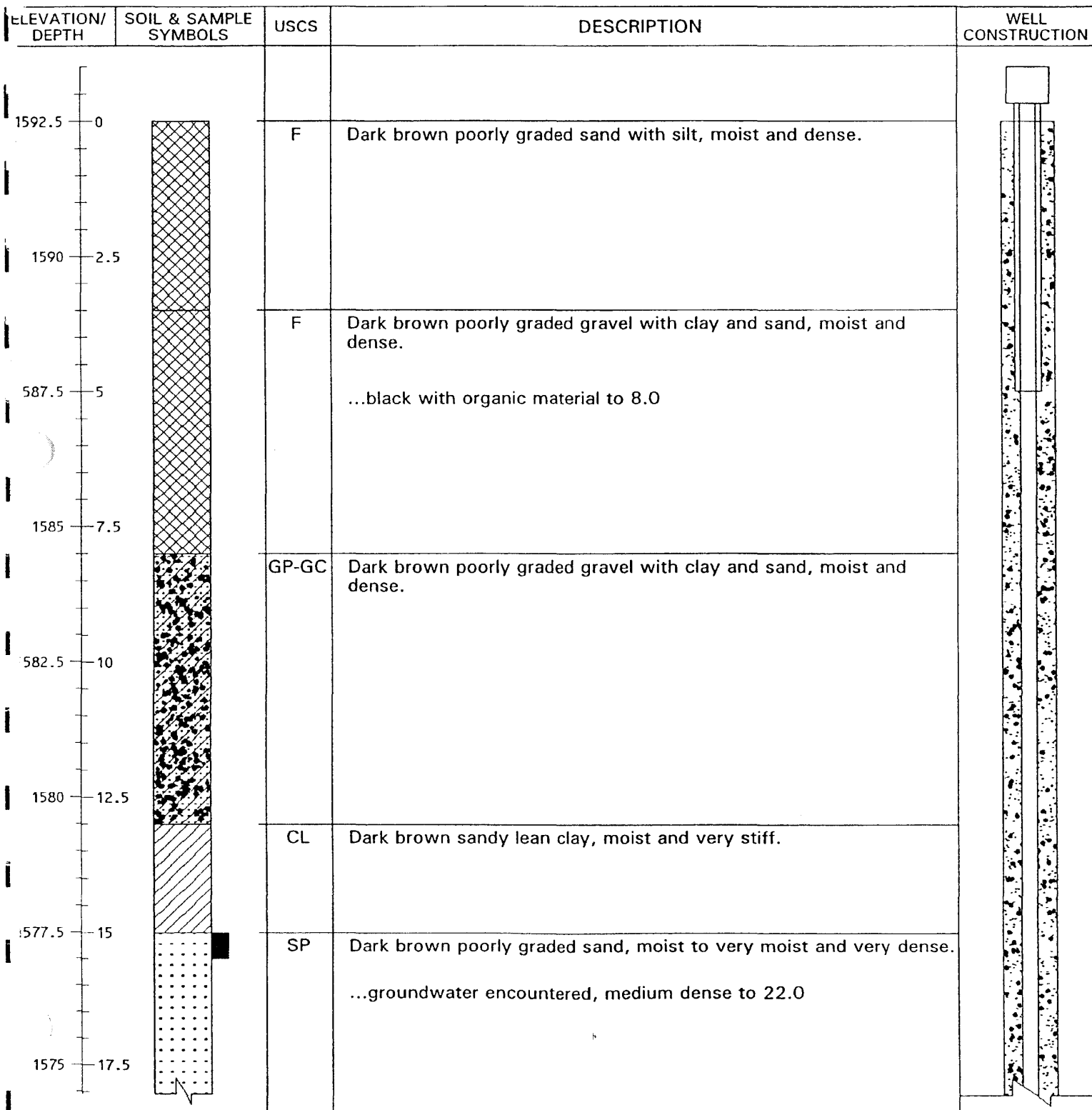


EXPLORATION LOG MW-K5

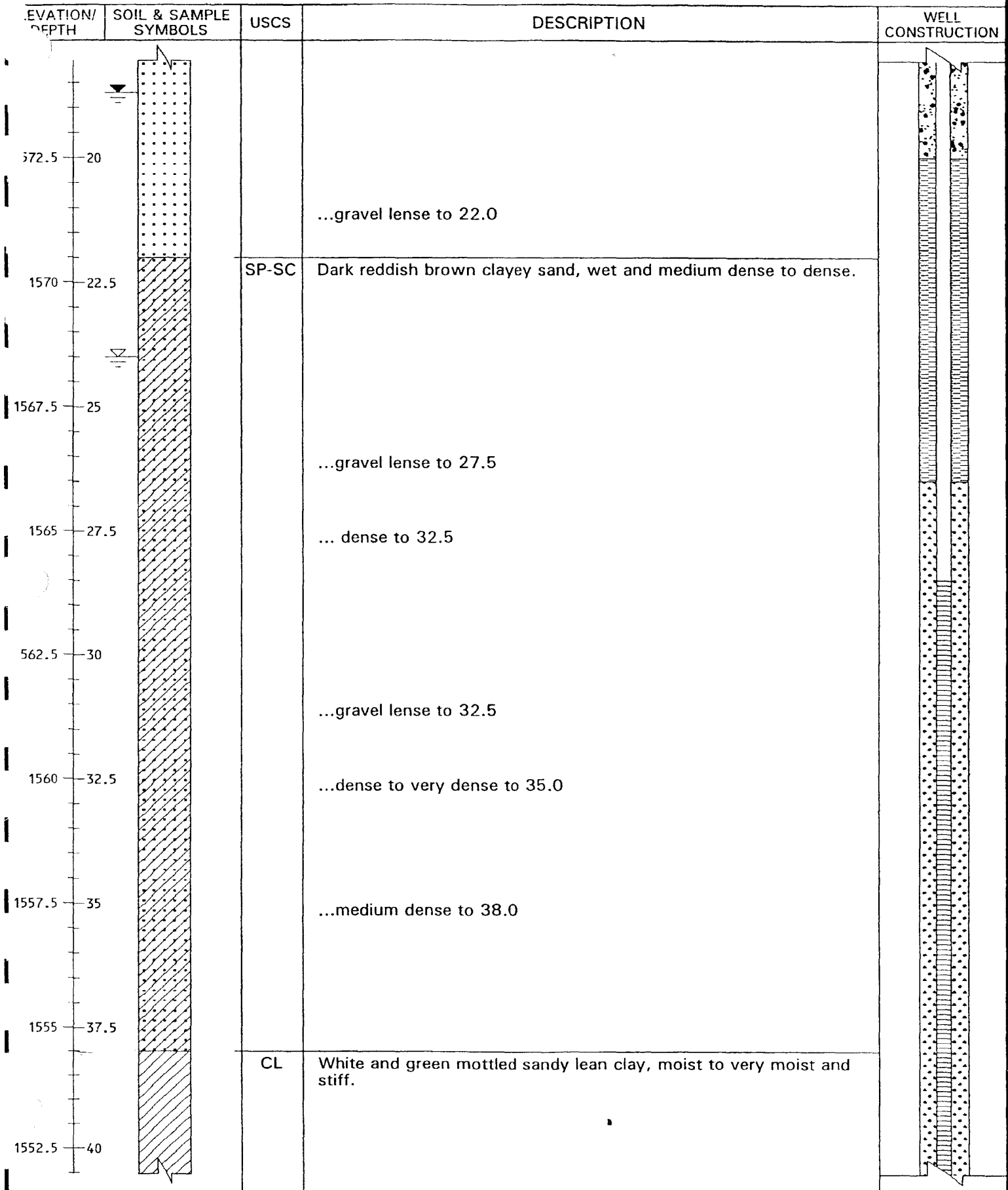
CONFIDENTIAL

PROJECT: FORMER PEPCON FACILITY PROJECT NO.: 97664V1
 SITE LOCATION: SEE SITE PLAN EXPLORATION DATE: 4-2-98
 EXPLORATION SIZE (diameter): 2" MONITORING WELL EQUIPMENT: MOBILE B-61-HDX
 G.S. ELEVATION: 1592.49 LOGGED BY: S. JOHNSON
 INITIAL DEPTH TO WATER: 24 DATE MEASURED: 4-2-98
 FINAL DEPTH TO WATER: 18.7 DATE MEASURED: 4-3-98



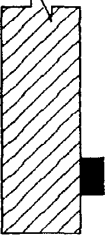
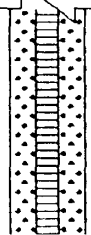
EXPLORATION LOG MW-K5

CONFIDENTIAL



EXPLORATION LOG MW-K5

CONFIDENTIAL

ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	WELL CONSTRUCTION
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">1550 — 42.5</div> <div style="margin-bottom: 10px;">1547.5 — 45</div> <div style="margin-bottom: 10px;">1545 — 47.5</div> <div style="margin-bottom: 10px;">1542.5 — 50</div> <div style="margin-bottom: 10px;">1540 — 52.5</div> <div style="margin-bottom: 10px;">1537.5 — 55</div> <div style="margin-bottom: 10px;">1535 — 57.5</div> <div style="margin-bottom: 10px;">1532.5 — 60</div> <div style="margin-bottom: 10px;">1530 — 62.5</div> </div>			<p>END OF BORING AT 43.5 FEET</p>	

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division		KM SUBSIDIARY KMC LLC		LOCATION HENDERSON, NV		BORING NUMBER PC 100				
DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE				REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	DEPTH	REC.	
5	0-18 gravelly SAND, mod yell brn (10YR5/4). 10% silt, 25% volc granules & sm pebbles up to 1"		SW							
10										
15										damp @ 16'
20	18-29 silty sdy GRAVEL 14 brn (5YR5/4). 20-25% silt, 20-25% poorly sorted, SA-SR, vf-vc sd		SW							
25	50% volc granules and pebbles to 3"									▽ @ 25'
29	Locally hard thin calcified zones									
36	29-36 silty SAND, lt. yell brn (10YR6/4). vf-fg w/com m-cg, SR-SA, 25-30% silt. Very calcareous. Minor m-vc size caliche nodules		SM							
36	36-45 silty grav SAND, mod yell brn (10YR5/4) 25% silt, 25% volc granules		SW							
EXPLANATION	Water Table (24 Hour)		GRAPHIC LOG LEGEND		DATE DRILLED		PAGE			
	Water Table (Time of Boring)		CLAY	DEBRIS FILL	5-18-00		1 of 2			
	PID NO. TYPE Identifies Sample by Number Sample Collection Method		SILT	HIGHLY ORGANIC (PEAT)	DRILLING METHOD		HSA			
	SPLIT-BARREL	AUGER	SAND	SANDY CLAY	DRILLED BY		COMPLIANCE			
	THIN-WALLED TUBE	CONTINUOUS SAMPLER	GRAVEL	CLAYEY SAND	LOGGED BY		ED KRISH			
	ROCK CORE	NO RECOVERY	SILTY CLAY	CLAYEY SILT	EXISTING GRADE ELEVATION (FT AMSL)					
DEPTH Depth Top and Bottom of Sample REC. Actual Length of Recovered Sample in Feet				LOCATION OR GRID COORDINATES						

SOIL BORING LOG KM-5655-B

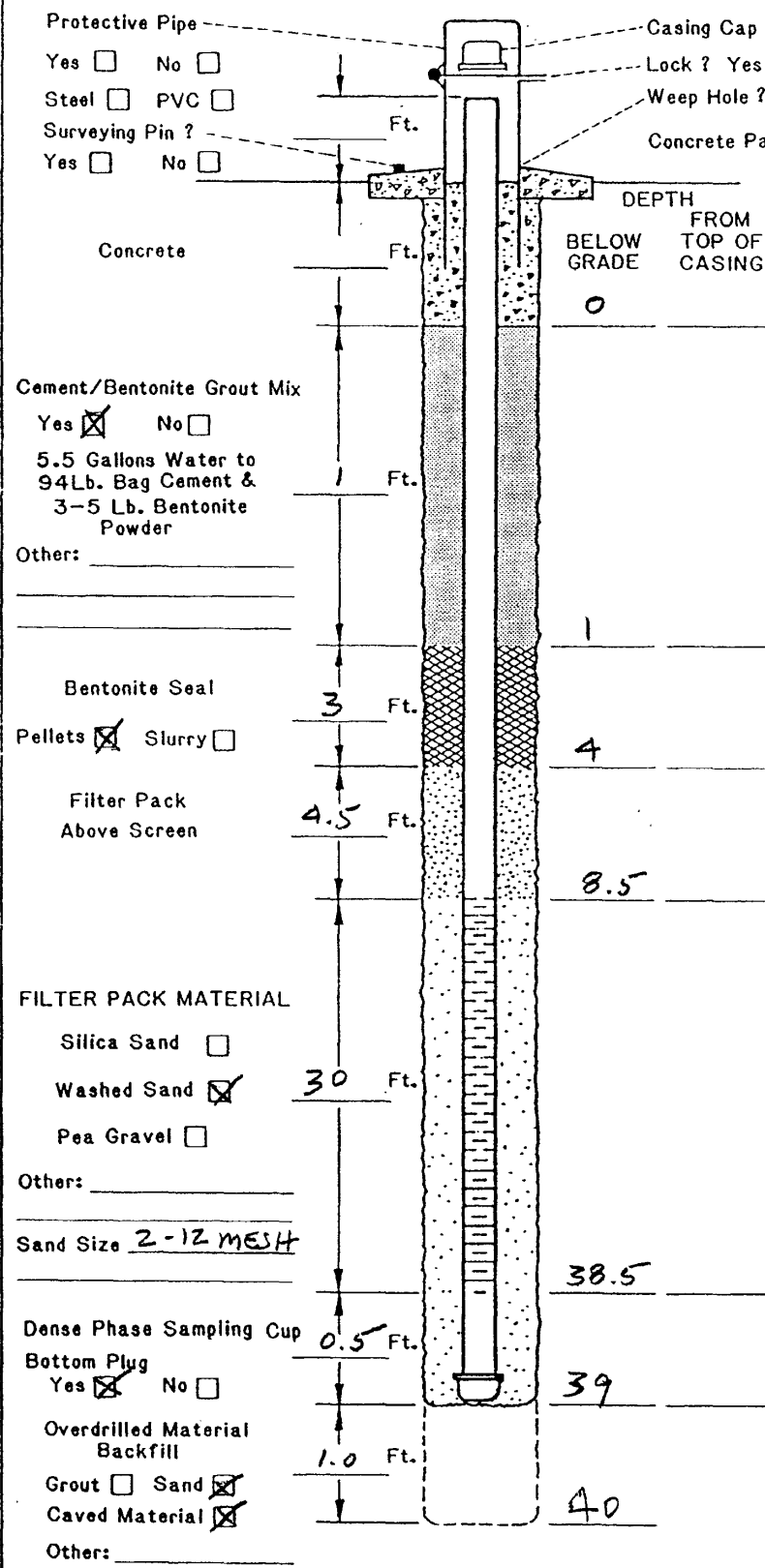
KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division	KM SUBSIDIARY KMC LLC	LOCATION HENDERSON, NV	BORING NUMBER PC 100
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DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE				REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	DEPTH	REC.	
45	and sm pebbles; vf-vc sd 42-45 silty gravelly SAND, gry oran pink (SYR 6/2) 10% clay, 20% silt, 20% volc & ls granules to 1/8"-1/2" dissem throughout Very calcareous w/ minor sm. caliche nodules TD 45'		SW							MC not reached

EXPLANATION	Water Table (24 Hour)	GRAPHIC LOG LEGEND		DATE DRILLED 5-18-00	PAGE 2 of 2
	Water Table (Time of Boring)	CLAY	DEBRIS FILL	DRILLING METHOD HSA	
	PID NO. Identifies Sample by Number TYPE Sample Collection Method	SILT	HIGHLY ORGANIC (PEAT)	DRILLED BY Compliance	
	SPLIT-BARREL	AUGER	SAND	SANDY CLAY	LOGGED BY ED KRISH
THIN-WALLED TUBE	CONTINUOUS SAMPLER	GRAVEL	CLAYEY SAND	EXISTING GRADE ELEVATION (FT AMSL)	
ROCK CORE	NO RECOVERY	SILTY CLAY	CLAYEY SILT	LOCATION OR GRID COORDINATES	
DEPTH: Depth Top and Bottom of Sample REC.: Actual Length of Recovered Sample in Feet					

**KERR-McGEE CORPORATION
HYDROLOGY DEPARTMENT
MONITORING WELL INSTALLATION DIAGRAM**

*FLUSH
MOUNT*



- DRILLING INFORMATION:**
- Borehole Diameter = 8 Inches.
 - Were Drilling Additives Used? Yes No
Revert Bentonite Water
Solid Auger Hollow Stem Auger
 - Was Outer Steel Casing Used? Yes No
Depth = _____ to _____ Feet.
 - Borehole Diameter for Outer Casing _____ Inches.

- WELL CONSTRUCTION INFORMATION:**
- Type of Casing: PVC Galvanized Teflon
Stainless Other _____
 - Type of Casing Joints: Screw-Couple Glue-Couple Other _____
 - Type of Well Screens: PVC Galvanized
Stainless Teflon Other _____
 - Diameter of Casing and Well Screens:
Casing 2 Inches, Screen 2 Inches.
 - Slot Size of Screens: 0.020
 - Type of Screen Perforation: Factory Slotted
Hacksaw Drilled Other _____
 - Installed Protector Pipe w/Lock: Yes No

- WELL DEVELOPMENT INFORMATION:**
- How was Well Developed? Bailing Pumping
Air Surging (Air or Nitrogen) Other _____
 - Time Spent on Well Development? _____
1.60 Minutes/Hours
 - Approximate Water Volume Removed? _____ Gallons
 - Water Clarity Before Development? Clear
Turbid Opaque
 - Water Clarity After Development? Clear
Turbid Opaque
 - Did Water have Odor? Yes No
If Yes, Describe _____
 - Did Water have any Color? Yes No
If Yes, Describe _____

WATER LEVEL INFORMATION:
Water Level Summary (From Top of Casing)
During Drilling 25 Ft. Date 5-18-00
Before Development 14.03 Ft. Date 5-19-00
After Development _____ Ft. Date _____

Driller/Firm COMPLIANCE Drill Rig Type Mobile B-59 Date Installed 5-18-00
Drill Crew LOYA Well No. PC 100 Kerr-McGee Hydrologist ED KRISH

SOIL BORING LOG KM-5655-B

KERR-MCGEE CORPORATION Hydrology Dept. - S&EA Division		KM SUBSIDIARY KMC LLC	LOCATION Henderson, NV		BORING NUMBER PC100R					
DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE				REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	DEPTH	REC.	
4	0-4 gravelly SAND, gry brn w/ 10-15% silt. 20-30% volc granules to pea gravel. vf-vc SA sd		SW							start drilling @ 8:30 am finish @ 9:00
7	4-7 SAND, gry brn w/ 10% silt and 5-10% v. sm granules to 1/10". f-vc SA-SR sand.		SW							
9	7-9 sdy GRAVEL, brn, A-SA to 1". 30-35% vf-vc sand		SW							damp @ 12'
15	9-11 SAND, brn, w/ 10% silt + 5-10% v. sm gran. f-vc, SA sand		GW							∇ @ 18'
20	11-25 sdy GRAVEL brn w/ 5-10% silt + 25-30% vf-vc, SR-SA sd. Grav. up to 2" (ave 1/10" - 3/4") volc w/ minor caliche coatings		GW							
25	25-27 SAND brn, mod silty (15-20%). Calcareous. w/ 10-15% sm volc granules vf-vc, SA-SR		SW							
27	27-30 sdy GRAVEL, brn, volc up to 2" (ave 3/4") clean, vf-vc sd		GW							
30	30-35 SAND, brn, vf-c w/ minor vc, SA-SR. 10-15% silt, calcareous		SW							
35	35-38 silty SAND/sdy SILT var amts of silt in vf-fg SA-SR sd		SM							
38			GM/SM							

EXPLANATION

- Water Table (24 Hour)
- Water Table (Time of Boring)
- PID Photoionization Detection (ppm)
- Identifies Sample by Number
- Sample Collection Method
- SPLIT-BARREL
- AUGER
- ROCK CORE
- THIN-WALLED TUBE
- CONTINUOUS SAMPLER
- NO RECOVERY

DEPTH Depth Top and Bottom of Sample
REC. Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

- CLAY
- SILT
- SAND
- GRAVEL
- SILTY CLAY
- CLAYEY SILT
- DEBRIS FILL
- HIGHLY ORGANIC (PEAT)
- SANDY CLAY
- CLAYEY SAND

DATE DRILLED
8-16-00

PAGE
1 of 2

DRILLING METHOD
PERCUSSION

DRILLED BY
LAYNE

LOGGED BY
ED KRISH

EXISTING GRADE ELEVATION (FT. AMSL)

LOCATION OR GRID COORDINATES

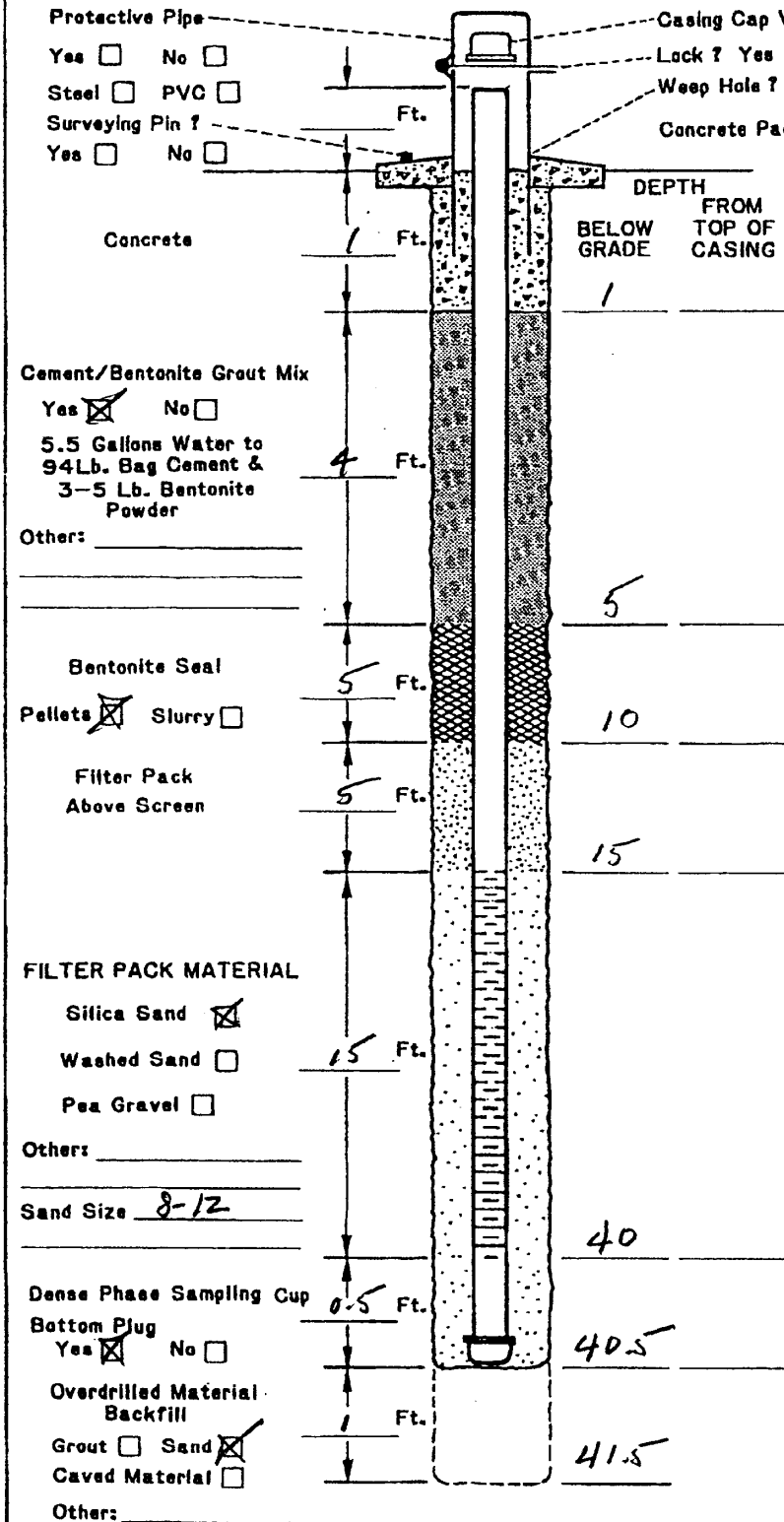
SOIL BORING LOG KM-5655-8

KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division		KM SUBSIDIARY KMC LLC		LOCATION HENDERSON, NV		BORING NUMBER PC100R				
DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE				REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	DEPTH	REC.	
40.5	38-40.5 gravelly silty SAND, brn. 20-25% silt and 10-20% volc sm granules. SA-SR vf-vc sd. 40.5-41.5 lt grn silty CLAY w/ gyp xtals TD 41.5'	CL								MC @ 40.5'
45										

EXPLANATION	▼	Water Table (24 Hour)	GRAPHIC LOG LEGEND		DATE DRILLED 8-16-00	PAGE 2 of 2	
	▽	Water Table (Time of Boring)			[diagonal lines] CLAY	[cross-hatch] DEBRIS FILL	DRILLING METHOD PERCUSSION
	PID	Photoionization Detection (ppm)	[horizontal lines] SILT	[wavy] HIGHLY ORGANIC (PEAT)	DRILLED BY LAYNE		
	TYPE	Identifies Sample by Number Sample Collection Method	[dots] SAND	[diagonal lines] SANDY CLAY	LOGGED BY ED KRISH		
[split barrel symbol]	SPLIT-BARREL	[vertical lines] GRAVEL	[diagonal lines] CLAYEY SAND	EXISTING GRADE ELEVATION (FT. AMSL)			
[thin-walled tube symbol]	THIN-WALLED TUBE	[diagonal lines] SILTY CLAY	[diagonal lines] CLAYEY SILT	LOCATION OR GRID COORDINATES			
[auger symbol]	AUGER	[diagonal lines] CLAYEY SILT					
[rock core symbol]	ROCK CORE						
[continuous sampler symbol]	CONTINUOUS SAMPLER						
[no recovery symbol]	NO RECOVERY						
DEPTH Depth Top and Bottom of Sample							
REC. Actual Length of Recovered Sample in Feet							

KERR-McGEE CORPORATION HYDROLOGY DEPARTMENT MONITORING WELL INSTALLATION DIAGRAM

FLUSH
MOUNT



- DRILLING INFORMATION:**
- Borehole Diameter = 9 Inches.
 - Were Drilling Additives Used? Yes No
 Revert Bentonite Water
 Solid Auger Hollow Stem Auger
 - Was Outer Steel Casing Used? Yes No
 Depth = _____ to _____ Feet.
 - Borehole Diameter for Outer Casing _____ Inches.
- WELL CONSTRUCTION INFORMATION:**
- Type of Casings: PVC Galvanized Teflon
 Stainless Other _____
 - Type of Casing Joints: Screw-Couple Glue-Couple Other _____
 - Type of Well Screens: PVC Galvanized
 Stainless Teflon Other _____
 - Diameter of Casing and Well Screen:
 Casing 2 Inches, Screen 2 Inches.
 - Slot Size of Screens: 0.040
 - Type of Screen Perforation: Factory Slotted
 Hackaw Drilled Other _____
 - Installed Protector Pipe w/Locks: Yes No
- WELL DEVELOPMENT INFORMATION:**
- How was Well Developed? Bailing Pumping
 Air Surging (Air or Nitrogen) Other _____
 - Time Spent on Well Development? 2 1 Minutes/Hours
 - Approximate Water Volume Removed? _____ Gallons
 - Water Clarity Before Development? Clear
 Turbid Opaque
 - Water Clarity After Development? Clear
 Turbid Opaque
 - Did Water have Odor? Yes No
 If Yes, Describe Pesticide
 - Did Water have any Color? Yes No
 If Yes, Describe _____
- WATER LEVEL INFORMATION:**
 Water Level Summary (From Top of Casing)
 During Drilling 18' Ft. Date 8-16-00
 Before Development _____ Ft. Date _____
 After Development 13.64 Ft. Date 8-17-00

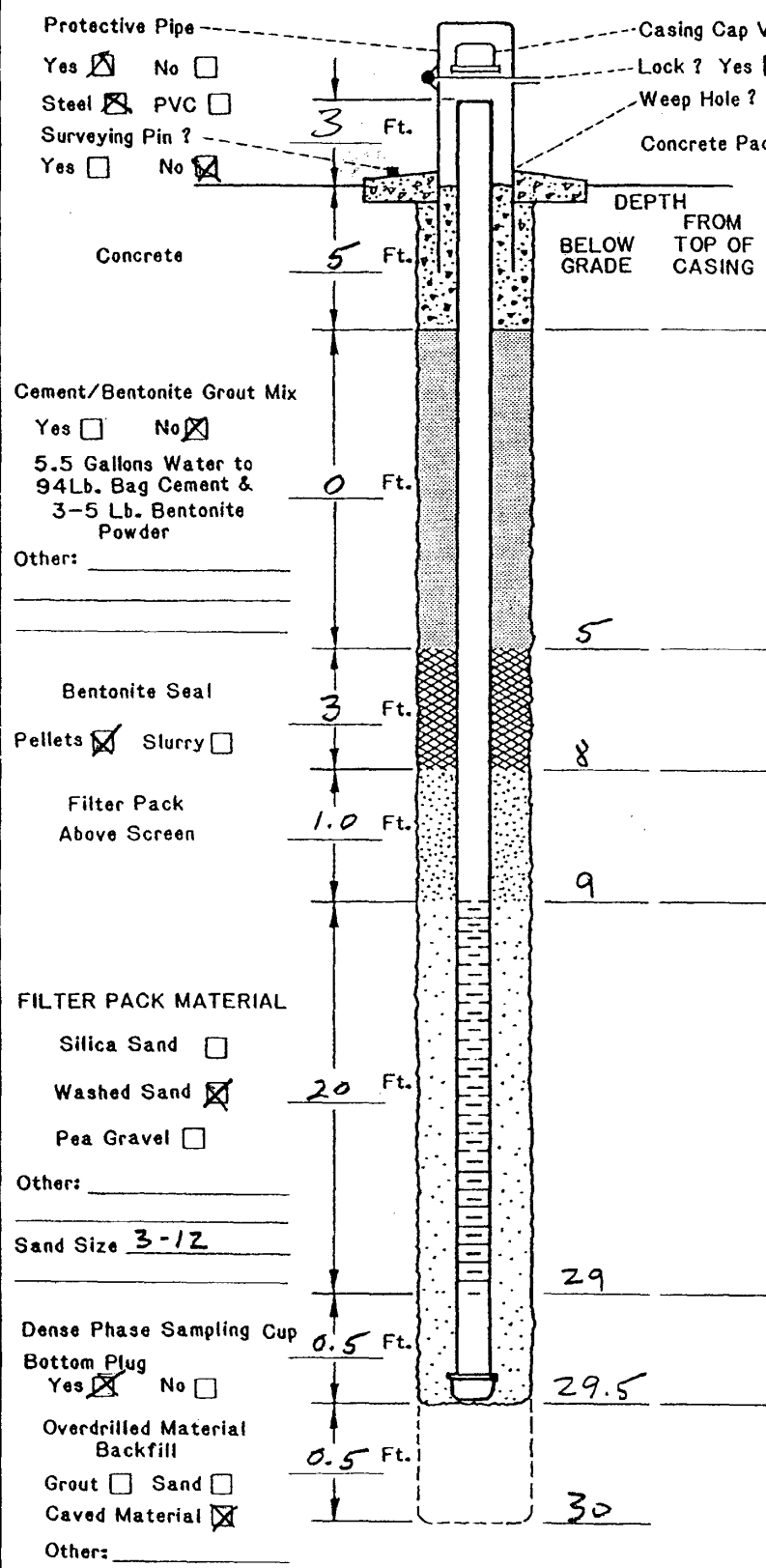
Driller/Firm HORMANN/LAYNE Drill Rig Type AP-1000 Date Installed 8-16-00
 Drill Crew _____ Well No. PC 100R Kerr-McGee Hydrologist Ed Krish

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division		KM SUBSIDIARY KMC LLC		LOCATION Henderson NV		BORING NUMBER PC 103				
DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE				REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	DEPTH	REC.	
6	0-6 BERM. Com construction material	/								
10	6-10 SAND, gravelly, brn (5YR5/4), 10-20% volc pea gravel to 1/4" in vf-vc, A-SR sd	[Symbol]	SW							
15	10-17' GRAVEL, sdy, silty, brn, 10-20% silt & 20-30% vf-vc, SA-SR sd in volc gravel to 1". Sl. calcareous. [Prob. series of fining-up. alluvial beds]	[Symbol]	GM							damp @ 14'
17	16-17' Gravel to 4"	[Symbol]								▽
20	17-29 Gravel, sl. sdy tr silt. 10-15% vf-vc sd, A-SR, volc SA-SR pea gravel to 1/2" w/ local thin beds up to 4"	[Symbol]	GP							WTR @ 17'
25	25-28' com lg volc gravel to 4"	[Symbol]								
	28-29' gravel w/ 20-30% silt in matrix	[Symbol]								
30	29-30' CLAY, silty & CLAY, lt grngry (5GY8/1), 10-20% silt in matrix, non-calcareous, tr-sp gypsum	[Symbol]	CL							MC @ 29'
	TD 30'									

EXPLANATION	▽	Water Table (24 Hour)	GRAPHIC LOG LEGEND		DATE DRILLED	PAGE
	▽	Water Table (Time of Boring)			2-3-01	1 of 1
	PID NO. TYPE	Photoionization Detection (ppm) Identifies Sample by Number Sample Collection Method	[Symbol]	CLAY	[Symbol]	DEBRIS FILL
	[Symbol]	SPLIT-BARREL	[Symbol]	SILT	[Symbol]	HIGHLY ORGANIC (PEAT)
	[Symbol]	AUGER	[Symbol]	SAND	[Symbol]	SANDY CLAY
[Symbol]	ROCK CORE	[Symbol]	GRAVEL	[Symbol]	CLAYEY SAND	
[Symbol]	THIN-WALLED TUBE	[Symbol]	SILTY CLAY	[Symbol]		
[Symbol]	CONTINUOUS SAMPLER	[Symbol]	CLAYEY SILT	[Symbol]		
[Symbol]	NO RECOVERY	[Symbol]		[Symbol]		
DEPTH Depth Top and Bottom of Sample				EXISTING GRADE ELEVATION (FT. AMSL)		
REC. Actual Length of Recovered Sample in Feet				LOCATION OR GRID COORDINATES		

KERR-McGEE CORPORATION HYDROLOGY DEPARTMENT MONITORING WELL INSTALLATION DIAGRAM



Protective Pipe
 Yes No
 Steel PVC
 Surveying Pin?
 Yes No

Casing Cap Vent? Yes No
 Lock? Yes No
 Weep Hole? Yes No
 Concrete Pad _____ Ft. x _____ Ft. x _____ Inches

Cement/Bentonite Grout Mix
 Yes No
 5.5 Gallons Water to
 94Lb. Bag Cement &
 3-5 Lb. Bentonite
 Powder
 Other: _____

Bentonite Seal
 Pellets Slurry
 Filter Pack
 Above Screen

FILTER PACK MATERIAL
 Silica Sand
 Washed Sand
 Pea Gravel
 Other: _____
 Sand Size 3-12

Dense Phase Sampling Cup
 Bottom Plug
 Yes No
 Overdrilled Material
 Backfill
 Grout Sand
 Caved Material
 Other: _____

DRILLING INFORMATION:

- Borehole Diameter = 9 Inches.
- Were Drilling Additives Used? Yes No
 Revert Bentonite Water
 Solid Auger Hollow Stem Auger
- Was Outer Steel Casing Used? Yes No
 Depth = _____ to _____ Feet.
- Borehole Diameter for Outer Casing _____ Inches.

WELL CONSTRUCTION INFORMATION:

- Type of Casing: PVC Galvanized Teflon
 Stainless Other _____
- Type of Casing Joints: Screw-Couple Glue-Couple Other _____
- Type of Well Screen: PVC Galvanized
 Stainless Teflon Other _____
- Diameter of Casing and Well Screen:
 Casing 2 Inches, Screen 2 Inches.
- Slot Size of Screen: 0.020
- Type of Screen Perforation: Factory Slotted
 Hacksaw Drilled Other _____
- Installed Protector Pipe w/Lock: Yes No

WELL DEVELOPMENT INFORMATION:

- How was Well Developed? Bailing Pumping
 Air Surging (Air or Nitrogen) Other _____
- Time Spent on Well Development?
 _____ / _____ Minutes/Hours
- Approximate Water Volume Removed? _____ Gallons
- Water Clarity Before Development? Clear
 Turbid Opaque
- Water Clarity After Development? Clear
 Turbid Opaque
- Did Water have Odor? Yes No
 If Yes, Describe _____
- Did Water have any Color? Yes No
 If Yes, Describe _____

WATER LEVEL INFORMATION:

Water Level Summary (From Top of Casing)
 During Drilling 17 Ft. Date 2-3-01
 Before Development _____ Ft. Date _____
 After Development _____ Ft. Date _____

Driller/Firm LAYNE Drill Rig Type AP-1000 Date Installed 2-3-01
 Drill Crew Perry Well No. PC-103 Kerr-McGee Hydrologist Ed Krish

SOIL BORING LOG KM-5655-B

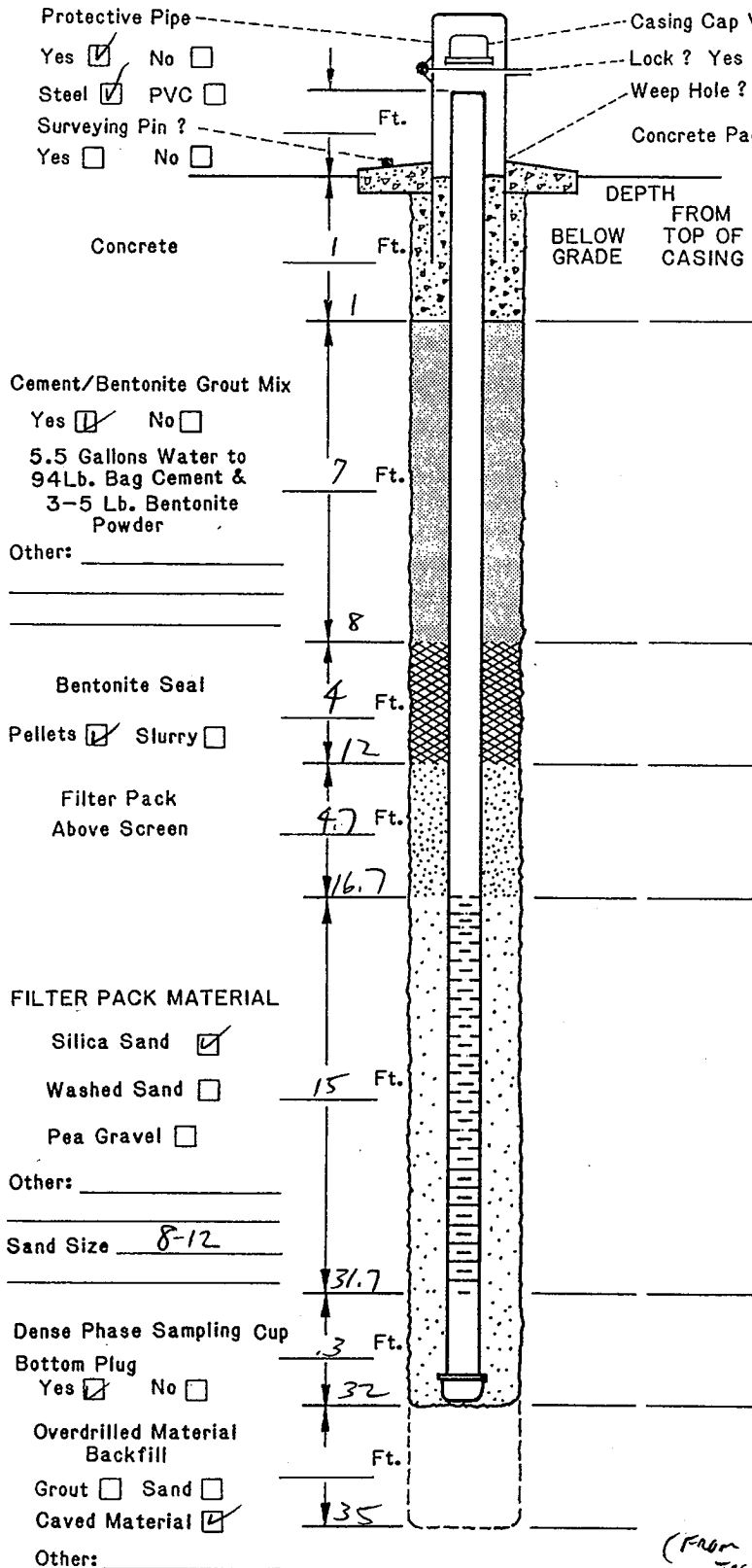
KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division	KM SUBSIDIARY KMC LLC	LOCATION HENDERSON, NV	BORING NUMBER PC-2
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DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6'	PID (ppm)	SOIL SAMPLE			REMARKS OR FIELD OBSERVATIONS	
						NO.	TYPE	DEPTH		REC.
5	SAND/SILTY SAND w/ ASD GRAVEL; LT. TAN-BROWN; W/LL - GRAVEL; DRY GRAVEL @ 6-7'		SM-GM							
10	SAND AS ABOVE GRAVEL @ 14-15'									
18'	---		∇							
20	SAND AS ABOVE; SATURATED									
25										
30										
31	SILTY CLAY; REDDISH-BROWN GRADING INTO LT. GRAY-GREEN <u>MUDDY CREEK</u>		CL	312-27		1	X	30 31.5	1.4'	
35	TO 35'									

GROUNDWATER SAMPLE TAKEN @ 30'

EXPLANATION	Water Table (24 Hour)	GRAPHIC LOG LEGEND CLAY SILT SAND GRAVEL SILTY CLAY CLAYEY SILT DEBRIS FILL HIGHLY ORGANIC (PEAT) SANDY CLAY CLAYEY SAND	DATE DRILLED 3/23/98	PAGE 1 of 1	
	Water Table (Time of Boring)		DRILLING METHOD HSA	DRILLED BY WABER DRILLING	
	PID NO. Identifies Sample by Number TYPE Sample Collection Method	SPLIT-BARREL AUGER ROCK CORE THIN-WALLED TUBE CONTINUOUS SAMPLER NO RECOVERY	LOGGED BY T. REED	EXISTING GRADE ELEVATION (FT. AMSL)	
	DEPTH RECORD Actual Length of Recovered Sample in Feet		LOCATION OR GRID COORDINATES		

**KERR-McGEE CORPORATION
HYDROLOGY DEPARTMENT
MONITORING WELL INSTALLATION DIAGRAM**



DRILLING INFORMATION:

- Borehole Diameter = 8 Inches.
- Were Drilling Additives Used? Yes No
 Revert Bentonite Water
 Solid Auger Hollow Stem Auger
- Was Outer Steel Casing Used? Yes No
 Depth = _____ to _____ Feet.
- Borehole Diameter for Outer Casing _____ Inches.

WELL CONSTRUCTION INFORMATION:

- Type of Casing: PVC Galvanized Teflon
 Stainless Other _____
- Type of Casing Joints: Screw-Couple Glue-Couple Other _____
- Type of Well Screens: PVC Galvanized
 Stainless Teflon Other _____
- Diameter of Casing and Well Screens:
 Casing 2 Inches, Screen 2 Inches.
- Slot Size of Screen: .020
- Type of Screen Perforations: Factory Slotted
 Hacksaw Drilled Other _____
- Installed Protector Pipe w/Lock: Yes No

WELL DEVELOPMENT INFORMATION:

- How was Well Developed? Bailing Pumping
 Air Surging (Air or Nitrogen) Other _____
- Time Spent on Well Development?
10 / 1 Minutes/Hours
- Approximate Water Volume Removed? 75 Gallons
- Water Clarity Before Development? Clear
 Turbid Opaque
- Water Clarity After Development? Clear
 Turbid Opaque
- Did Water have Odor? Yes No
 If Yes, Describe _____
- Did Water have any Color? Yes No
 If Yes, Describe _____

WATER LEVEL INFORMATION:
 Water Level Summary (From Top of Casing)

During Drilling 18' Ft. Date 3/23/98
 Before Development _____ Ft. Date _____
 After Development 20.01' Ft. Date 3/25/98

Driller/Firm LEE ROBERTSON / WEGEL DRG. Drill Rig Type B-61 Date Installed 3/23/98
 Drill Crew L. ROBERTSON / B. JOHNSON Well No. PC-2 Kerr-McGee Hydrologist T. REED

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division		KM SUBSIDIARY KMC-LLC		LOCATION HENDERSON NV			BORING NUMBER PC-52		
DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE			REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	DEPTH	
5	SILTY SAND w/ GRAVEL LT TAW - RED BROWN WELL GRADED DRY		SM/CL						
10									
15									
20	SAND/GRAVEL DARK BROWN CLAYEY MOIST BEING WET		SM						GROUND WATER SAMPLE COLLECTED AT 20'
25	SAND MS-V. CLS DIL BROWN TR GRAVEL		SM						
30									
33	SILTY CLAY LT GRAY TO OFF WHITE LAM SOFT TO FIRM		CL						33' T/ MUDDY CORE
									TO 34'

EXPLANATION	▼	Water Table (24 Hour)	GRAPHIC LOG LEGEND CLAY SILT SAND GRAVEL SILTY CLAY CLAYEY SILT		DATE DRILLED 5/4/98	PAGE 1 of 1
	▽	Water Table (Time of Boring)			DEBRIS FILL HIGHLY ORGANIC (PEAT)	DRILLING METHOD HSA
	PID NO. TYPE	Photoionization Detection (ppm) Identifies Sample by Number Sample Collection Method	SPLIT-BARREL AUGER ROCK CORE THIN-WALLED TUBE CONTINUOUS SAMPLER	SANDY CLAY CLAYEY SAND	DRILLED BY WEBER	
	X	NO RECOVERY	NO RECOVERY		LOGGED BY J. Crawford	
	DEPTH REC.	Depth Top and Bottom of Sample Actual Length of Recovered Sample in Feet			EXISTING GRADE ELEVATION (FT. AMSL) LOCATION OR GRID COORDINATES	

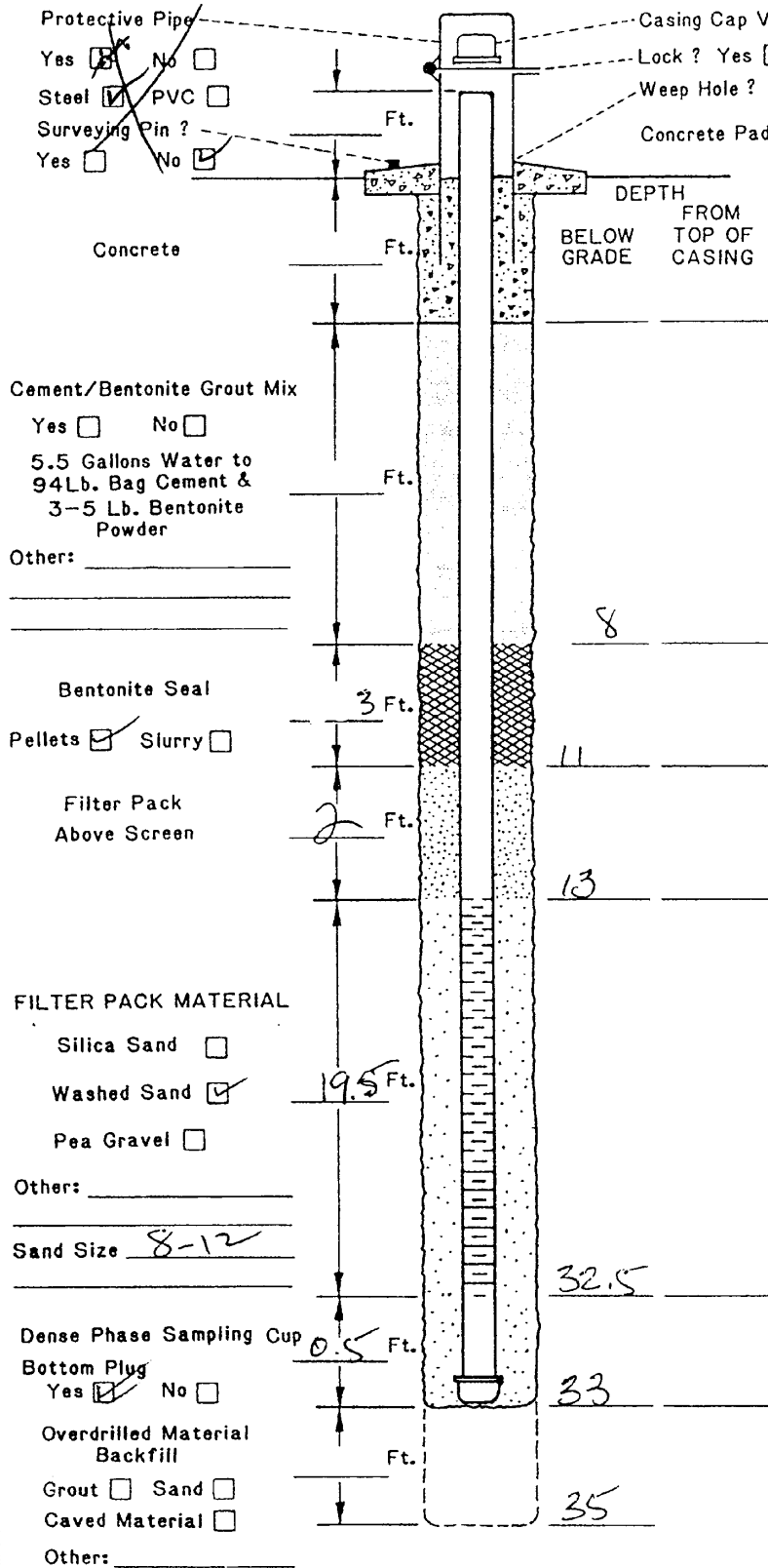
SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division		KM SUBSIDIARY KMC-LLC		LOCATION HENDERSON NV		BORING NUMBER PC-53			
DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE			REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	DEPTH	
5	SILTY SAND (TO BRN TO TAN GRAVELS WELL GRADED DRY	[Symbol]							
10		[Symbol]							
15	SILTY SAND W/ GRAVEL BEING CLAYEY MOIST DARK BRN	[Symbol]							
20		[Symbol]							
25	SAND SILTY BRN-DK BRN SL CLAYEY TR GRAVELS CR5-V CR5 GR SAT	[Symbol]							
30		[Symbol]							
	SILTY CLAY GRN GY TO OFF WH LAM FIRM	[Symbol]							32' T/ MUDDY REGIL
		[Symbol]							TO 35'

EXPLANATION	▼	Water Table (24 Hour)	GRAPHIC LOG LEGEND		DATE DRILLED 5/4/98	PAGE 1 of 1
	▽	Water Table (Time of Boring)	[Symbol]	CLAY	[Symbol]	DEBRIS FILL
	PID	Photoionization Detection (ppm)	[Symbol]	SILT	[Symbol]	HIGHLY ORGANIC (PEAT)
	NO.	Identifies Sample by Number	[Symbol]	SAND	[Symbol]	SANDY CLAY
	TYPE	Sample Collection Method	[Symbol]	GRAVEL	[Symbol]	CLAYEY SAND
[Symbol]	SPLIT-BARREL	[Symbol]	AUGER	[Symbol]	NO RECOVERY	
[Symbol]	THIN-WALLED TUBE	[Symbol]	CONTINUOUS SAMPLER	[Symbol]		
[Symbol]		[Symbol]	ROCK CORE	[Symbol]		
DEPTH Depth Top and Bottom of Sample						
REC. Actual Length of Recovered Sample in Feet						
				LOGGED BY J. GAWFORD		EXISTING GRADE ELEVATION (FT AMSL)
						LOCATION OR GRID COORDINATES

[CASING PROTECTION]
 FLUSH
 MOUNT

KERR-McGEE CORPORATION
 HYDROLOGY DEPARTMENT
 MONITORING WELL INSTALLATION DIAGRAM



Casing Cap Vent ? Yes No
 Lock ? Yes No
 Weep Hole ? Yes No
 Concrete Pad 1 Ft. x 1 Ft. x 2 Inches

DRILLING INFORMATION:

- Borehole Diameter = _____ Inches.
- Were Drilling Additives Used ? Yes No
 Revert Bentonite Water
 Solid Auger Hollow Stem Auger
- Was Outer Steel Casing Used ? Yes No
 Depth = _____ to _____ Feet.
- Borehole Diameter for Outer Casing _____ Inches.

WELL CONSTRUCTION INFORMATION:

- Type of Casings: PVC Galvanized Teflon
 Stainless Other _____
- Type of Casing Joints: Screw-Couple Glue-Couple Other _____
- Type of Well Screens: PVC Galvanized
 Stainless Teflon Other _____
- Diameter of Casing and Well Screen:
 Casing 2 Inches, Screen 2 Inches.
- Slot Size of Screen: .020
- Type of Screen Perforation: Factory Slotted
 Hacksaw Drilled Other _____
- Installed Protector Pipe w/Lock: Yes No

WELL DEVELOPMENT INFORMATION:

- How was Well Developed ? Bailing Pumping
 Air Surging (Air or Nitrogen) Other _____
- Time Spent on Well Development ?
 _____ / _____ Minutes/Hours
- Approximate Water Volume Removed ? 100 Gallons
- Water Clarity Before Development ? Clear
 Turbid Opaque
- Water Clarity After Development ? Clear
 Turbid Opaque
- Did Water have Odor ? Yes No
 If Yes, Describe _____
- Did Water have any Color ? Yes No
 If Yes, Describe _____

WATER LEVEL INFORMATION:

Water Level Summary (From Top of Casing)
 During Drilling _____ Ft. Date _____
 Before Development 18 Ft. Date 5/4/98
 After Development 19.54 Ft. Date 5/12/98

Driller/Firm WEBER Drill Rig Type MOBILE 361 Date Installed 5/4/98
 Drill Crew LEE ROBERTSON Well No. PC-53 Kerr-McGee Hydrologist J. Crawford

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division		KM SUBSIDIARY KMC LLC		LOCATION HENDERSON NV		BORING NUMBER PC 98				
DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE				REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	DEPTH	REC.	
5	0-12 gravelly SAND, mod yell brn (10YR 5/4), 20-25% granules & sm. pebbles to 1" diam (volc) sp-mod silt in matrix (10-20%). Sand vf-vc, SR-SA		SP							
16	12-16 silty sdy GRAVEL H brn (5YR 5/4), 20% silt 25% vf-vc A-SR sand. 50% volc granules to cobbles up to 6" diam Mod com caliche throughout		GW							damp @ 15'
25	16-34 silty gravelly SAND, mod brn (5YR 4/4) 20-25% silt, 20-25% granules and sm pebbles to 3/4". 50% vf-vc A-SR sand		SW							▽ @ 22'
37	34-37 silty SAND, lt yell brn (10YR 6/4), vf-fg w/ minor mg, SR-SA. 25-30% silt. Mod com m-vc caliche nodules. Very calcareous		SM GC-ML							

EXPLANATION	Water Table (24 Hour)			Water Table (Time of Boring)			GRAPHIC LOG LEGEND			DATE DRILLED	PAGE		
		Water Table (24 Hour)			Water Table (Time of Boring)				CLAY		DEBRIS FILL	5-16-00	1 of 2
	PID Photoionization Detection (ppm) Identifies Sample by Number			SPLIT-BARREL				SILT		HIGHLY ORGANIC (PEAT)	DRILLING METHOD HSA		
	NO. TYPE Sample Collection Method				AUGER		ROCK CORE		SAND		SANDY CLAY	DRILLED BY COMPLIANCE	
	THIN-WALLED TUBE				CONTINUOUS SAMPLER		NO RECOVERY		GRAVEL		CLAYEY SAND	LOGGED BY ED KRISH	
	DEPTH Depth Top and Bottom of Sample				CLAYEY SILT				SILTY CLAY			EXISTING GRADE ELEVATION (FT AMSL)	
	REC. Actual Length of Recovered Sample in Feet											LOCATION OR GRID COORDINATES	

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division		KM SUBSIDIARY KMC LLC		LOCATION HENDERSON, NV			BORING NUMBER PC 98			
DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE				REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	DEPTH	REC.	
41	37- 41 sdy grav SILT/silty grav SAND w/ 15% dissem granules to 1/8-1/4", mod gry orange pink (5YR 6/2). Contains 25-50% v-f sd in silt/clay matrix. 10-20% v-vc + 1s granules to 1/8-1/4". Very calcareous w/ mod c-vc caliche nodules. 41-45 silty CLAY, lt gm gry (5G 8/1) and yell gry (5G 8/1). 25% silt, v. calcareous w/ minor m-vc sized caliche nodules dissem.	CL								MC @ 41'
45		45' TD								

EXPLANATION

Water Table (24 Hour)	Water Table (Time of Boring)	PID NO. TYPE
Identifies Sample by Number	Sample Collection Method	
SPLIT-BARREL	AUGER	ROCK CORE
THIN-WALLED TUBE	CONTINUOUS SAMPLER	NO RECOVERY

DEPTH Depth Top and Bottom of Sample
 REC. Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

CLAY	DEBRIS FILL
SILT	HIGHLY ORGANIC (PEAT)
SAND	SANDY CLAY
GRAVEL	CLAYEY SAND
SILTY CLAY	
CLAYEY SILT	

DATE DRILLED
5-16-00

PAGE
2 of 2

DRILLING METHOD
HSA

DRILLED BY
COMPLIANCE

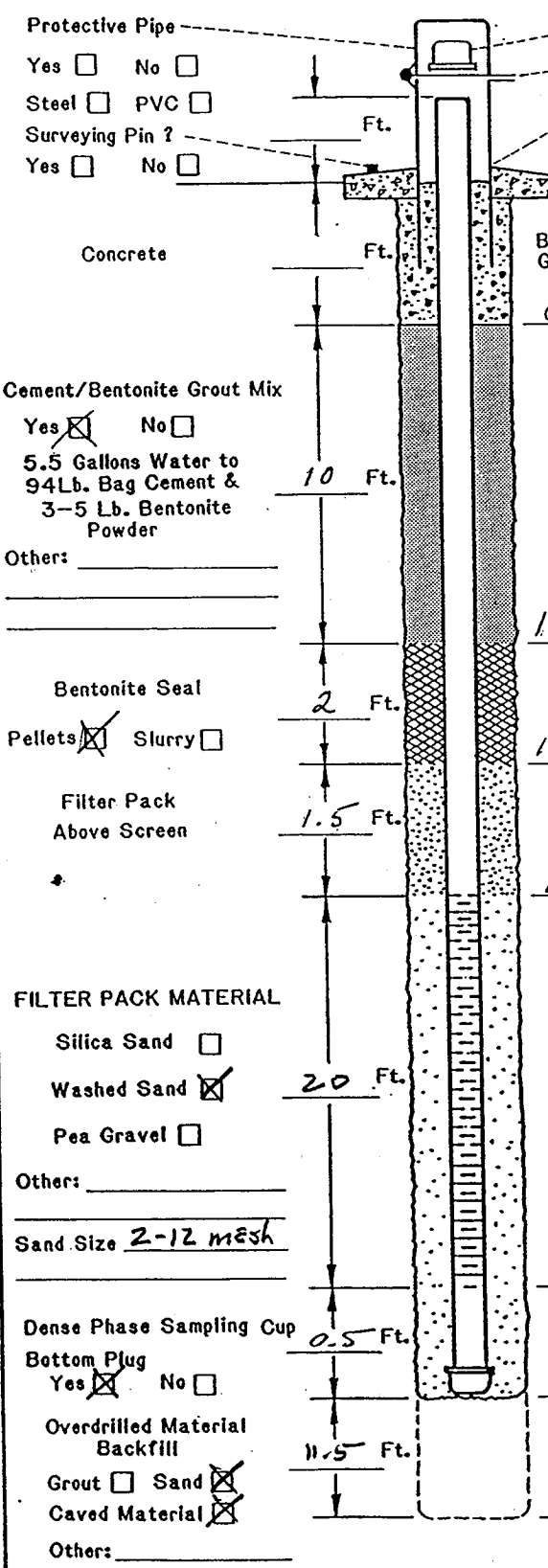
LOGGED BY
ED KRISH

EXISTING GRADE ELEVATION (FT AMSL)

LOCATION OR GRID COORDINATES

**KERR-McGEE CORPORATION
HYDROLOGY DEPARTMENT
MONITORING WELL INSTALLATION DIAGRAM**

FLUSH
MOUNT



Casing Cap Vent? Yes No
 Lock? Yes No
 Weep Hole? Yes No
 Concrete Pad _____ Ft. x _____ Ft. x _____ Inches

DRILLING INFORMATION:

- Borehole Diameter = 10.5 Inches.
- Were Drilling Additives Used? Yes No
 Revert Bentonite Water
 Solid Auger Hollow Stem Auger
- Was Outer Steel Casing Used? Yes No
 Depth = _____ to _____ Feet.
- Borehole Diameter for Outer Casing _____ Inches.

WELL CONSTRUCTION INFORMATION:

- Type of Casing: PVC Galvanized Teflon
 Stainless Other _____
- Type of Casing Joints: Screw-Couple Glue-Couple Other _____
- Type of Well Screens: PVC Galvanized
 Stainless Teflon Other _____
- Diameter of Casing and Well Screens:
 Casing 4 Inches, Screen 4 Inc
- Slot Size of Screens: _____
- Type of Screen Perforation: Factory Slotted
 Hacksaw Drilled Other _____
- Installed Protector Pipe w/Lock: Yes No

WELL DEVELOPMENT INFORMATION:

- How was Well Developed? Bailing Pumping
 Air Surging (Air or Nitrogen) Other _____
- Time Spent on Well Development? 1 60 (Minutes/Hours)
- Approximate Water Volume Removed? _____ Gallons
- Water Clarity Before Development? Clear
 Turbid Opaque
- Water Clarity After Development? Clear
 Turbid Opaque
- Did Water have Odr? Yes No
 If Yes, Describe _____
- Did Water have any Color? Yes No
 If Yes, Describe _____

WATER LEVEL INFORMATION:

Water Level Summary (From Top of Casing)
 During Drilling 22 Ft. Date 5-16-00
 Before Development 14.01 Ft. Date 5-17-00
 After Development _____ Ft. Date _____

Driller/Firm COMPLIANCE Drill Rig Type Mobil B-59 Date Installed 5-17-00
 Drill Crew Loya Well No. PC 98 Kerr-McGee Hydrologist ED KRISH

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division		KM SUBSIDIARY KMCC		LOCATION Henderson NV		BORING NUMBER PC 98R		
DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE		REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	
5	0-5 gravelly SAND gryish brn w/10% silt, 20-30% granules - pea gravel to 3/4". vf-vc SA sd		SP					
9	5-9 SAND, gry brn w/10% silt and 5-10% volc granules to 1/4". f-vc SA sand		SW					
12	9-10 sdy GRAVEL (to 1") 25-35% vf-vc sd		SW					damp @ 12'
15	10-12 SAND, brn, 10% silt, 5% granules. f-vc volc, SA sand							
20	12-24 sdy GRAVEL brn. w/5-10% silt, 25% vf-vc, SA-A sand. Granules to pea gravel, A-SA. 1/2" - 3/4" w/ minor 3/4" - 2" Locally caliche. cemented.		GW					▽ @ 18'
24	16'-20' hard. Com caliche cement		SP	29 30				
26	24-26 SAND. gry brn. SR, clean, f-mg w/c-vcg							
30	26-34 sdy GRAVEL gry brn, 10-15% silt, 25- 30% vf-vc, SA sand in granule - pea gravel to 1/2" - 3/4"		GW	22 29 30				20'-21.5' 50%
34	29-30 - cobbles up to 7" 34-40.5 gravelly silty SAND 20-30% silt and 10-15% volc granules to 1/4", brn. Com. dissem sd-size		GM SM	12 13 31				30'-31.5' 80%
								35'-36.5' 100%

EXPLANATION	Water Table (24 Hour)	GRAPHIC LOG LEGEND		DATE DRILLED 8-8-00	PAGE 1 of 2	
	Water Table (Time of Boring)	CLAY	DEBRIS FILL	DRILLING METHOD PERCUSSION		
	PID NO. TYPE Photoionization Detection (ppm) Identifies Sample by Number Sample Collection Method	SILT	HIGHLY ORGANIC (PEAT)	DRILLED BY LAYNE		
	SPLIT-BARREL	AUGER	SAND	SANDY CLAY	LOGGED BY ED KRISH	
THIN-WALLED TUBE	CONTINUOUS SAMPLER	GRAVEL	CLAYEY SAND	EXISTING GRADE ELEVATION (FT AMSL)		
ROCK CORE	NO RECOVERY	SILTY CLAY	CLAYEY SILT	LOCATION OR GRID COORDINATES		
DEPTH	Depth Top and Bottom of Sample					
REC.	Actual Length of Recovered Sample in Feet					

SOIL BORING LOG KM-5655-B

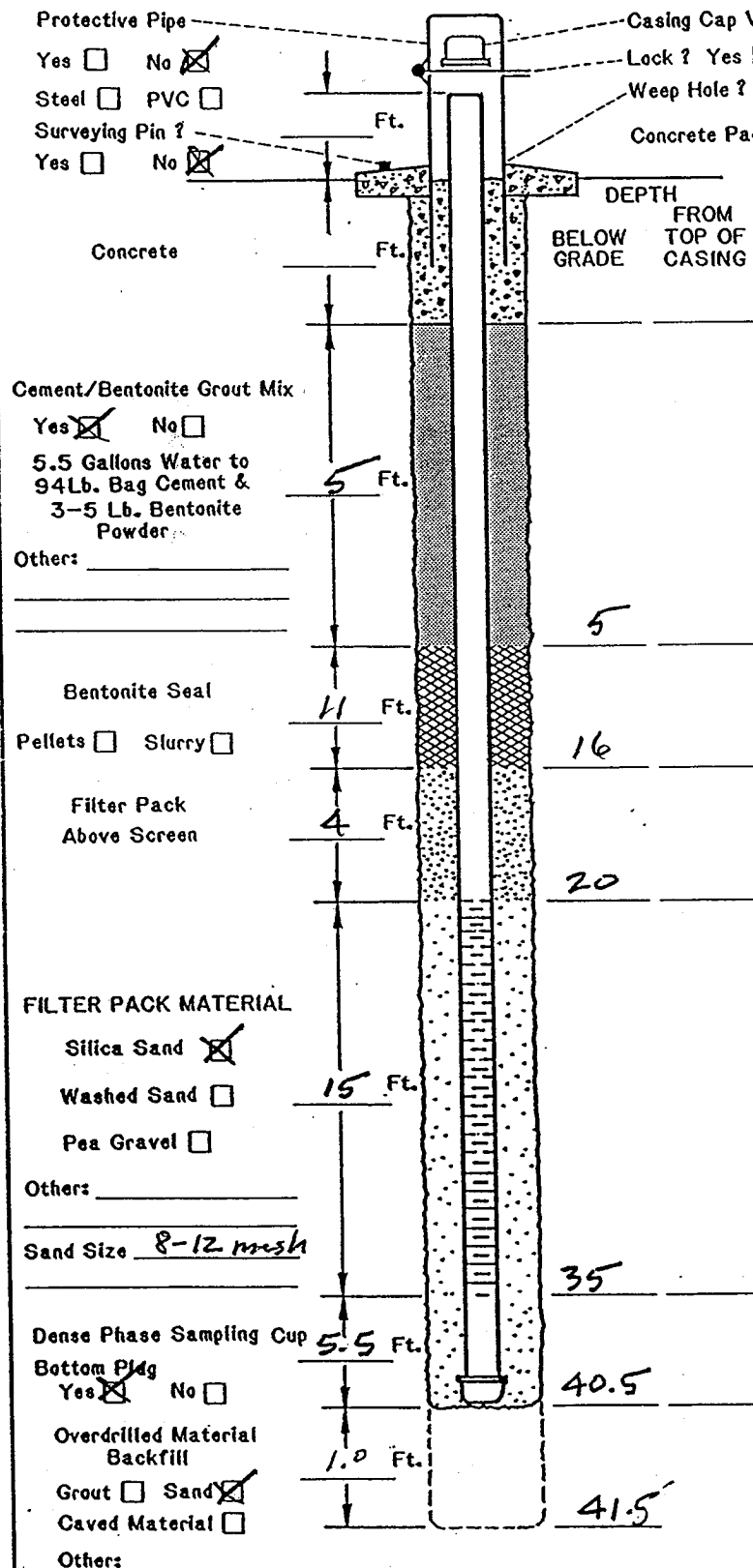
KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division	KM SUBSIDIARY KMCC	LOCATION HENDERSON NV	BORING NUMBER PC 98R
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DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE				REMARKS OR FIELD OBSERVATIONS
						NO.	TYPE	DEPTH	REC.	
40.5	caliche nodules. Very calcareous. Sand is vf-f w/minor mg, SA-SR 40.5-41.5 silty CLAY lt grn, w/ dissem sm gypsum x tals TD 41.5'	XV	CL							

EXPLANATION	<input checked="" type="checkbox"/>	Water Table (24 Hour)	GRAPHIC LOG LEGEND		DATE DRILLED 18-8-00	PAGE 2 of 2
	<input checked="" type="checkbox"/>	Water Table (Time of Boring)	CLAY	DEBRIS FILL	DRILLING METHOD PERCUSSION	
	<input type="checkbox"/>	Photoionization Detection (ppm)	SILT	HIGHLY ORGANIC (PEAT)		
	<input type="checkbox"/>	Identifies Sample by Number	SAND	SANDY CLAY	DRILLED BY LAYNE	
	<input type="checkbox"/>	Sample Collection Method	GRAVEL	CLAYEY SAND		
<input checked="" type="checkbox"/>	SPLIT-BARREL	AUGER	SILTY CLAY	<input type="checkbox"/>	LOGGED BY ED KRISH	
<input type="checkbox"/>	THIN-WALLED TUBE	CONTINUOUS SAMPLER	CLAYEY SILT	<input type="checkbox"/>		
<input type="checkbox"/>		ROCK CORE			EXISTING GRADE ELEVATION (FT AMSL)	
<input type="checkbox"/>		NO RECOVERY			LOCATION OR GRID COORDINATES	
	DEPTH	Depth Top and Bottom of Sample				
	REC.	Actual Length of Recovered Sample in Feet				

KERR-McGEE CORPORATION
 HYDROLOGY DEPARTMENT
 MONITORING WELL INSTALLATION DIAGRAM

FLUSH
 MOUNT



DRILLING INFORMATION:

- Borehole Diameter = 9 Inches.
- Were Drilling Additives Used? Yes No
 Revert Bentonite Water
 Solid Auger Hollow Stem Auger
- Was Outer Steel Casing Used? Yes No
 Depth = _____ to _____ Feet.
- Borehole Diameter for Outer Casing _____ Inches.

WELL CONSTRUCTION INFORMATION:

- Type of Casing: PVC Galvanized Teflon
 Stainless Other _____
- Type of Casing Joints: Screw-Couple Glue-Couple Other _____
- Type of Well Screen: PVC Galvanized
 Stainless Teflon Other _____
- Diameter of Casing and Well Screens:
 Casing 4 Inches, Screen 4 Inches.
- Slot Size of Screens: 0.040
- Type of Screen Perforation: Factory Slotted
 Hacksaw Drilled Other _____
- Installed Protector Pipe w/Locks: Yes No

WELL DEVELOPMENT INFORMATION:

- How was Well Developed? Bailing Pumping
 Air Surging (Air or Nitrogen) Other _____
- Time Spent on Well Development?
120 Minutes/Hours
- Approximate Water Volume Removed? _____ Gallons
- Water Clarity Before Development? Clear
 Turbid Opaque
- Water Clarity After Development? Clear
 Turbid Opaque
- Did Water have Odor? Yes No
 If Yes, Describe faint pesticide
- Did Water have any Color? Yes No
 If Yes, Describe _____

WATER LEVEL INFORMATION:

Water Level Summary (From Top of Casing)
 During Drilling 18 Ft. Date 8-8-00
 Before Development _____ Ft. Date _____
 After Development _____ Ft. Date _____

Driller/Firm _____

Drill Rig Type AP-1000

Date Installed 8-8-00

Drill Crew _____

Well No. PC 98R

Kerr-McGee Hydrologist ED KRISH

Project Number: 2027.11.10		Boring ID: PRD-Bench test boring (I 2)	
Project Name: Trazox PRD bench test		Location: Cost/WRF Henderson, NV	
Drilling Contractor: Eagle		Logged By: Patrick Ferringer	
Drilling Method: HSA R-51	Date Started: 12/6/10	Total Depth: 40' BGS	Depth to Water:
Borehole Dia. (in):	Completed:	Surface Elev.:	TOC Elev.:

Surface Seal Type:
Interval (ft bgs) From: To:

Remarks:
 - Collect (3) 5 gal. buckets of soil in saturated zone ~ 20'-40'
 - Collect 10 gal of water w/ bailer from borehole

Depth (ft)	Sample ID	Sample Time	Recovery %	Blow Count	Graphic Log	USCS Code	Material Description	Water Level	PID (ppm)
1						SP-SM	4.5' Brown (7.5PR 5/4) poorly graded sand w/ silt, trace fine SP-SA gravel, <10% med + coarse sand, 75% v. fine - fine sand, 15% silt, dry and med dense, non plastic, strong HCL rxn.		
2									
3									
4									
5							5' brown (7.5PR 4 1/2), trace fine - med gravel, <15% med - coarse sand, 75% v. fine - fine sand, 10% silt,		
6									
7							7' trace fine gravel		
8									
9									
10						SP	9' Brown (7.5PR 4 1/2) poorly graded sand, trace fine gravel SP-SA, ~5% coarse sand, ~20% med sand, ~70% v. fine - fine sand, 5% silt, dry and med dense, strong HCL rxn. non plastic		
11									
12									
13									
14									
15									
16							16.25' ~5% fine gravel		
17									
18							18' 5% fine gravel, 5-10% coarse sand, 20-25% med sand, 60-70% v. fine - fine sand, 5% silt		
19									
20									
21									
22									
23									
24							24.5' moist		
25									
26									
27									
28						SP-SM	27' brown (7.5PR 5/3) poorly graded sand w/ silt, ~10% med sand, 70% v. fine - fine sand, 15% silt, <5% clay. WPT + med dense, low plasticity, strong HCL rxn.		
29									
30									

Boring Log

Project Number: 2027.11.10 Boring ID: PEB Beach test boring (I-2) 8

Project Name: Trax PEB beach test Location: COM / WRF Henderson, NV

Drilling Contractor: Eagle Logged By: Patrick Ferringer

Remarks:

Depth (ft)	Sample ID	Sample Time	Recovery %	Blow Count	Graphic Log	USCS Code	Material Description	Water Level	PID (ppm)
31									
32									
33							33'; trace fine - coarse R-A gravel		
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
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54									
55									
56									
57									
58									
59									
60									
61									
62									
63									
64									
65									

TD @ 40' BGS