## MONITORING WELL CONSTRUCTION DIAGRAMS PHASE I AND PHASE II REMEDIAL INVESTIGATION

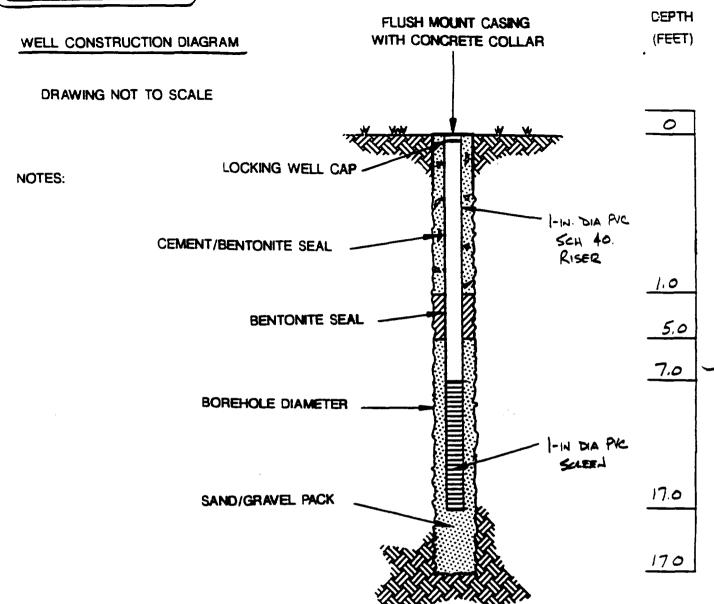
## ROCKWELL INTERNATIONAL SITE ALLEGAN, MICHIGAN



DEPTH FLUSH MOUNT CASING (FEET) WITH CONCRETE COLLAR WELL CONSTRUCTION DIAGRAM DRAWING NOT TO SCALE LOCKING WELL CAP NOTES: - I-IN DIA PUC SCH. 40. RISER CEMENT/BENTONITE SEAL 1.0 BENTONITE SEAL 5.0 7.0 BOREHOLE DIAMETER I-W. DIA. PVC SAEEN 17.0 SAND/GRAVEL PACK 17.0

PIEZOMETER NO	P-20				
PROJECT NAME Roc	KMELL - ALLEGA	<u>م</u>			_
PROJECT NO 9	2192				
LOCATION	ekbround				_
GEOLOGIST	NG				_
DRILLING CONTRACTOR	WISCONSIN	TEST	Drive	~6	
ORILLER	IKE NELSET	J			_
DRILLING METHOD	41/4-14 1.D	House	STEM	AUGER	_
DRILLING DATE	11/12/92				
GROUND ELEVATION	624.90				
TOP ELEVATION	624.21				
STATIC WATER DEPTH_	4.01 (4/2	2/97)			
WATER ELEVATION	620.20	<del></del>			

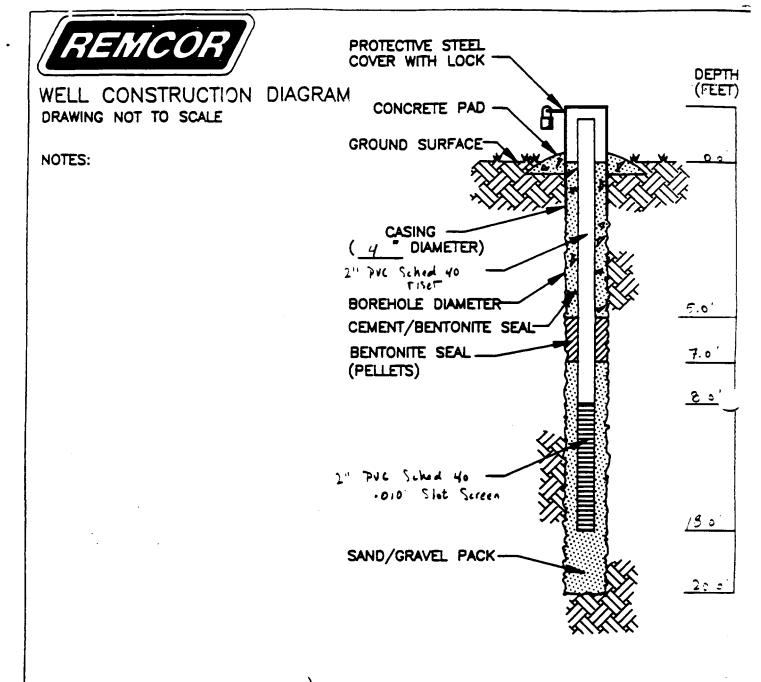




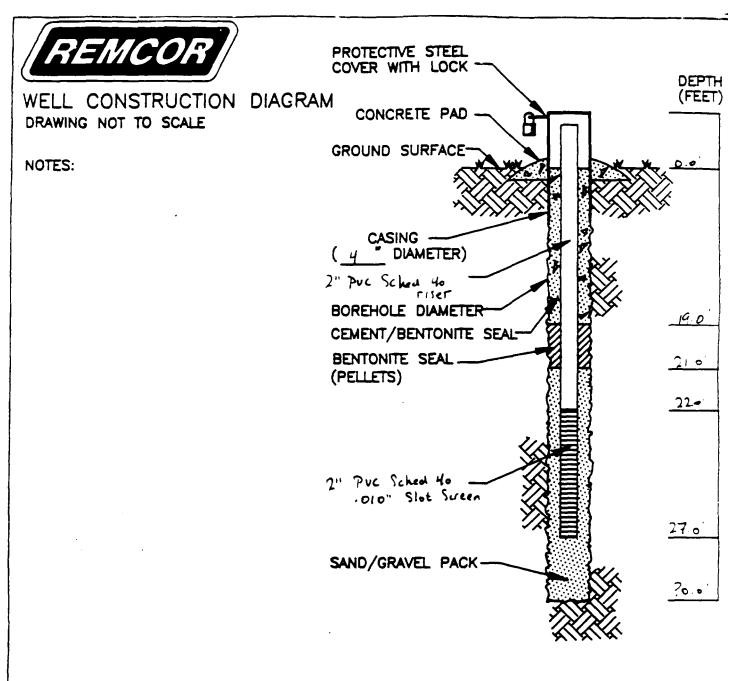
PIEZOMETER NO. P-ZI
PROJECT NAME ROCKWELL- ALLEGAN
PROJECT NO. 92192
OCATIONBACKGROWD
SEOLOGISTKPP
DRILLING CONTRACTOR WISCONSIN TEST DRILLING
DRILLER JOHN WEAKS
DRILLING METHOD 4 1/4-IN. I.D. HOLLOW STEM AUGER
DRILLING DATE 1./15/93
GROUND ELEVATION 632.0
TOP ELEVATION 631.57
STATIC WATER DEPTH 5./3 (2/15/13)
VATER ELEVATION 626.44

REMCOR	PROTECTIVE STEEL COVER WITH LOCK	DEPTH
WELL CONSTRUCTION DRAWING NOT TO SCALE	DIAGRAM CONCRETE PAD	(FEET)
NOTES:	GROUND SURFACE	
	CASING —	
	( 4 " DIAMETER) 2" PVC Sched 40 FISEE	
	BOREHOLE DIAMETER  CEMENT/BENTONITE SEAL	<u>/.o.'</u>
	(PELLETS)	30
	<u> </u>	
	2" Puc Sched 40	
	SAND (CDAVEL BACK	74.
	SAND/GRAVEL PACK——	1.0

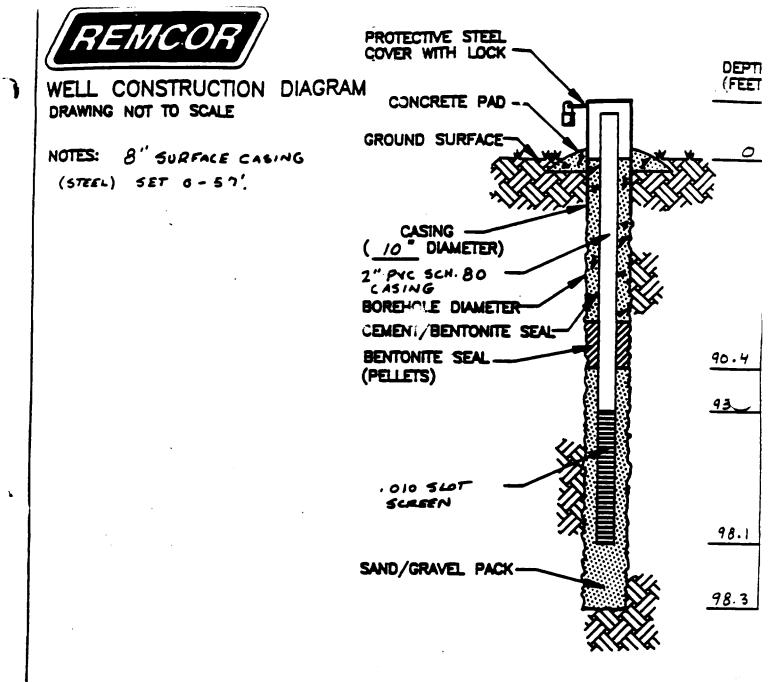
MONITORING WELL NO. HW-1
PROJECT NAME Rockwell Allegan
PROJECT NO
LOCATION Between River and Ponds
GEOLOGIST MARTINGE L
DRILLING CONTRACTOR . William Teit Builling
DRILLER T Symond:
DRILLING METHOD Hallow Ston CICIT Salit Spon Sami 45
DRILLING DATE 2/7 - 2/8/42
GROUND ELEVATION 621.74
TOP ELEVATION 624.36 Toc (inside) - 624.26



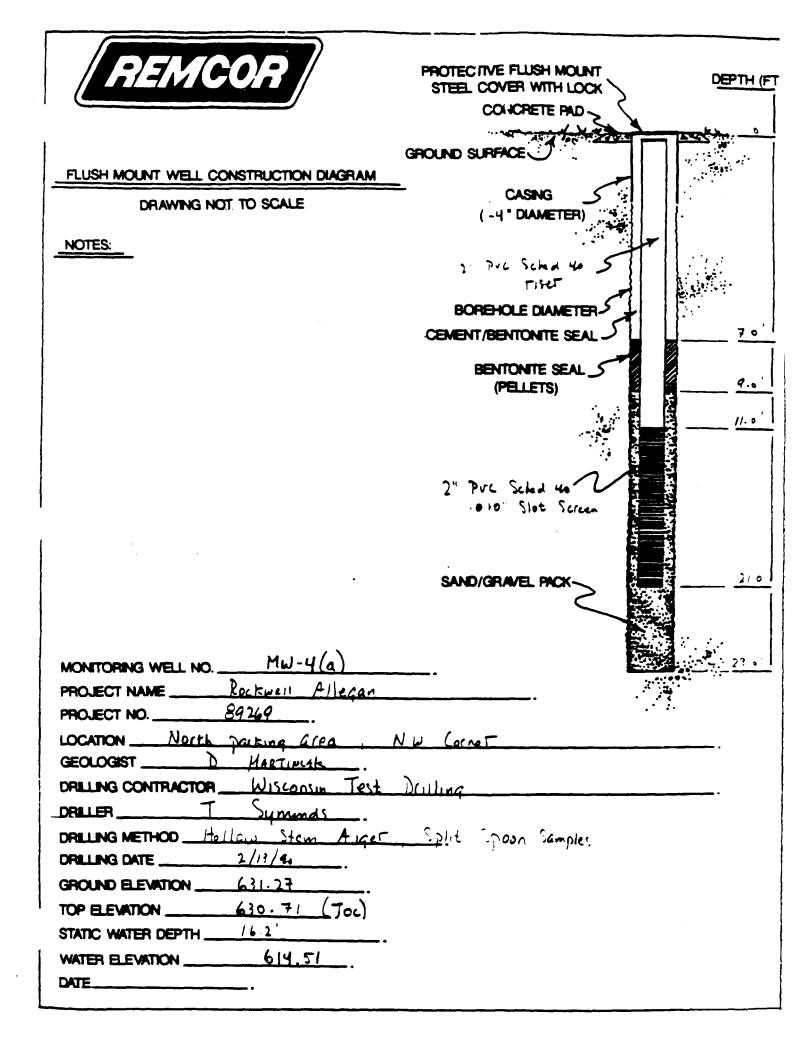
MONITORING WELL NO MW-2(a)
PROJECT NAME ROCKWELL FILEGAN
PROJECT NO 84169
LOCATION North of Waste Water Treatment Blog.
GEOLOGIST D MARTINGER
DRILLING CONTRACTOR ! Wisconsic Test Deiling
DRILLER Symmed:
DRILLING METHOD Hollow Sten Acce Solit Spoon Somme
DRILLING DATE 2/21/53
GROUND ELEVATION (28.89
TOP ELEVATION 632.03 To 612.02
STATIC WATER DEPTH 4.6'
WATER ELEVATION 618. 29



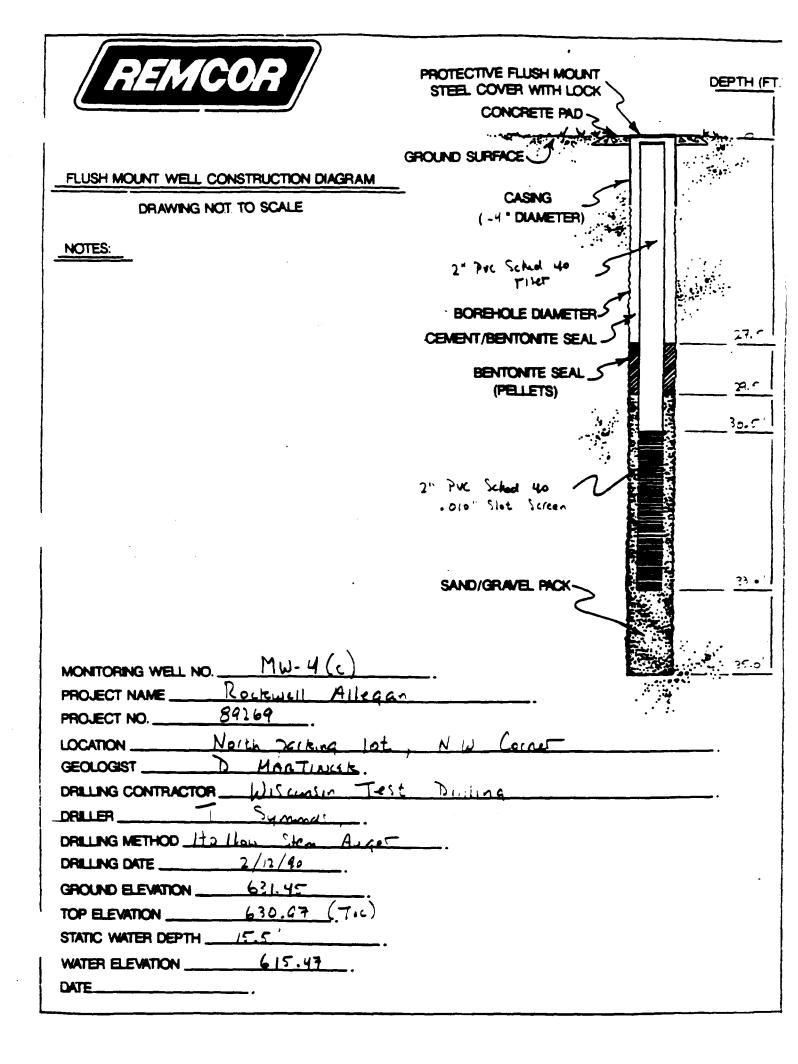
MONITORING WELL NO MW-2(bc)
PROJECT NAME ROLLWEIT Allegen
PROJECT NO 89169
LOCATION North of WWTP
GEOLOGIST D MARTINGER
DRILLING CONTRACTOR . WISCOMEN Test Drilling
DRILLER T Symmets
DRILLING METHOD Hollow Stem Auger Soli Sooms
DRILLING DATE 2/23/Go
GROUND ELEVATION 628.37
TOP ELEVATION 631.46 Toc (10.5 de) 630.34
STATIC WATER DEPTH
WATER ELEVATION

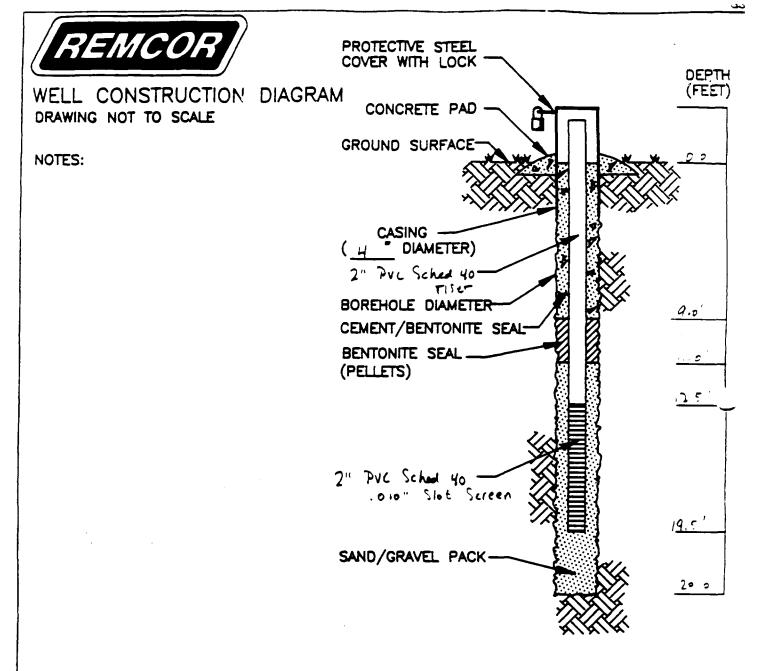


MONITORING WELL NO MW-3
PROJECT NAME ROCKWELL RIJES
PROJECT NO
LOCATION NOGTH OF WWTP.
GEOLOGIST J. Sunkok
DRILLING CONTRACTOR WISCOMBIN TEST DRILLING
DRILLER LARRY EROMAN
DRILLING METHOD WATER BIARY
DRILLING DATE 3-10-90
GROUND ELEVATION 627. 49
TOP ELEVATION 630.3 1
STATIC WATER DEPTH
WATER ELEVATION GIG. 5G



REMCOR	PROTECTIVE FLUSH MOUNT STEEL COVER WITH LOCK CONCRETE PAD	ОЕРТН (FT.
	GROUND SURFACE	
DRAWING NOT TO SCALE  NOTES:	CASING (4" DIAMETER)	
Norca	2" Puc Schad 46 Filer BOREHOLE DIAMETER	
	BENTONTE SEAL S  (PELLETS)	13.0
		340
	- DID! Slot Screen	
	SAND/GRAVEL PACK	27.0
MONITORING WELL NO. Hw. 4 (b)  PROJECT NAME Rockman Allegan	. •	27.
PROJECT NO. 89269	••	₹ <b>.</b>
GEOLOGIST Note Perking Ansa		·
DRILLER	st Juling	·
DRILLING METHOD 1+0110w Stem A:  DRILLING DATE 3/12 - 2/13/90	605	
TOP ELEVATION 6?1.??  TOP ELEVATION 6?0. 73 (700)  STATIC WATER DEPTH 16.5		
WATER ELEVATION		



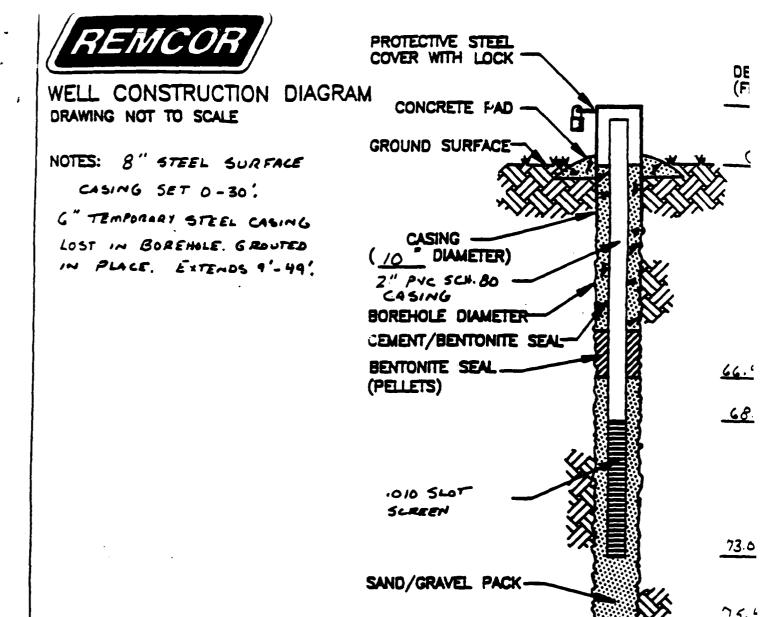


MONITORING WELL NO. MW-5(a)
PROJECT NAME Rockwed Allegan
PROJECT NO 89269
LOCATION North Porture Area - adiccont to Water Tower
GEOLOGIST D MARTINETE
DRILLING CONTRACTOR ! LISCONSIN Test Dalling
DRILLER T Symma!
DRILLING METHOD Hallow Stam Auger
DRILLING DATE ?/6/92
GROUND ELEVATION 632 08
TOP ELEVATION 635.03 To 403 (634.93
STATIC WATER DEPTH
WATER ELEVATION 6/8.08

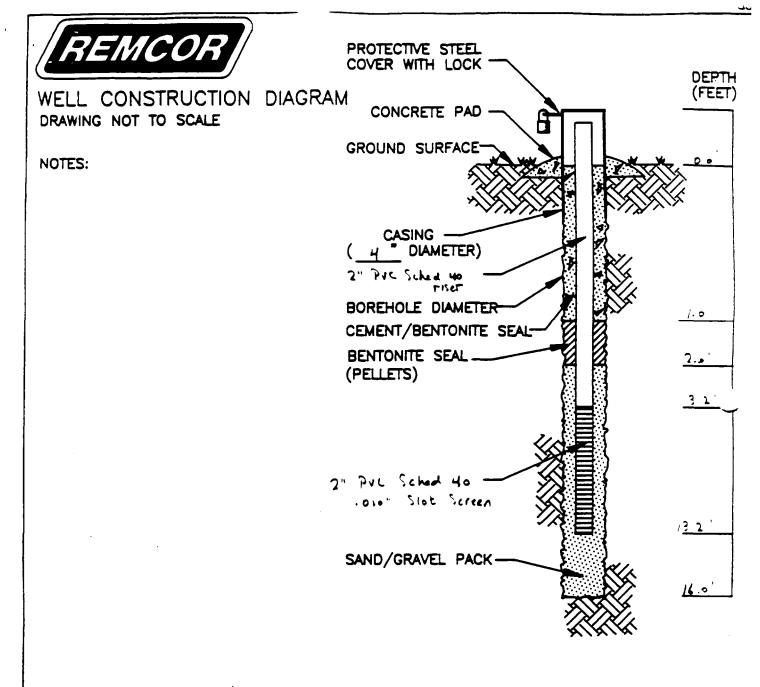
REMCOR	PROTECTIVE STEEL COVER WITH LOCK	ОЕРТН
WELL CONSTRUCTION DRAWING NOT TO SCALE	DIAGRAM CONCRETE PAD	(FEET)
NOTES:	GROUND SURFACE	
	CASING	
	( 4 DIAMETER)  2" PUC School 40  Fiser	
	BOREHOLE DIAMETER CEMENT/BENTONITE SEAL	22.5
	BENTONITE SEAL (PELLETS)	24.0
		25.0
	2" PVC School 40	
	. 010" Slot Screen	300
	SAND/GRAVEL PACK—	14.0

MONITORING WELL NO MW-5 (b)
PROJECT NAME ROCKWELL Allegan
PROJECT NO. BG269
LOCATION Adjacent to Water Tower North parking area
GEOLOGIST D MAGTINGE
DRILLING CONTRACTOR . DISCONSIN Test Drilling
DRILLER T Symmet
DRILLING METHOD Hallow Stem Ascet Split Spems
DRILLING DATE 3/6/90
GROUND ELEVATION632.19
TOP ELEVATION 635.10 Tac(Inside) 635.02
STATIC WATER DEPTH
WATER ELEVATION 619.32

MONITORING WELL NO	MW-5(c)
PROJECT NAME ROLL	well Allegan
PROJECT NO84	7269
LOCATIONN	orth Parking Area adjacent to Water Town
GEOLOGIST	MARTINCIA
DRILLING CONTRACTOR	· Wisconsin Test Delling
DRILLER	T Symunds
DRILLING METHOD Hallow	Stem Facer Split Soom Samples
DRILLING DATE 2/26	6 - 2/28/90
GROUND ELEVATION	632.06
TOP ELEVATION	634.74 Tec (inside) 634.72
STATIC WATER DEPTH	14.0
WATER ELEVATION	618.06



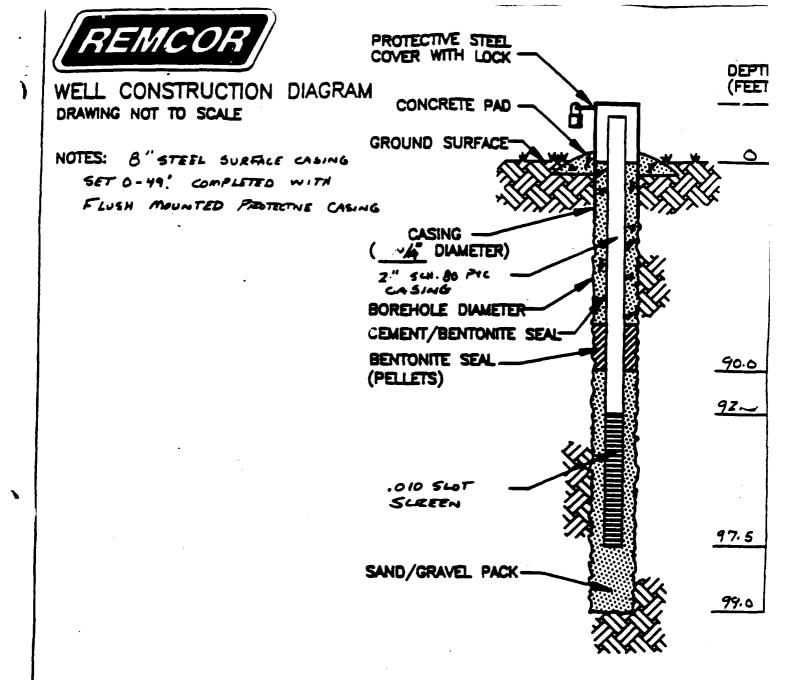
MONITORING WELL NO_MW-G
PROJECT NAME ROCKWELL REIFS
PROJECT NO
LOCATION PARKING LOT. N.E. CORNER
GEOLOGIST J. SUMROK
DRILLING CONTRACTOR WISCONSIN TEST DRILLING
DRILLER L. EROMAN
DRILLING METHOD WATER ROTARY
DRILLING DATE 3-11-90
GROUND ELEVATION (21.49
TOP ELEVATION 6 Z 4 . 4 2
STATIC WATER DEPTH
WATER ELEVATION 6/7.55



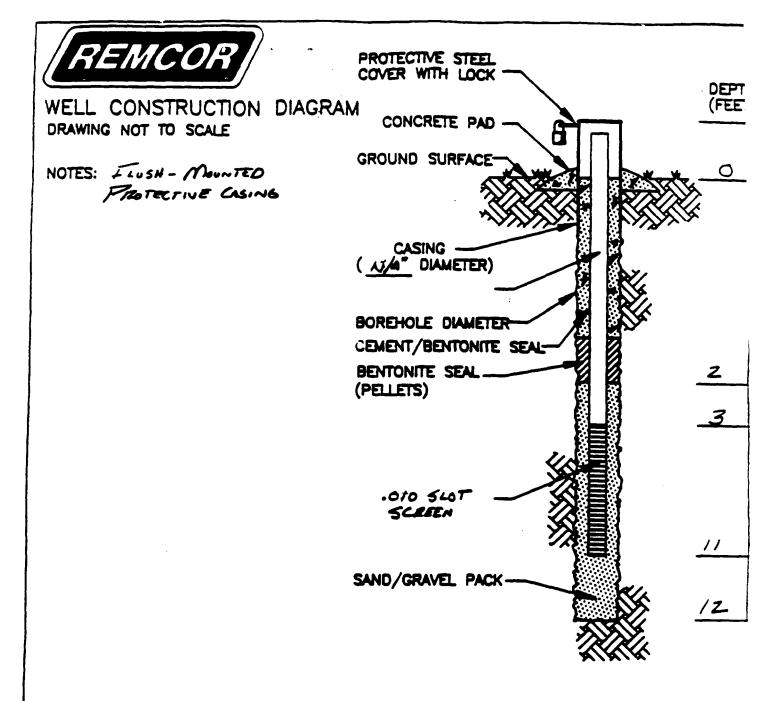
MONITORING WELL NOMW-7
PROJECT NAME ROCKWOM Allegan
PROJECT NO. 89269
LOCATION PARENG LOT - FILEGEN POTW N.S. COINT
GEOLOGIST D MARTINGE
DRILLING CONTRACTOR . WISCOME Test Drilling
DRILLER
DRILLING METHOD Hollow Sten Accet Split Spor Samples
DRILLING DATE 2/10/40
GROUND ELEVATION 621.67
TOP ELEVATION 624.62 TOC (include) 624.62
STATIC WATER DEPTH4.0'
WATER ELEVATION 617.67

REMCOR	PROTECTIVE STEEL COVER WITH LOCK	DEPTH
WELL CONSTRUCTION DRAWING NOT TO SCALE	DIAGRAM CONCRETE PAD	(FEET)
NOTES:	GROUND SURFACE	200
	CASING (1 DIAMETER)	
	2" Pore Schad 40 FISCE BOREHOLE DIAMETER	
	CEMENT/BENTONITE SEAL	
	BENTONITE SEAL (PELLETS)	20
		45,
	2" Puc Sched 40	
	.010" Slot Screen	14.5
	SAND/GRAVEL PACK—	8/4
		20 c

MONITORING WELL NO MW-8
PROJECT NAME ROLEWELL FILEGON
PROJECT NO 89269
LOCATION S.W. Color Perking lat - Allegan POTW)
GEOLOGIST D MARTINGE
DRILLING CONTRACTOR   Wisconsin Took Deviling
DRILLER T. Symme!
DRILLING METHOD Hollow Stew Back Split Som Samiles
DRILLING DATE 2/9/92
GROUND ELEVATION 620.34
TOP ELEVATION 623.21 Toc (11) (62) 621.99
STATIC WATER DEPTH
WATER ELEVATION 614.34



MONITORING WELL NO MVV-9
PROJECT NAME ROCKWELL RIJES
PROJECT NO
LOCATION SOUTH OF DRNE LINE ASSEMBLY BULLOING
GEOLOGIST
DRILLING CONTRACTOR WISCOMEN TEST DESWING
DRILLER L. ERDMAN
DRILLING METHOD WATER PATRY
DRILLING DATE 2-15-90
GROUND ELEVATION 628.05
TOP ELEVATION (27.53
STATIC WATER DEPTH 9.92
WATER ELEVATION 617.61



MONITORING WELL NO MW-10
PROJECT NAME ROCKWELL RIJES
PROJECT NO
LOCATION SOUTH OF DRIVE LINE ASSEMBLY BUILDING
GEOLOGISTJ75
DRILLING CONTRACTOR WISCONSIN TEST DENLING
DRILLER L. GROMAN
DRILLING METHOD HOLLOW- STEM AUGENZ
DRILLING DATE 2-6-90
GROUND ELEVATION 629.46
TOP ELEVATION 628.98
STATIC WATER DEPTH 6.17'
WATER ELEVATION 622.81

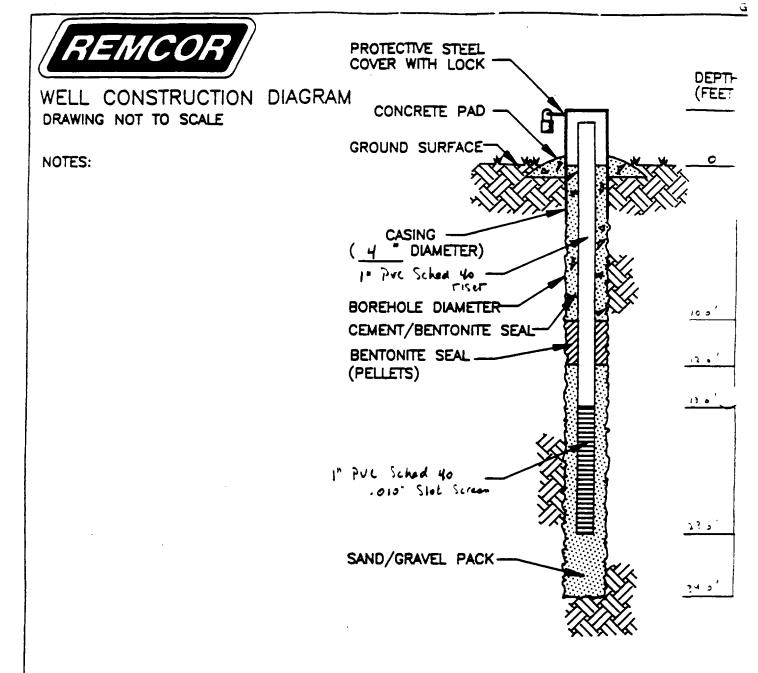
MAI ANTOUNA	PROTECTIVE STEEL	DEPTH
WELL CONSTRUCTION DRAWING NOT TO SCALE	DIAGRAM CONCRETE PAD	(FZET)
NOTES:	GROUND SURFACE	
	CASING (4 DIAMETER) 2" PVC School 40	, s
	BOREHOLE DIAMETER  CEMENT/BENTONITE SEAL	50
	BENTONITE SEAL (PELLETS)	6.0°
	2" PUL Sched 40	14-7'
	SAND/GRAVEL PACK	16.0'

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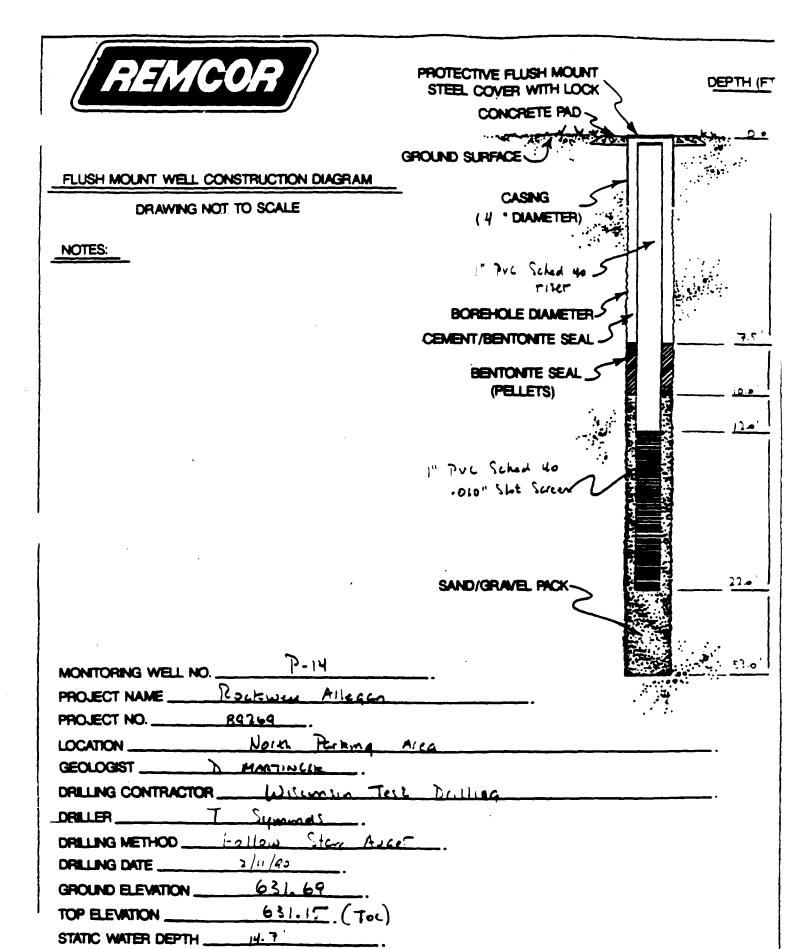
MONITORING WELL NO.	Mw-11		
PROJECT NAME Poc	Ewell Allogan		
PROJECT NO	89769	<b>_</b> .	
LOCATION	Grassy field	- Northe	est of property
GEOLOGIST	MARTINLAK		
DRILLING CONTRACTOR	Wisconsin	Test Du	lling
DRILLER	Terry Symon	ds	•
DRILLING METHODH	bllas Stem A	uger	· · · · · · · · · · · · · · · · · · ·
DRILLING DATE	2/6/90		
GROUND ELEVATION	628.76		
TOP ELEVATION	630.92	TOP	630. <b>82</b>
STATIC WATER DEPTH_	3.7 ′	<del>_</del>	
WATER ELEVATION	625.06	<del></del>	

	· · · · · · · · · · · · · · · · · · ·		٧
REMCOR	PROTECTIVE STEEL COVER WITH LOCK	DEPT	
WELL CONSTRUCTION DRAWING NOT TO SCALE	DIAGRAM CONCRETE PAD	(FEE	T)
NOTES:	GROUND SURFACE	***	
	CASING —		
	( 4 DIAMETER)		
	BOREHOLE DIAMETER  CEMENT/BENTONITE SEAL		-
	BENTONITE SEAL (PELLETS)	3.0	-
	} }	<u>4</u>	-
	1" Puc Schad 40		
	. o.o. Slot Screen	7.0	
	SAND/GRAVEL PACK—	37.5	
	<u>}</u>		ר

MONITORING WELL NO
PROJECT NAME Rockwed Allegan
PROJECT NO 89269
LOCATION Perking let Allegan POTW WAST SIDE
GEOLOGIST D MAGTINGIE
DRILLING CONTRACTOR ! William Test During
DRILLER T Symmets
DRILLING METHOD Itollow Stem 1:190
DRILLING DATE 2/10/40
GROUND ELEVATION 620.55
TOP ELEVATION 623. 21 To. (inside) 623.11
STATIC WATER DEPTH
WATER ELEVATION 614.55



MONITORING WELL NO. P-13	
PROJECT NAME Revewer Allegan	
PROJECT NO B9169	
LOCATION N.W. Corner Hair Blog	_
GEOLOGIST D MARTINICK	
DRILLING CONTRACTOR WILLIAM Test Diving	
DRILLER T Symmets	
DRILLING METHOD 141100 Stem Pages Son Som	220,000
DRILLING DATE 2/3/4,	
GROUND ELEVATION 631.39	
TOP ELEVATION 634.47 Toc (INSID) 634.37	
STATIC WATER DEPTH	
WATER ELEVATION 615.39	

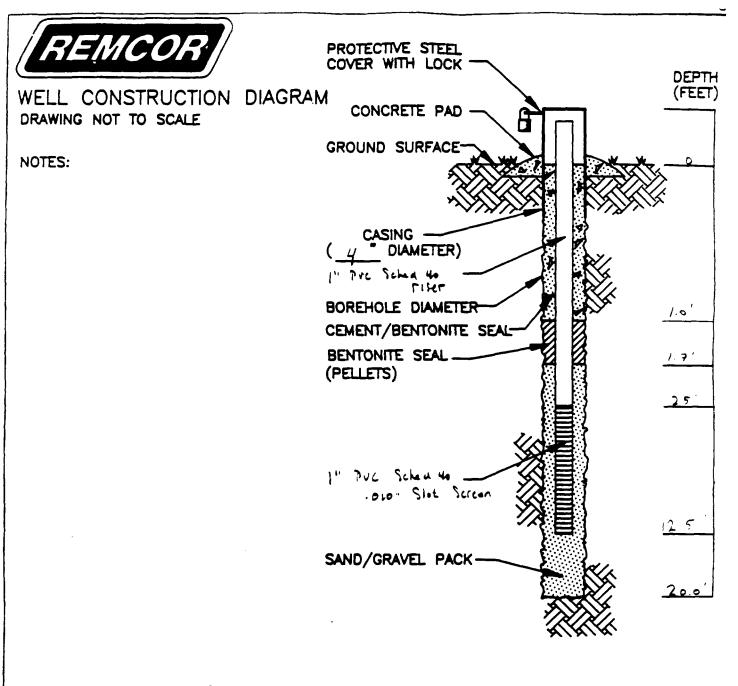


WATER ELEVATION 616.45

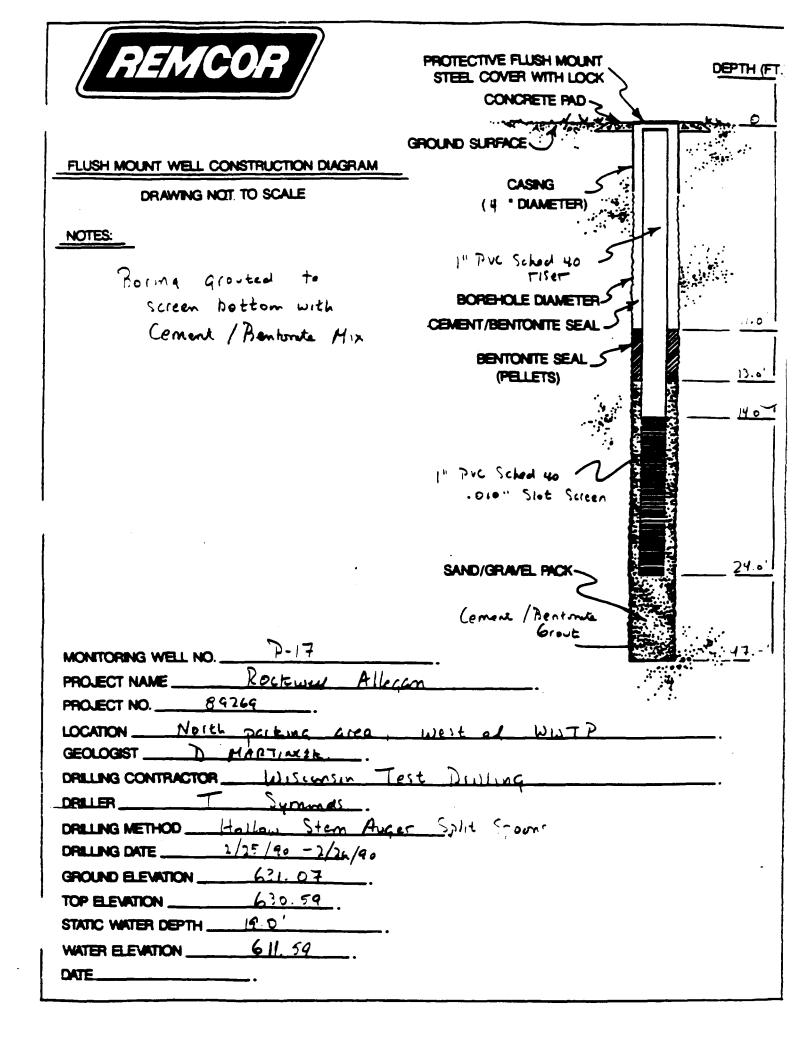
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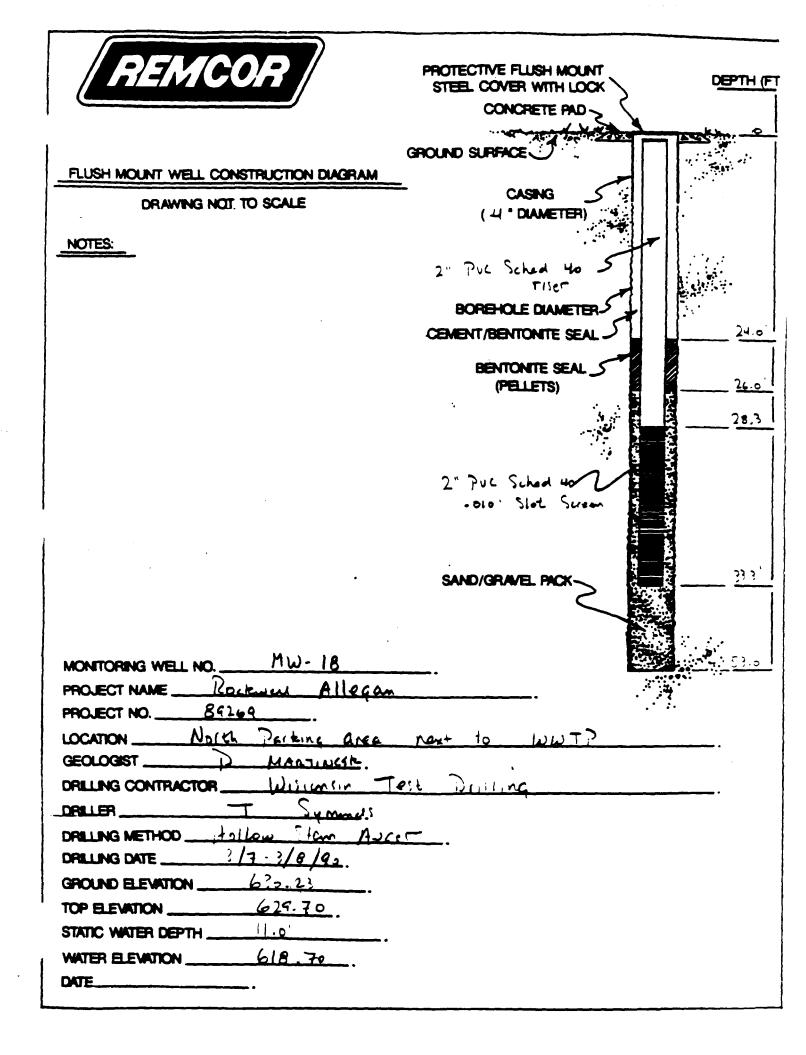
REMCOR	PROTECTIVE STEEL COVER WITH LOCK	DEPTI-
WELL CONSTRUCTION DRAWING NOT TO SCALE	DIAGRAM CONCRETE PAD	(FEET
NOTES:	GROUND SURFACE	0.0
	CASING —	
	( y DIAMETER)	
	BOREHOLE DIAMETER  CEMENT/BENTONITE SEAL	√· o
	BENTONITE SEAL (PELLETS)	3.0
		50
	I' Puc Sched 40	
	.010" Slot Screen	1-0'
	SAND/GRAVEL PACK	
		24.0
	HIHIM.	

MONITORING WELL NO. 13-15	
PROJECT NAME ROCKWISE Allegan	
PROJECT NO	
LOCATION Grassy area between	Main 31dg - Active Rldg
GEOLOGIST D MARTINISK	·
DRILLING CONTRACTOR WIS COT	osin Test Drilling
DRILLER T Symmas	`
DRILLING METHOD 1701 low 151cm	Auger Split Spoon Samples
DRILLING DATE 2/7/90	,
GROUND ELEVATION 631.67	
TOP ELEVATION 634.51 T.O.?	634.39
STATIC WATER DEPTH 8.0'	
WATER ELEVATION (23.67	



MONITORING WELL NO P-16	
PROJECT NAME ROCKWELL Allega	<u>~</u>
PROJECT NO 84264	
LOCATION Northeast Gres	sy flud
GEOLOGIST D MARTINGE	
DRILLING CONTRACTOR WINEW:	in Test Dulling
DRILLER T	amam et s
DRILLING METHOD Hallow Sten	in Auget Solit Spen ampel
DRILLING DATE 2/6 - 2/7/	<i>q</i> .
GROUND ELEVATION 627.14	
TOP ELEVATION 630.03	
TOP ELEVATION 430.03 STATIC WATER DEPTH 3.5 '	<u>T</u> oP 629.81







DEPTH FLUSH MOUNT CASING (FEET) WITH CONCRETE COLLAR WELL CONSTRUCTION DIAGRAM DRAWING NOT TO SCALE 0 LOCKING WELL CAP NOTES: - 2-IN. DIA Prc Scu. 80 CEMENT/BENTONITE SEAL RISER 50.0 BENTONITE SEAL 60.Z 65.0 BOREHOLE DIAMETER 2-IN. DIA. 0.010 SLOT PUC SCREEN 85.0 SAND/GRAVEL PACK 85.0

MONITORING WELL NO MW-12
PROJECT NAME ROCKWELL - ALLEGAN
PROJECT NO. 92192
LOCATIONBACKGROUND
GEOLOGISTKPP
DRILLING CONTRACTOR WISCONSIN TEST DKILLING
DRILLER JOHN WEAKS
DRILLING METHOD 6/4-W 1.D. HOLOW STEM AUGER
DRILLING DATE 11/11/92 - 11/18/92
GROUND ELEVATION 631.90
TOP ELEVATION_ 631.49
STATIC WATER DEPTH_ 43.60 (2/15/93)
WATER ELEVATION 587.59



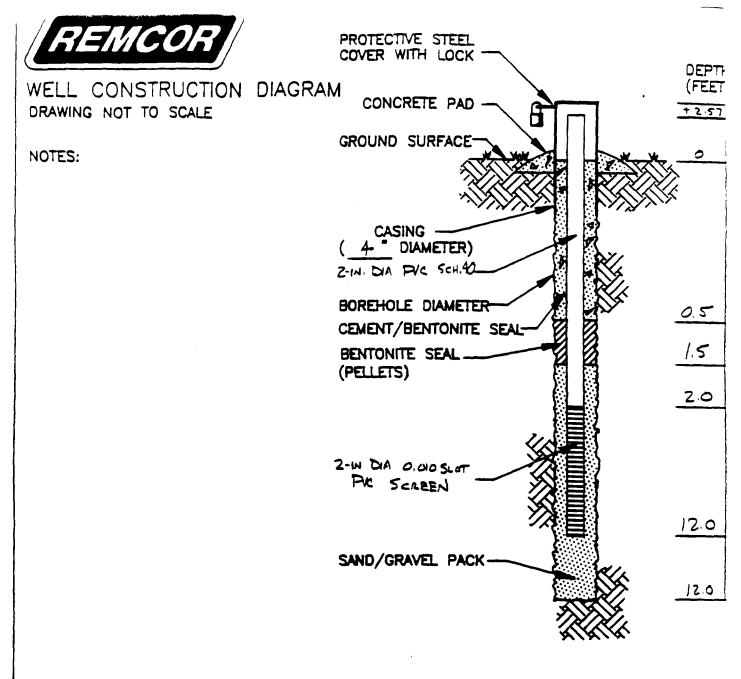
DEPTH FLUSH MOUNT CASING (FEET) WELL CONSTRUCTION DIAGRAM WITH CONCRETE COLLAR DRAWING NOT TO SCALE 0 LOCKING WELL CAP NOTES: 2-11. DIA. Ple SCH 40 CEMENT/BENTONITE SEAL RISER 0.5 BENTONITE SEAL 5.0 7.0 BOREHOLE DIAMETER 2-IN. DIA. 0.010 SLOT PVC SCREEN 17.0 SAND/GRAVEL PACK 17.0

ONITORING WELL NO MW-13	
ROJECT NAME ROCKWELL - ALLEGAN	
ROJECT NO. 92192	_
OCATION RAILROAD RIGHT- OF WAY	_
EOLOGISTKPP	_
RILLING CONTRACTOR WISCONSIN TEST DRILLING	_
RILLER LIGHT WEAKS	_
RILLING METHOD 614-IN 1.D. HOLLOW STEM AUGER	_
RILLING DATE 11/13/92	
ROUND ELEVATION 631.70	
OP ELEVATION631.//	
TATIC WATER DEPTH_ 6.64 (2/15/93)	
ATER ELEVATION 624.47	

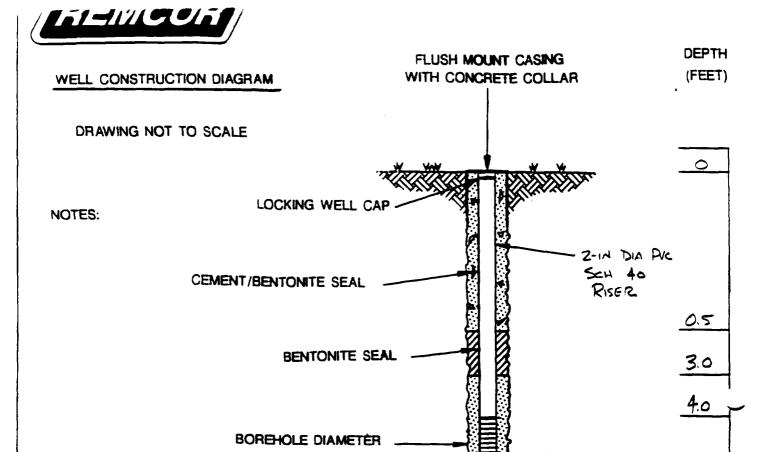


## DEPTH FLUSH MOUNT CASING (FEET) WITH CONCRETE COLLAR WELL CONSTRUCTION DIAGRAM DRAWING NOT TO SCALE LOCKING WELL CAP NOTES: - Z-IN. DIA PVC SCH. 40 RISER CEMENT/BENTONITE SEAL 1.5 BENTONITE SEAL 7.5 BOREHOLE DIAMETER 2-W. DA PVC SCREEN 17.5 SAND/GRAVEL PACK 17.5

MONITORING WELL NO MW-14
PROJECT NAME ROCKWELL- ALLEGAN
PROJECT NO. 92192
LOCATIONBACKGROWD
GEOLOGISTNG
DRILLING CONTRACTOR WISCONSIN TEST DRILLING
DRILLER MIKE NELSEN
DRILLING METHOD 6'14-IN 1.D HOLLOW STEM AUGER
DRILLING DATE 11/15/92
GROUND ELEVATION 629.40
TOP ELEVATION 628.33
STATIC WATER DEPTH 8.34 (2)15/93)
WATER ELEVATION 6/9.99



MONITORING WELL NOMW-15
PROJECT NAME ROCKWELL- ALLEGAN
PROJECT NO. 92/92
LOCATION_BACKGROUND
GEOLOGISTKPP
DRILLING CONTRACTOR WISCONSIN TEST DRILLING
DRILLER JOHN WEAKS
DRILLING METHOD 6 14-IN. 1.D. HOLLON STEM AUSEIL
DRILLING DATE 11/17/92
GROUND ELEVATION 618.30
TOP ELEVATION 620.87
STATIC WATER DEPTH 5.44 (2/15/93)
WATER ELEVATION 6/5.43

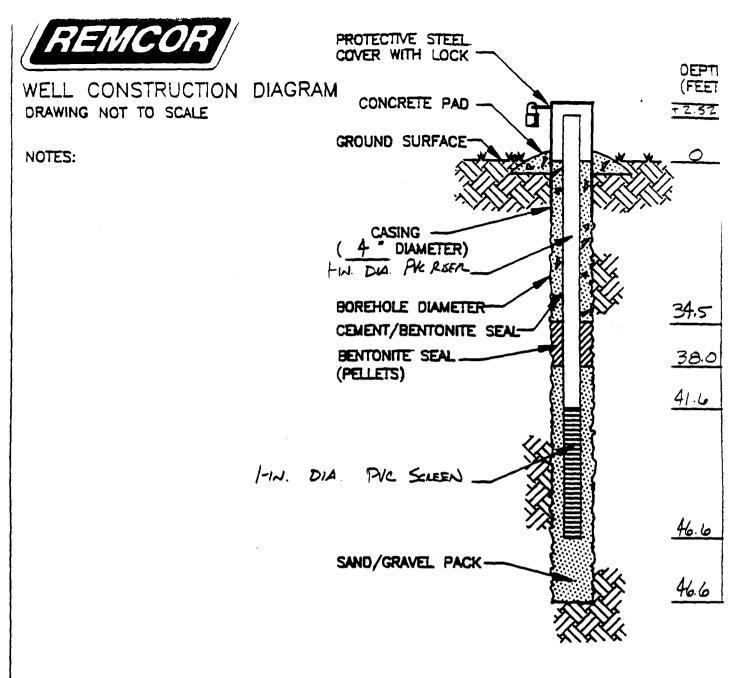


2-IN DIA. PVC SCREEN 0.010 SCOT

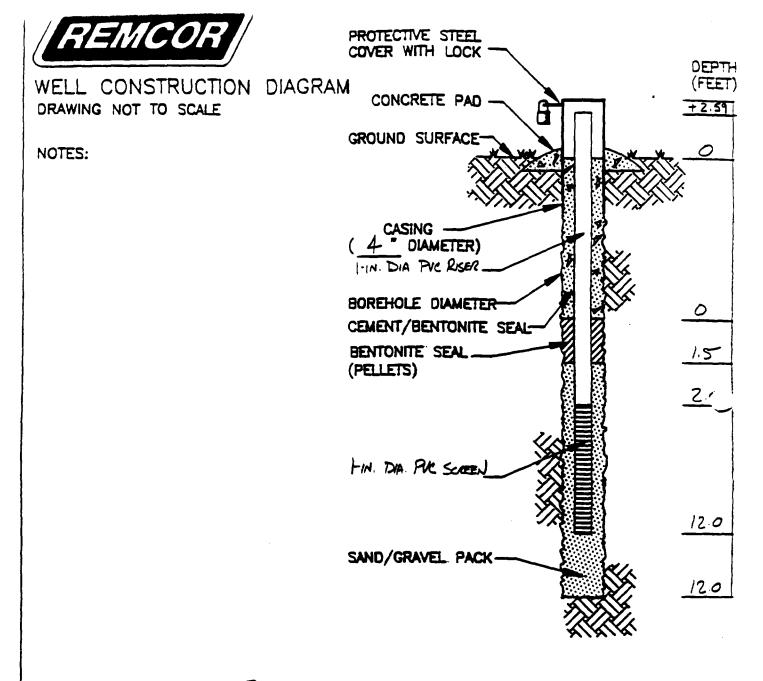
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MONITORING WELL NO MW-16
PROJECT NAME ROCKWELL- ALEGAN
PROJECT NO 92192
LOCATION_ BACKGROUND
GEOLOGISTNG
DRILLING CONTRACTOR WISCONSIN TEST DRILLING
DRILLER MIKE NELSEN
DRILLING METHOD 6'14-IN 1.D HOUSE STEM AUSER
DRILLING DATE 11/13/92
GROUND ELEVATION 620.62
TOP ELEVATION 620.21
STATIC WATER DEPTH 5.03 (2/15/93)
WATER ELEVATION 6/5./8

SAND/GRAVEL PACK



PIEZOMETER NO. P. 18
PROJECT NAME KOCKHELL- ALLEGAN
PROJECT NO 92192
LOCATIONBACKGROUND
GEOLOGISTNG
DRILLING CONTRACTOR WISCONSIN TEST DRILLING
DRILLER MIKE NELSEN
DRILLING METHOD 41/4-IN 1.D. HOLON STEM AUGETZ
DRILLING DATE 11/11/92
GROUND ELEVATION 664.40
TOP ELEVATION 666.92
STATIC WATER DEPTH 43.59 (2/15/93)
WATER ELEVATION 623.33



PIEZOMETER NO
PROJECT NAME ROCKWELL- ALLESAN
PROJECT NO. 92192
LOCATION FORMER CITY OF ALLEGAN LANDAU
GEOLOGISTNG
DRILLING CONTRACTOR WISCONSIN TEST DRILLING
DRILLER MIKE NELSEN
DRILLING METHOD +1/4-W 1.D HOLLOW STEM AUGETZ
DRILLING DATE 11/17/92
GROUND ELEVATION
TOP ELEVATION 620 49
STATIC WATER DEPTH 4.54 (2/15/95)
WATER ELEVATION 615.95