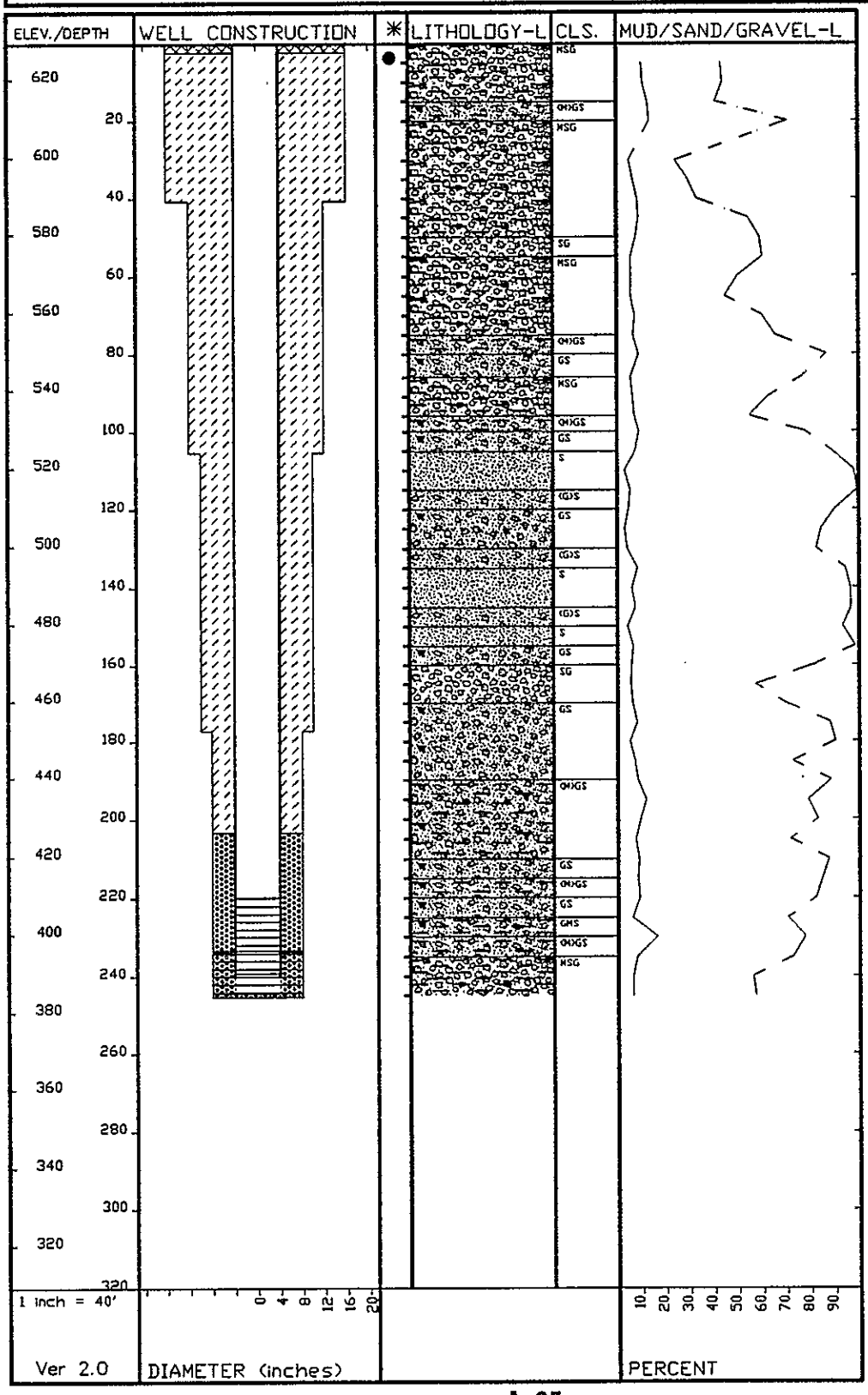
WELL NAME	299-E26-13	COMPLETION DATE	08/16/91
CASING ELEV.	605.02 Feet	INITIAL	
WELL DEPTH	213.90 Feet	DEPTH TO WATER	197.0 ft
DRILL DEPTH	215.00 Feet		
COORDINATES N-S	136528.6 LAMBERT NAD83		
E-W	576199.3 LAMBERT NAD83	PAGE	1 of 1



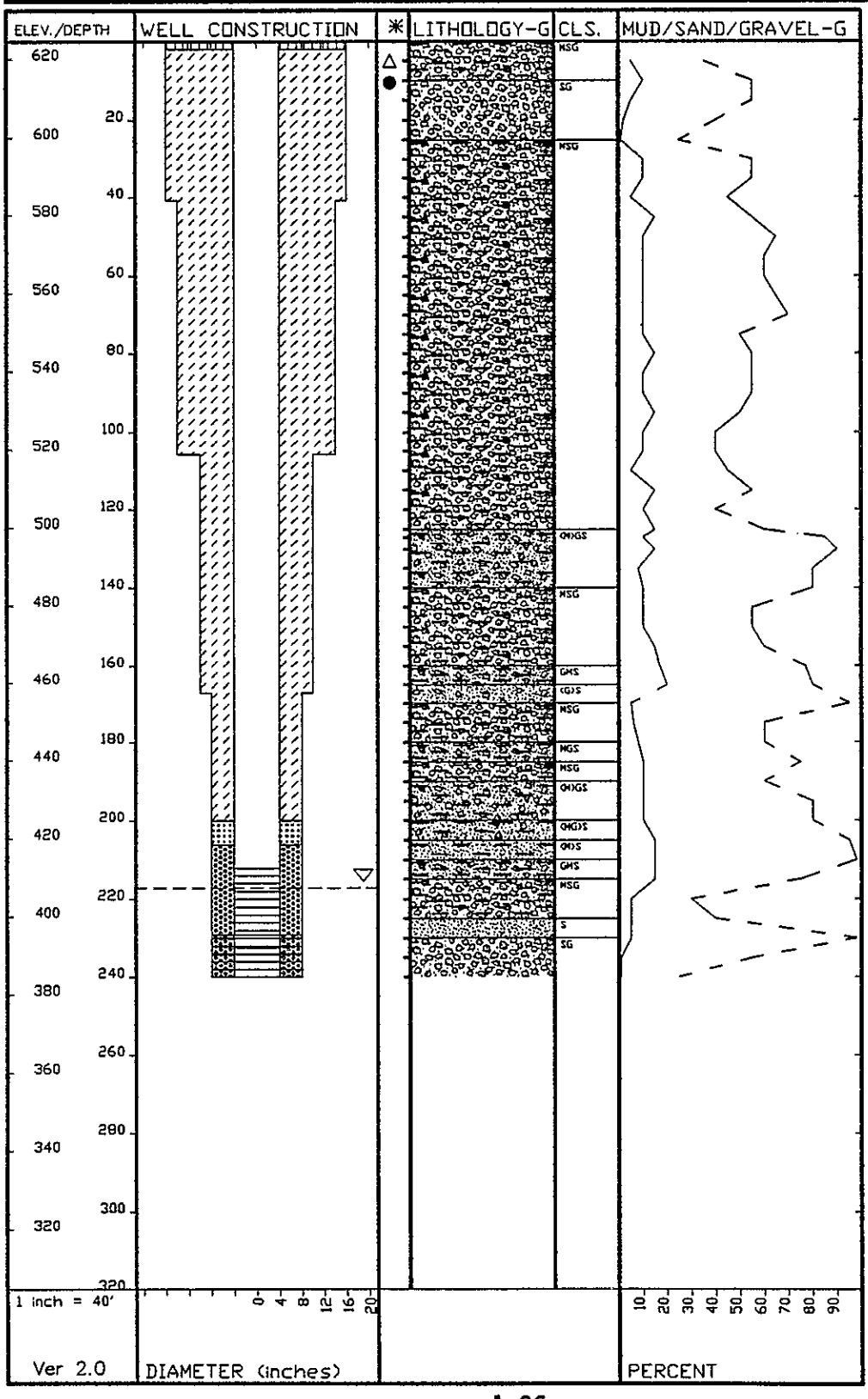
WELL NAME	299-E27-8	COMPLETION DATE	09/30/87
CASING ELEV.	637.83 Feet	INITIAL DEPTH TO WATER	229.4 ft
WELL DEPTH	245.50 Feet		
DRILL DEPTH	246.50 Feet		
COORDINATES N-S	44496 P		
E-W	-49642 P	PAGE	1 of 1



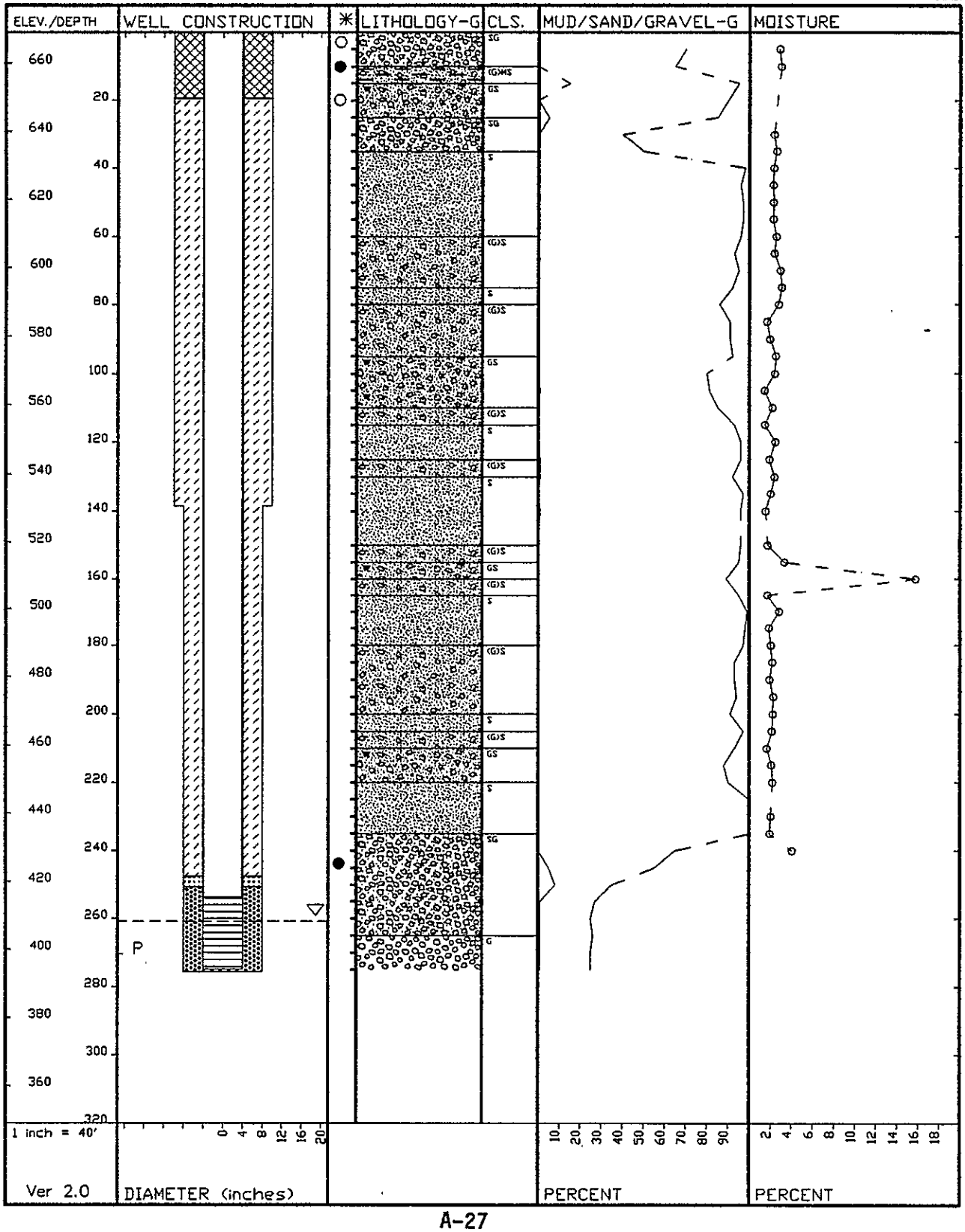
WELL NAME	299-E27-9	COMPLETION DATE	08/21/87
CASING ELEV.	629.21 Feet	INITIAL DEPTH TO WATER	221.1 ft
WELL DEPTH	239.08 Feet		
DRILL DEPTH	245.23 Feet		
COORDINATES N-S	44484 P		
E-W	-49122 P	PAGE	1 of 1



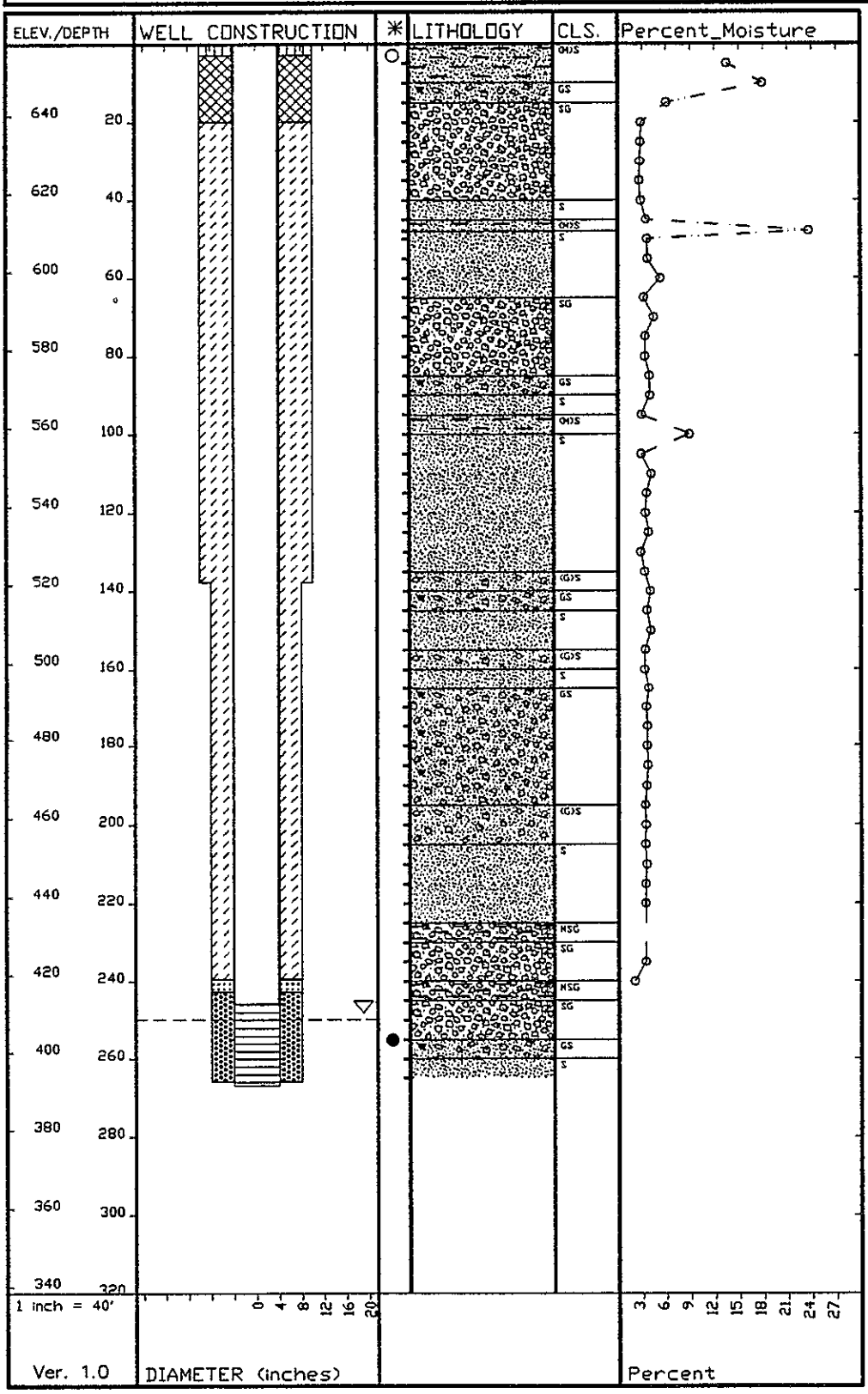
WELL NAME	299-E27-10	COMPLETION DATE	08/19/87
CASING ELEV.	624.47 Feet	INITIAL DEPTH TO WATER	217.16 ft
WELL DEPTH	232.40 Feet		
DRILL DEPTH	240.00 Feet		
COORDINATES N-S	44520 P		
E-W	-48522 P	PAGE	1 of 1



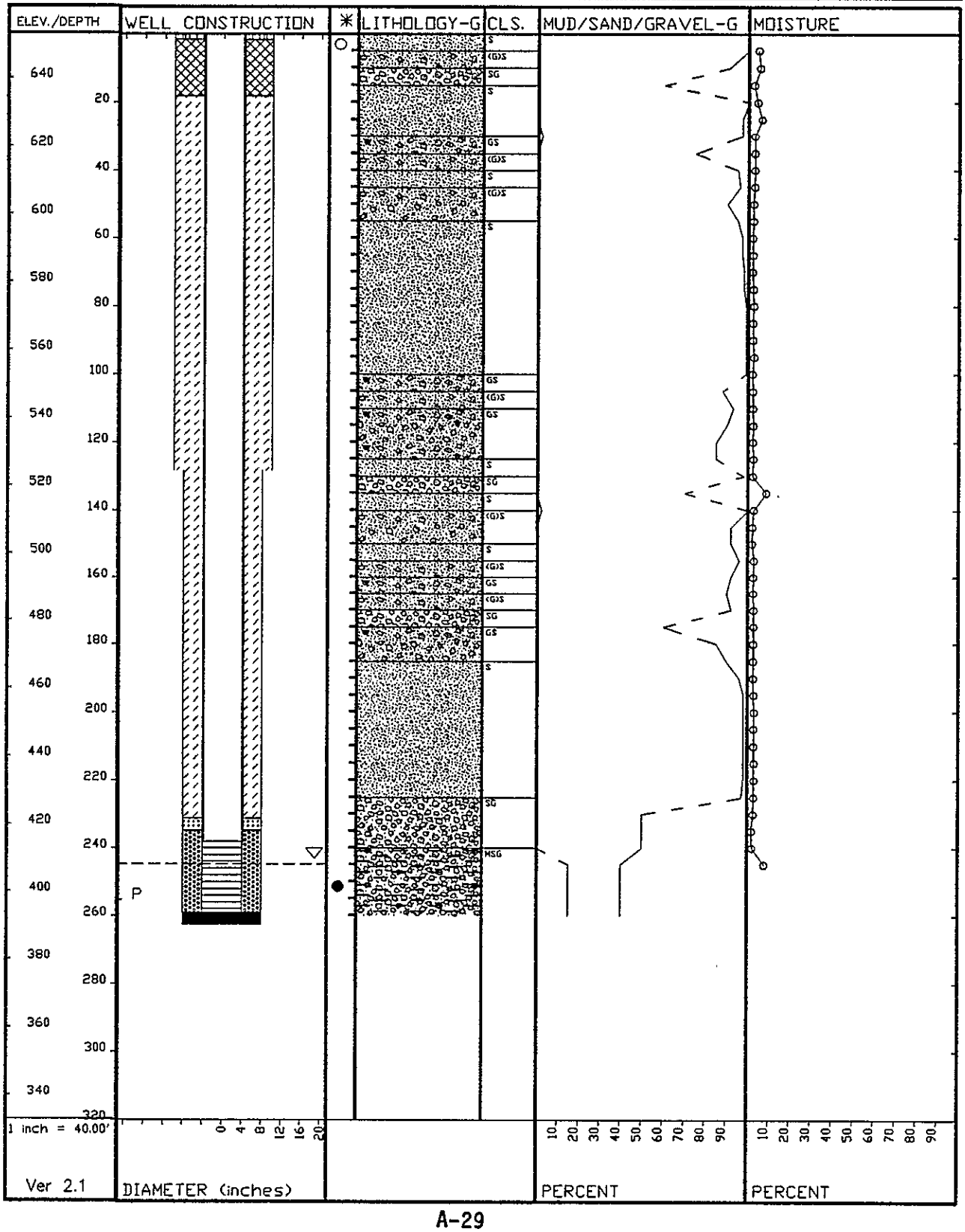
WELL NAME	299-E27-13	COMPLETION DATE	10/12/89
CASING ELEV.	668.99 Feet	INITIAL DEPTH TO WATER	260.73 ft
WELL DEPTH	275.00 Feet		
DRILL DEPTH	275.90 Feet		
COORDINATES N-S	42671.9 P		
E-W	-48644 P	PAGE	1 of 1



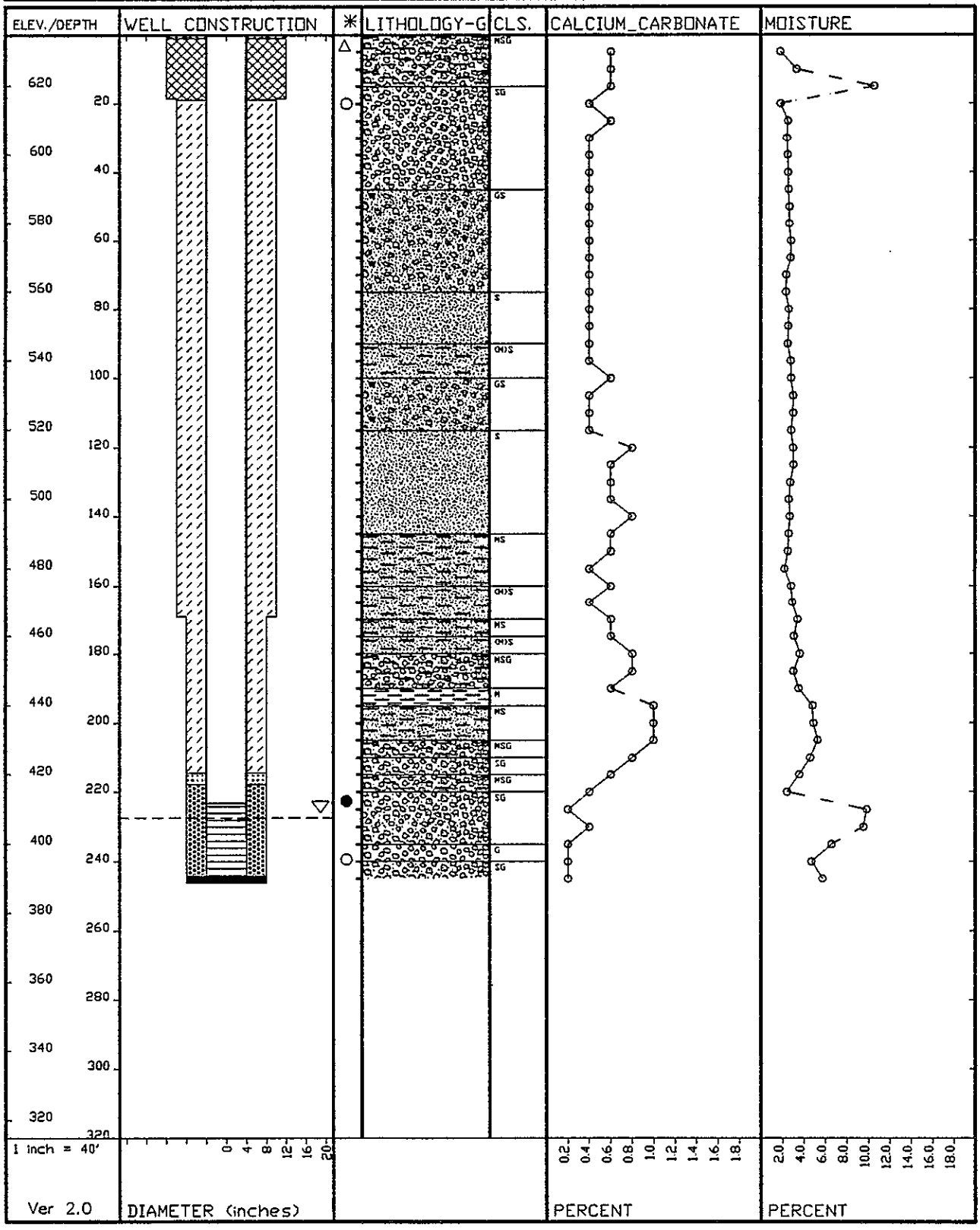
WELL NAME	299-E27-14	COMPLETION DATE	09/19/89
CASING ELEV.	658.34 Feet	INITIAL DEPTH TO WATER	255 ft
WELL DEPTH	266.83 Feet		
DRILL DEPTH	266.80 Feet		
COORDINATES N-S	42700.1 P		
E-W	-48143.6 P	PAGE	1 of 1



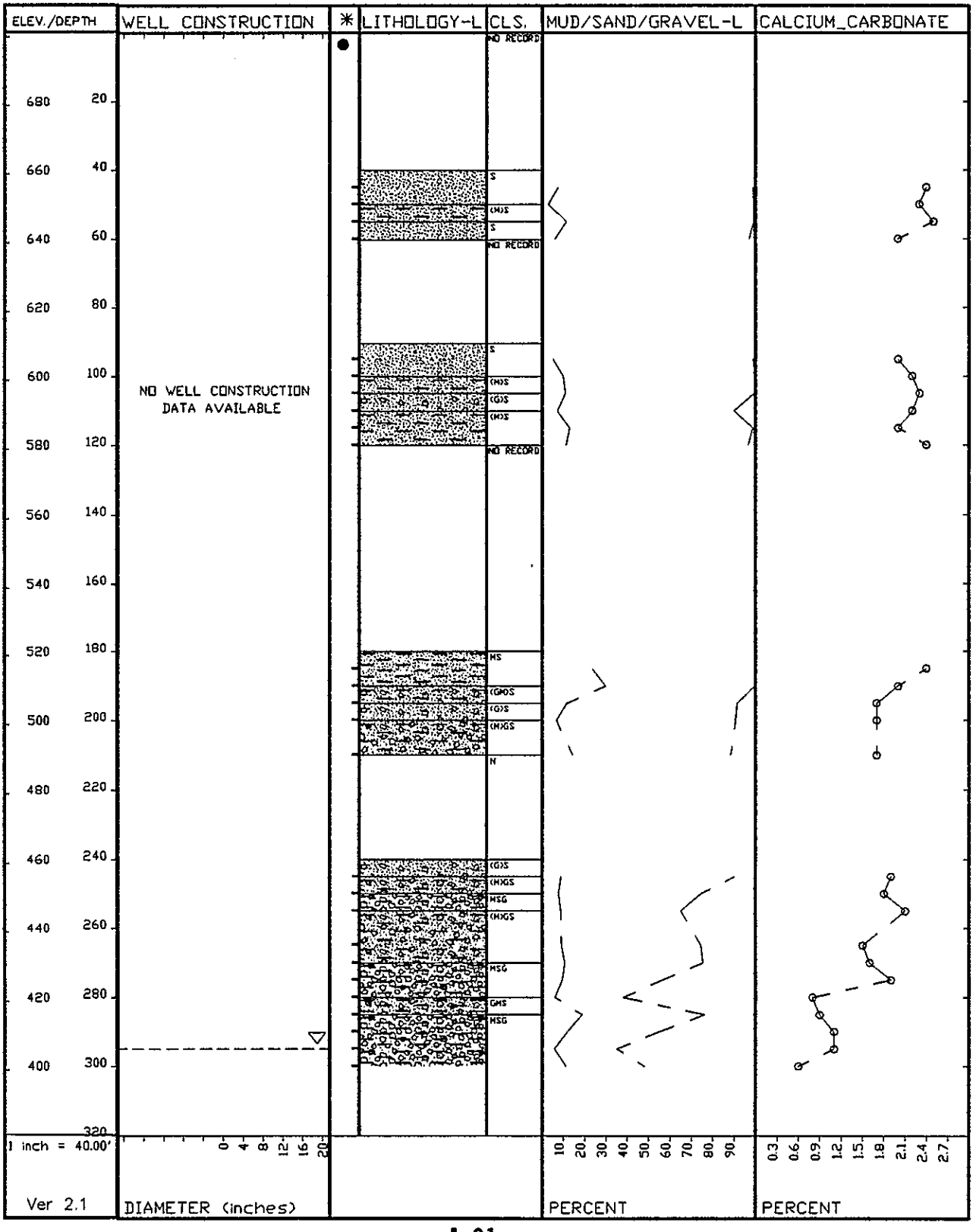
WELL NAME	299-E27-15	COMPLETION DATE	10/03/89
CASING ELEV.	652.67 Feet	INITIAL DEPTH TO WATER	244.77 ft
WELL DEPTH	259.03 Feet		
DRILL DEPTH	262.54 Feet		
COORDINATES N-S	43134.7 P		
E-W	-48543 P	PAGE	1 of 1



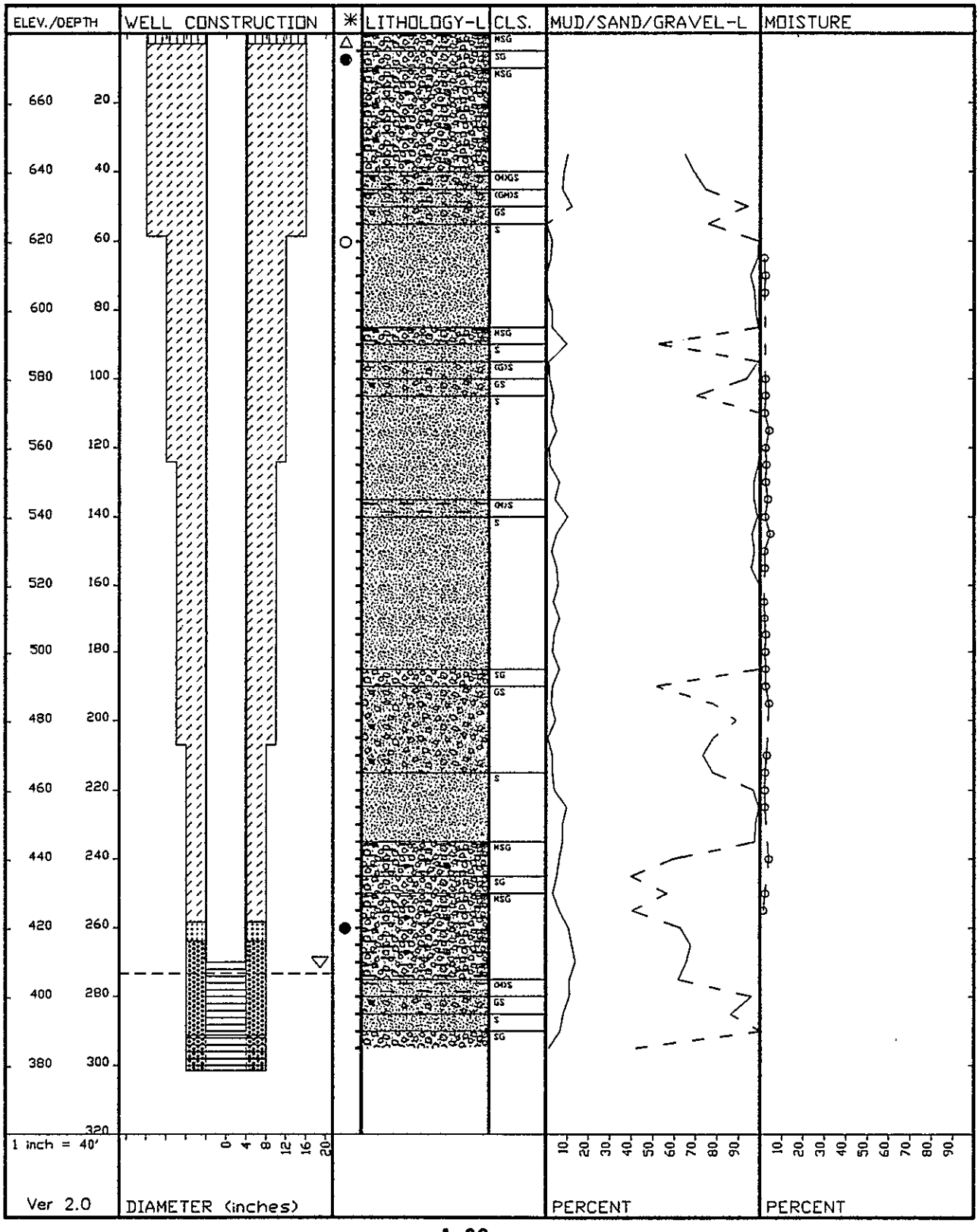
WELL NAME	299-E27-17	COMPLETION DATE	11/11/91
CASING ELEV.	634.72 Feet	INITIAL DEPTH TO WATER	226.9 ft
WELL DEPTH	244.15 Feet		
DRILL DEPTH	246.20 Feet		
COORDINATES N-S	137122 LAMBERT NAD83		
E-W	574547.3 LAMBERT NAD83	PAGE	1 of 1



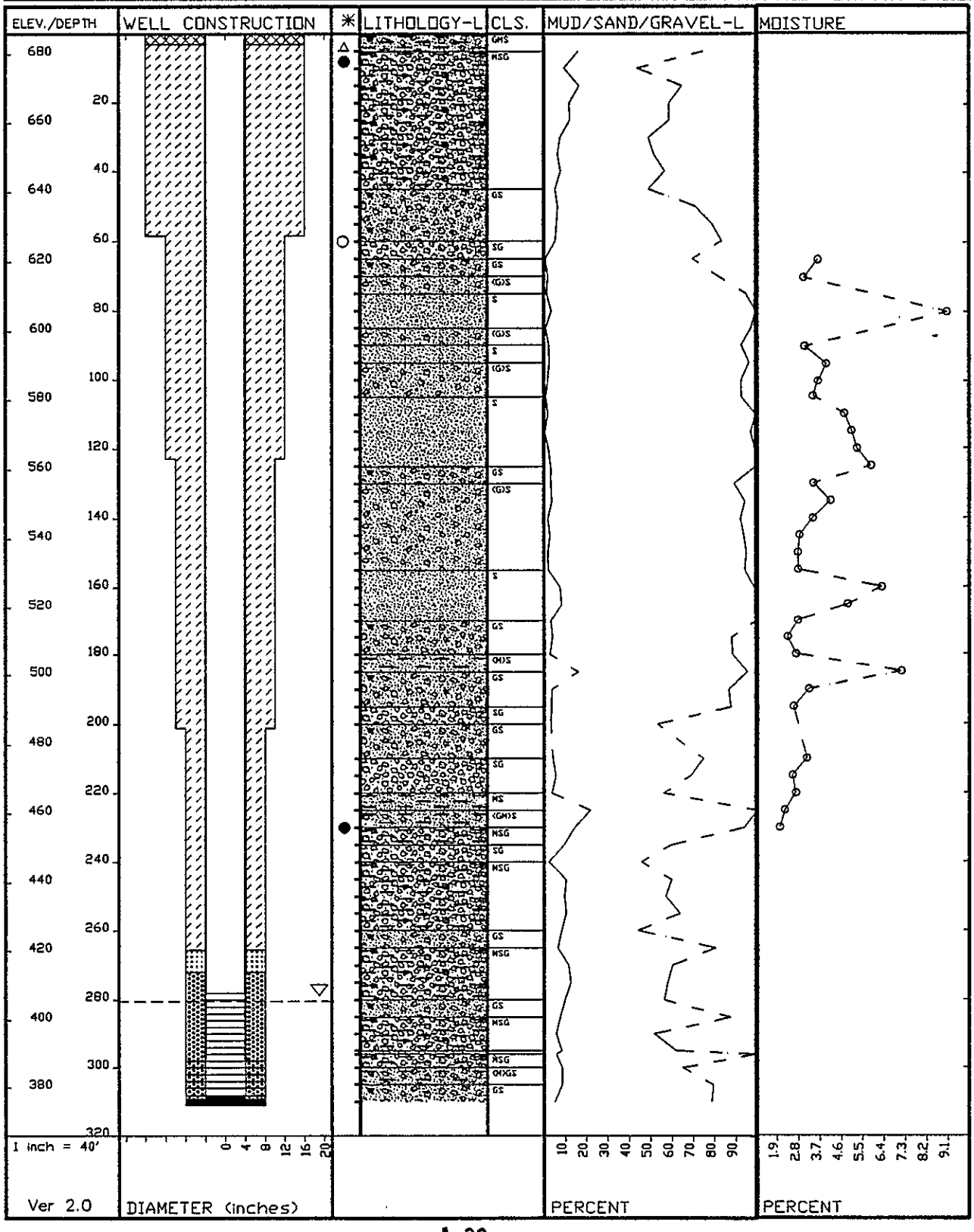
WELL NAME	299-E28-15	COMPLETION DATE	01/31/68
CASING ELEV.	701.00 Feet	INITIAL DEPTH TO WATER	295.0 ft
WELL DEPTH	300.00 Feet		
DRILL DEPTH	300.00 Feet		
COORDINATES N-S	42588 P		
E-W	-54420 P	PAGE	1 of 1



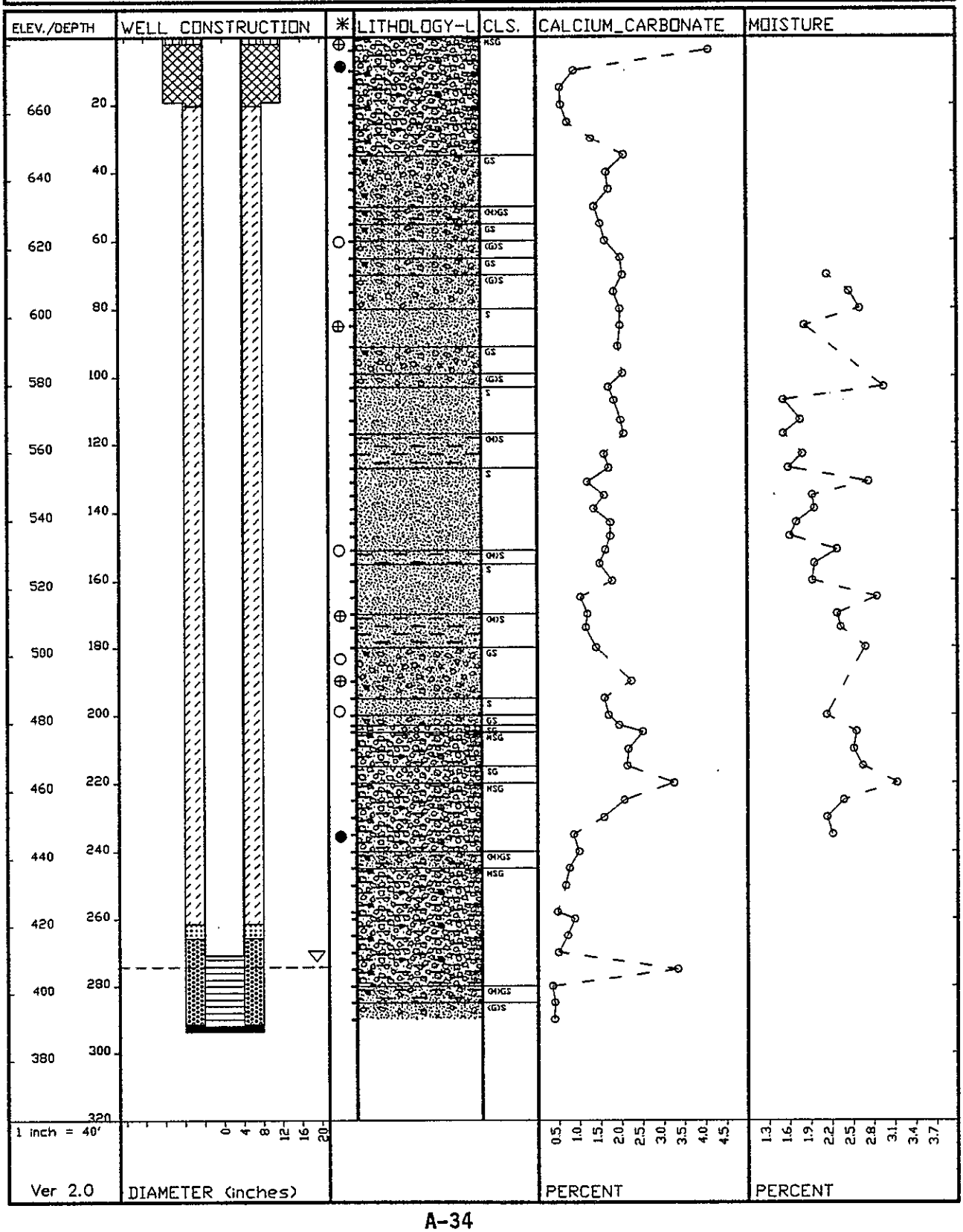
WELL NAME	299-E28-27	COMPLETION DATE	09/30/87
CASING ELEV.	680.37 Feet	INITIAL DEPTH TO WATER	273.20 ft
WELL DEPTH	289.90 Feet		
DRILL DEPTH	301.42 Feet		
COORDINATES N-S	44595 P		
E-W	-54670 P	PAGE	1 of 1



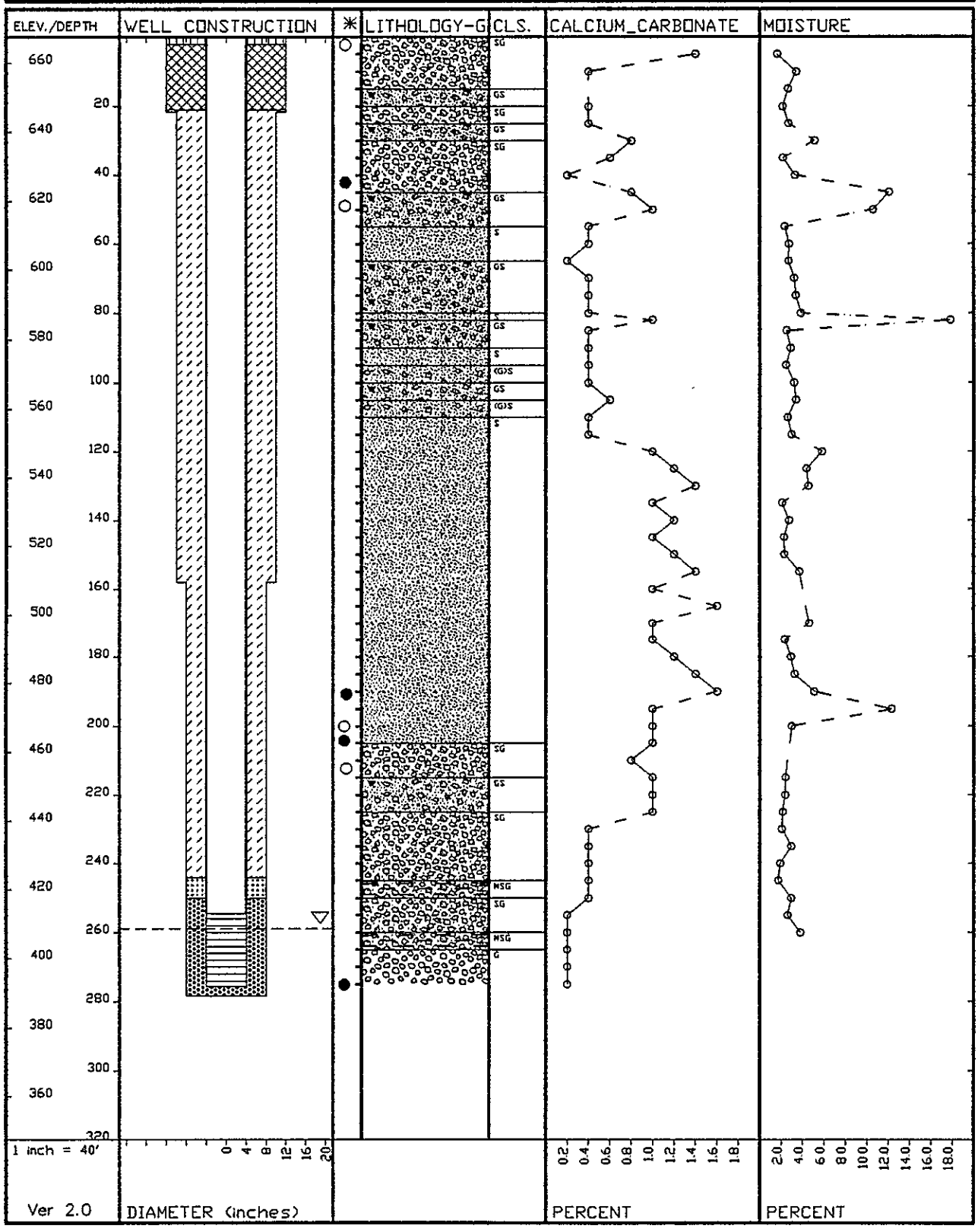
WELL NAME	299-E32-4	COMPLETION DATE	09/30/87
CASING ELEV.	685.88 Feet	INITIAL	
WELL DEPTH	298.08 Feet	DEPTH TO WATER	280.34 ft
DRILL DEPTH	311.00 Feet		
COORDINATES N-S	44985 P		
E-W	-56713 P	PAGE	1 of 1



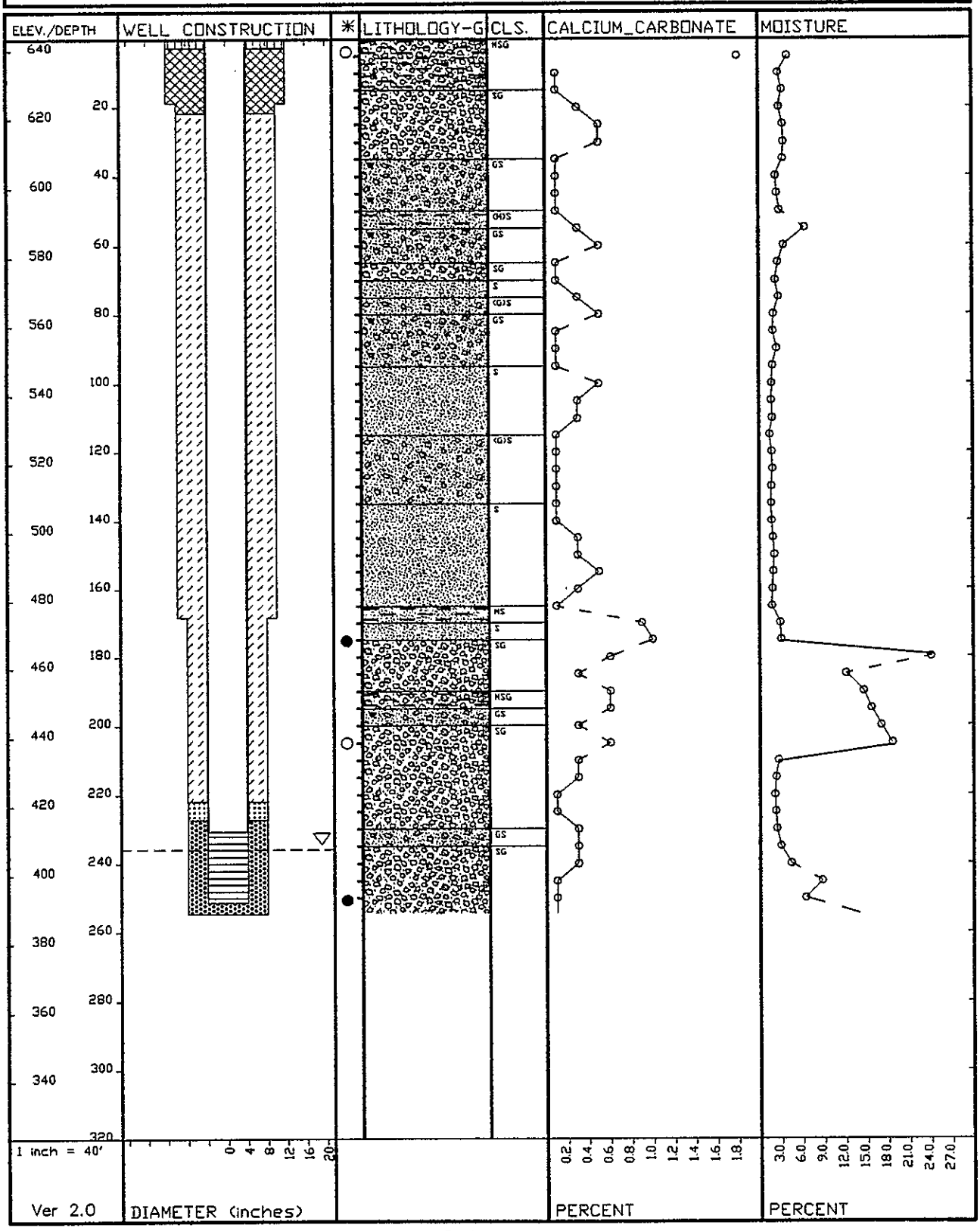
WELL NAME	299-E32-5	COMPLETION DATE	11/09/89
CASING ELEV.	682.14 Feet	INITIAL DEPTH TO WATER	274.16 ft
WELL DEPTH	291.84 Feet		
DRILL DEPTH	293.60 Feet		
COORDINATES N-S	45306 P		
E-W	-56725 P	PAGE	1 of 1



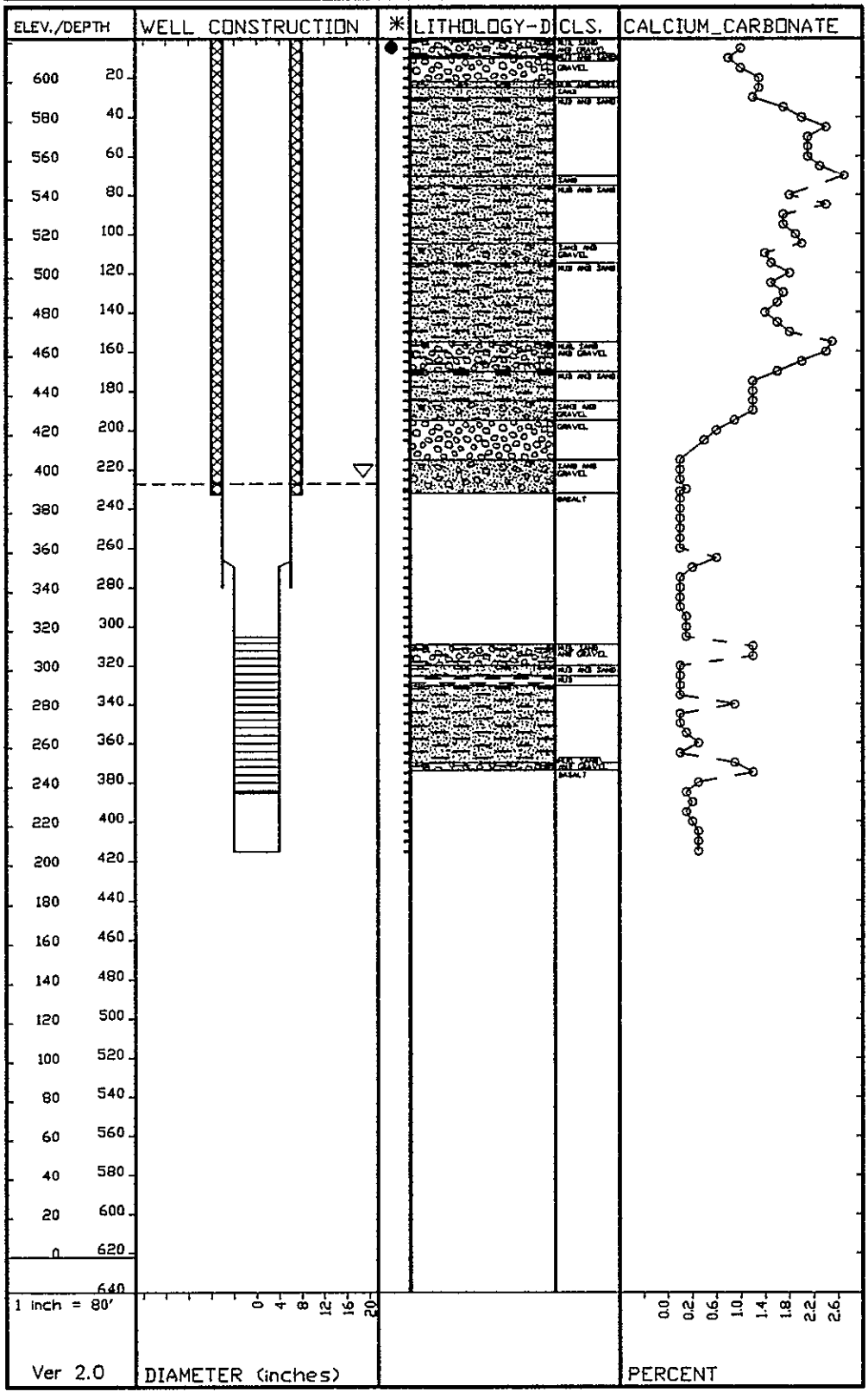
WELL NAME	299-E32-6	COMPLETION DATE	07/17/91
CASING ELEV.	667.45 Feet	INITIAL DEPTH TO WATER	258.9 ft
WELL DEPTH	275.50 Feet		
DRILL DEPTH	278.83 Feet		
COORDINATES N-S	137515.1 LAMBERT NAD83		
E-W	572600.4 LAMBERT NAD83	PAGE	1 of 1



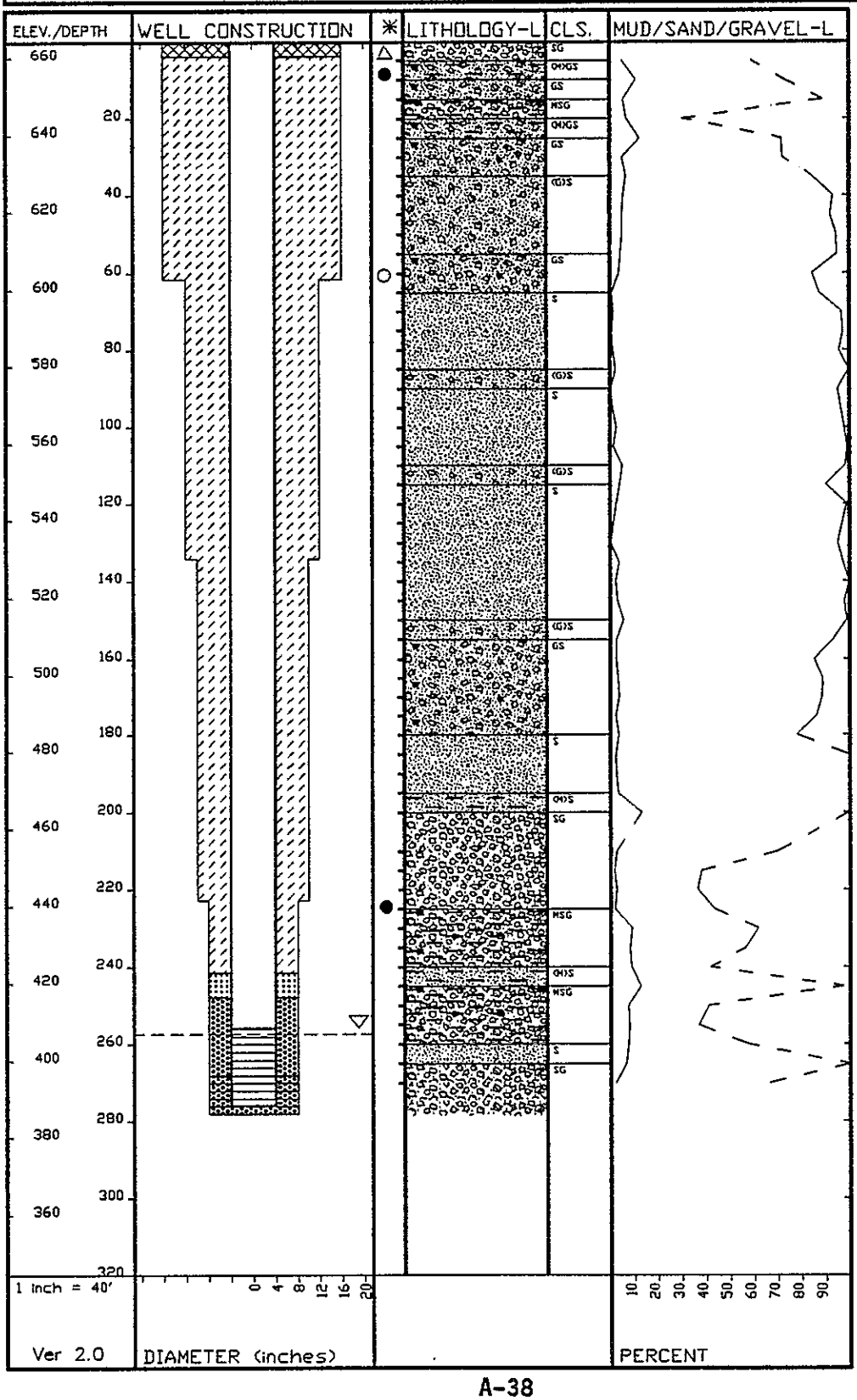
WELL NAME	299-E32-9	COMPLETION DATE	07/12/91
CASING ELEV.	643.33 Feet	INITIAL DEPTH TO WATER	235.9 ft
WELL DEPTH	254.60 Feet		
DRILL DEPTH	254.60 Feet		
COORDINATES N-S	134741.7 LAMBERT NAD83		
E-W	572795.1 LAMBERT NAD83	PAGE	1 of 1



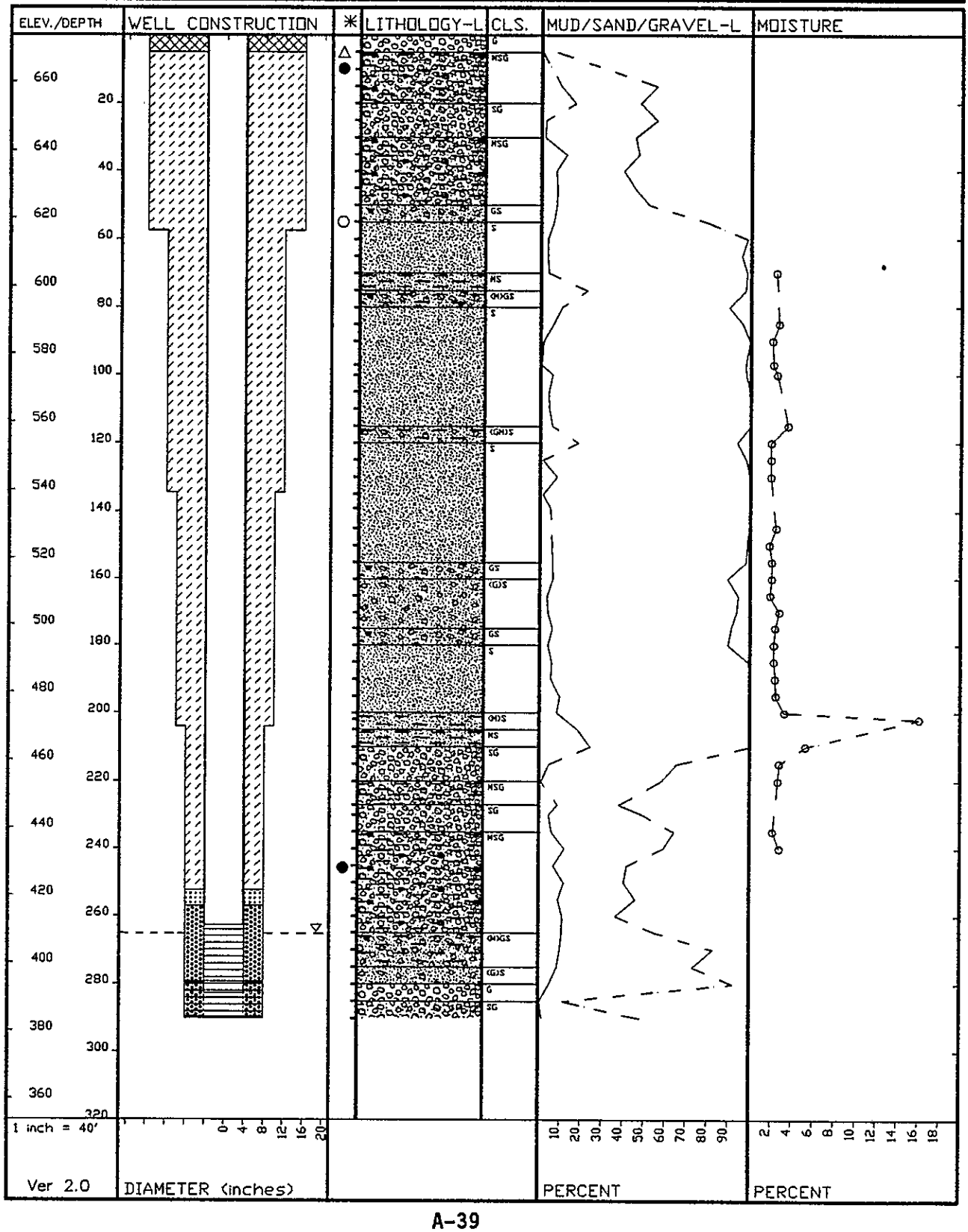
WELL NAME	299-E33-12	COMPLETION DATE	09/22/53
CASING ELEV.	622.19 Feet	INITIAL DEPTH TO WATER	227 ft
WELL DEPTH	415.00 Feet		
DRILL DEPTH	415.00 Feet		
COORDINATES N-S	46436 P		
E-W	-52850 P	PAGE	1 of 1



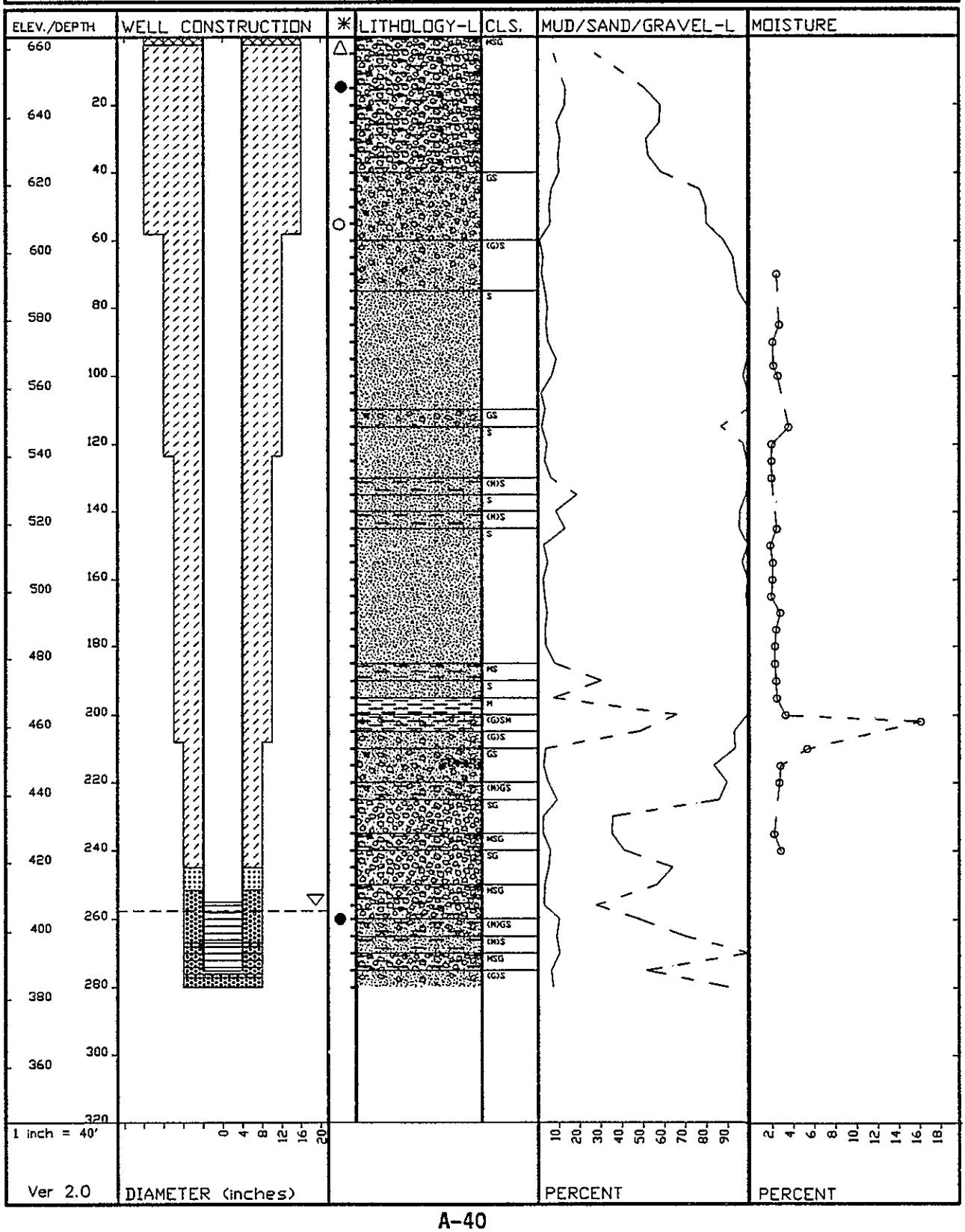
WELL NAME	299-E33-28	COMPLETION DATE	11/06/87
CASING ELEV.	664.23 Feet	INITIAL DEPTH TO WATER	257.29 ft
WELL DEPTH	275.67 Feet		
DRILL DEPTH	278.03 Feet		
COORDINATES N-S	45596 P		
E-W	-54668 P	PAGE	1 of 1



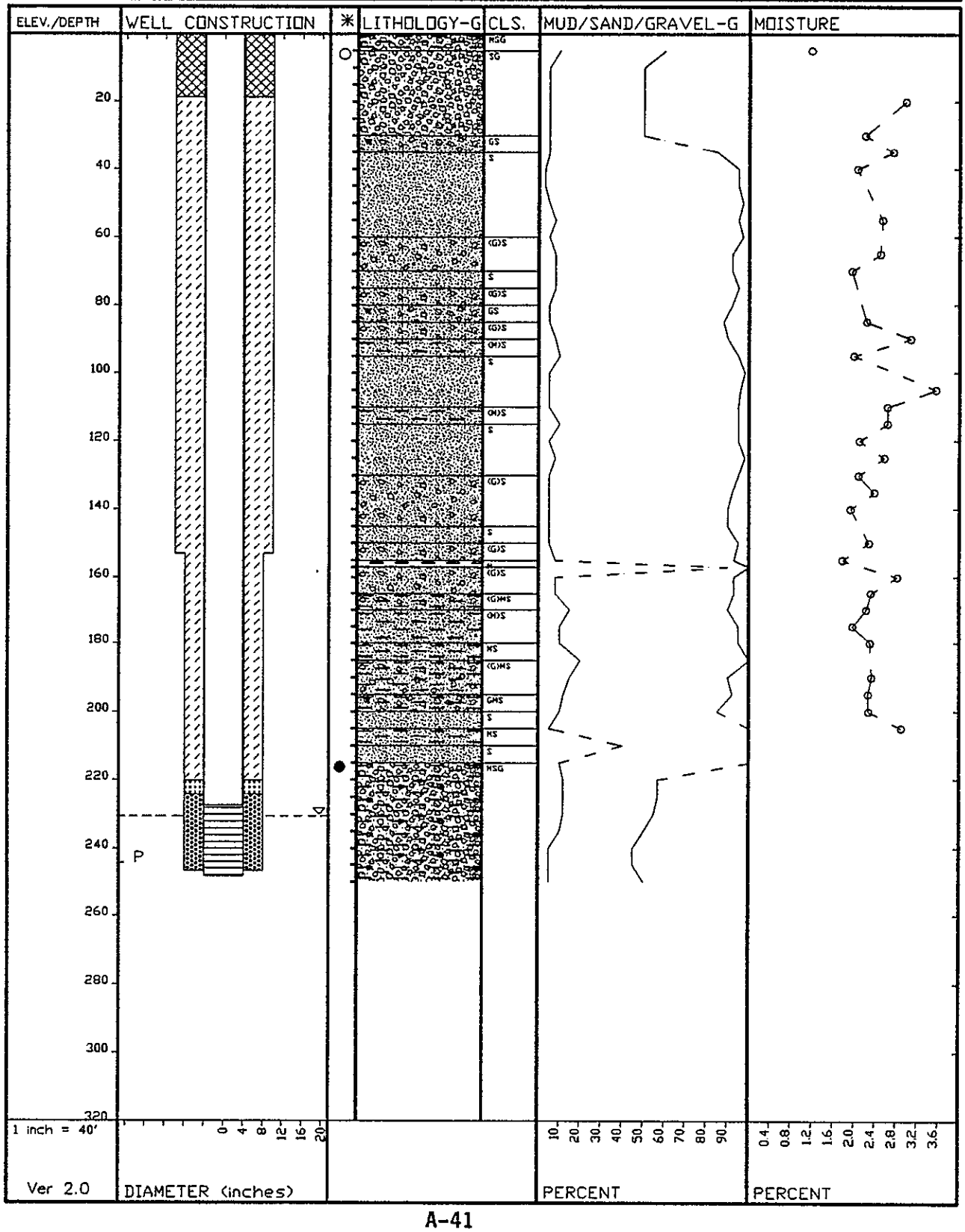
WELL NAME	299-E33-29	COMPLETION DATE	09/30/87
CASING ELEV.	673.77 Feet	INITIAL DEPTH TO WATER	265.68 ft
WELL DEPTH	282.75 Feet		
DRILL DEPTH	290.00 Feet		
COORDINATES N-S	45124 P		
E-W	-54665 P	PAGE	1 of 1



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	299-E33-33	COMPLETION DATE	08/29/89
CASING ELEV.	640.17 Feet	INITIAL DEPTH TO WATER	232.8 ft
WELL DEPTH	248.00 Feet		
DRILL DEPTH	252.00 Feet		
COORDINATES N-S	45348 P		
E-W	-51868 P	PAGE	1 of 1



WELL NAME	299-E33-42	COMPLETION DATE	11/06/91
CASING ELEV.	654.08 Feet	INITIAL	
WELL DEPTH	260.20 Feet	DEPTH TO WATER	247.0
DRILL DEPTH	260.20 Feet		
COORDINATES N-S	137424.38 LAMBERT NAD83		
E-W	-573520.99 LAMBERT NAD83		

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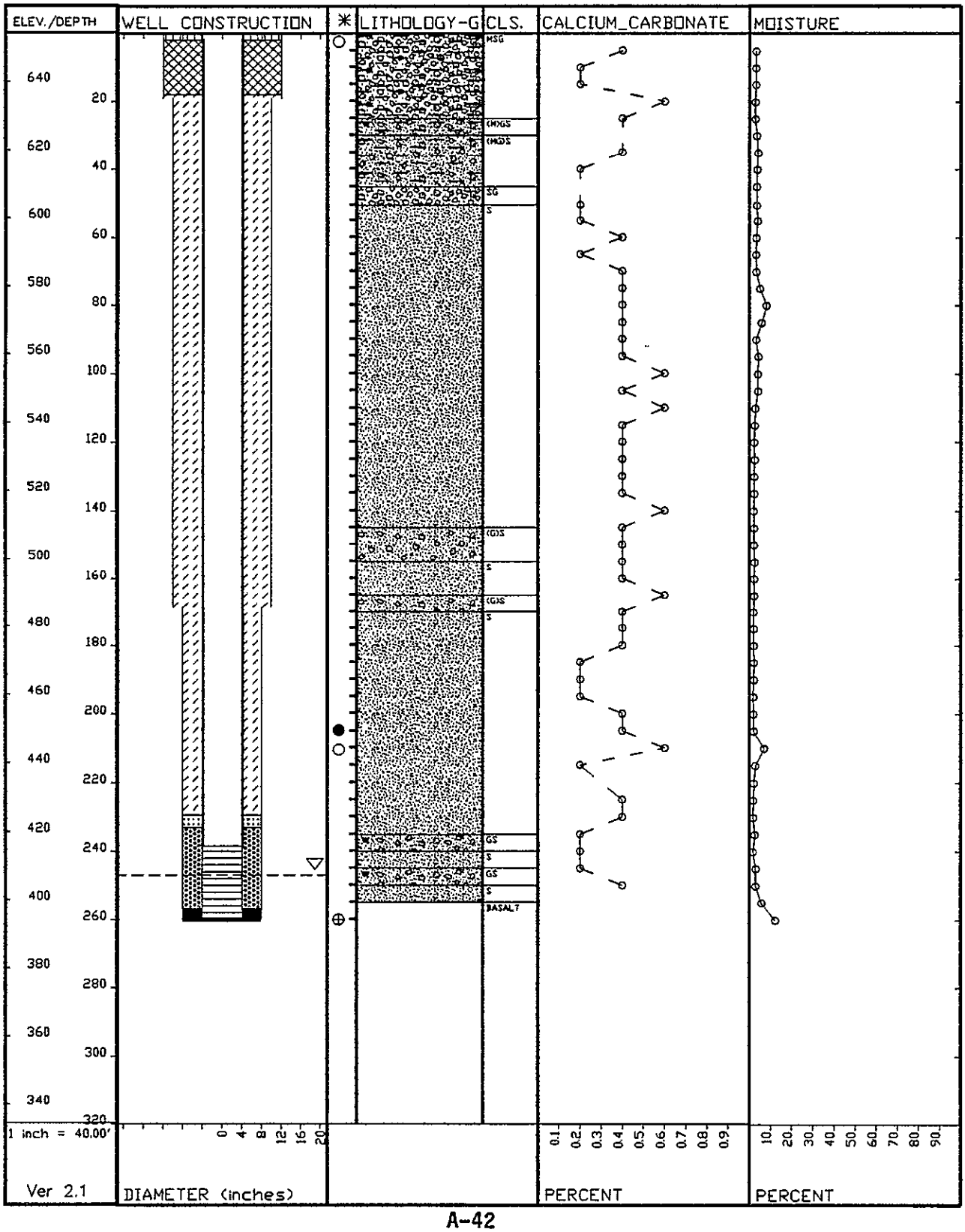
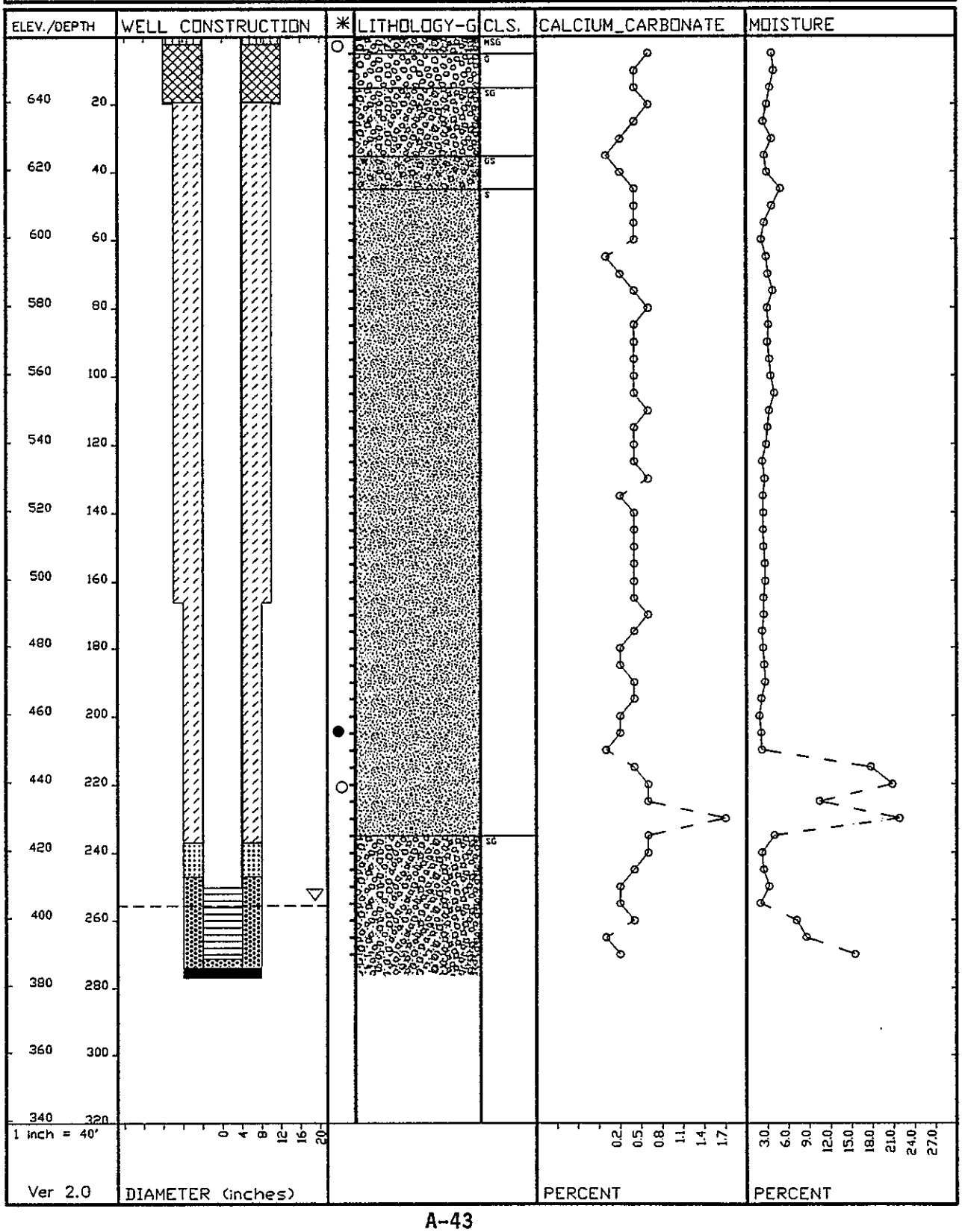
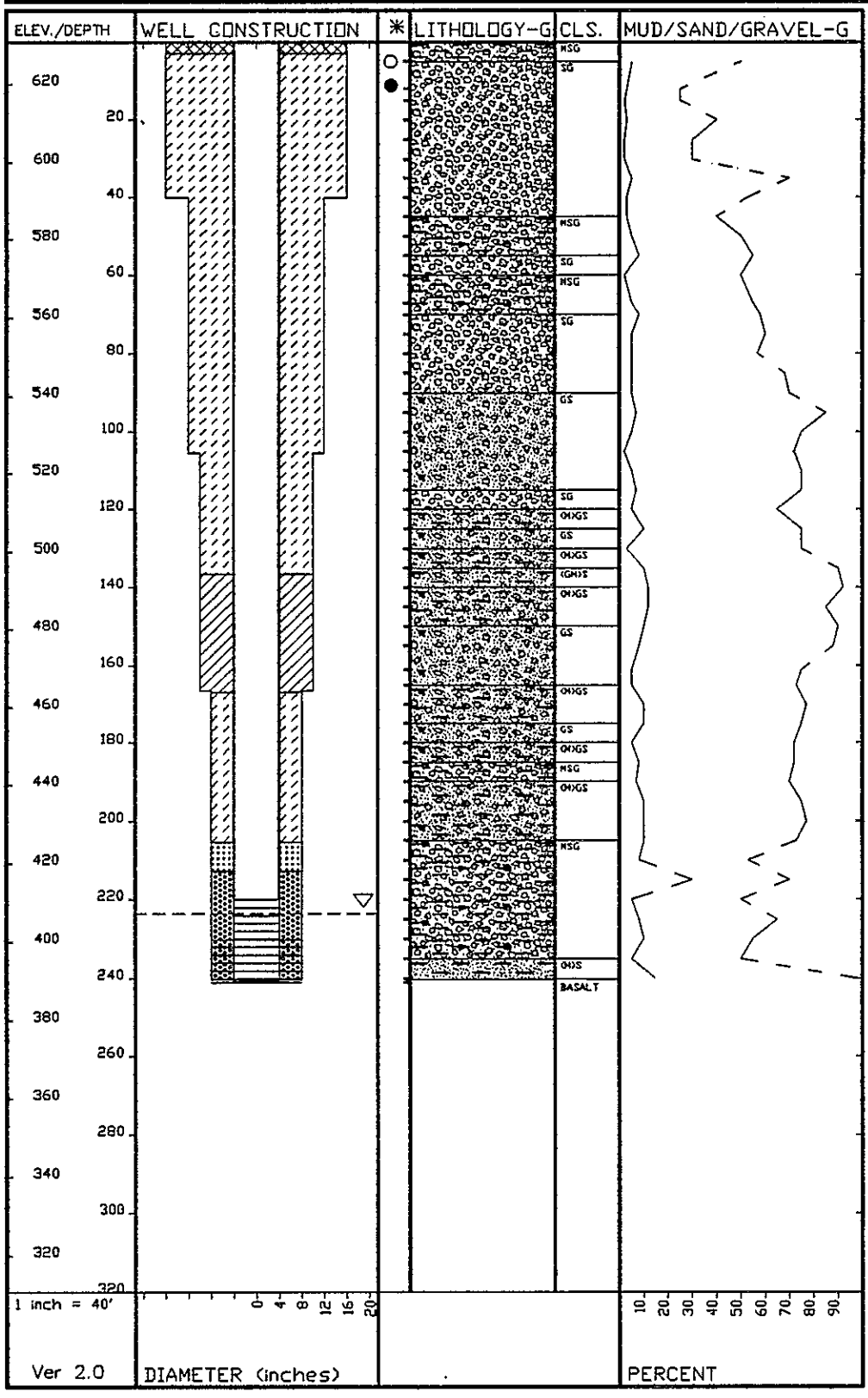


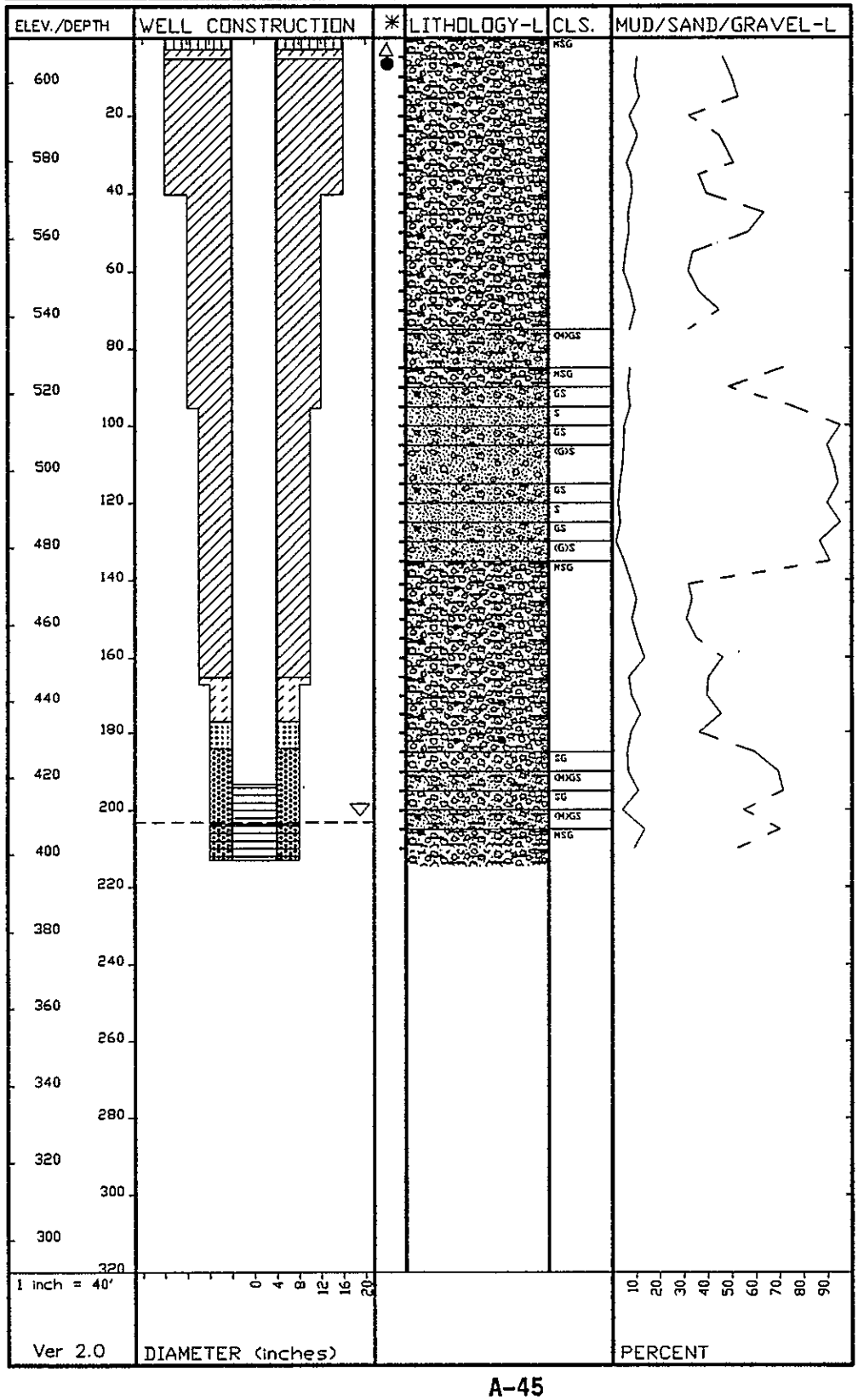
WELL NAME	299-E33-43	COMPLETION DATE	11/05/91
CASING ELEV.	659.18 Feet	INITIAL DEPTH TO WATER	255.5 ft
WELL DEPTH	274.90 Feet		
DRILL DEPTH	275.80 Feet		
COORDINATES N-S	137325.43 LAMBERT NAD83		
E-W	-573523.19 LAMBERT NAD83	PAGE	1 of 1



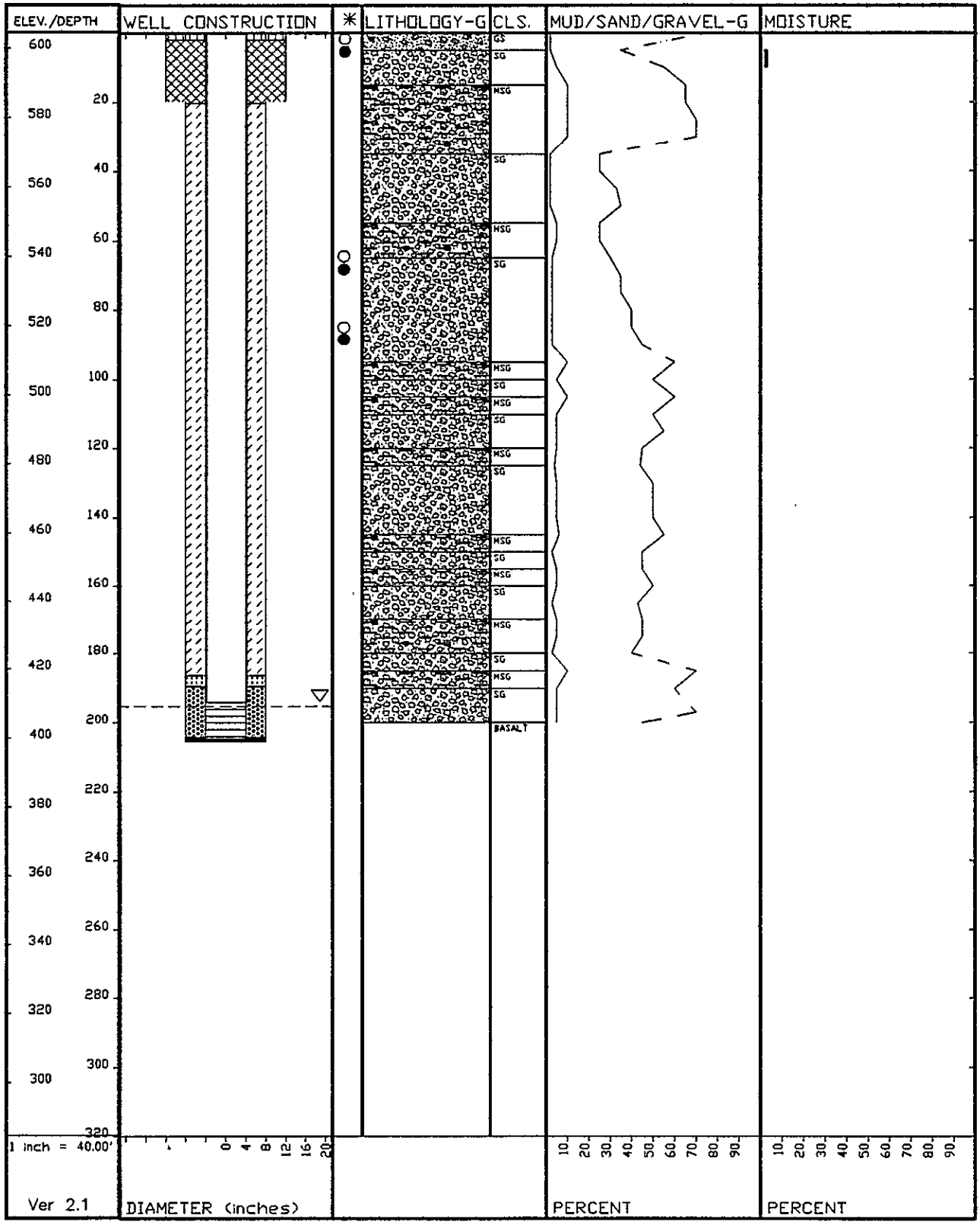
WELL NAME	299-E34-2	COMPLETION DATE	09/30/87
CASING ELEV.	630.80 Feet	INITIAL DEPTH TO WATER	223.5 ft
WELL DEPTH	239.92 Feet		
DRILL DEPTH	241.50 Feet		
COORDINATES N-S	45076 P		
E-W	-50048 P	PAGE	1 of 1



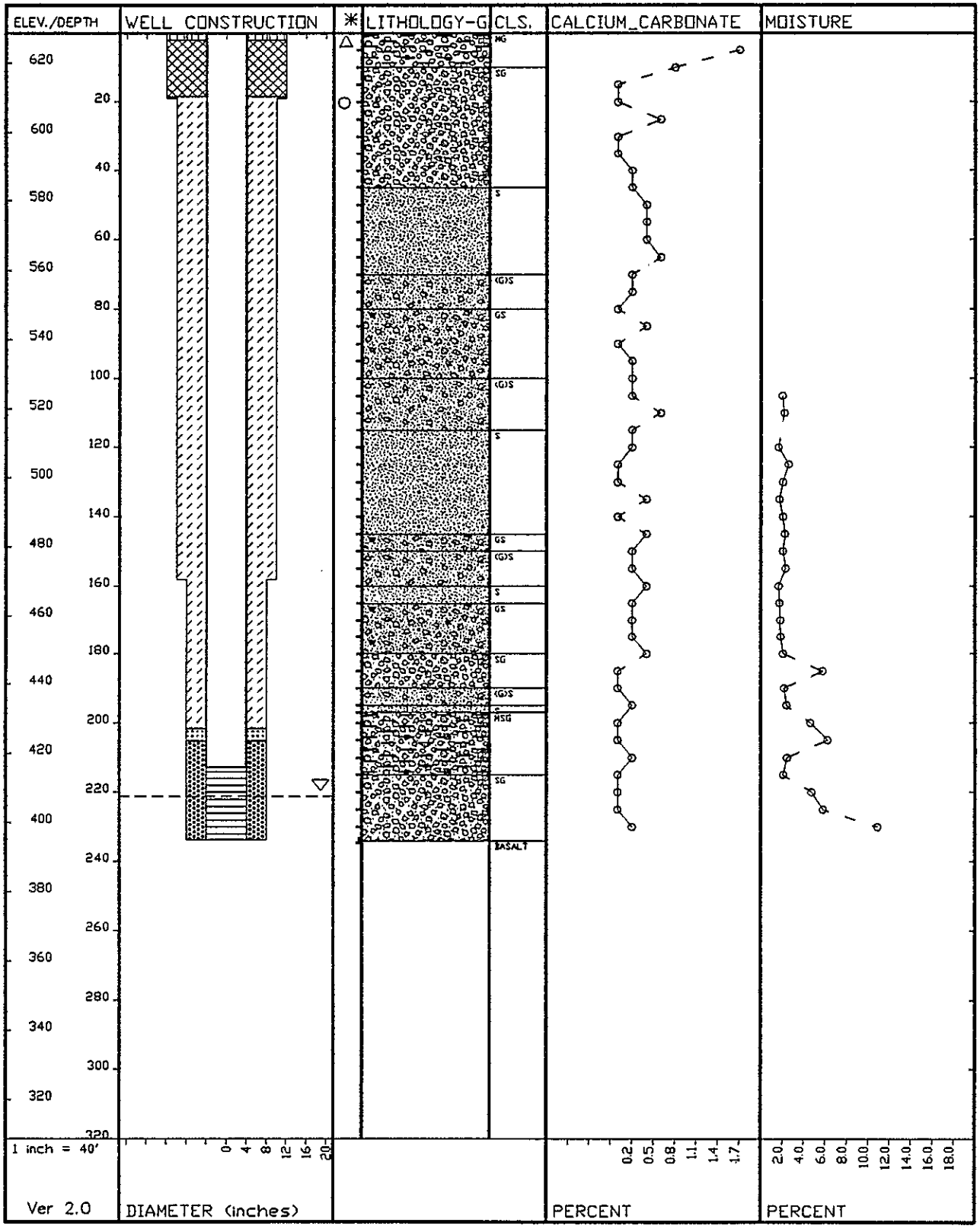
WELL NAME	299-E34-3	COMPLETION DATE	08/19/87
CASING ELEV.	611.52 Feet	INITIAL	
WELL DEPTH	213.00 Feet	DEPTH TO WATER	203.12 ft
DRILL DEPTH	213.00 Feet		
COORDINATES N-S	45337 P		
E-W	-48488 P	PAGE	1 of 1



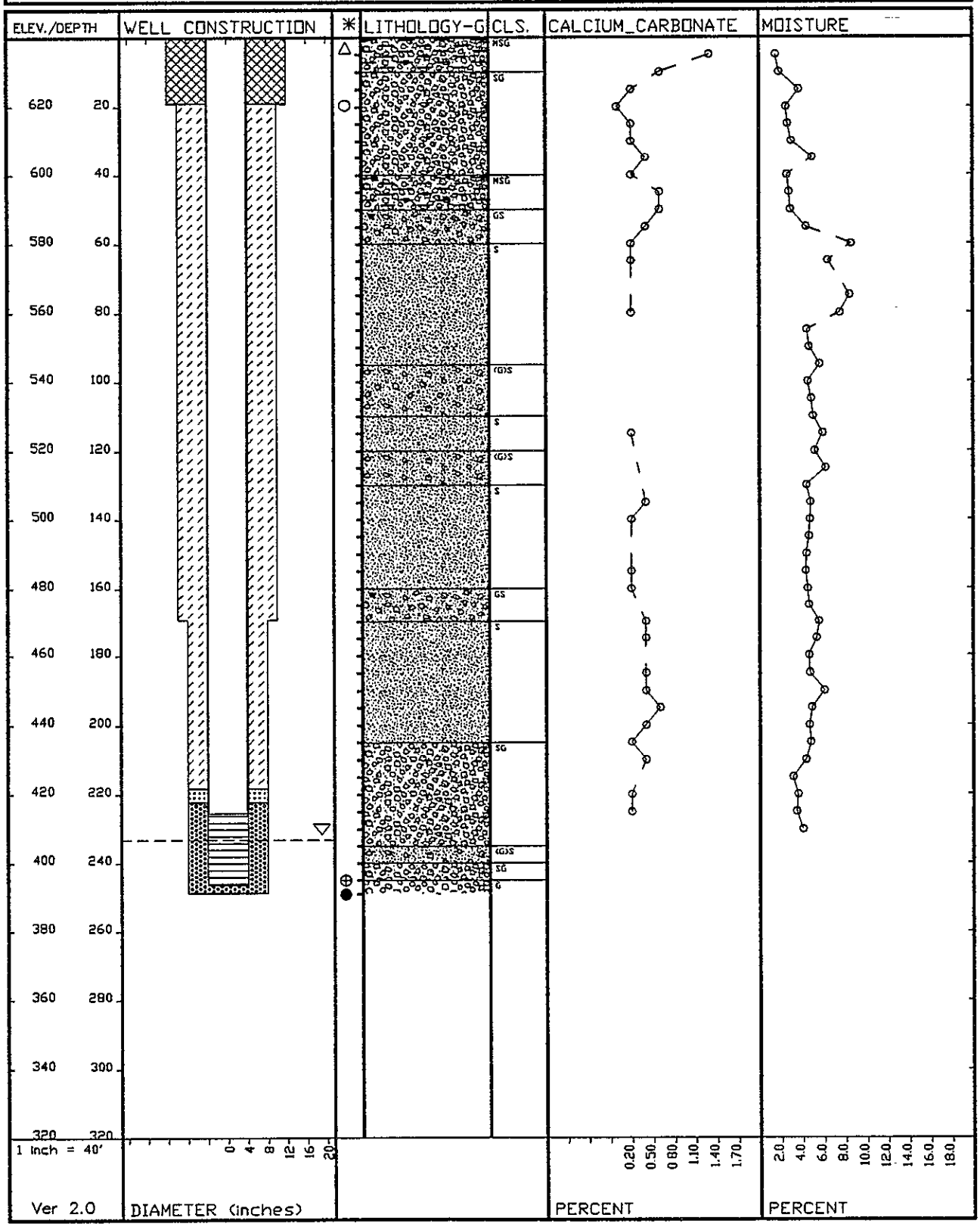
WELL NAME	299-E34-7	COMPLETION DATE	10/17/89
CASING ELEV.	604.25 Feet	INITIAL	
WELL DEPTH	204.55 Feet	DEPTH TO WATER	195.20 ft
DRILL DEPTH	205.50 Feet		
COORDINATES N-S	Missing Missing		
E-W	Missing Missing	PAGE	1 of 1



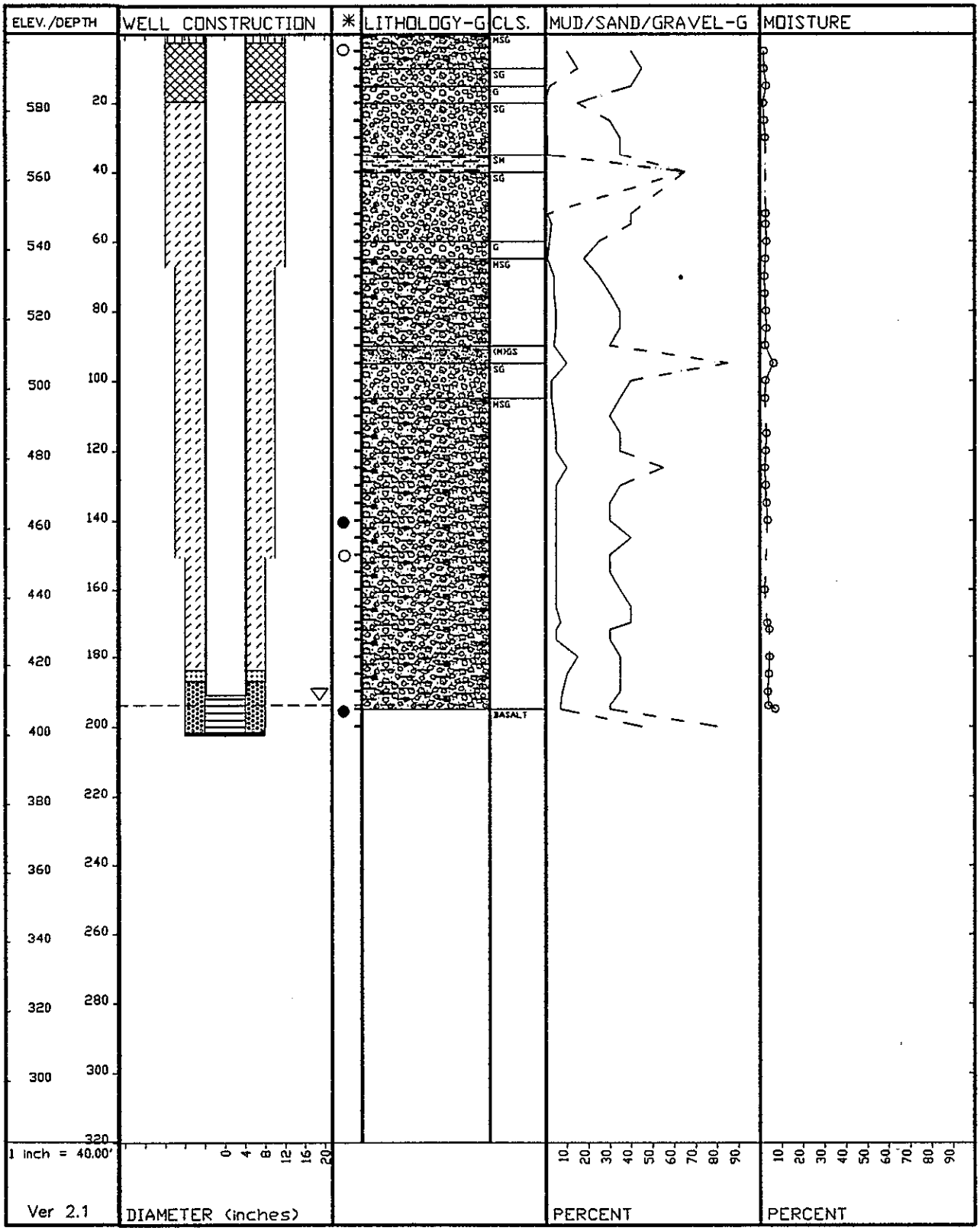
WELL NAME	299-E34-9	COMPLETION DATE	11/05/91
CASING ELEV.	628.69 Feet	INITIAL DEPTH TO WATER	221.05 ft
WELL DEPTH	233.70 Feet		
DRILL DEPTH	234.50 Feet		
COORDINATES N-S	137429.8 LAMBERT NAD83		
E-W	574186 LAMBERT NAD83	PAGE	1 of 1



WELL NAME	299-E34-10	COMPLETION DATE	10/10/91
CASING ELEV.	639.77 Feet	INITIAL DEPTH TO WATER	233.07 ft
WELL DEPTH	246.35 Feet		
DRILL DEPTH	249.00 Feet		
COORDINATES N-S	137224.6 LAMBERT NAD83		
E-W	574284.4 LAMBERT NAD83	PAGE	1 of 1



WELL NAME	299-E35-2	COMPLETION DATE	08/01/90
CASING ELEV.	602.10 Feet	INITIAL	
WELL DEPTH	201.49 Feet	DEPTH TO WATER	193.87 ft
DRILL DEPTH	202.30 Feet		
COORDINATES N-S	45179.9 P		
E-W	-46959.4 P	PAGE	1 of 1



WELL NAME	699-28-40	COMPLETION DATE	05/31/56
CASING ELEV.	559.44 Feet	INITIAL DEPTH TO WATER	N/A
WELL DEPTH	229.00 Feet		
DRILL DEPTH	470.00 Feet		
COORDINATES N-S	27696 P		
E-W	-40297 P		

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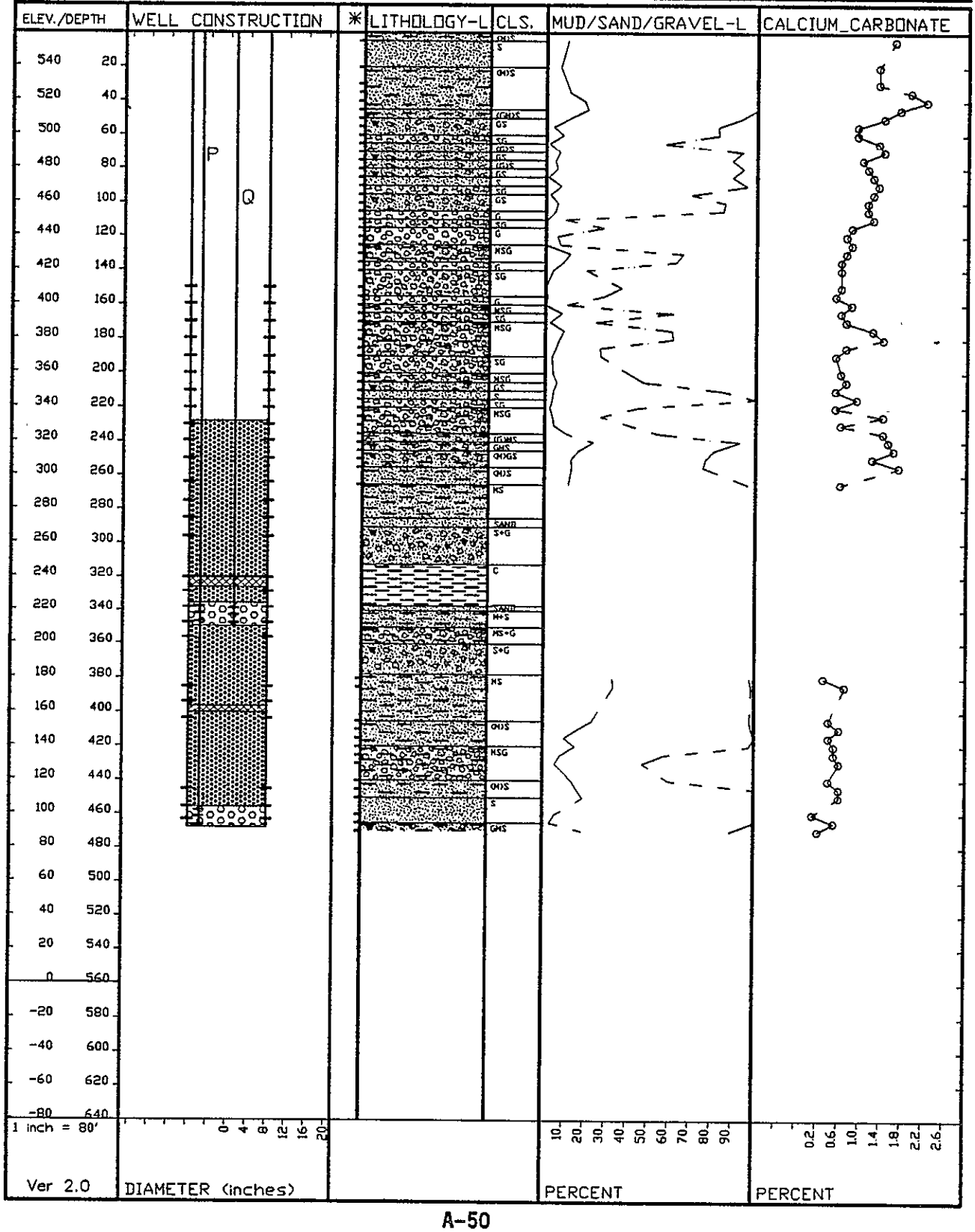
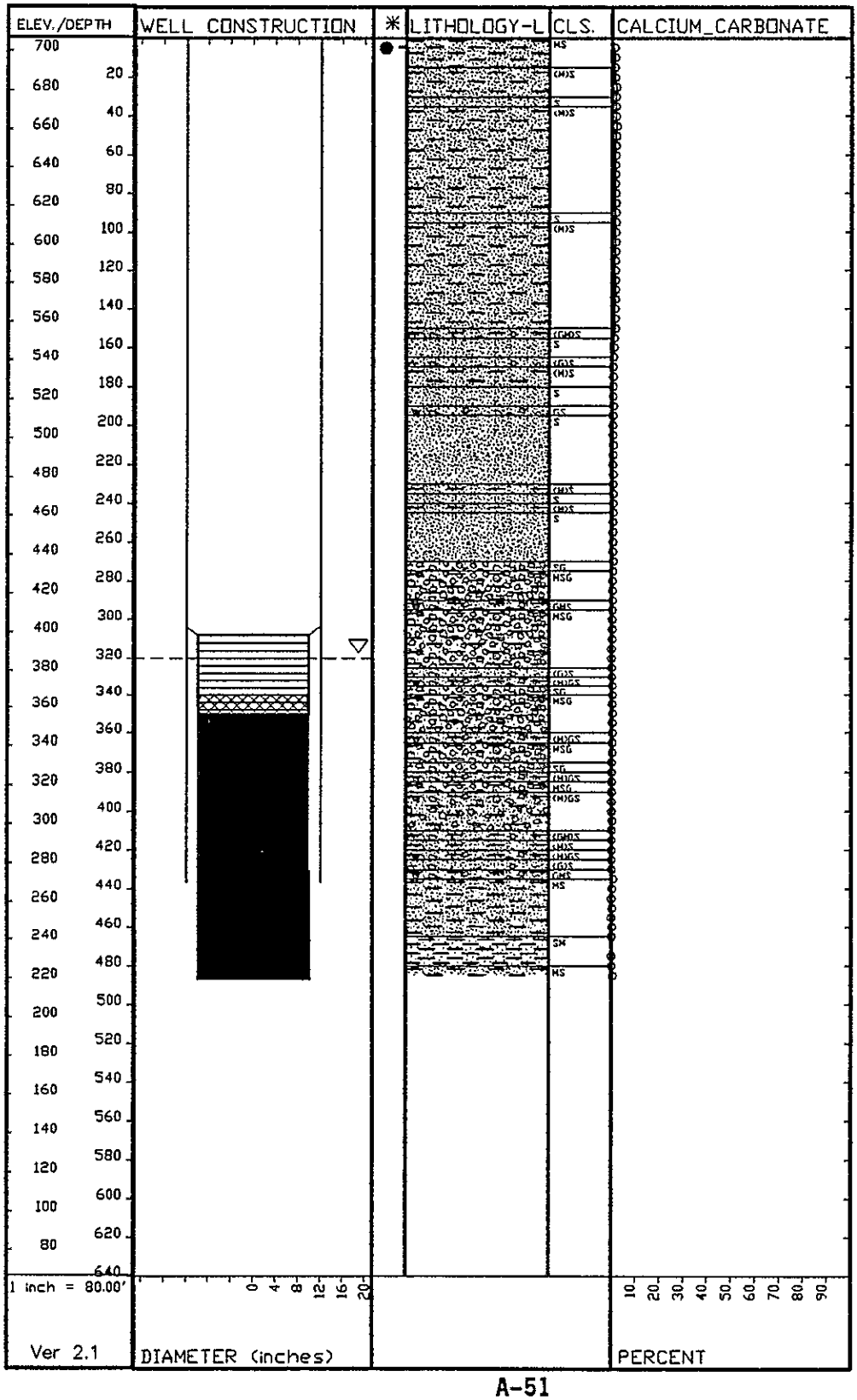
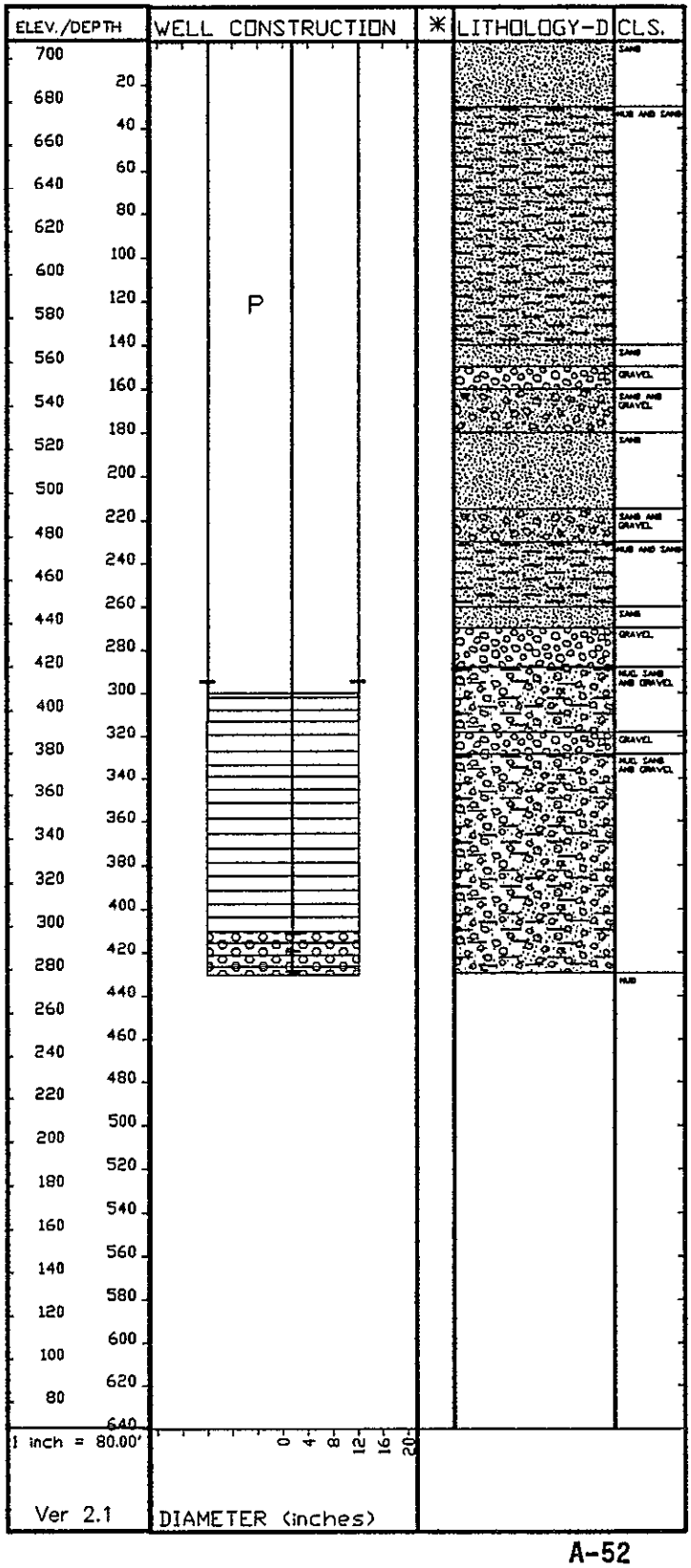


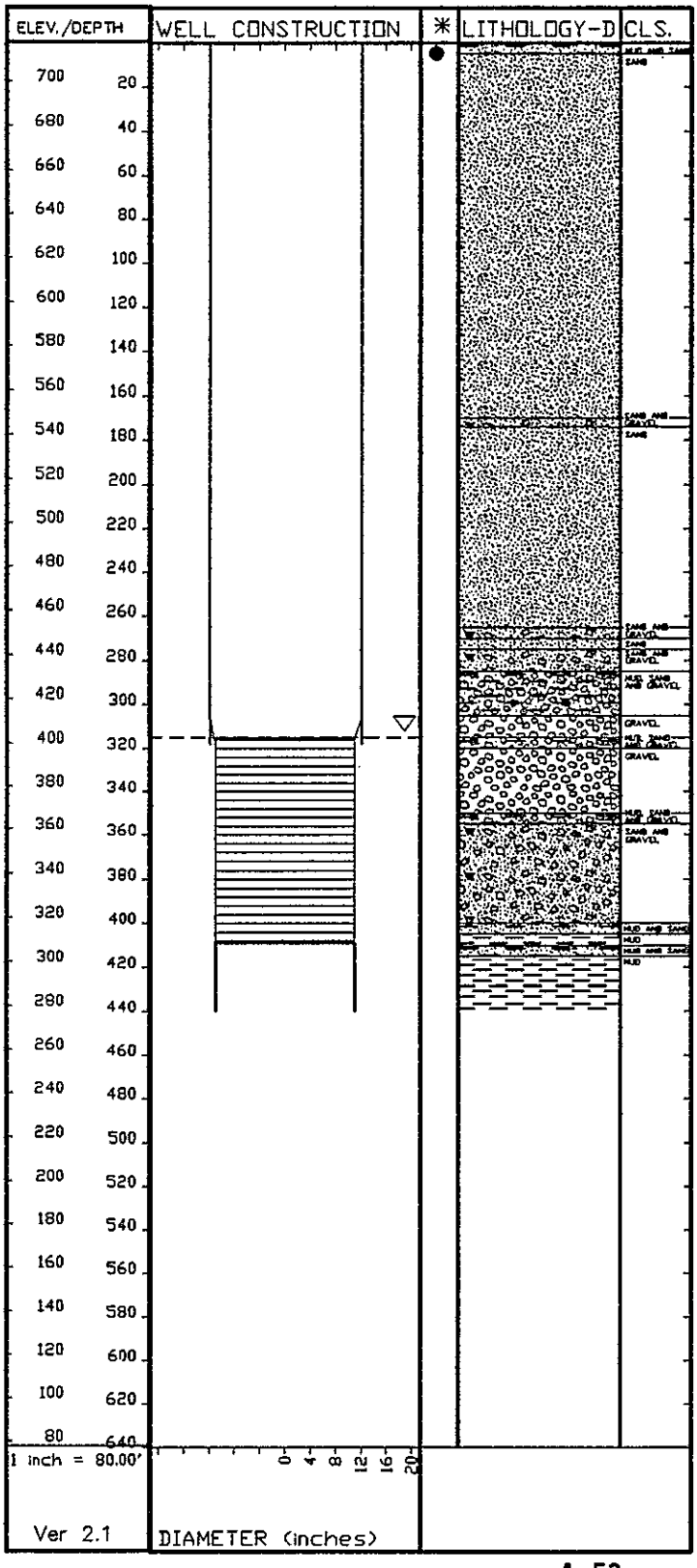
WELL NAME	699-31-53A	COMPLETION DATE	02/16/59
CASING ELEV.	706.14 Feet	INITIAL	
WELL DEPTH	340.00 Feet	DEPTH TO WATER	320.0 ft
DRILL DEPTH	487.00 Feet		
COORDINATES N-S	-31111 P		
E-W	-52977 P	PAGE	1 of 1



WELL NAME	699-31-53B	COMPLETION DATE	04/23/59
CASING ELEV.	707.53 Feet	INITIAL DEPTH TO WATER	N/A
WELL DEPTH	PIEZOMETER		
DRILL DEPTH	430.50 Feet		
COORDINATES N-S	31160 P		
E-W	-52964 P	PAGE	1 of 1



WELL NAME	699-33-56	COMPLETION DATE	07/20/58
CASING ELEV.	717.03 Feet	INITIAL	
WELL DEPTH	440.00 Feet	DEPTH TO WATER	315.0 ft
DRILL DEPTH	440.00 Feet		
COORDINATES N-S	33000 P		
E-W	-56000 P	PAGE	1 of 1



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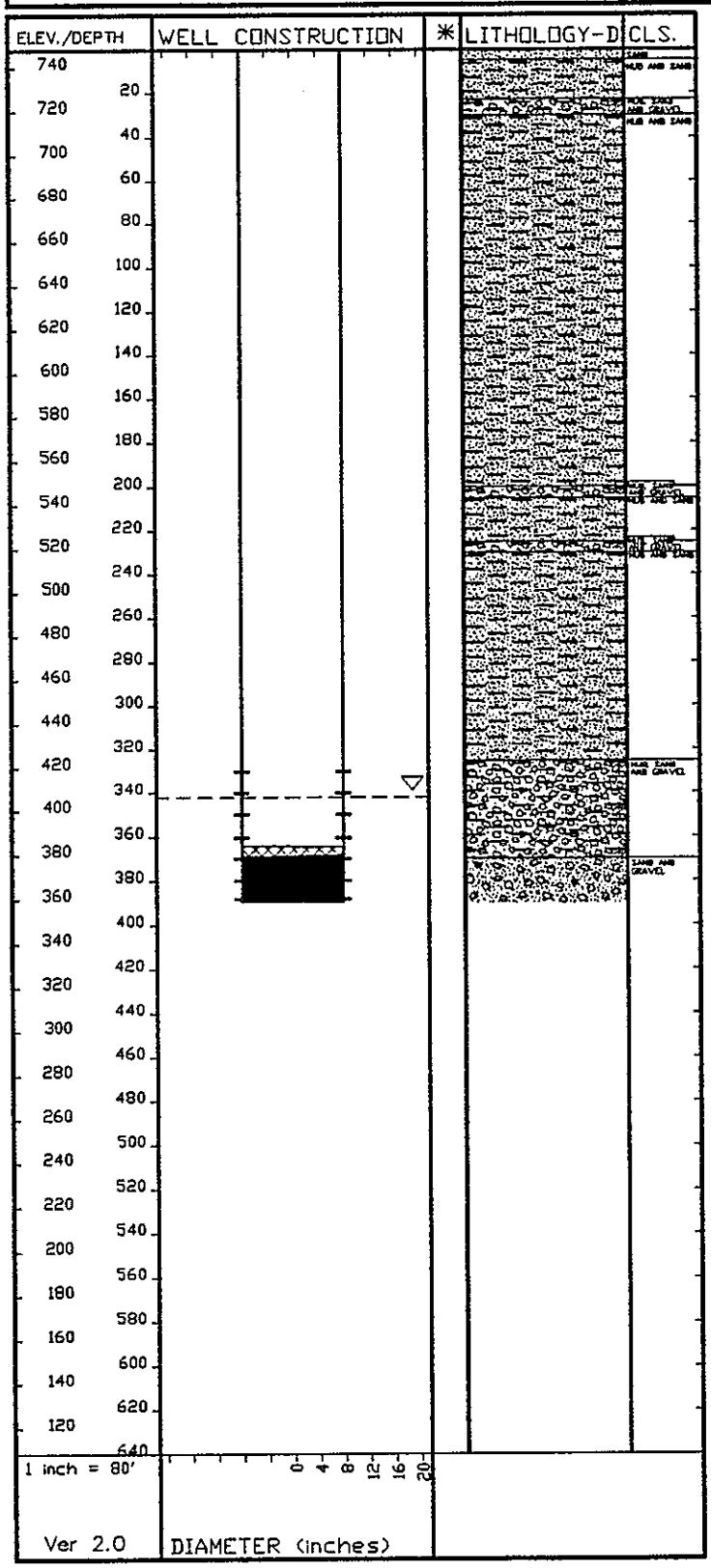
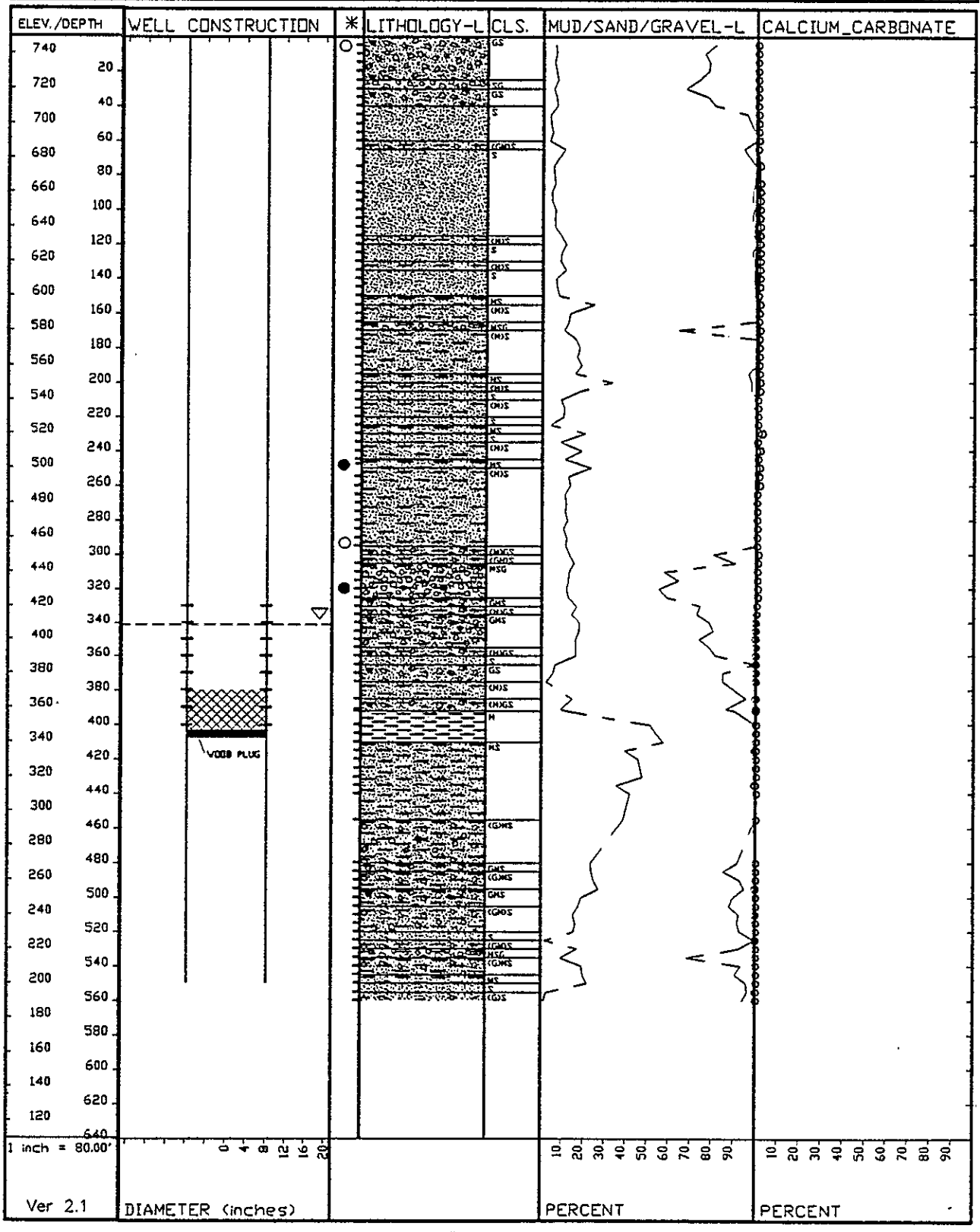
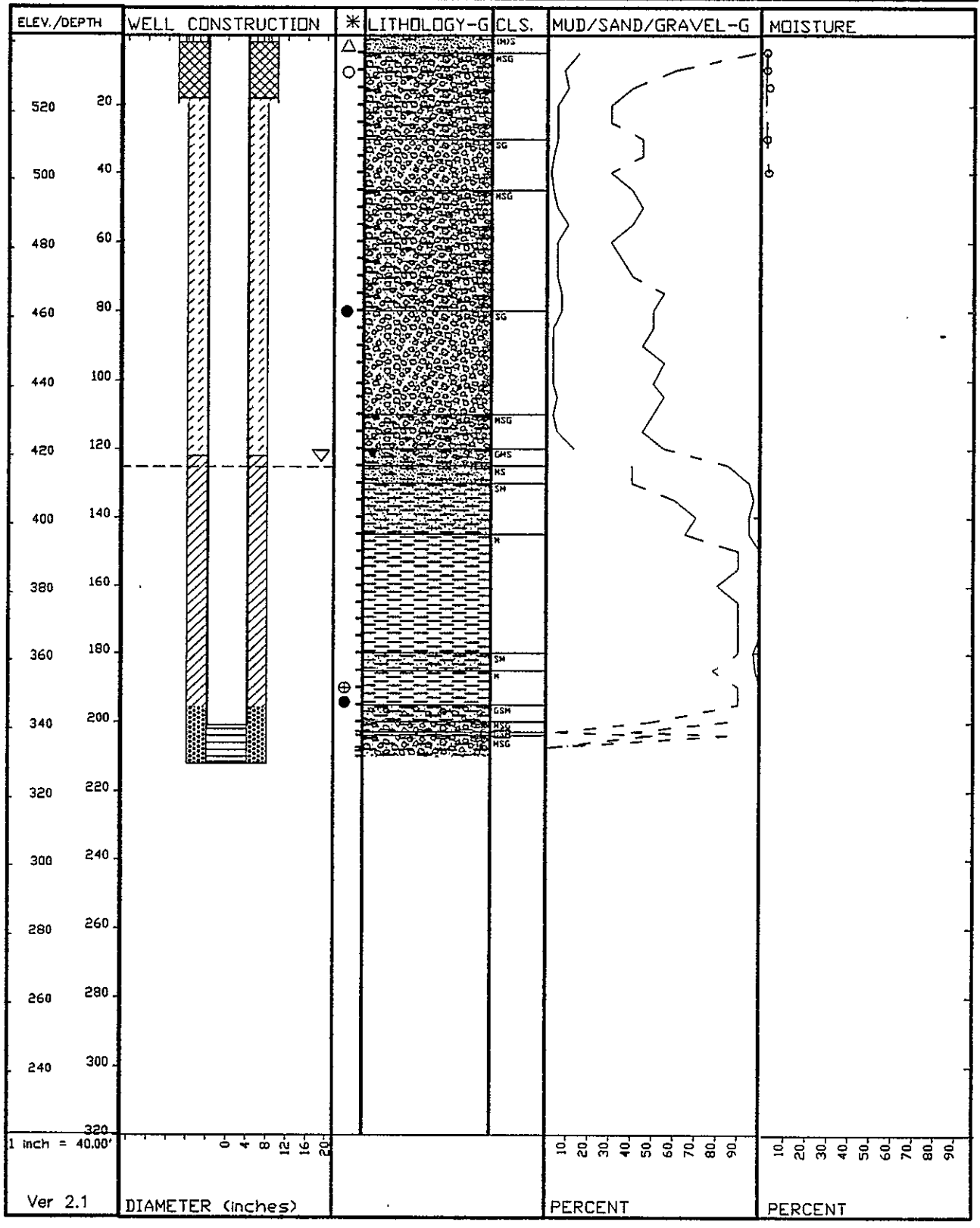
WELL NAME	699-36-61A	COMPLETION DATE	08/12/48
CASING ELEV.	748.11 Feet	INITIAL DEPTH TO WATER	357 ft
WELL DEPTH	363.00 Feet		
DRILL DEPTH	390.00 Feet		
COORDINATES N-S	36365 P		
E-W	-60704 P	PAGE	1 of 1



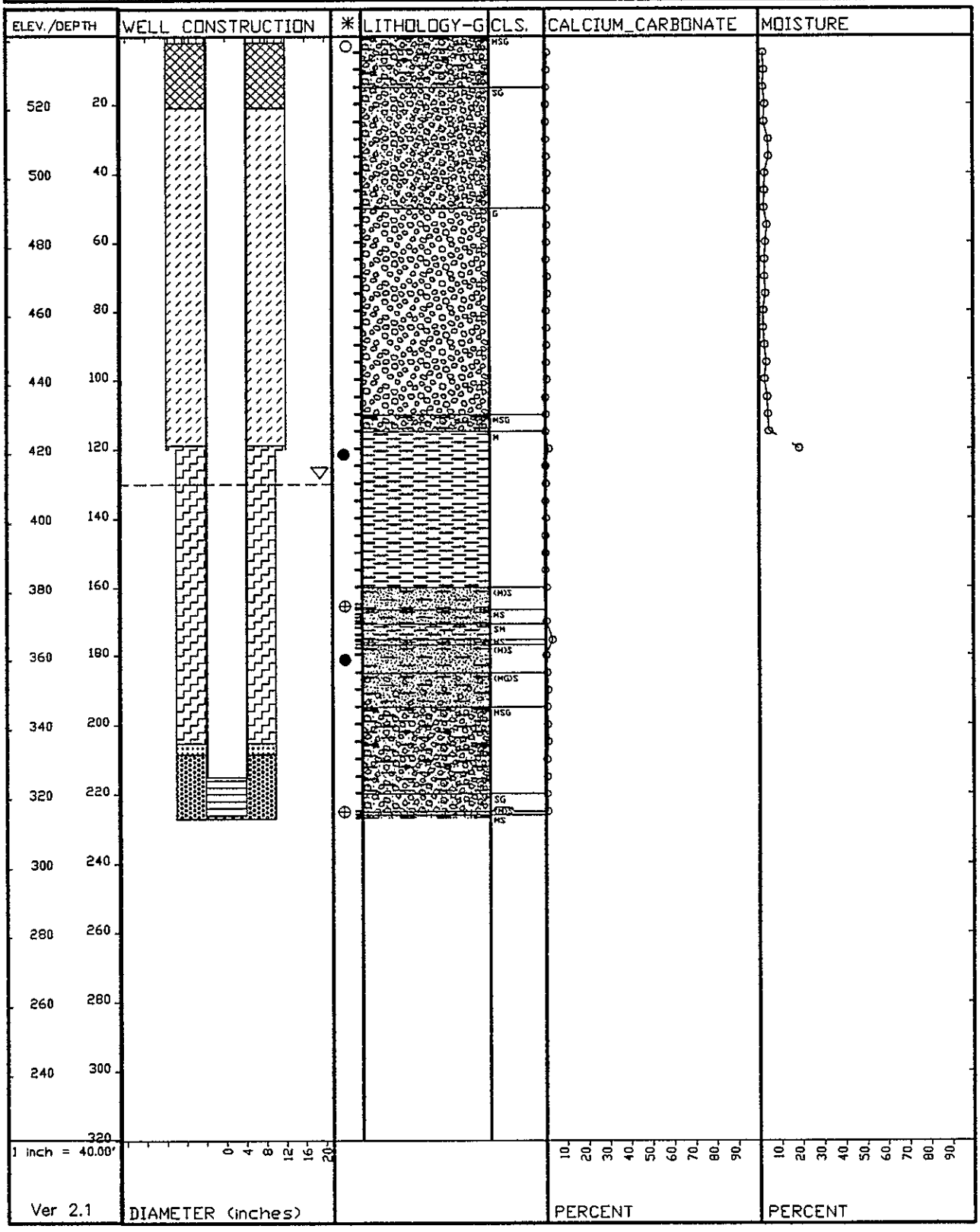
WELL NAME	699-36-61B	COMPLETION DATE	02/04/60
CASING ELEV.	749.26 Feet	INITIAL DEPTH TO WATER	341.0 ft
WELL DEPTH	380.00 Feet		
DRILL DEPTH	568.00 Feet		
COORDINATES N-S	36463 P		
E-W	-60685 P	PAGE	1 of 1



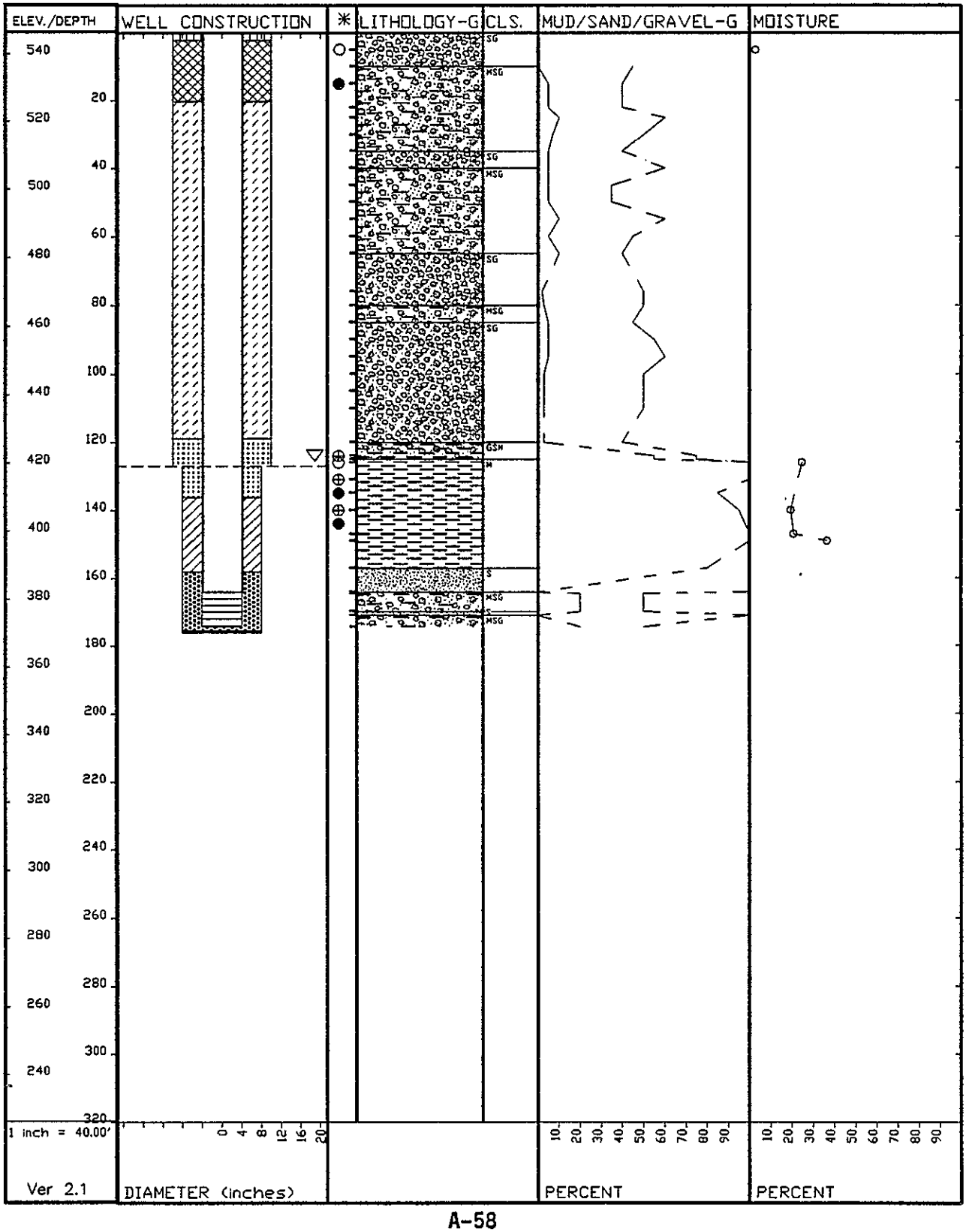
WELL NAME	699-40-39	COMPLETION DATE	08/07/89
CASING ELEV.	541.84 Feet	INITIAL DEPTH TO WATER	125.30 ft
WELL DEPTH	212.00 Feet		
DRILL DEPTH	212.00 Feet		
COORDINATES N-S	39877.9 P		
E-W	-39224.3 P	PAGE	1 of 1



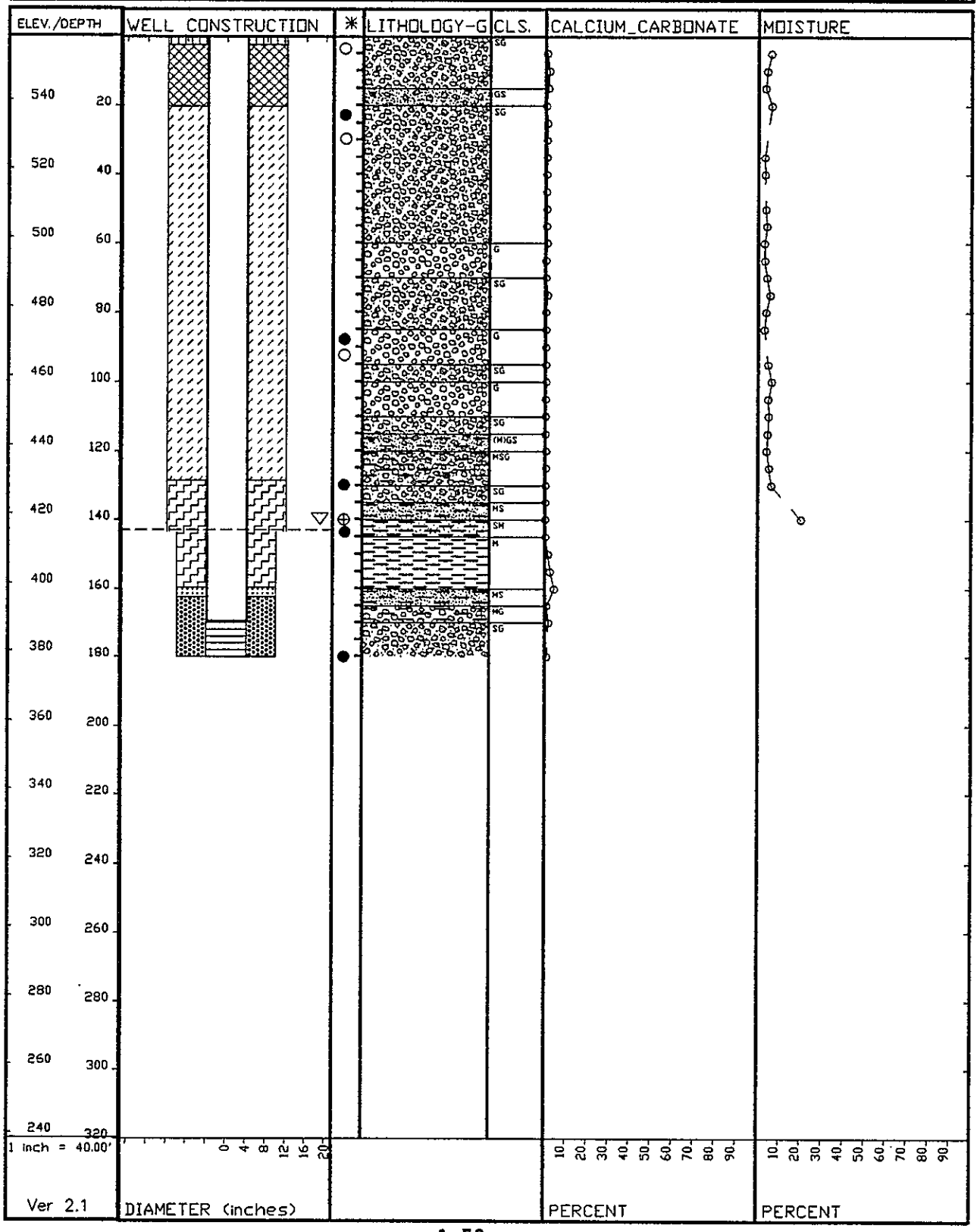
WELL NAME	699-40-40A	COMPLETION DATE	10/17/91
CASING ELEV.	541.21 Feet	INITIAL DEPTH TO WATER	130.0 ft
WELL DEPTH	226.10 Feet		
DRILL DEPTH	227.00 Feet		
COORDINATES N-S	135594.3 LAMBERT NAD83		
E-W	577680.3 LAMBERT NAD83	PAGE	1 of 1



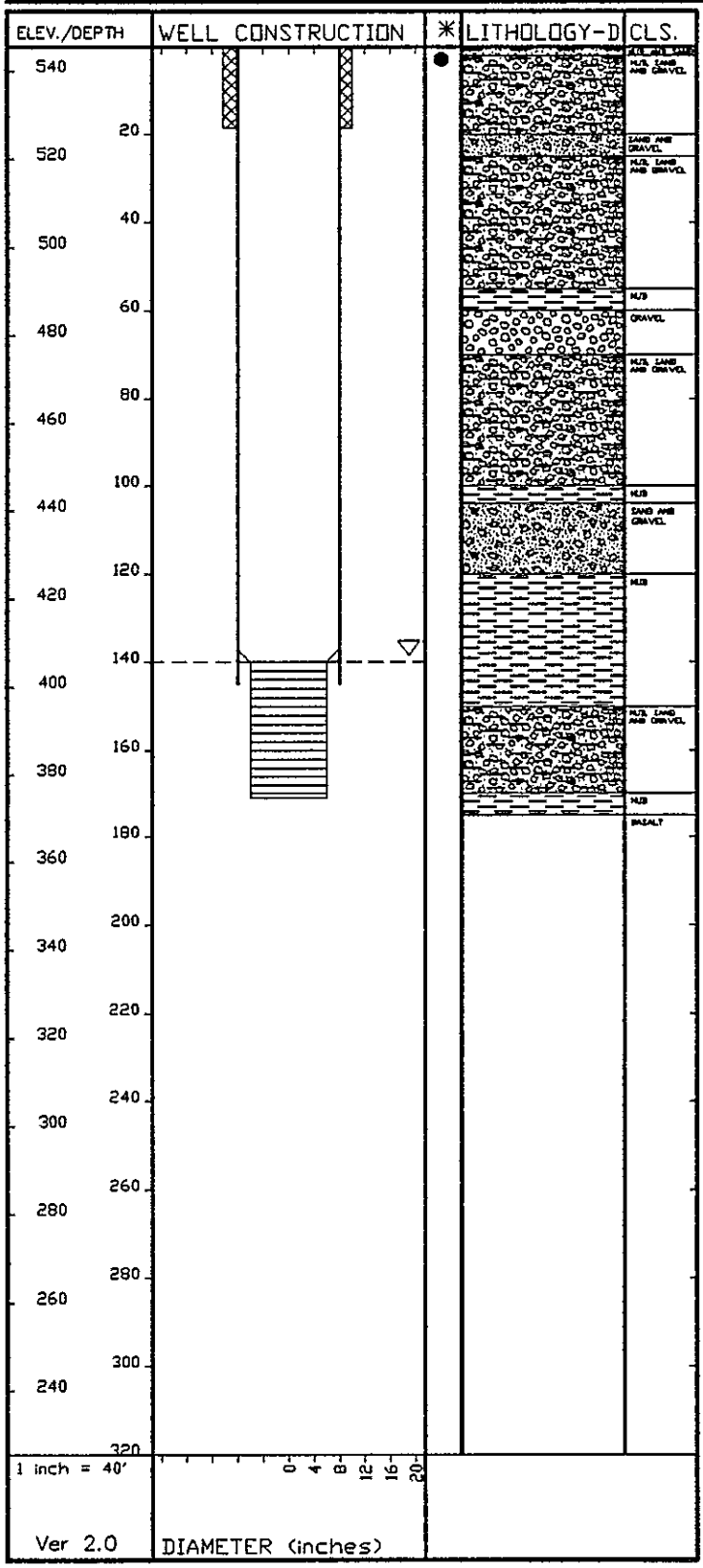
WELL NAME	699-41-40	COMPLETION DATE	08/04/89
CASING ELEV.	545.94 Feet	INITIAL	
WELL DEPTH	174.30 Feet	DEPTH TO WATER	127.08 ft
DRILL DEPTH	176.14 Feet		
COORDINATES N-S	41029.8 P		
E-W	-40284.9 P	PAGE	1 of 1



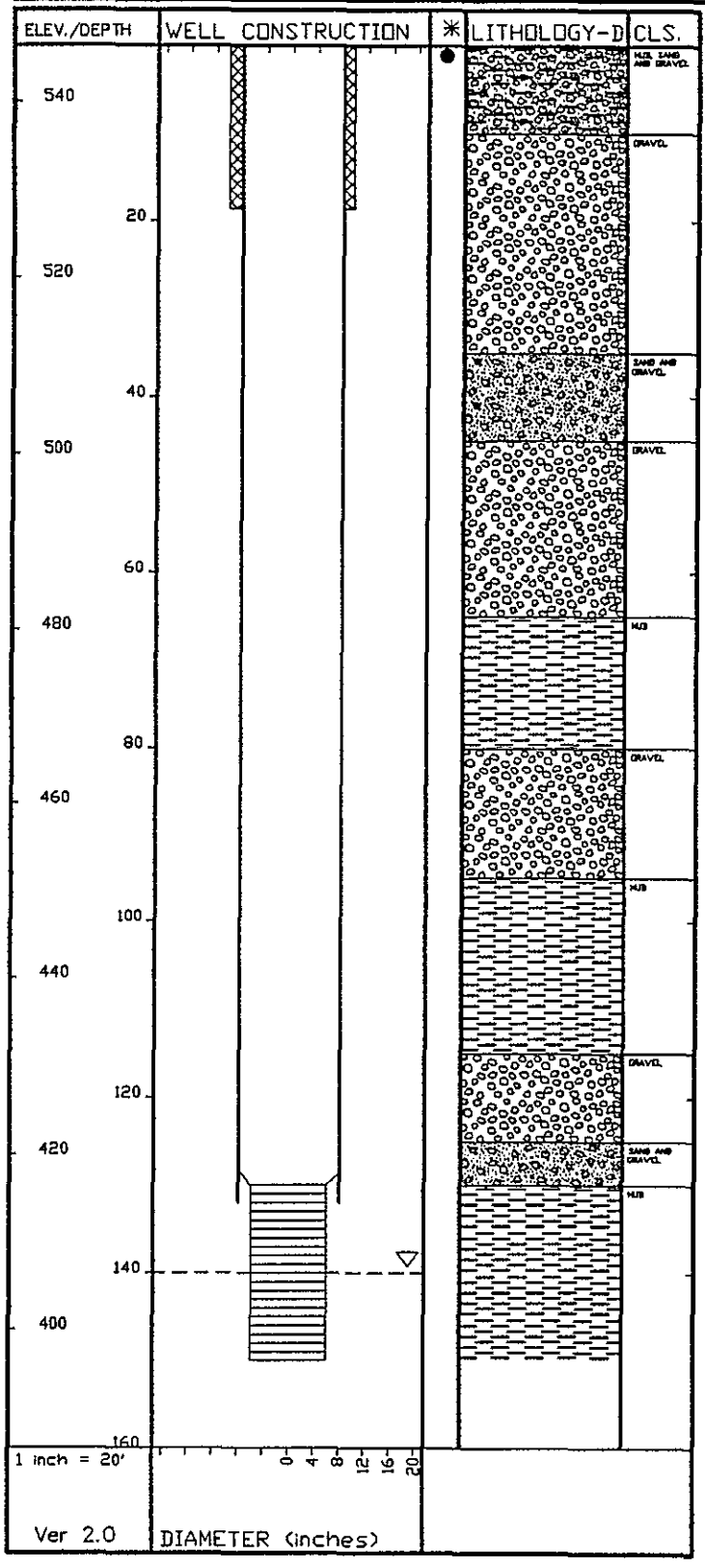
WELL NAME	699-42-39A	COMPLETION DATE	09/26/91
CASING ELEV.	558.14 Feet	INITIAL DEPTH TO WATER	143.0 ft
WELL DEPTH	180.10 Feet		
DRILL DEPTH	180.60 Feet		
COORDINATES N-S	136251.95 LAMBERT NAD83		
E-W	-577857 LAMBERT NAD83	PAGE	1 of 1



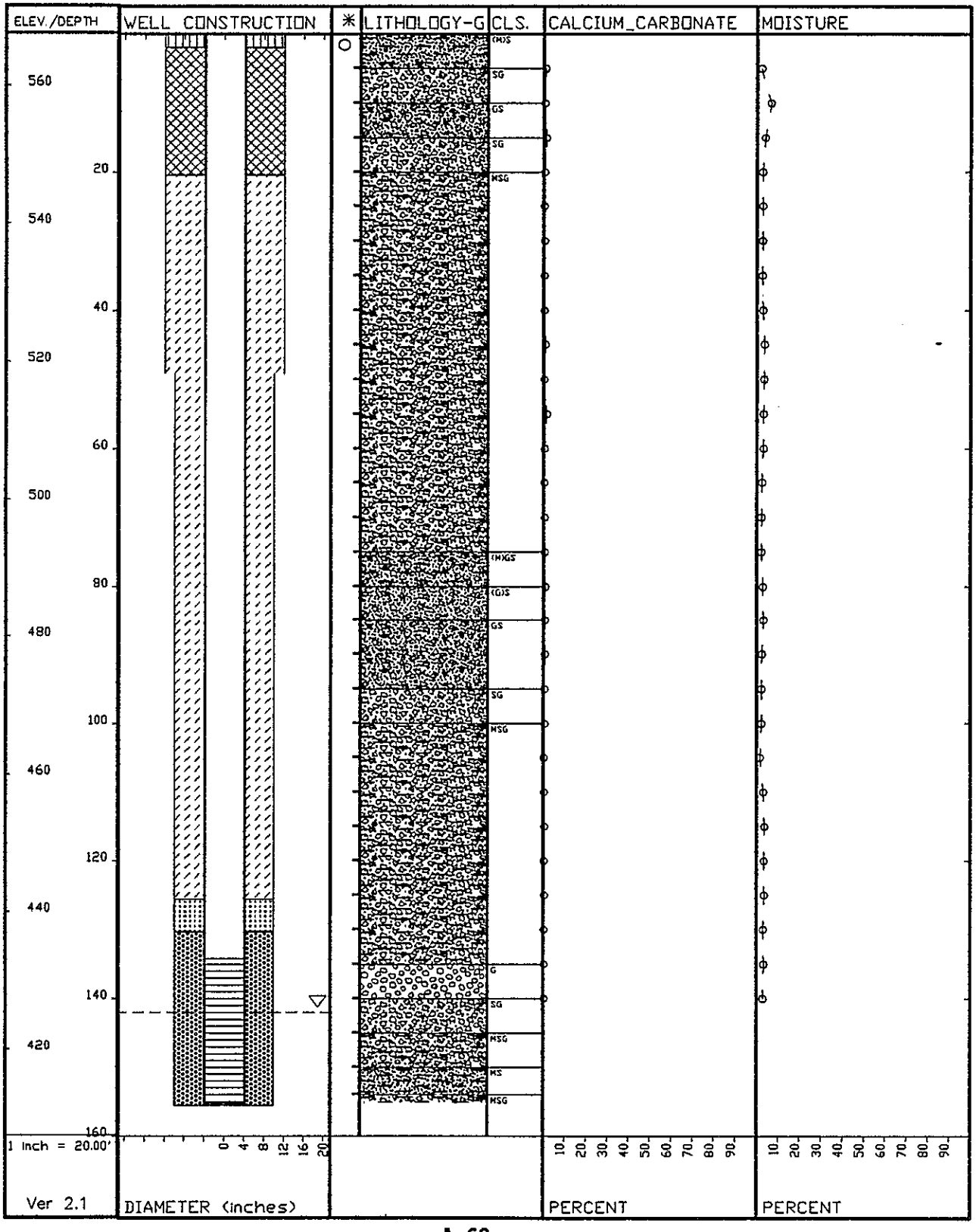
WELL NAME	699-42-40A	COMPLETION DATE	07/20/81
CASING ELEV.	545.53 Feet	INITIAL DEPTH TO WATER	140.0 ft
WELL DEPTH	173.00 Feet		
DRILL DEPTH	176.00 Feet		
COORDINATES N-S	42420 P		
E-W	-40205 P	PAGE	1 of 1



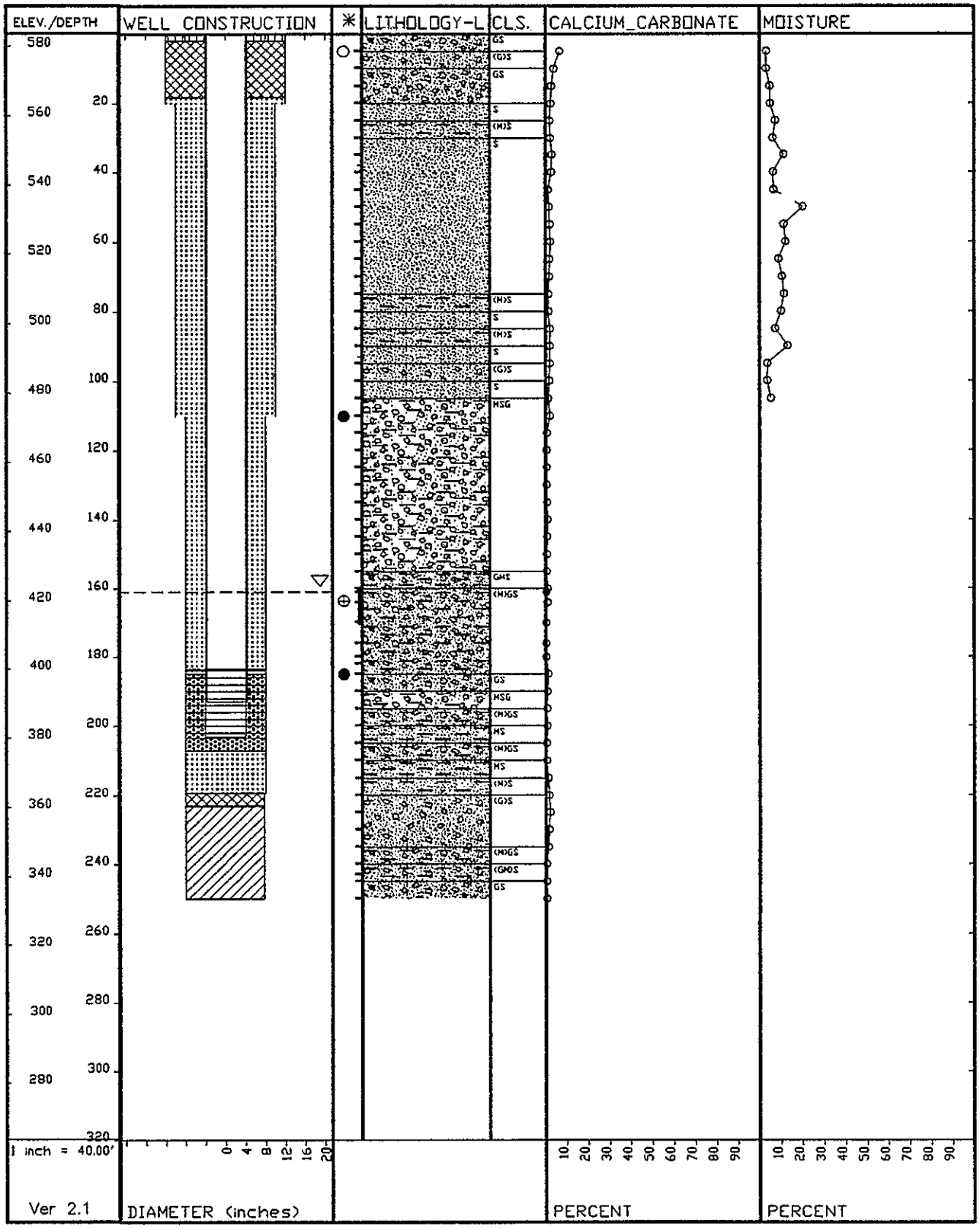
WELL NAME	699-42-40B	COMPLETION DATE	09/30/81
CASING ELEV.	546.46 Feet	INITIAL DEPTH TO WATER	140.0 ft
WELL DEPTH	150.00 Feet		
DRILL DEPTH	150.00 Feet		
COORDINATES N-S	42420 P		
E-W	-40205 P	PAGE	1 of 1



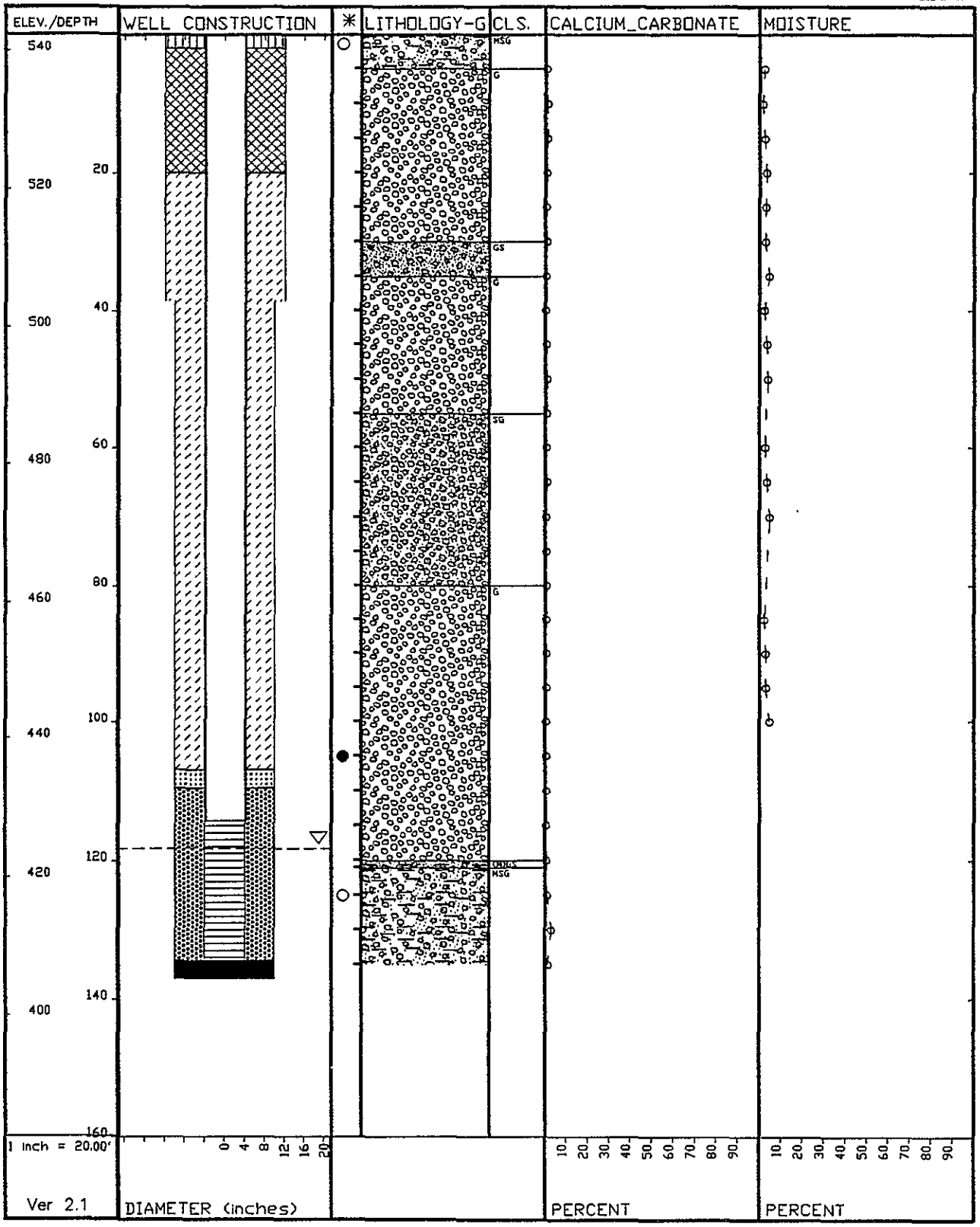
WELL NAME	699-42-41	COMPLETION DATE	08/29/91
CASING ELEV.	567.30 Feet	INITIAL DEPTH TO WATER	142.0 ft
WELL DEPTH	155.20 Feet		
DRILL DEPTH	155.20 Feet		
COORDINATES N-S	136365.6 Lambert NAD83		
E-W	-577335.6 Lambert NAD83	PAGE	1 of 1



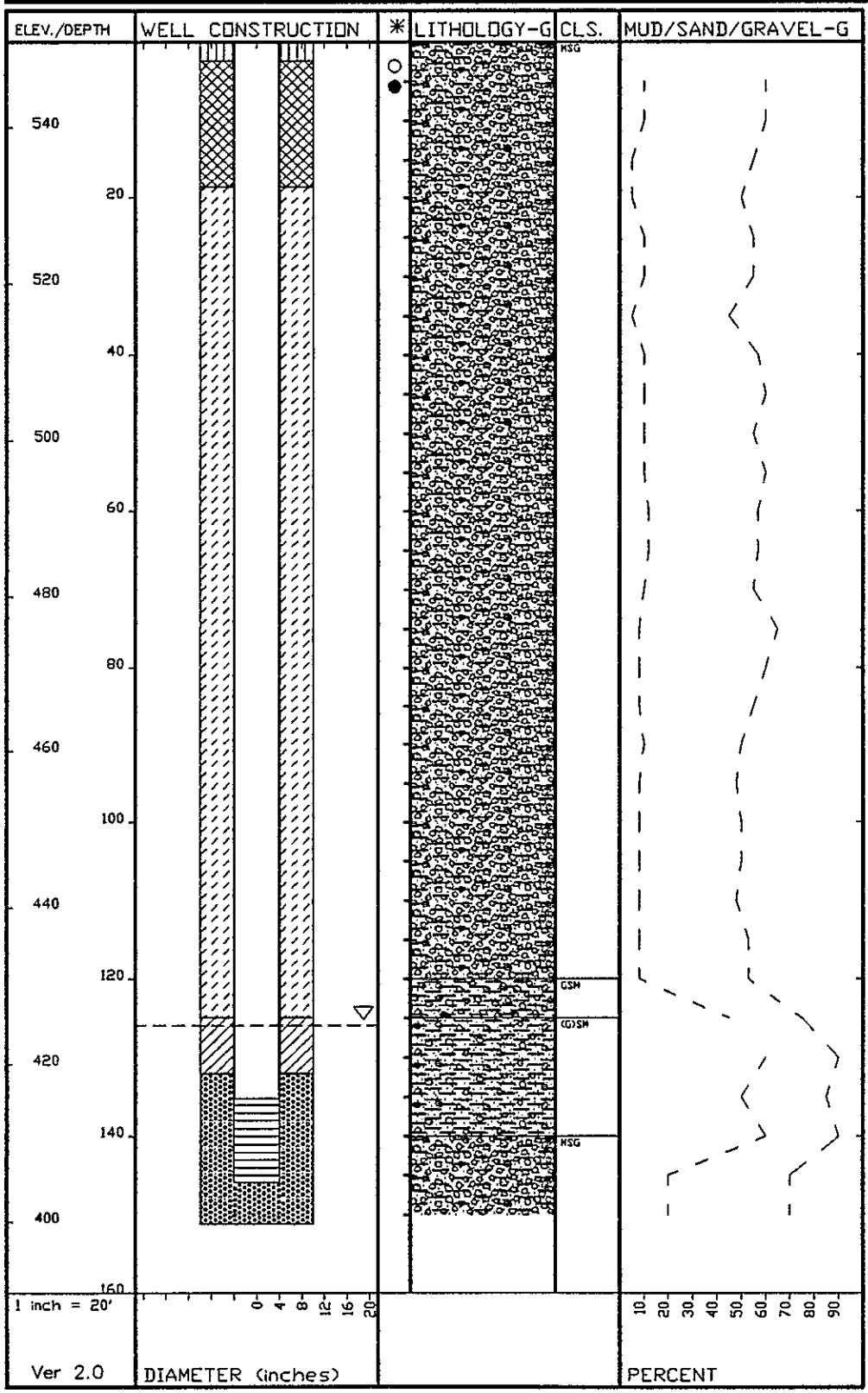
WELL NAME	699-42-42B	COMPLETION DATE	10/15/88
CASING ELEV.	583.23 Feet	INITIAL DEPTH TO WATER	160.85 ft
WELL DEPTH	203.00 Feet		
DRILL DEPTH	250.00 Feet		
COORDINATES N-S	42472.9 P		
E-W	-42301.3 P	PAGE	1 of 1



WELL NAME	699-43-40	COMPLETION DATE	10/24/91
CASING ELEV.	542.20 Feet	INITIAL DEPTH TO WATER	118.3 ft
WELL DEPTH	135.30 Feet		
DRILL DEPTH	137.00 Feet		
COORDINATES N-S	43357.4 P		
E-W	-40379.1 P	PAGE	1 of 1



WELL NAME	699-43-41E	COMPLETION DATE	08/04/89
CASING ELEV.	550.86 Feet	INITIAL DEPTH TO WATER	125.95 ft
WELL DEPTH	145.84 Feet		
DRILL DEPTH	150.02 Feet		
COORDINATES N-S	42994.9 P		
E-W	-40723 P	PAGE	1 of 1



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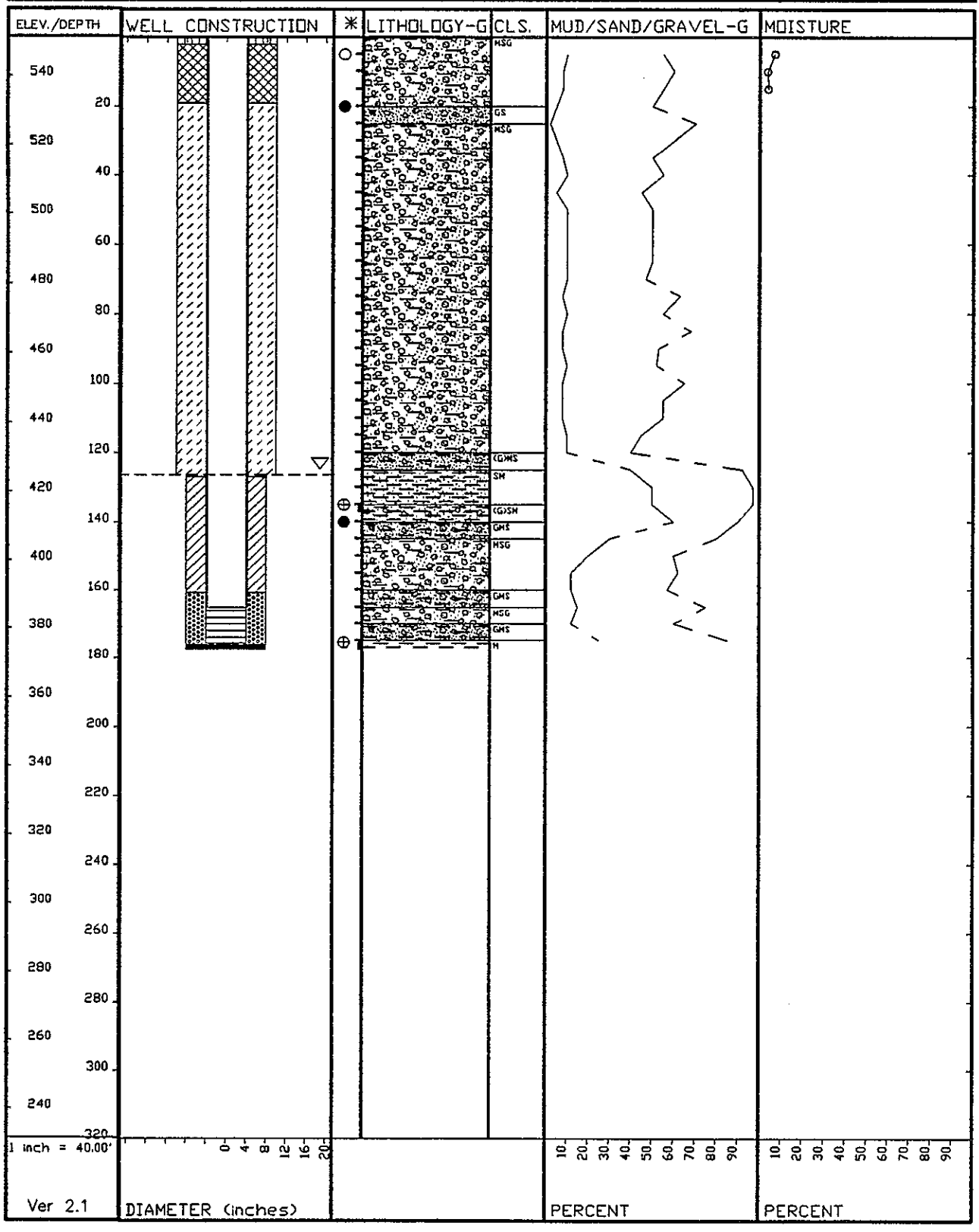
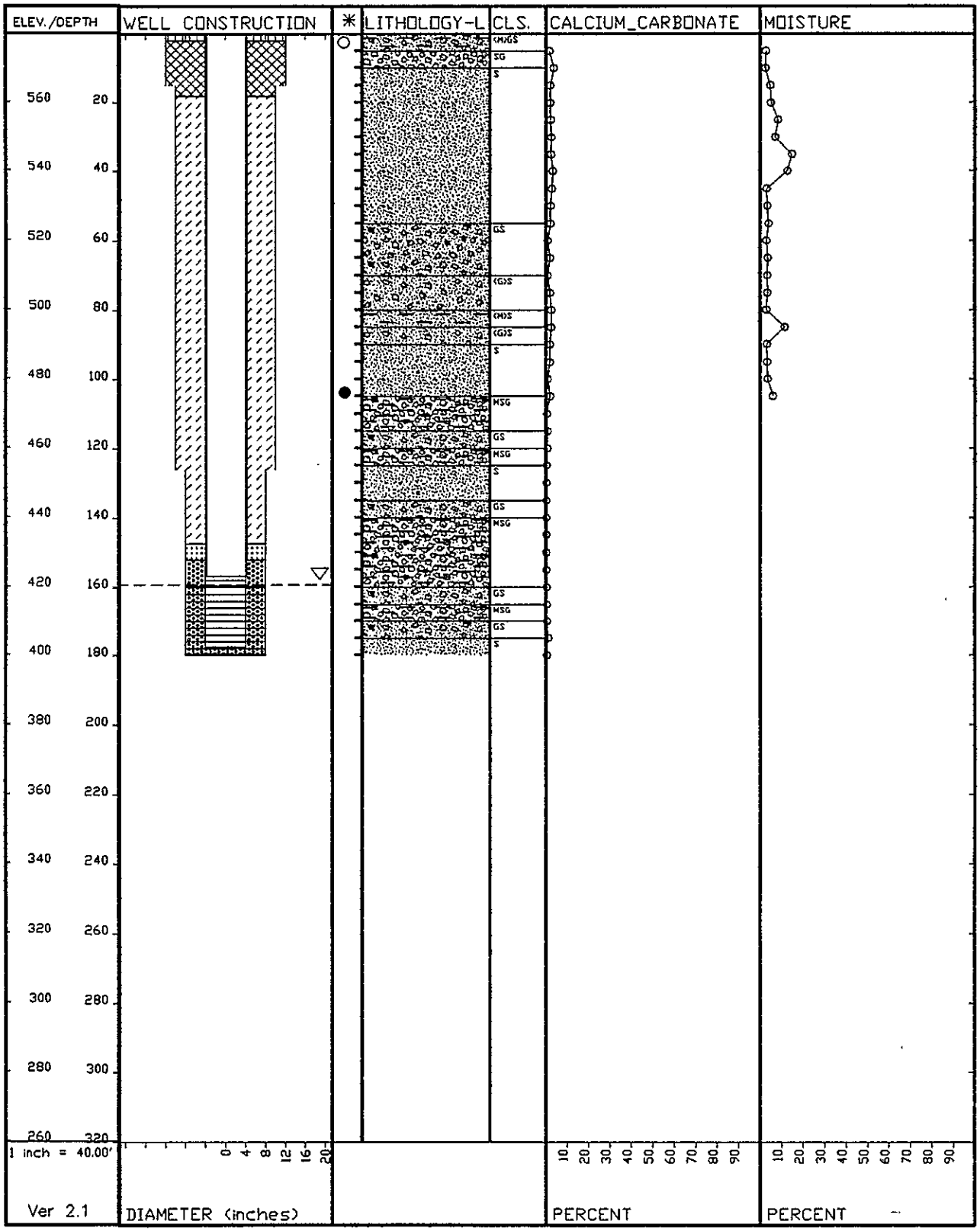
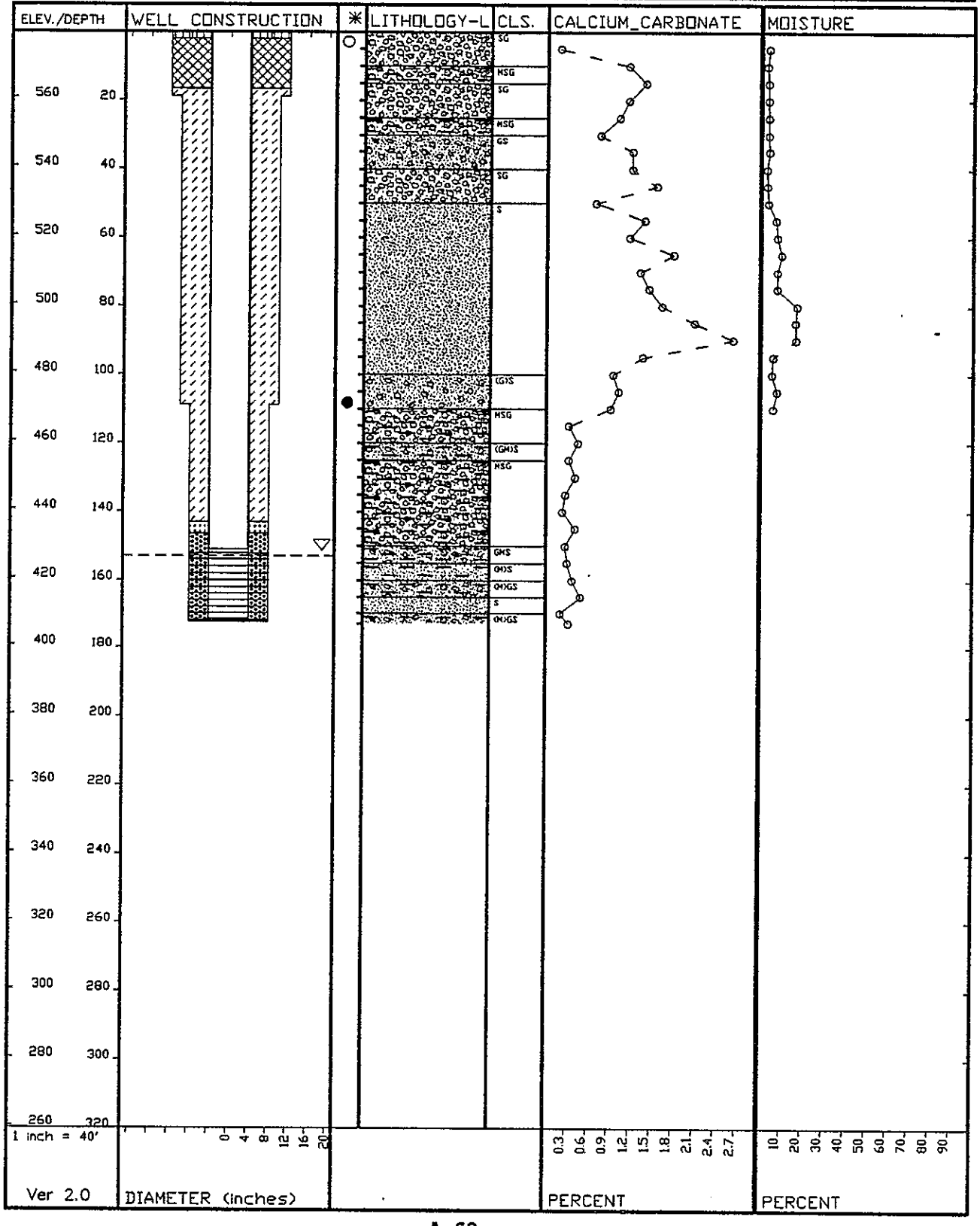
WELL NAME	699-43-41F	COMPLETION DATE	08/07/89
CASING ELEV.	551.01 Feet	INITIAL	
WELL DEPTH	175.68 Feet	DEPTH TO WATER	126.36 ft
DRILL DEPTH	177.50 Feet		
COORDINATES N-S	42944.5 P		
E-W	-40720.9 P	PAGE	1 of 1



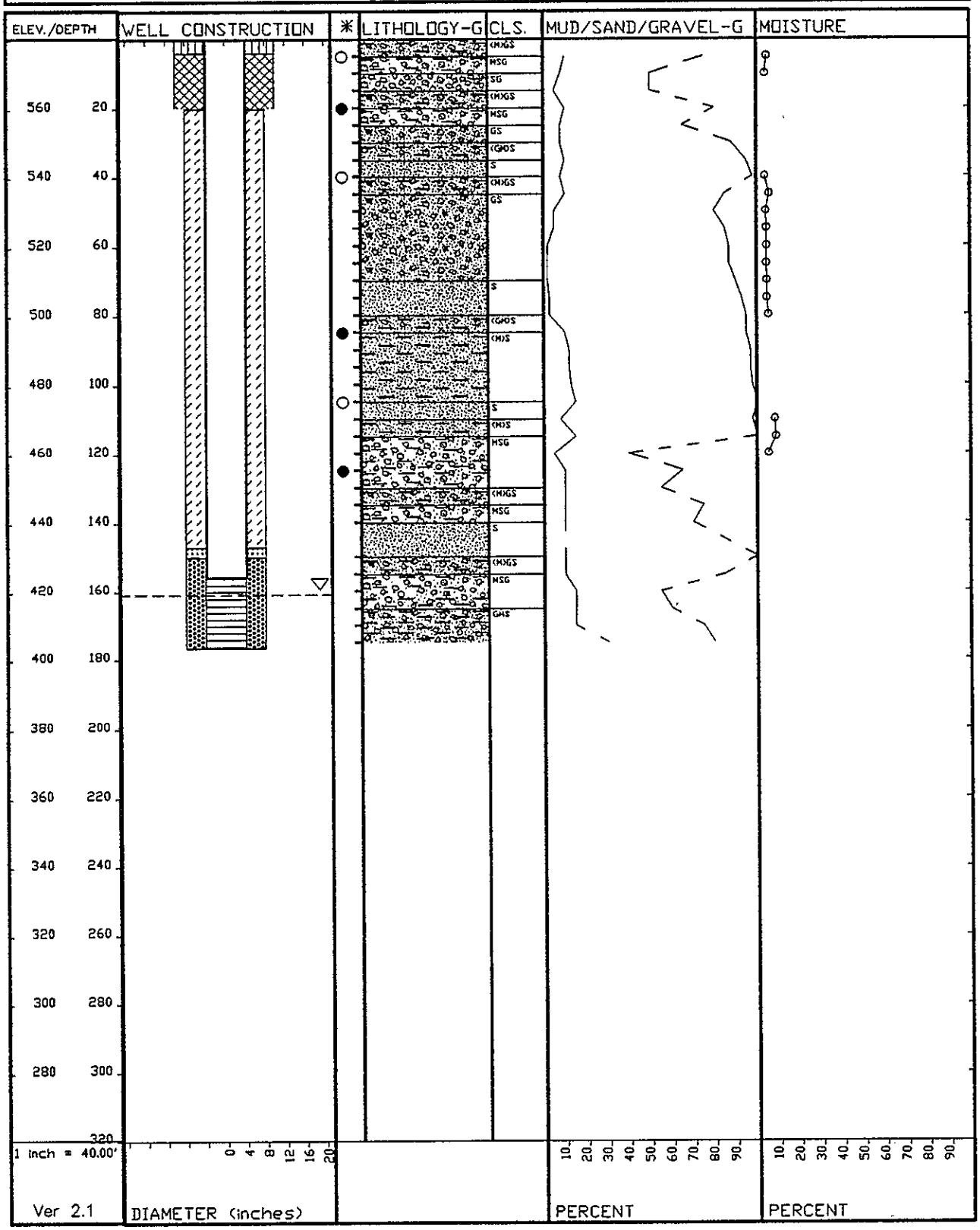
WELL NAME	699-43-43	COMPLETION DATE	09/30/88
CASING ELEV.	579.37 Feet	INITIAL DEPTH TO WATER	159.3 ft
WELL DEPTH	177.45 Feet		
DRILL DEPTH	180.00 Feet		
COORDINATES N-S	42942.4 P		
E-W	-43184.4 P	PAGE	1 of 1



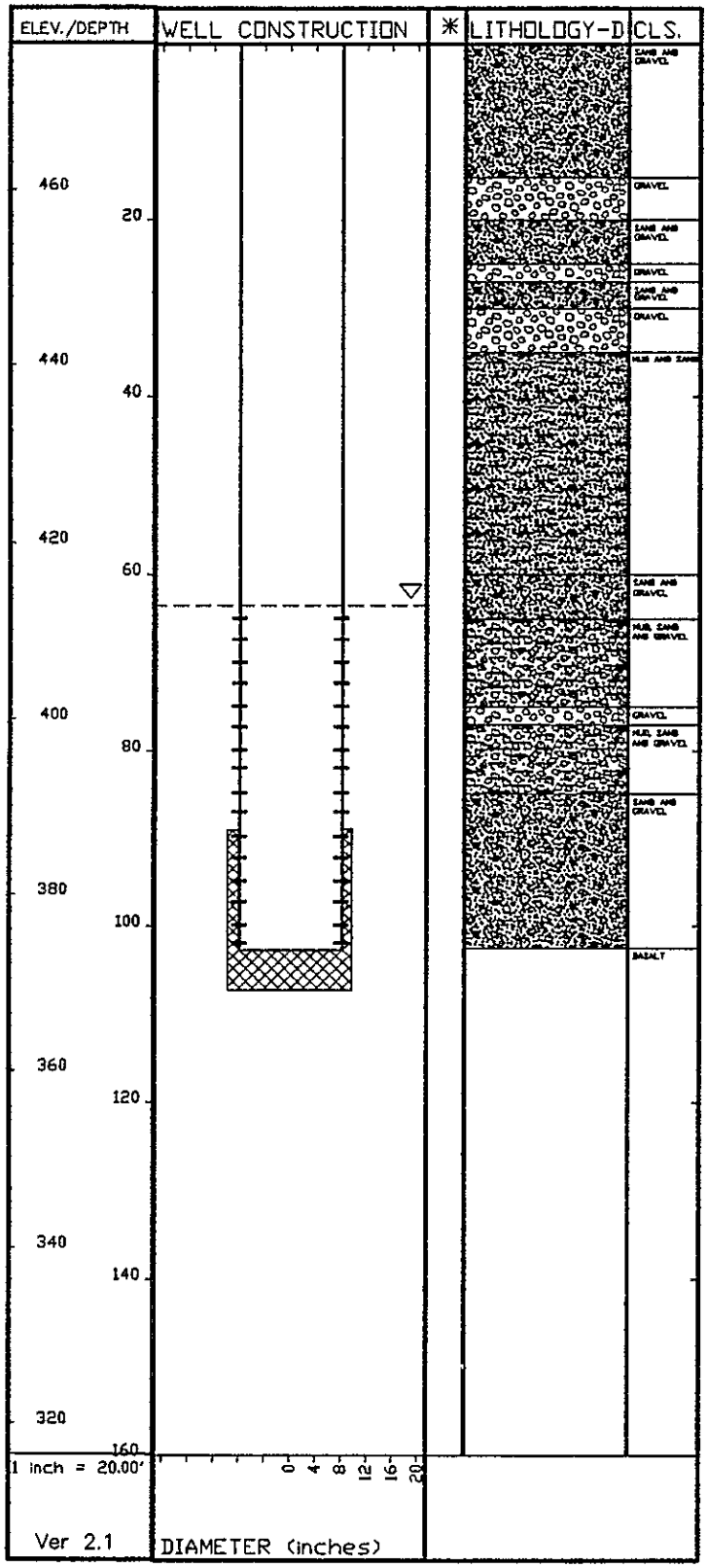
WELL NAME	699-44-42	COMPLETION DATE	09/30/88
CASING ELEV.	579.22 Feet	INITIAL DEPTH TO WATER	153.4 ft
WELL DEPTH	172.00 Feet		
DRILL DEPTH	173.00 Feet		
COORDINATES N-S	43783.4 P		
E-W	-41965.4 P	PAGE	1 of 1



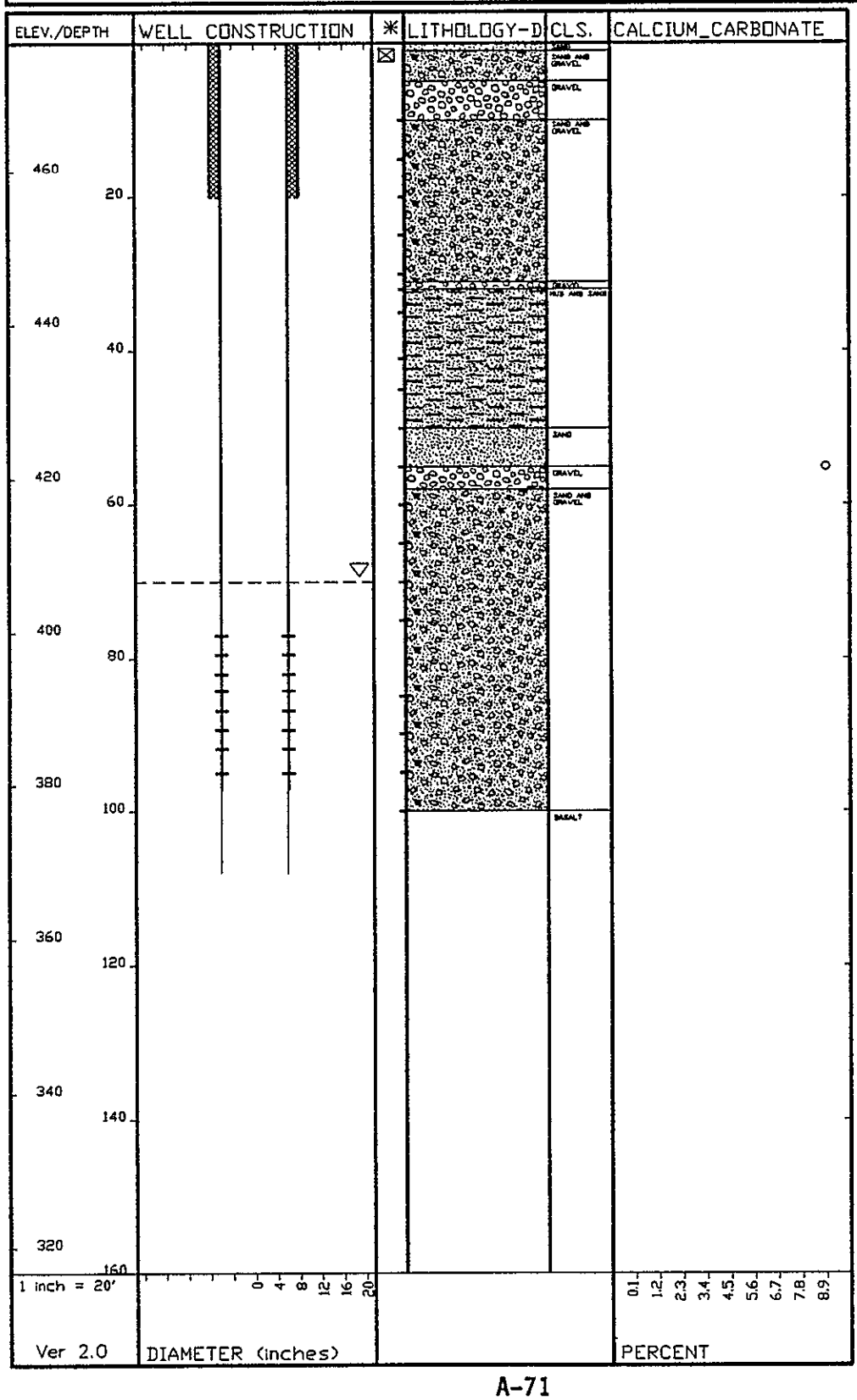
WELL NAME	699-44-43B	COMPLETION DATE	08/07/89
CASING ELEV.	580.12 Feet	INITIAL DEPTH TO WATER	160.83 ft
WELL DEPTH	176.20 Feet		
DRILL DEPTH	176.66 Feet		
COORDINATES N-S	43997.2 P		
E-W	-43362.8 P	PAGE	1 of 1



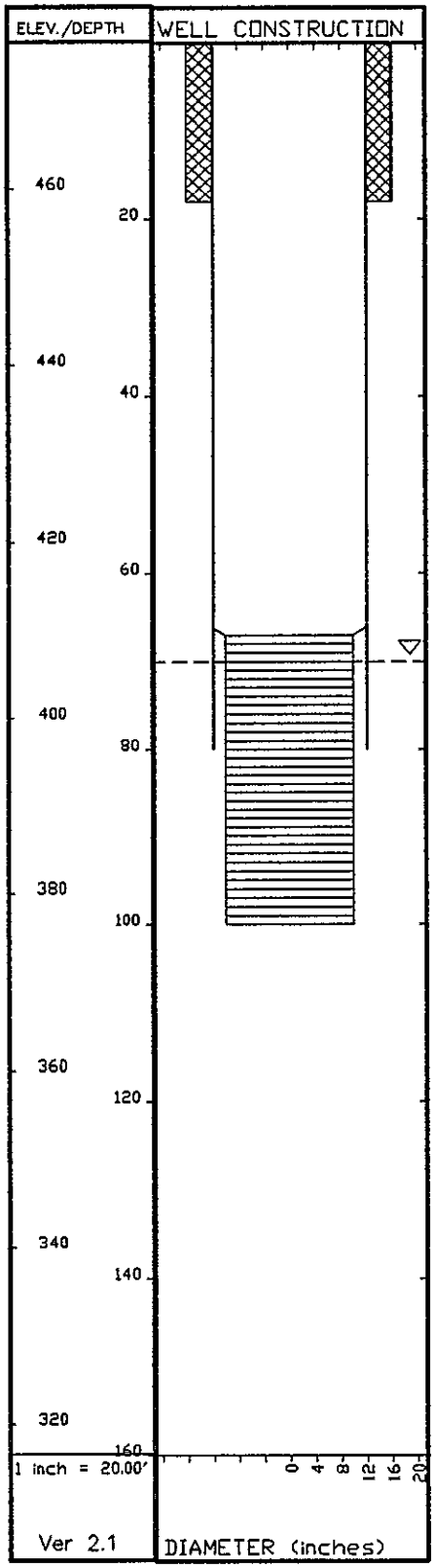
WELL NAME	699-47-35A	COMPLETION DATE	08/31/55
CASING ELEV.	476.36 Feet	INITIAL DEPTH TO WATER	63.50 ft
WELL DEPTH	88.00 Feet		
DRILL DEPTH	107.00 Feet		
COORDINATES N-S	46875 P		
E-W	-34703 P	PAGE	1 of 1



WELL NAME	699-47-35B	COMPLETION DATE	05/08/75
CASING ELEV.	476.65 Feet	INITIAL DEPTH TO WATER	70.0 ft
WELL DEPTH	108.00 Feet		
DRILL DEPTH	108.00 Feet		
COORDINATES N-S	46917 P		
E-W	-34694 P	PAGE	1 of 1



WELL NAME	699-47-35C	COMPLETION DATE	05/31/75
CASING ELEV.	476.41 Feet	INITIAL DEPTH TO WATER	70.0 ft
WELL DEPTH	100.00 Feet		
DRILL DEPTH	100.00 Feet		
COORDINATES N-S	46900 P		
E-W	-34719 P	PAGE	1 of 1



NO GEOLOGIC DESCRIPTION AVAILABLE

GEOLOGY SIMILAR TO 699-47-35A

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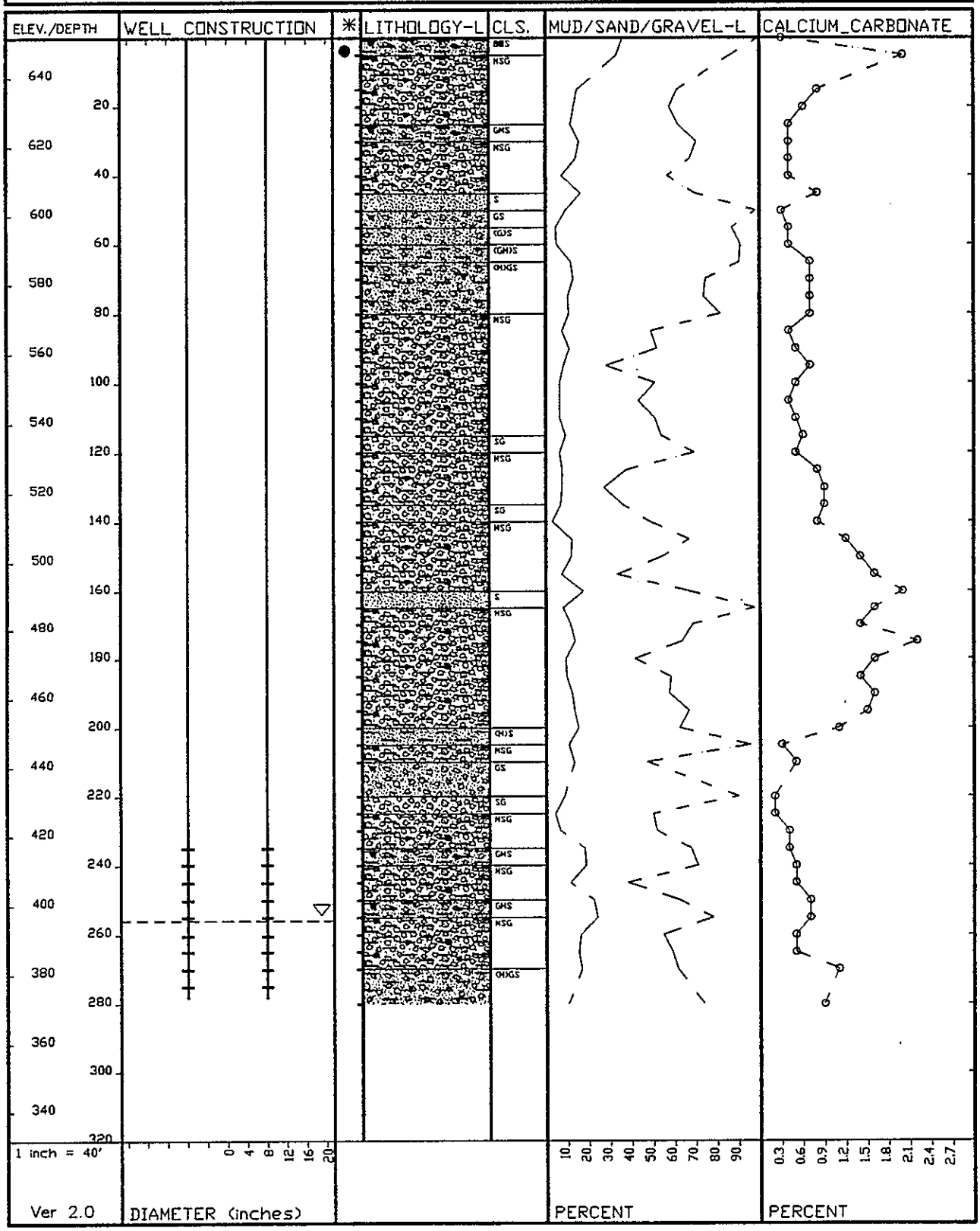
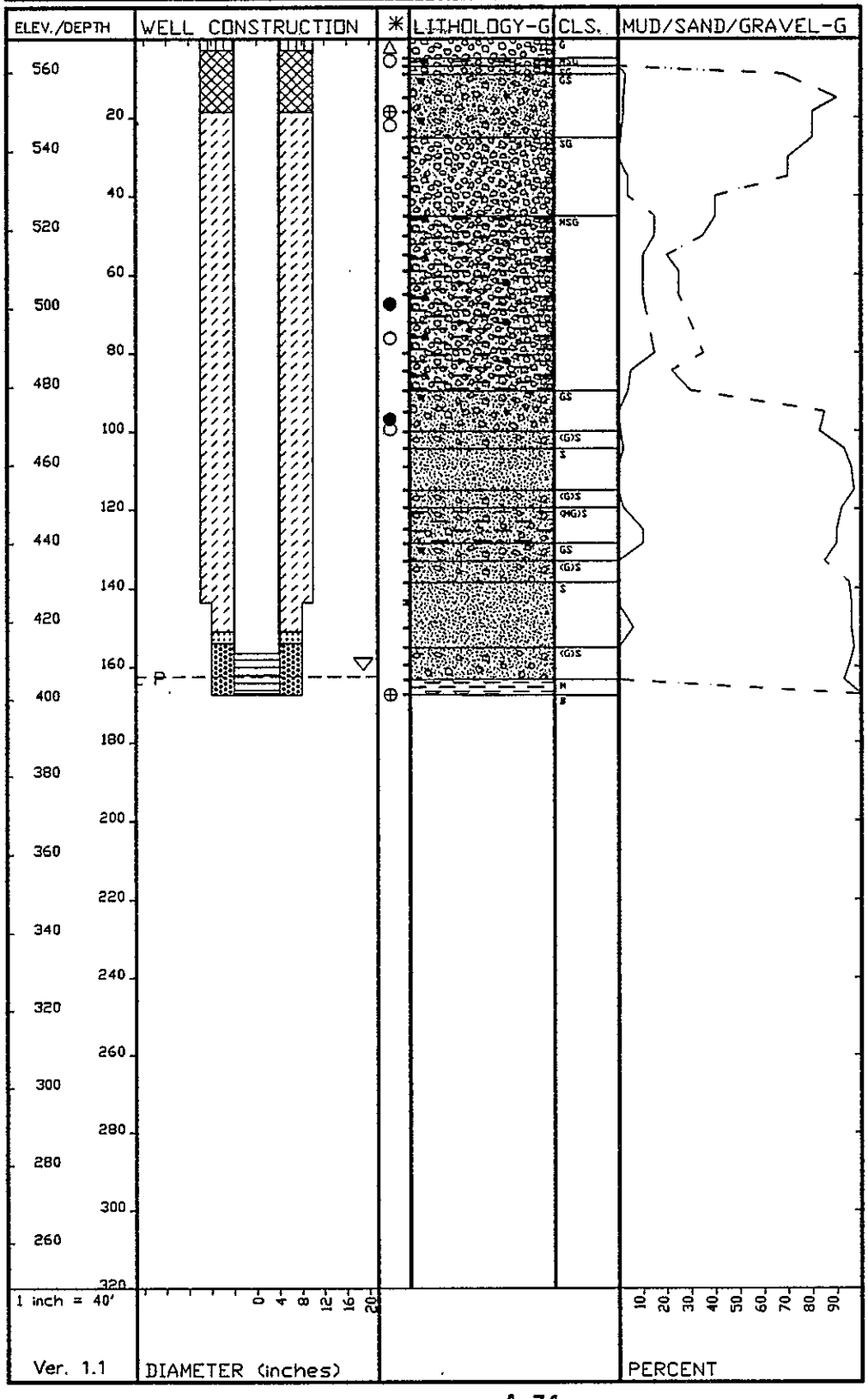
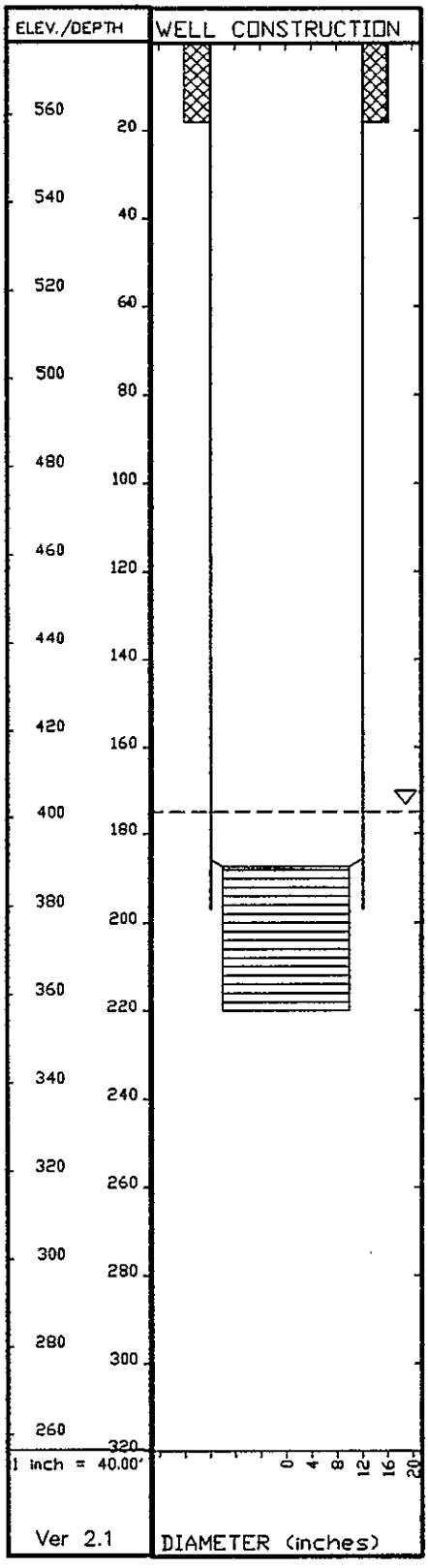
WELL NAME	699-47-60	COMPLETION DATE	07/20/48
CASING ELEV.	651.52 Feet	INITIAL DEPTH TO WATER	256 ft
WELL DEPTH	278.00 Feet		
DRILL DEPTH	287.00 Feet		
COORDINATES N-S	47137 P		
E-W	-60286 P	PAGE	1 of 1



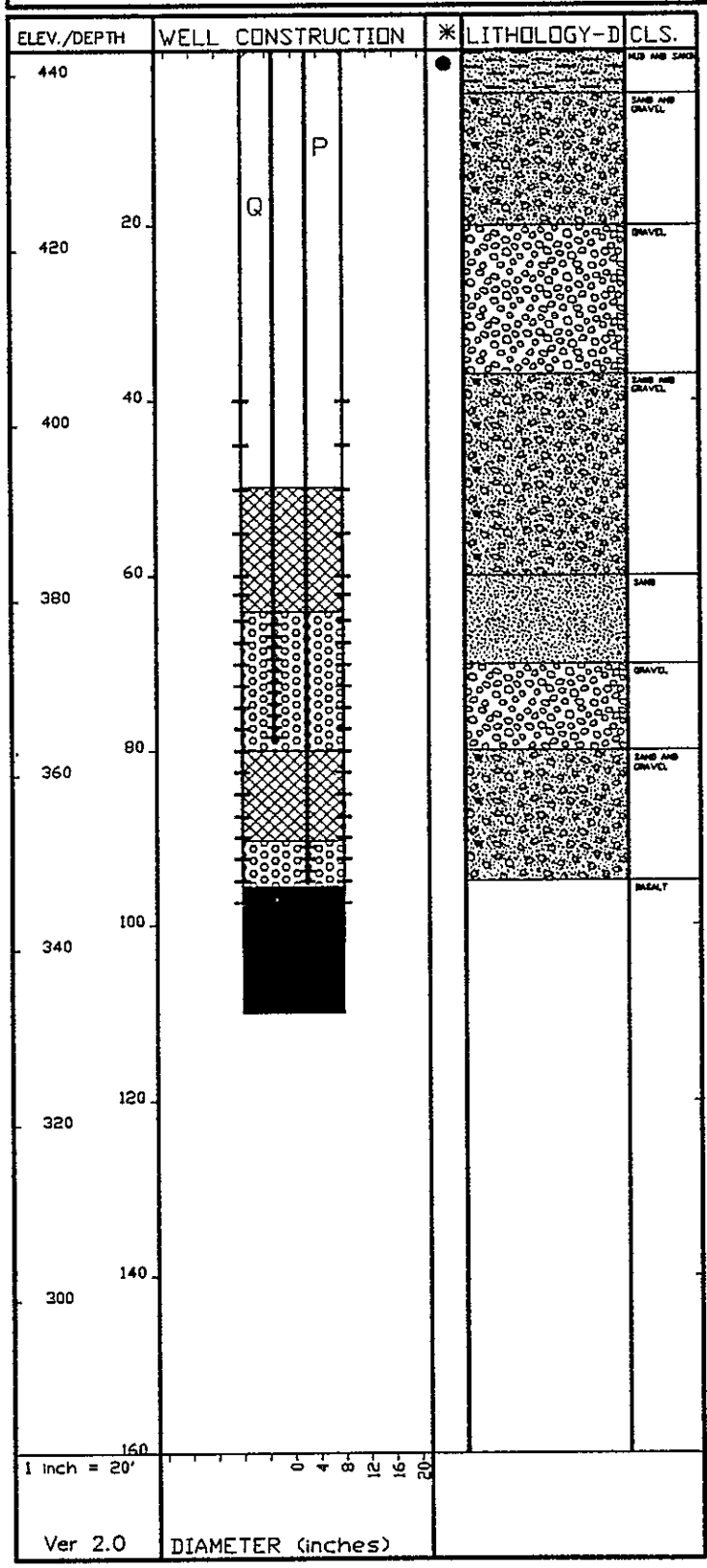
WELL NAME	699-52-54	COMPLETION DATE	05/22/90
CASING ELEV.	568.45 Feet	INITIAL DEPTH TO WATER	161.9 ft
WELL DEPTH	166.80 Feet		
DRILL DEPTH	167.20 Feet		
COORDINATES N-S	139193.6 LAMBERT NAD83		
E-W	573254.4 LAMBERT NAD83	PAGE	1 of 1



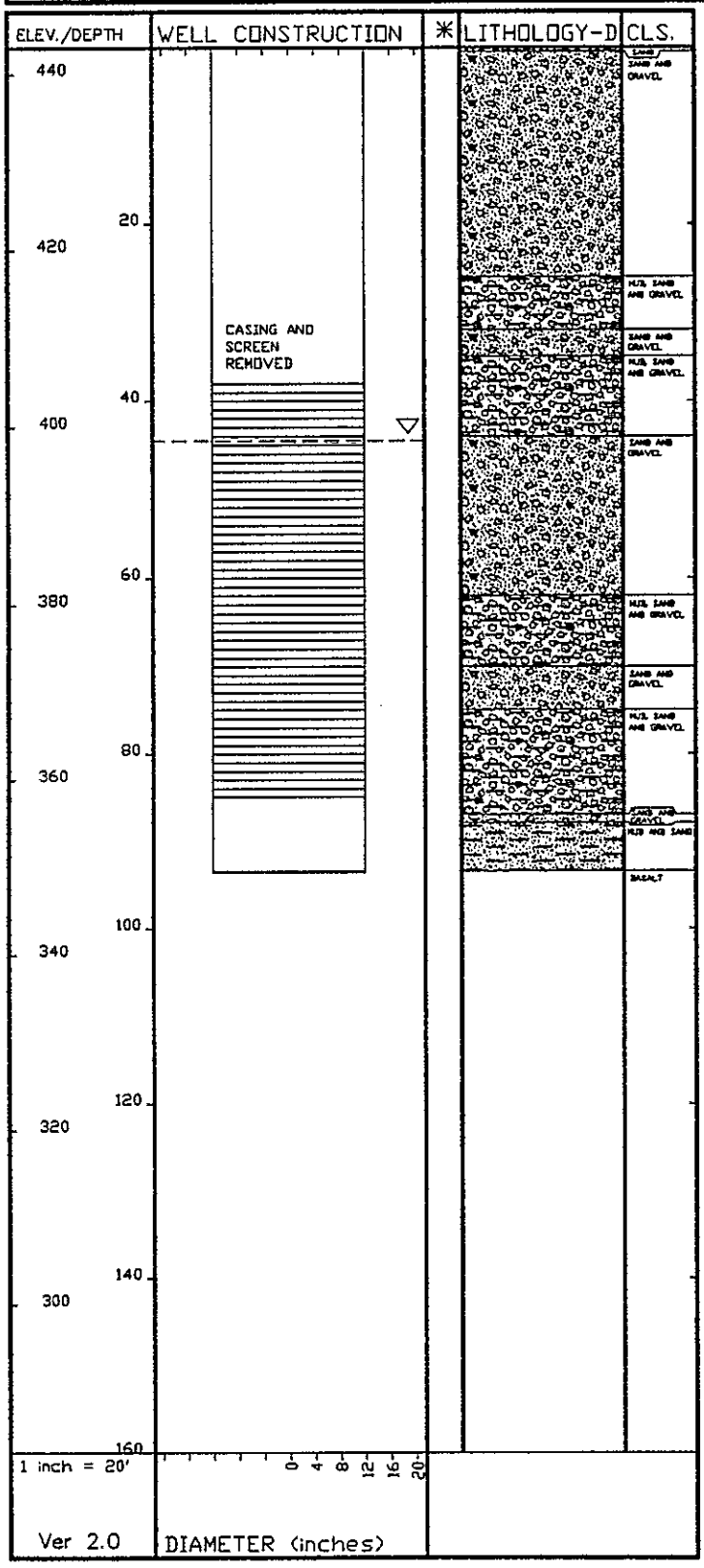
WELL NAME	699-53-55C	COMPLETION DATE	05/31/75
CASING ELEV.	576.13 Feet	INITIAL	
WELL DEPTH	220.00 Feet	DEPTH TO WATER	175.0 ft
DRILL DEPTH	220.00 Feet		
COORDINATES N-S	52976 P		
E-W	-55015 P	PAGE	1 of 1



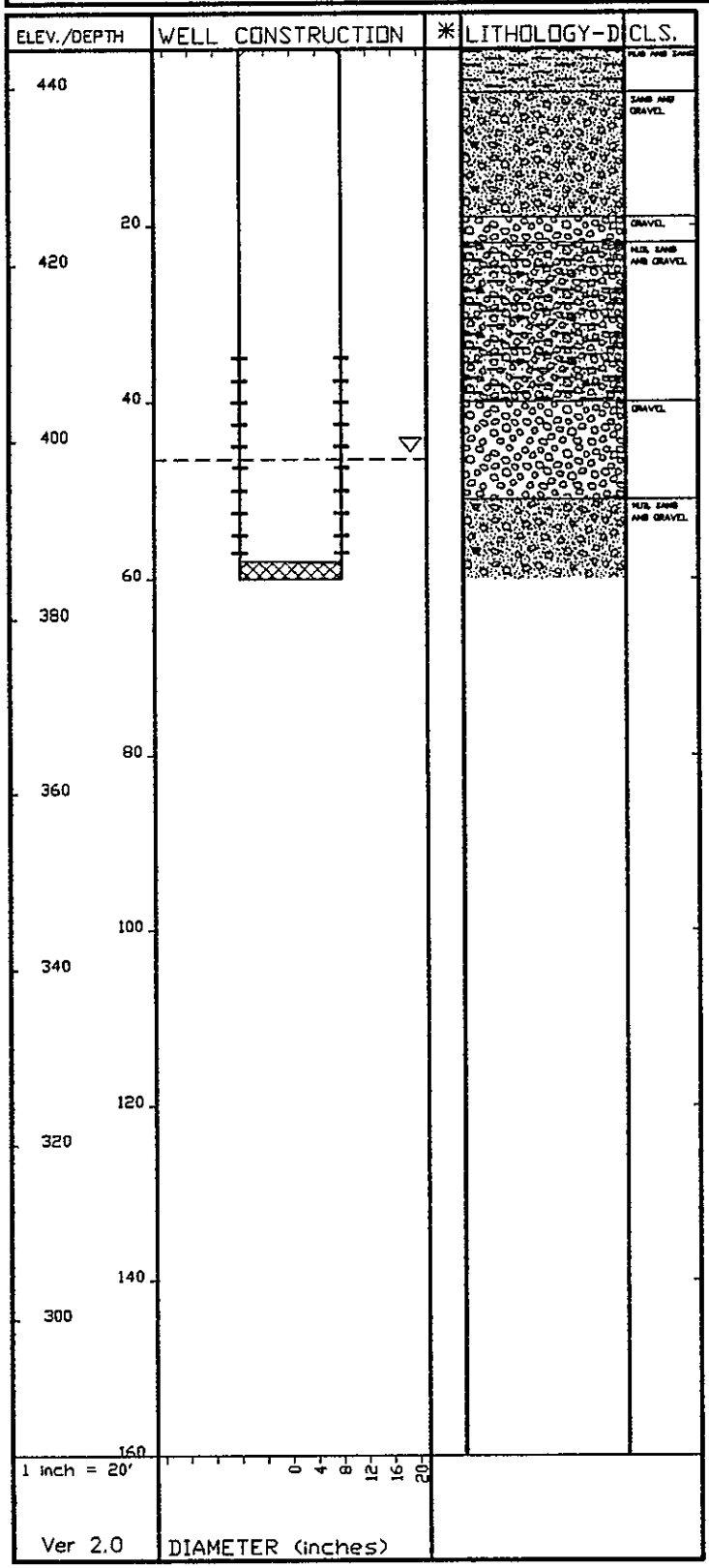
WELL NAME	699-55-50A	COMPLETION DATE	06/02/48
CASING ELEV.	442.81 Feet	INITIAL DEPTH TO WATER	N/A
WELL DEPTH	Piezometers		
DRILL DEPTH	110.00 Feet		
COORDINATES N-S	55006 P		
E-W	-49999 P	PAGE	1 of 1



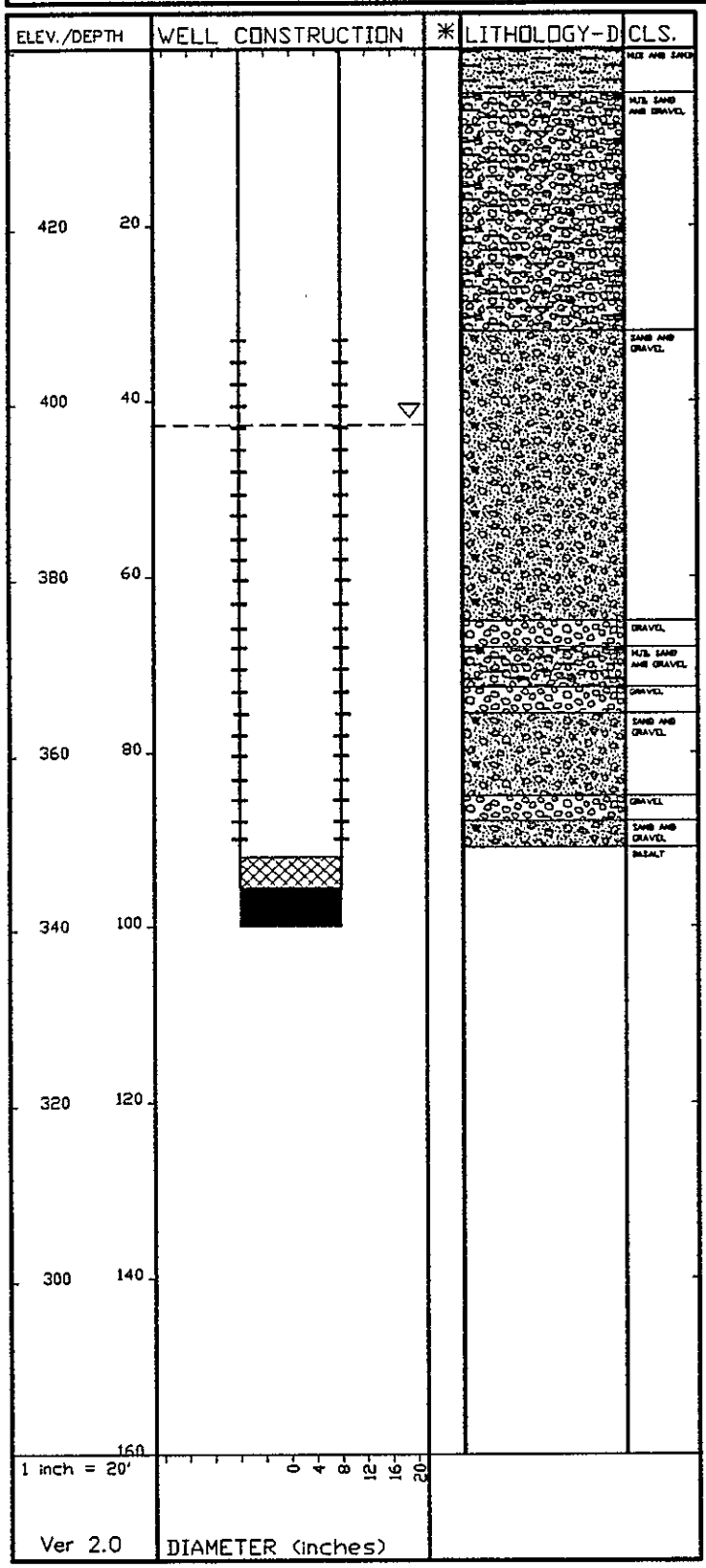
WELL NAME	699-55-50B	COMPLETION DATE	10/04/56
CASING ELEV.	443.00 Feet	INITIAL DEPTH TO WATER	43 ft
WELL DEPTH	ABANDONED		
DRILL DEPTH	95.00 Feet		
COORDINATES N-S	54900 P		
E-W	-5000 P	PAGE	1 of 1



WELL NAME	699-55-50C	COMPLETION DATE	06/22/56
CASING ELEV.	444.43 Feet	INITIAL DEPTH TO WATER	46.5 ft
WELL DEPTH	60.00 Feet		
DRILL DEPTH	60.00 Feet		
COORDINATES N-S	55000 P		
E-W	-49940 P	PAGE	1 of 1



WELL NAME	699-55-50D	COMPLETION DATE	07/03/56
CASING ELEV.	440.44 Feet	INITIAL DEPTH TO WATER	43 ft
WELL DEPTH	92.00 Feet		
DRILL DEPTH	100.00 Feet		
COORDINATES N-S	55017 P		
E-W	-50150 P	PAGE	1 of 1



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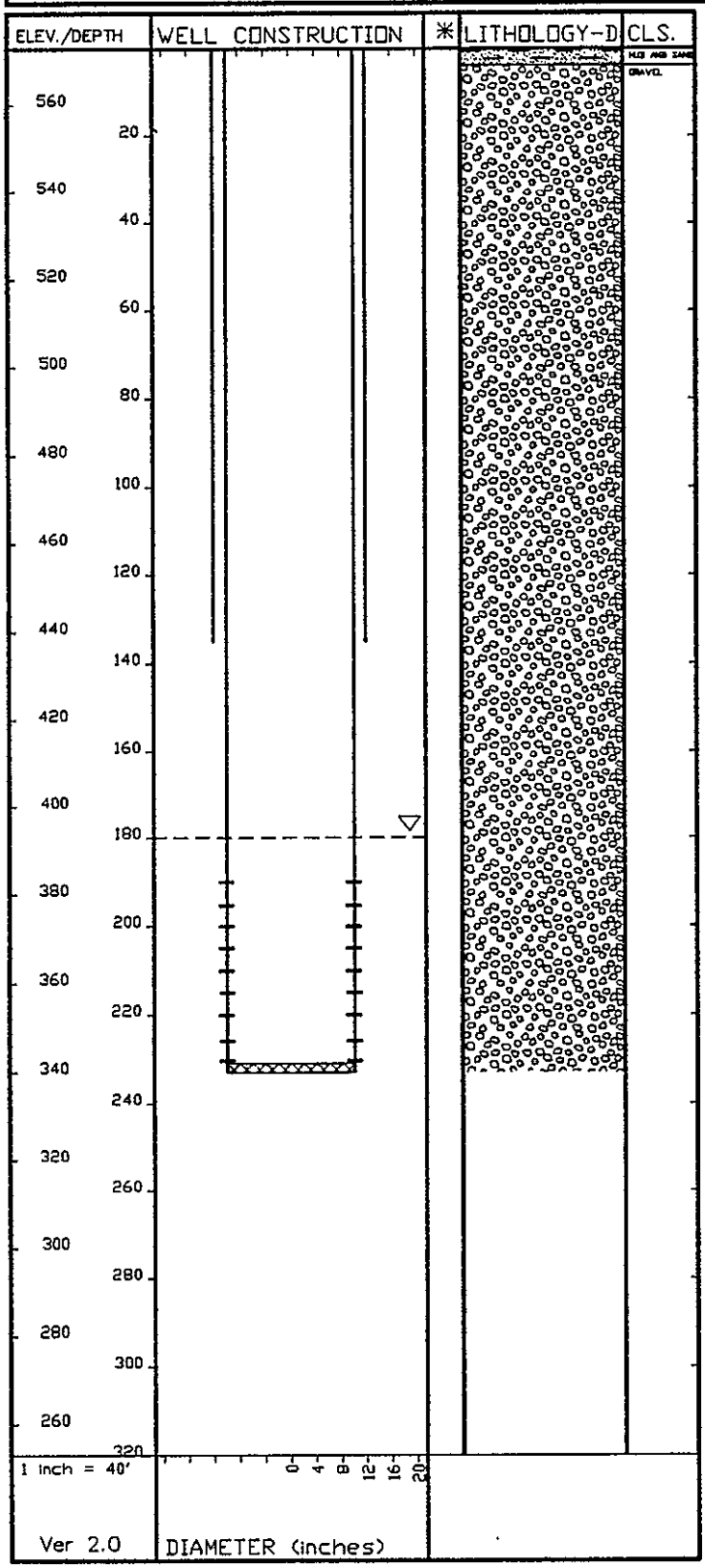
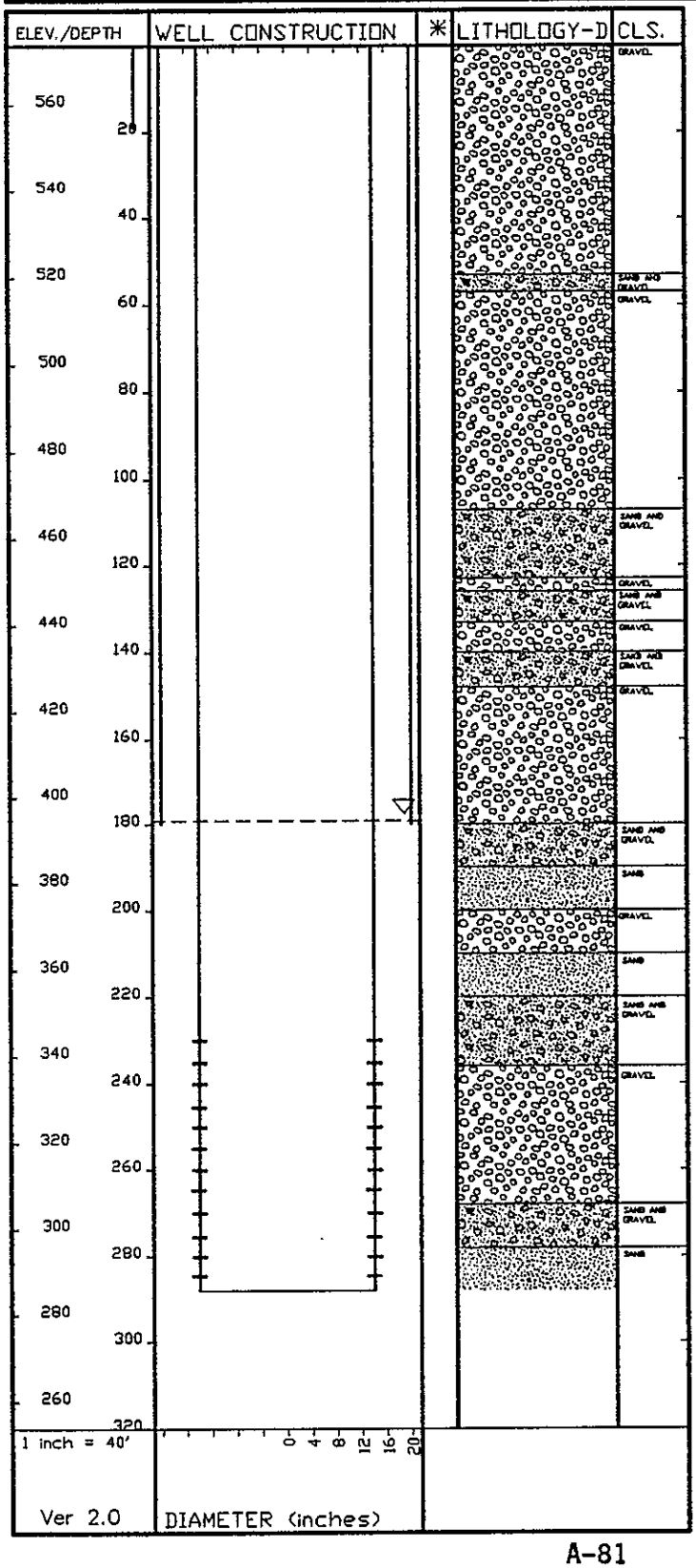
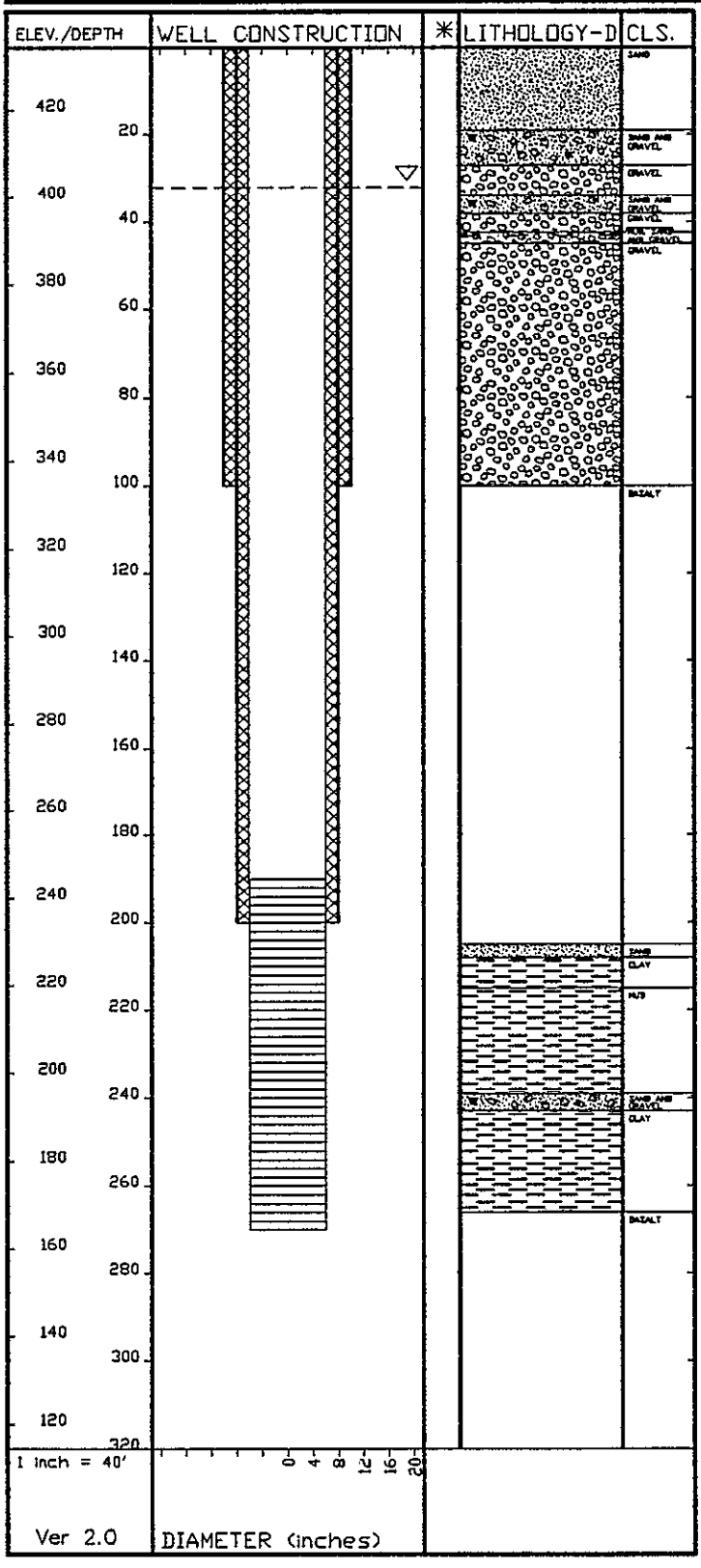
WELL NAME	699-55-60A	COMPLETION DATE	12/15/43
CASING ELEV.	572.89 Feet	INITIAL DEPTH TO WATER	180 ft
WELL DEPTH	231.00 Feet		
DRILL DEPTH	233.00 Feet		
COORDINATES N-S	55100 P		
E-W	-60100 P	PAGE	1 of 1



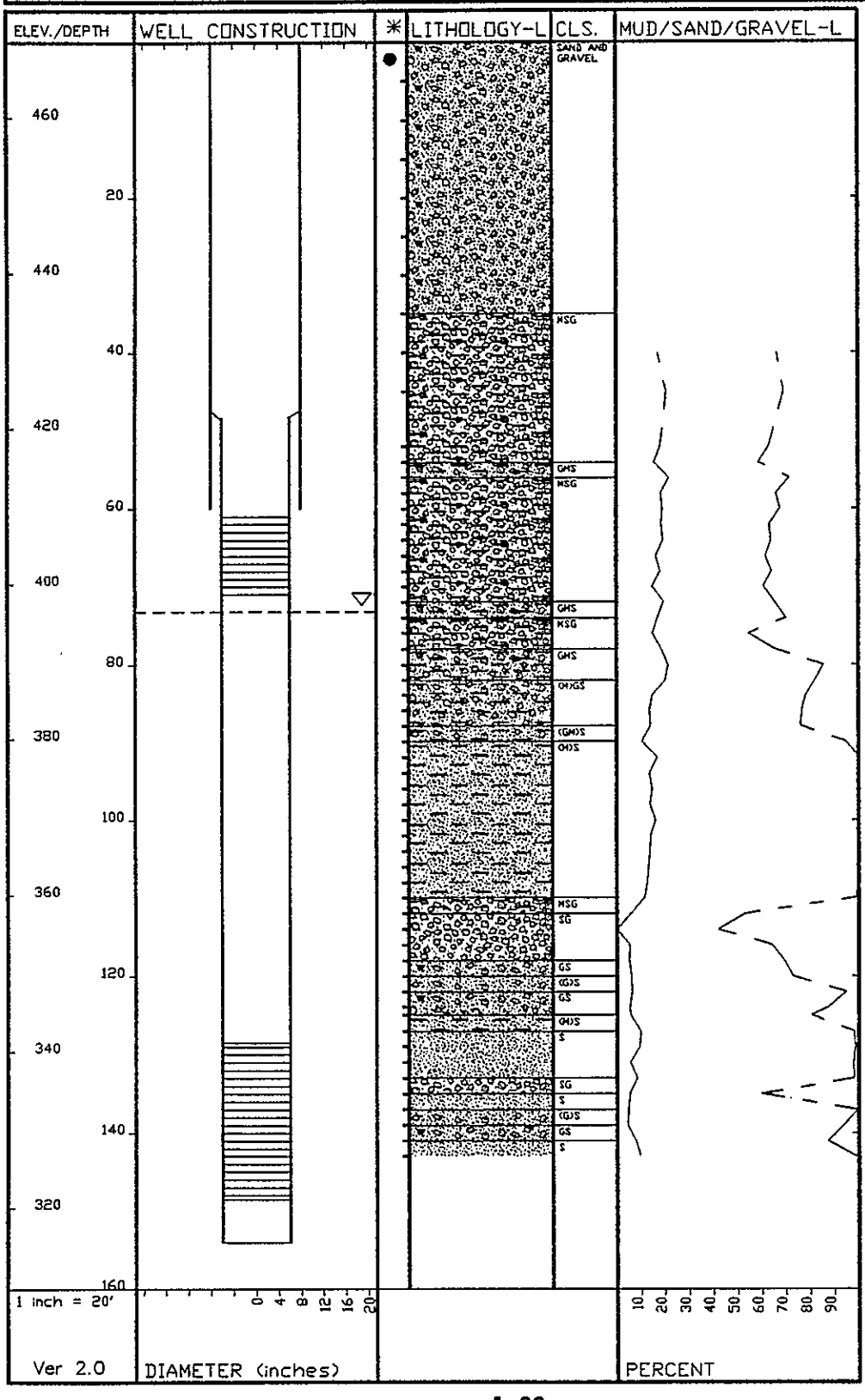
WELL NAME	699-55-60B	COMPLETION DATE	07/20/44
CASING ELEV.	573.68 Feet	INITIAL DEPTH TO WATER	179.07 ft
WELL DEPTH	288.00 Feet		
DRILL DEPTH	288.00 Feet		
COORDINATES N-S	55425 P		
E-W	-60140 P	PAGE	1 of 1



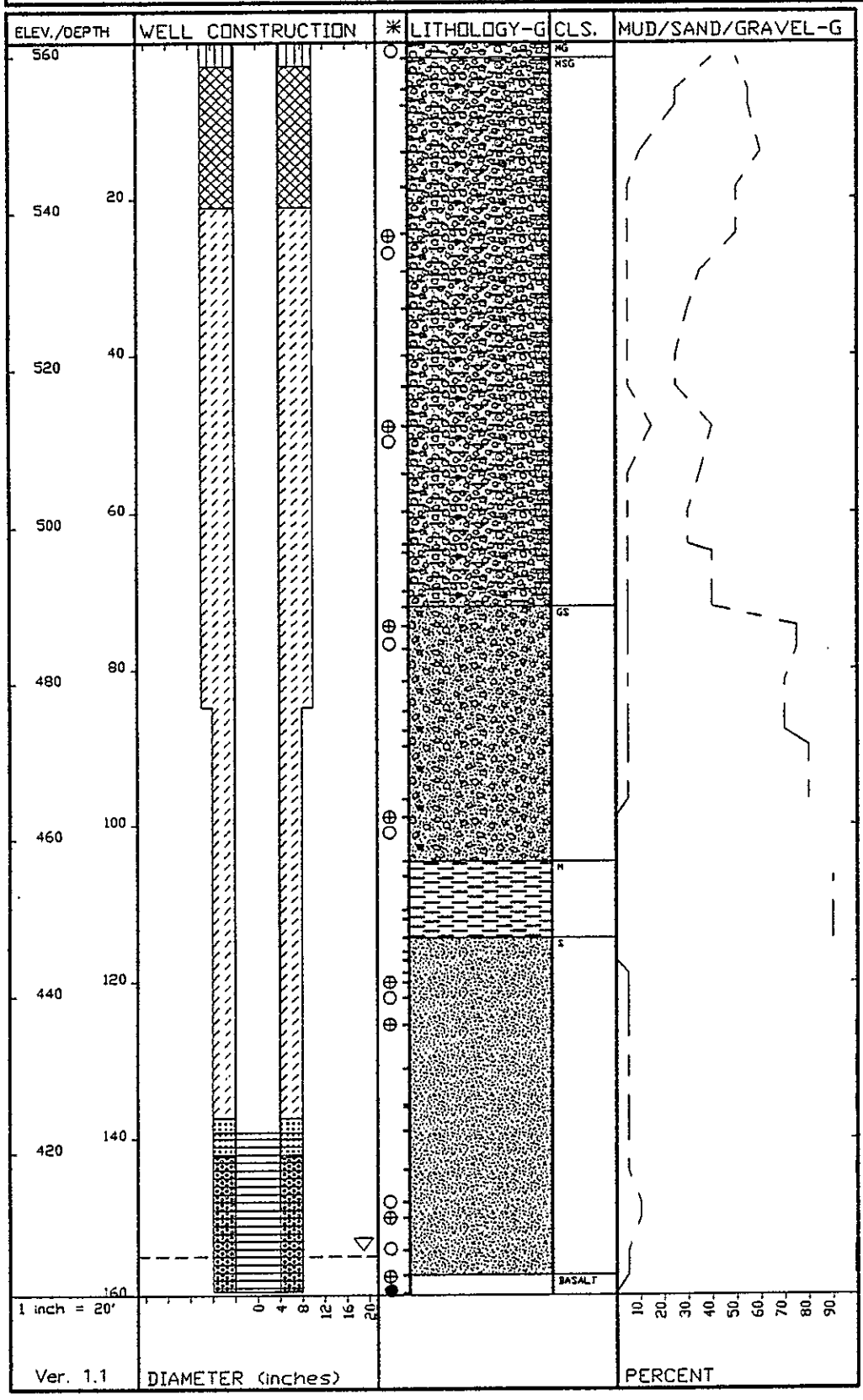
WELL NAME	699-56-53	COMPLETION DATE	03/31/82
CASING ELEV.	434.34 Feet	INITIAL DEPTH TO WATER	32 ft
WELL DEPTH	270.00 Feet		
DRILL DEPTH	270.00 Feet		
COORDINATES N-S	56343 P		
E-W	-52779 P	PAGE	1 of 1



WELL NAME	699-60-57	COMPLETION DATE	07/14/72
CASING ELEV.	469.64 Feet	INITIAL DEPTH TO WATER	62.3 ft
WELL DEPTH	154.00 Feet		
DRILL DEPTH	155.00 Feet		
COORDINATES N-S	60350 P		
E-W	-56612 P	PAGE	1 of 1



WELL NAME	699-52-57	COMPLETION DATE	11/22/91
CASING ELEV.	561.80 Feet	INITIAL DEPTH TO WATER	155.0 ft
WELL DEPTH	159.70 Feet		
DRILL DEPTH	159.70 Feet		
COORDINATES N-S	139115.6 LAMBERT NAD83		
E-W	572761.6 LAMBERT NAD83	PAGE	1 of 1



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INFORMATION RELEASE REQUEST

Reference: WHC-CM-3-4

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ID Number (include revision, volume, etc.) WHC-SD-EN-DP-030, REV. 0 PNL-8288

List attachments.

Date Release Required: September 24, 1992

Title: Unconfined Aquifer Hydrologic Test Data Package for the 200 East Groundwater Aggregate Area Management Study

Unclassified Category: UC- N/A

Impact Level: 4

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BD-7600-062 (08/91) WEF074

Part 1

DISTRIBUTION SHEET

To: Distribution

From: 200/300 Area Remedial Investigation Group

Date: 9/22/92

Project Title/Work Order:

Unconfined Aquifer Hydrologic Test Data Package for the 200 East Groundwater Aggregate Area Management Study WHC-SD-EN-DP-030, Rev. 0

EDT No.: 159203

ECN No.:

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