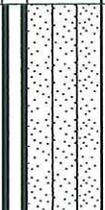


DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
	0					
2						
4						Practical refusal at 3 feet. No free water encountered.
6						
8						
10						
12						
14						
16						
18						
20						

DATE: 8-23-06
TOTAL DEPTH: 3.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

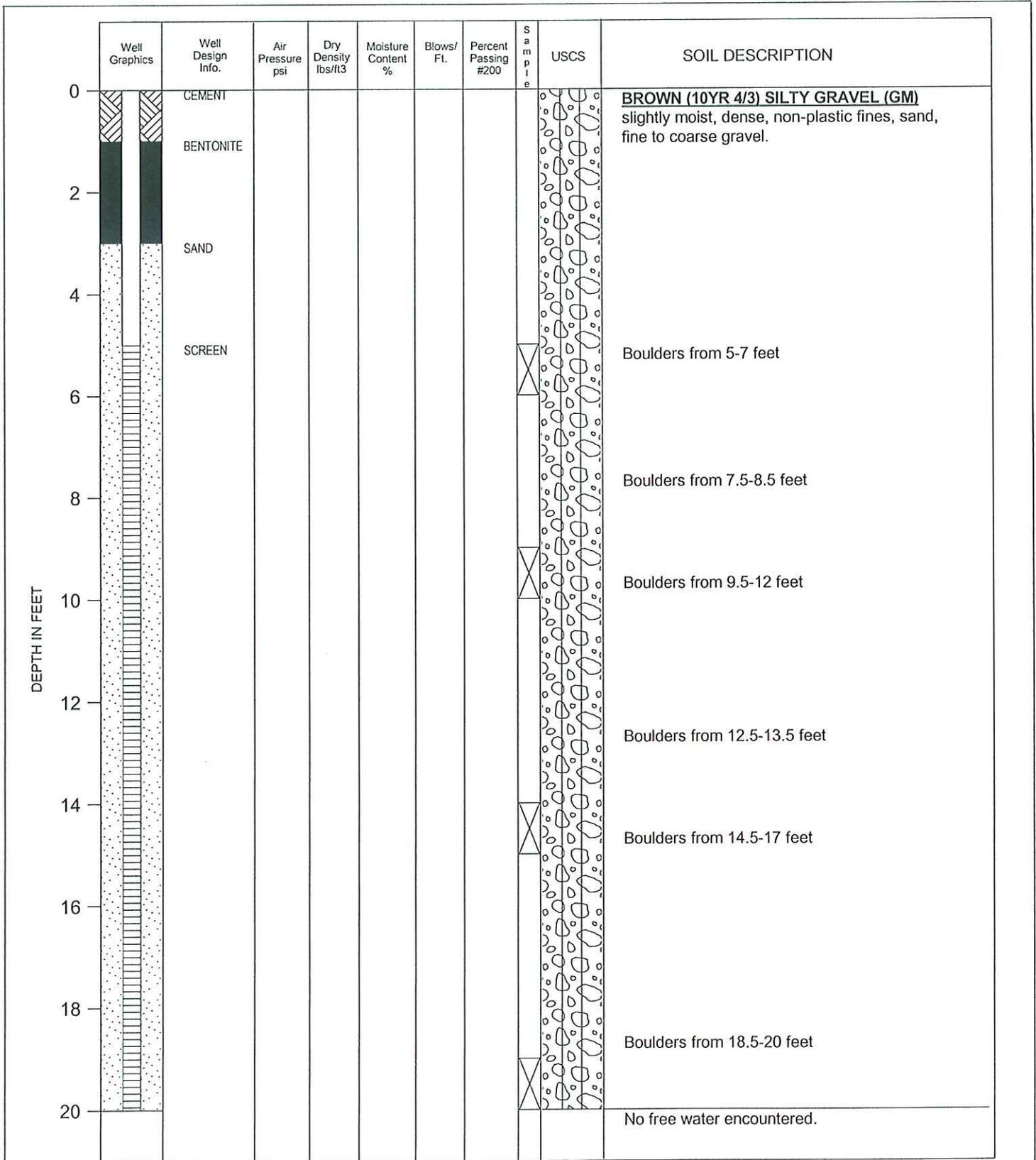
KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

**HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA**

PLATE
35

PROJECT NO. 74407.01

LOG OF GP-21



DATE: 10-10-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: B.WILLS
EQUIPMENT: INGERSOLL RAND A-400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

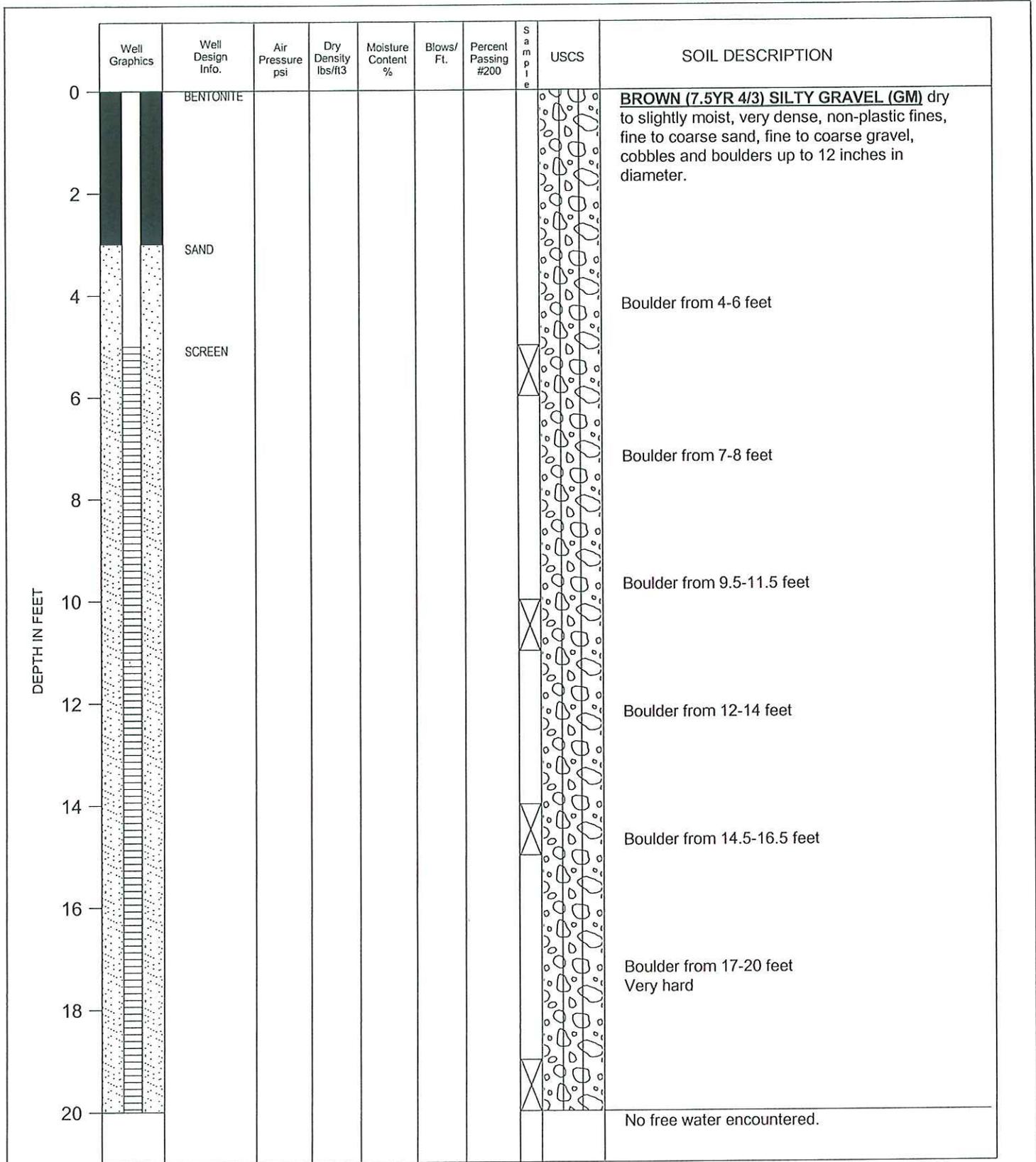
HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

PROJECT NO. 74407.01

LOG OF GP-25

PLATE

36



DATE: 10-10-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: INGERSOLL RAND A-400

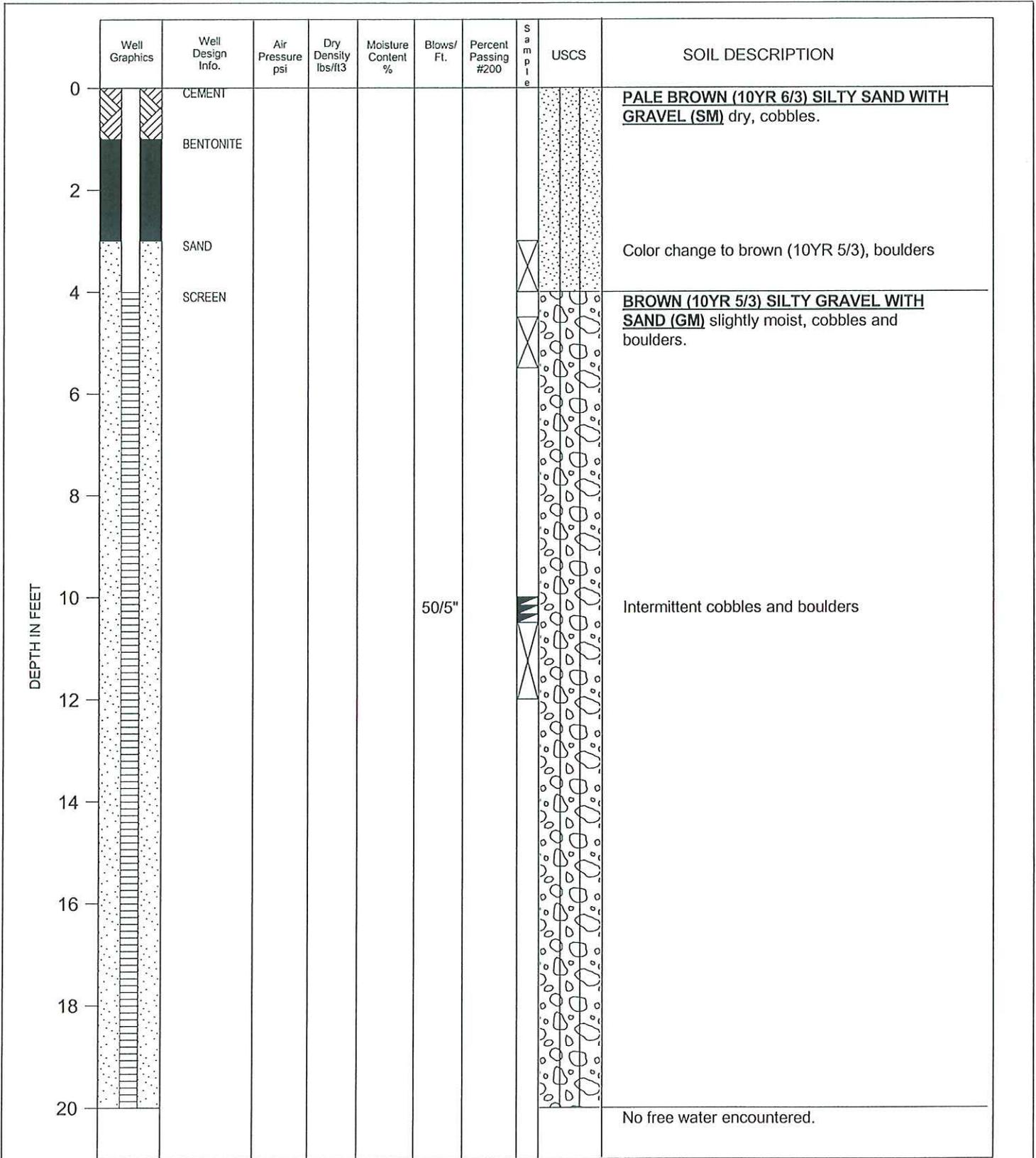
KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

PROJECT NO. 74407.01

HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

LOG OF GP-26

PLATE
37



DATE: 10-9-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: P.TOUSIGNANT
EQUIPMENT: INGERSOLL RAND A-400

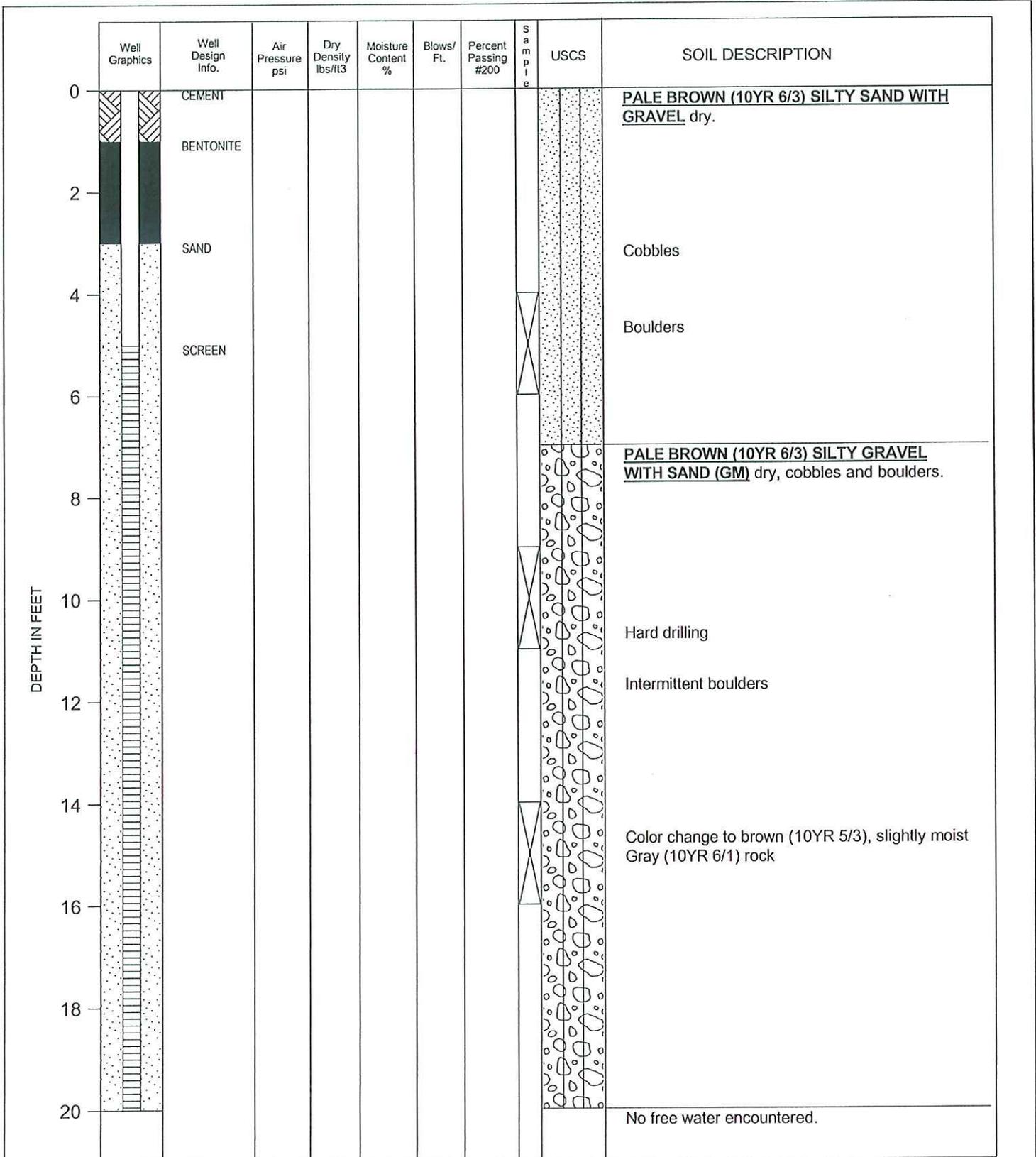
KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

PLATE
38

PROJECT NO. 74407.01

LOG OF GP-27



DATE: 10-9-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: P.TOUSIGNANT
EQUIPMENT: INGERSOLL RAND A-400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

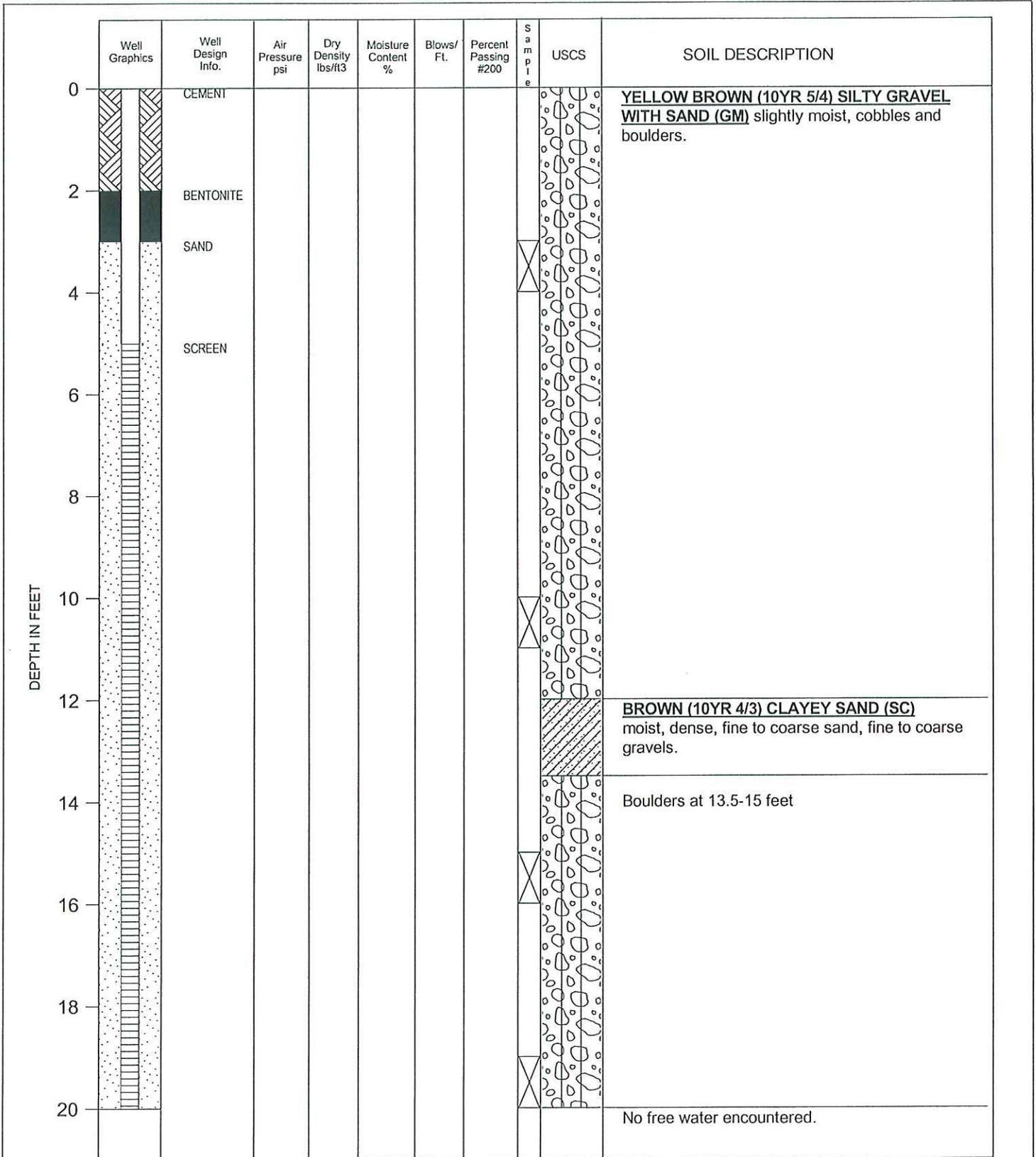
HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

PLATE

39

PROJECT NO. 74407.01

LOG OF GP-29



DATE: 10-10-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: B.WILLS
EQUIPMENT: INGERSOLL RAND A-400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

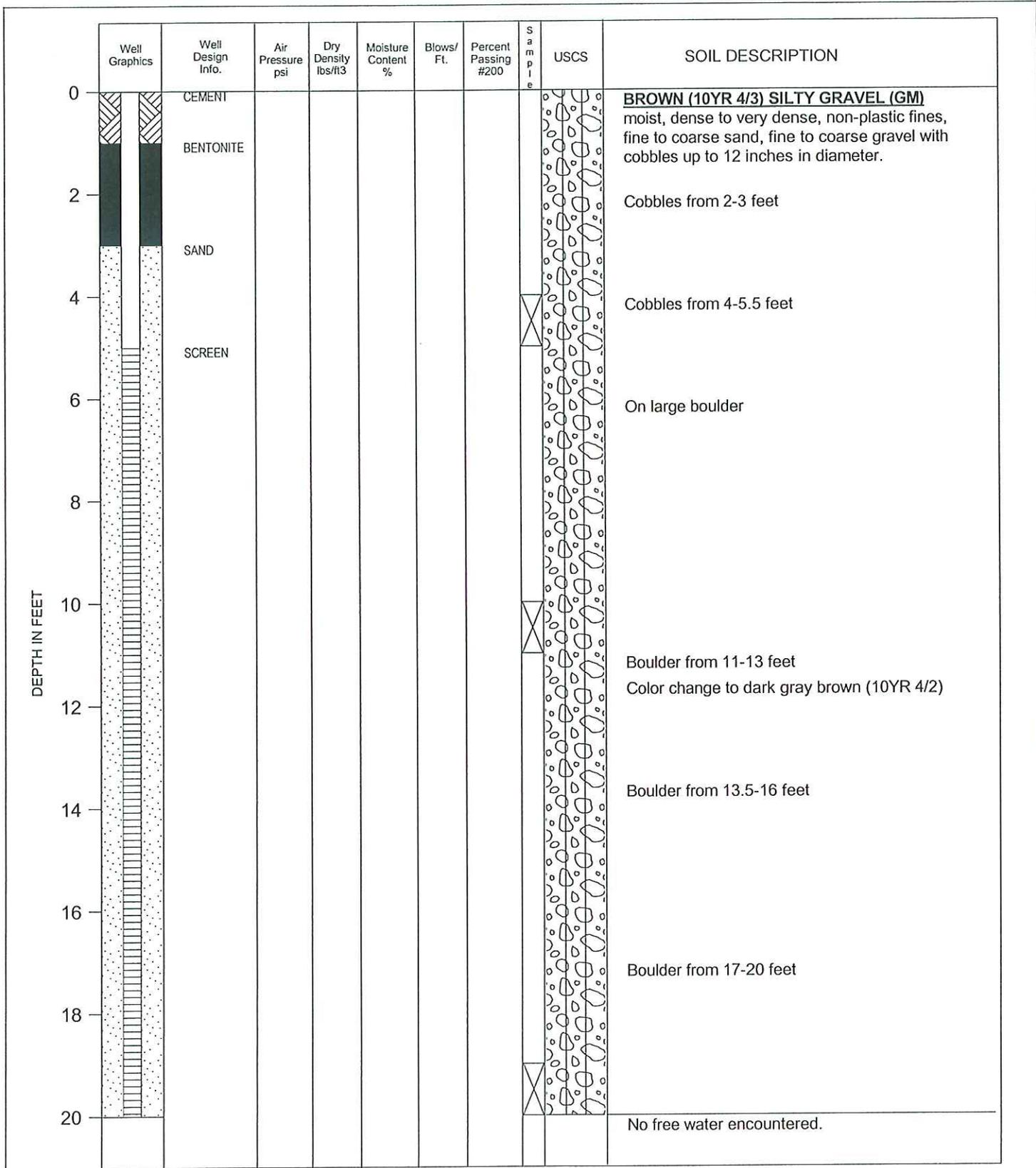
HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

PLATE

40

PROJECT NO. 74407.01

LOG OF GP-31



DATE: 10-10-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: B.WILLS
EQUIPMENT: INGERSOLL RAND A-400

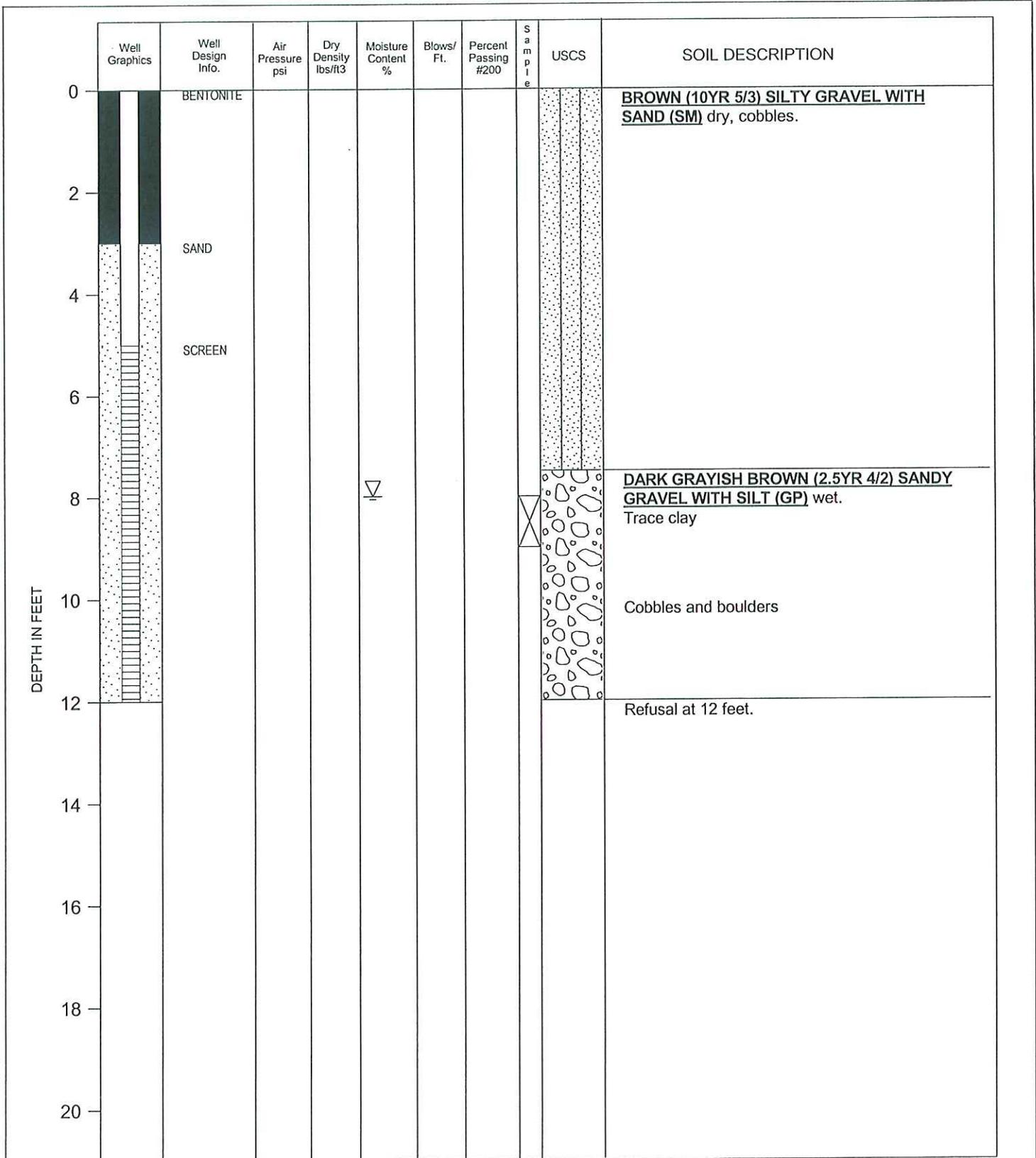
KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

PROJECT NO. 74407.01

HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

LOG OF GP-32

PLATE
41



DATE: 10-12-06
TOTAL DEPTH: 12.0 feet

LOGGED BY: P.TOUSIGNANT
EQUIPMENT: INGERSOLL RAND A-400

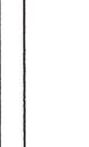
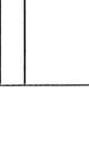
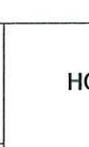
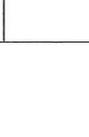
KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

PROJECT NO. 74407.01

HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

LOG OF GP-33

PLATE
42

DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
	0					
2						YELLOWISH BROWN (10YR 5/6) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to medium sand, fine gravel.
4						YELLOWISH BROWN (10YR 5/6) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to medium sand, fine gravel.
6						YELLOWISH BROWN (10YR 5/6) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to medium sand, fine gravel.
8						YELLOWISH BROWN (10YR 5/6) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to medium sand, fine gravel.
10						YELLOWISH BROWN (10YR 5/6) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to medium sand, fine gravel.
12						YELLOWISH BROWN (10YR 5/6) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to medium sand, fine gravel.
14						YELLOWISH BROWN (10YR 5/6) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to medium sand, fine gravel.
16						YELLOWISH BROWN (10YR 5/6) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to medium sand, fine gravel.
18						YELLOWISH BROWN (10YR 5/6) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to medium sand, fine gravel.
20						YELLOWISH BROWN (10YR 5/6) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to medium sand, fine gravel.
						Practical refusal at 7.5 feet. No free water encountered.

DATE: 8-23-06
TOTAL DEPTH: 7.5 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

PROJECT NO. 74407.01

HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

LOG OF GP-33-REFUSAL

PLATE
43

DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
	0					
2						Practical refusal at 2 feet. No free water encountered.
4						
6						
8						
10						
12						
14						
16						
18						
20						

DATE: 8-23-06
TOTAL DEPTH: 2.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

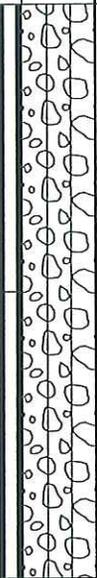
KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

PROJECT NO. 74407.01

HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

LOG OF GP-34

PLATE
44

DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
	0					
2					Color change to yellowish brown (10YR 5/4), slightly moist	
4						
6						
8						Practical refusal at 8 feet. No free water encountered.
10						
12						
14						
16						
18						
20						

DATE: 8-23-06
TOTAL DEPTH: 8.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

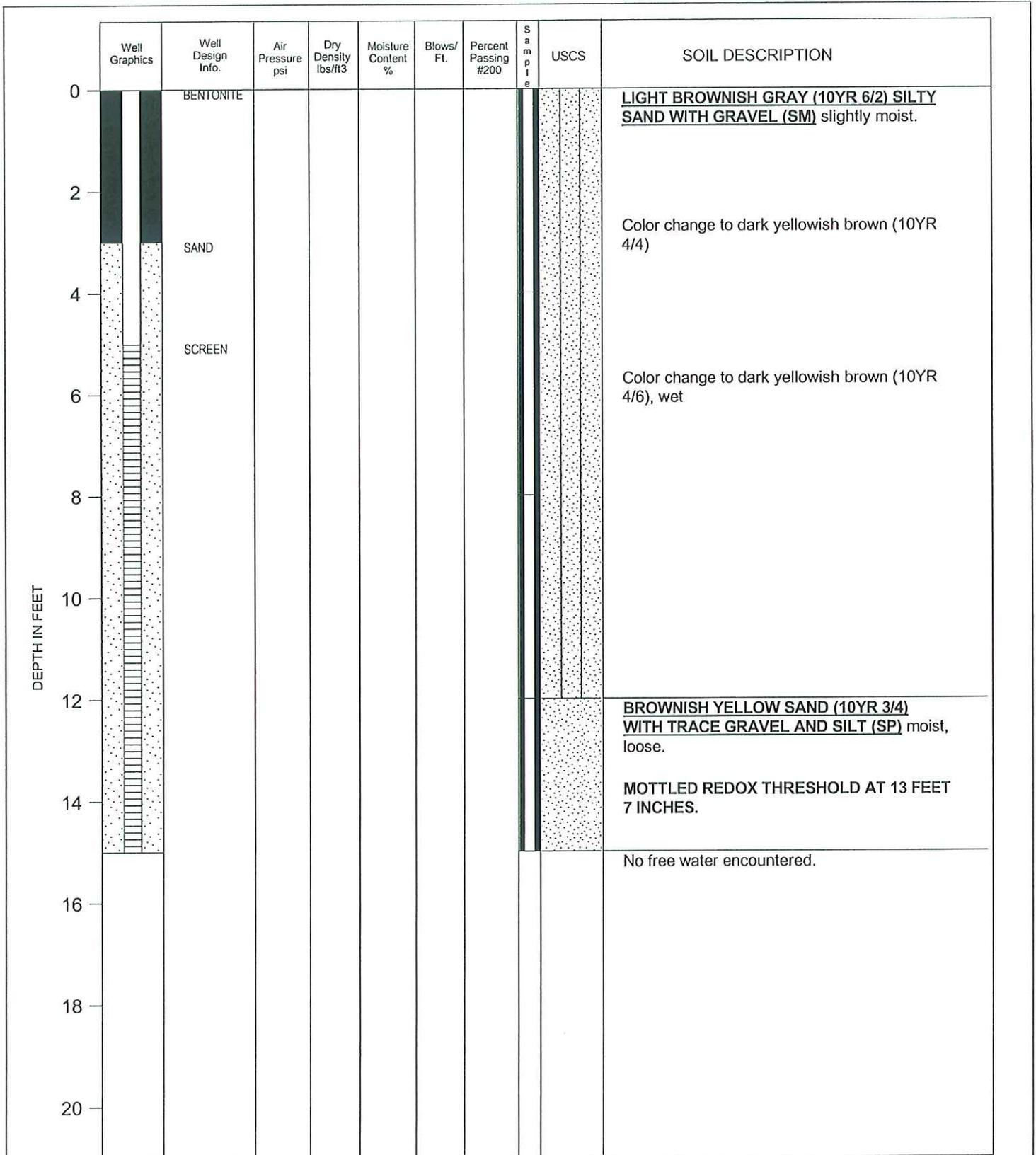
KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

PROJECT NO. 74407.01

HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

LOG OF GP-35

PLATE
45



DATE: 8-23-06
 TOTAL DEPTH: 15.0 feet

LOGGED BY: B. WILLS
 EQUIPMENT: GEOPROBE 5400

KLEINFELDER
 4835 Longley Lane
 Reno, NV 89502
 PH. (775) 689-7800 Fax (775) 689-7810
 www.kleinfelder.com

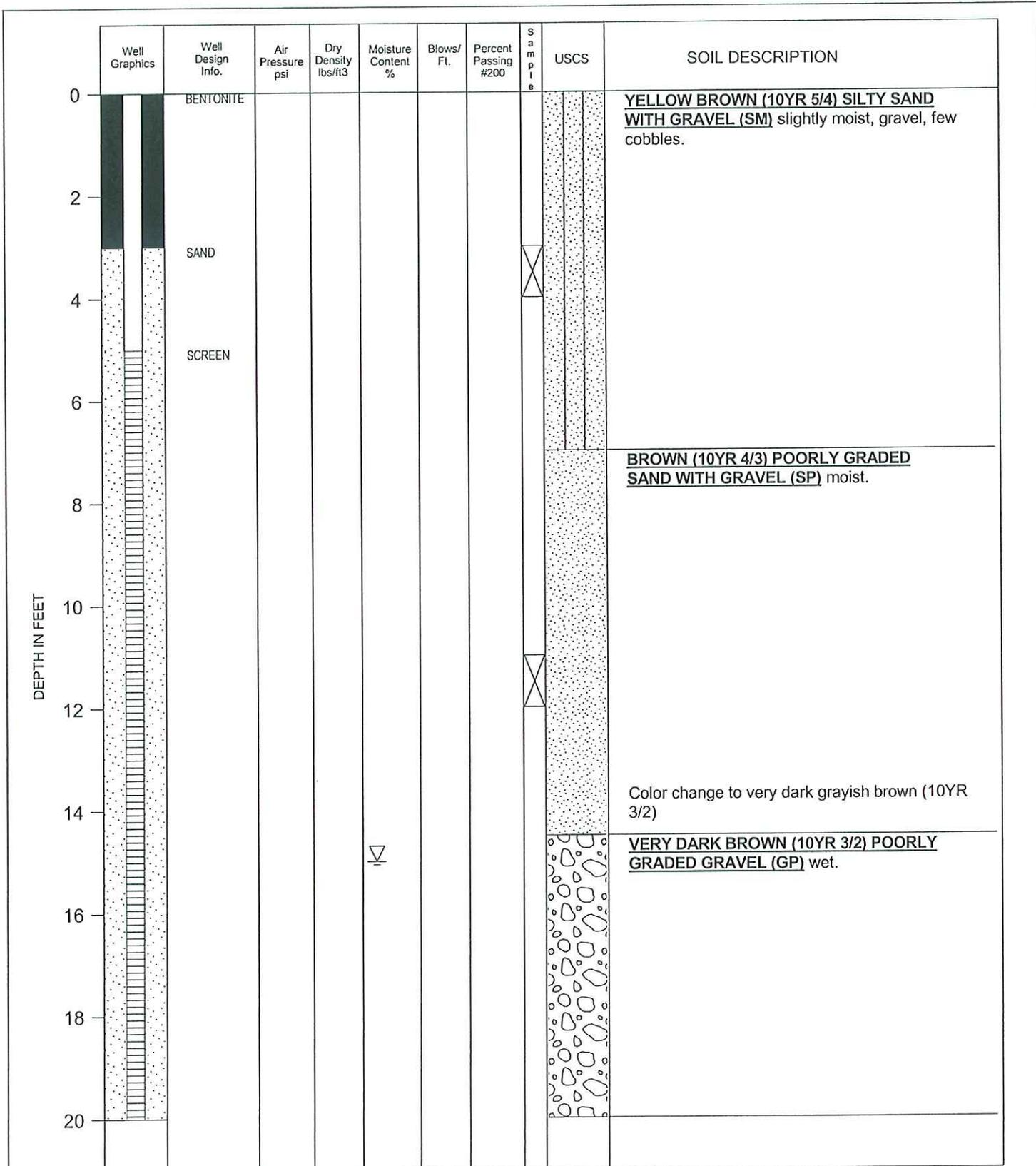
HOMWOOD GROUNDWATER INVESTIGATION
 HOMWOOD, CALIFORNIA

PLATE

46

PROJECT NO. 74407.01

LOG OF GP-36



DATE: 10-12-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: P.TOUSIGNANT
EQUIPMENT: INGERSOLL RAND A-400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

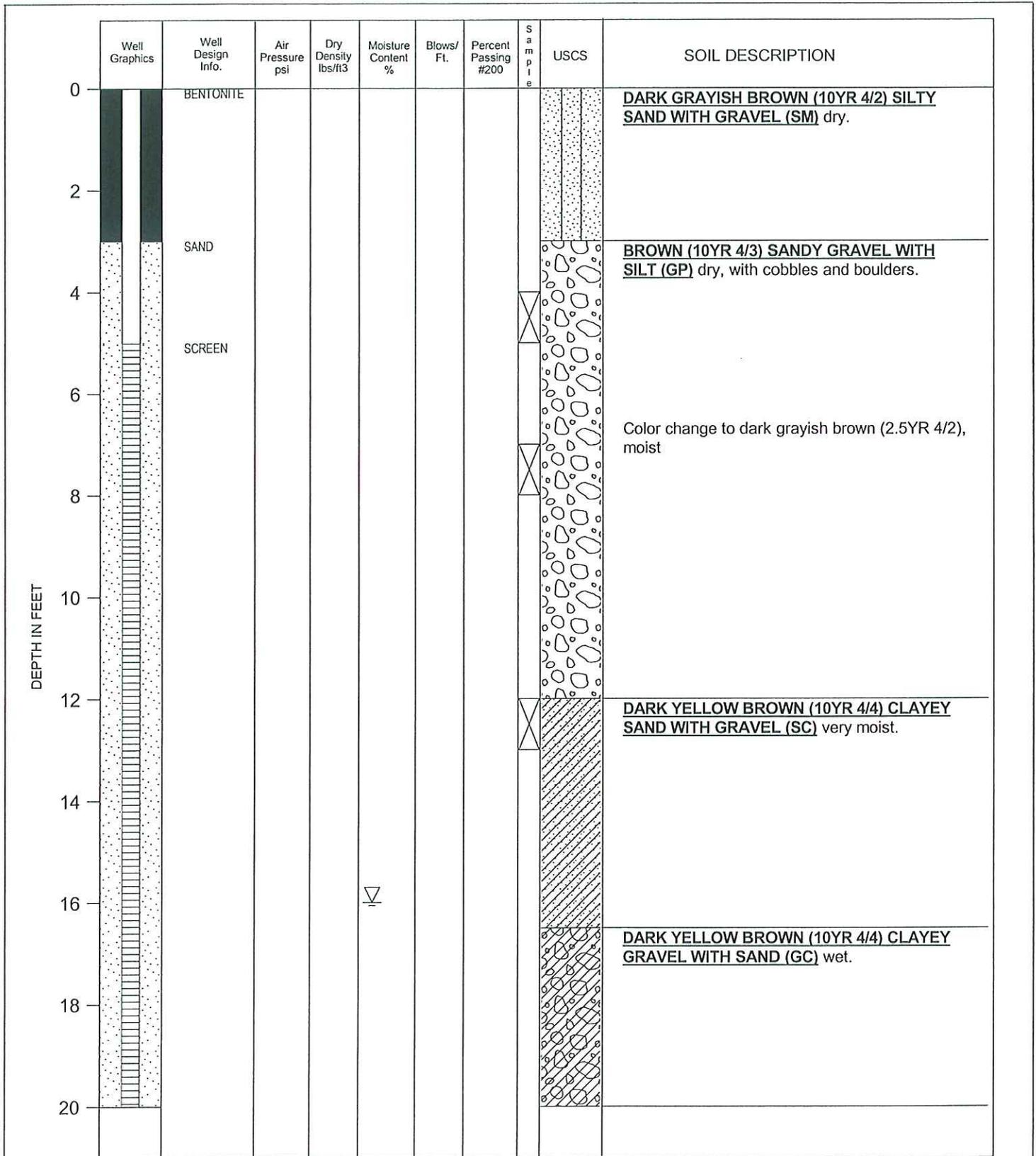
HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

PLATE

47

PROJECT NO. 74407.01

LOG OF GP-37



DATE: 10-12-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: P.TOUSIGNANT
EQUIPMENT: INGERSOLL RAND A-400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

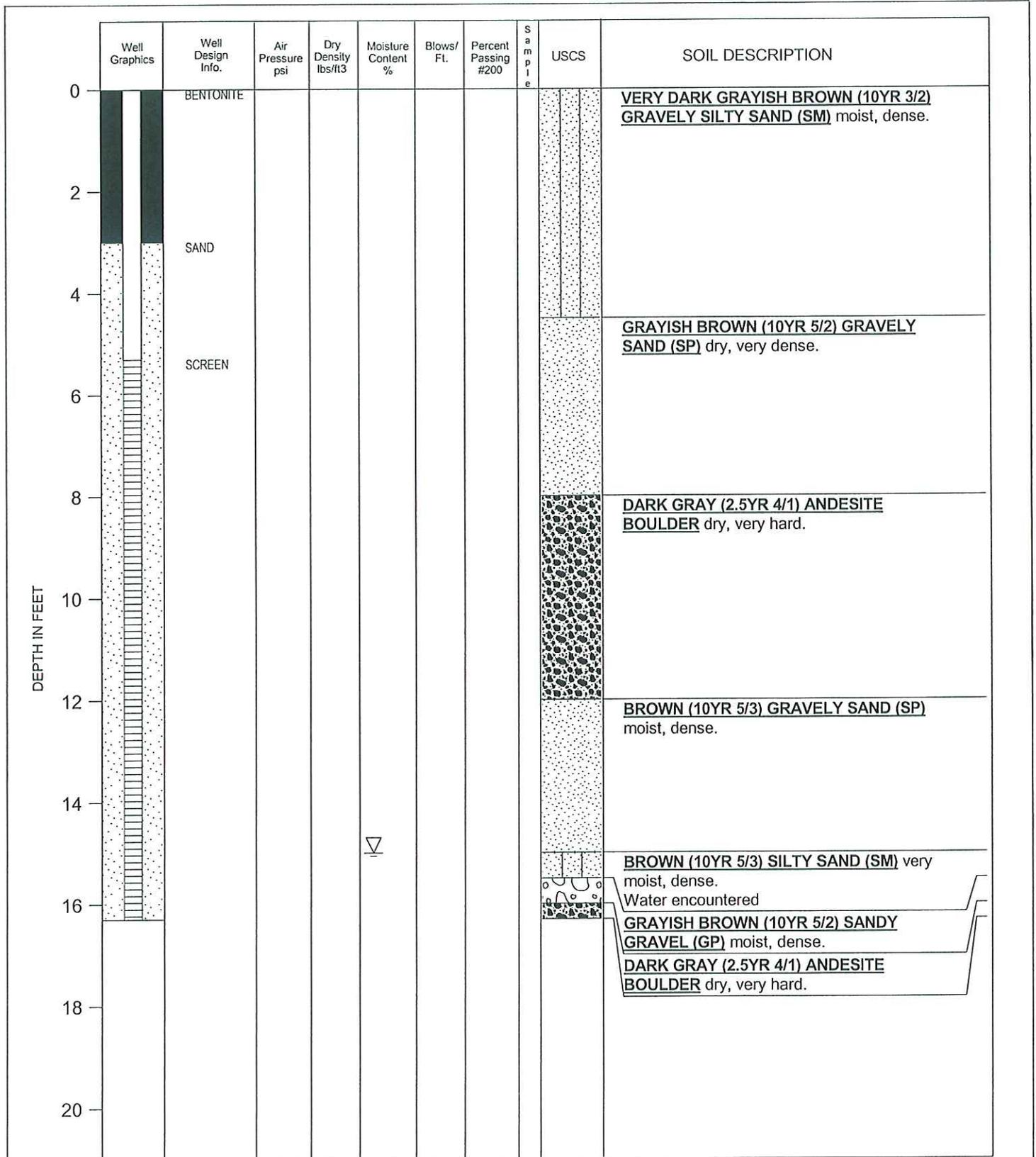
HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

PLATE

48

PROJECT NO. 74407.01

LOG OF GP-39



DATE: 10-11-06
TOTAL DEPTH: 16.3 feet

LOGGED BY: D. HERZOG
EQUIPMENT: INGERSOLL RAND A-400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

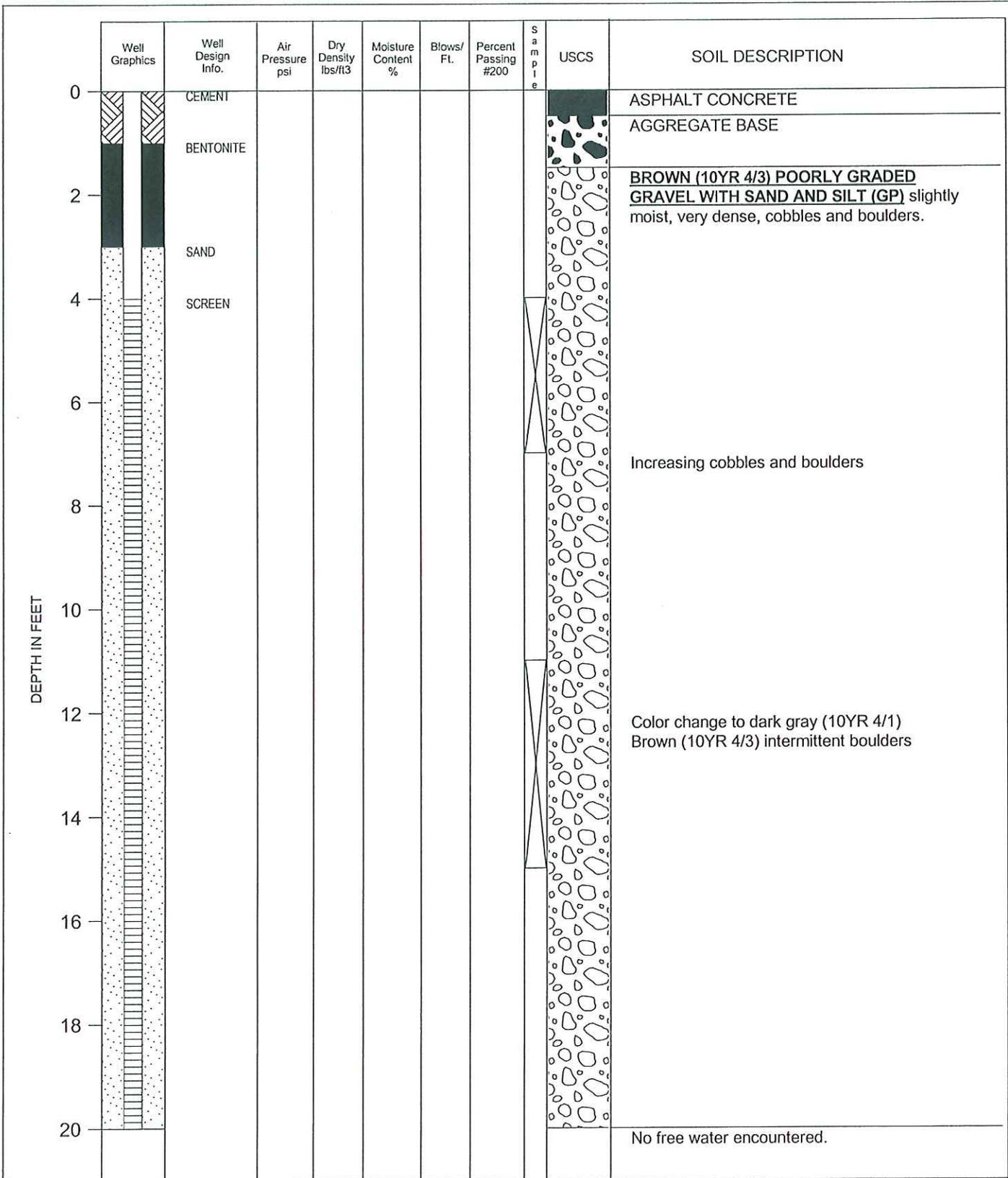
HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

PLATE

50

PROJECT NO. 74407.01

LOG OF GP-43



DATE: 10-4-06
 TOTAL DEPTH: 20.0 feet

LOGGED BY: P.TOUSIGNANT
 EQUIPMENT: INGERSOLL RAND A-400

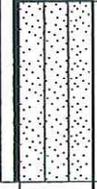
KLEINFELDER
 4835 Longley Lane
 Reno, NV 89502
 PH. (775) 689-7800 Fax (775) 689-7810
 www.kleinfelder.com

PROJECT NO. 74407.01

HOMWOOD GROUNDWATER INVESTIGATION
 HOMWOOD, CALIFORNIA

LOG OF GP-45

PLATE
51

DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
	0					
2						BROWN (10YR 4/3) SILTY SAND WITH GRAVEL (SM) slightly moist, very dense, non-plastic fines, fine to coarse sand, fine gravel.
4						Color change to lightly mottled with dark yellowish brown (10YR 4/6), cobbles, trace clay Practical refusal at 3 feet.
6						No free water encountered.
8						
10						
12						
14						
16						
18						
20						

DATE: 8-24-06
TOTAL DEPTH: 3.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

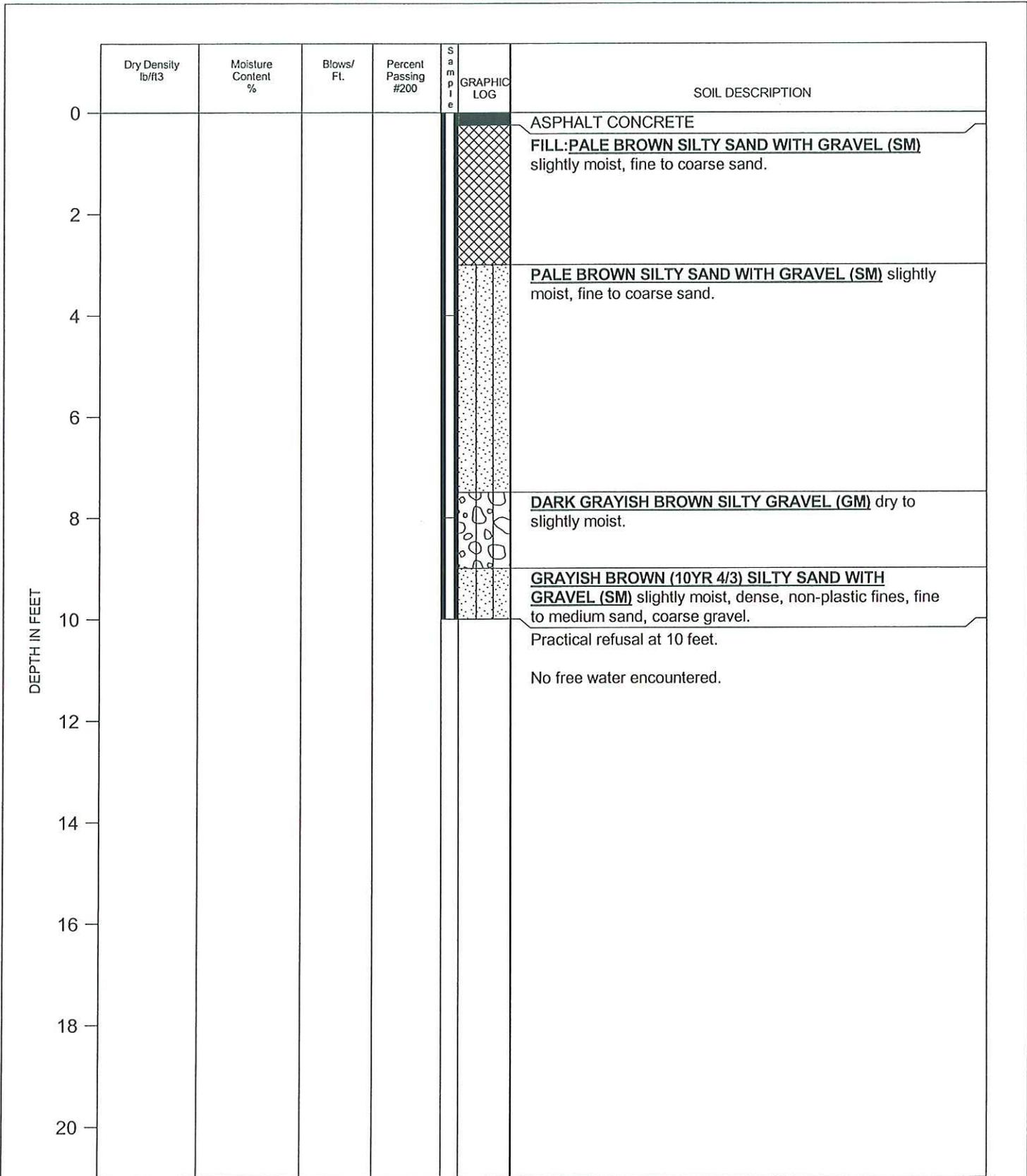
HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

PLATE

52

PROJECT NO. 74407.01

LOG OF GP-45-REFUSAL



DATE: 8-24-06
TOTAL DEPTH: 10.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

PLATE

53

PROJECT NO. 74407.01

LOG OF GP-46

DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
						0
						AGGREGATE BASE
2						BROWN (10YR 4/3) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to coarse sand, fine to coarse gravel.
4						Color change to dark grayish brown (10YR 4/2), roots Color change to yellowish brown (10YR 4/4)
6						
8						YELLOWISH BROWN (10YR 3/6) SILTY GRAVEL (GM) slightly moist, very dense, non-plastic fines, fine to coarse sand, fine to coarse gravel.
10						YELLOWISH BROWN (10YR 3/6) SILTY SAND (SM) slightly moist, very dense, fine to coarse sand, fine gravel.
12						Practical refusal at 12 feet. No free water encountered.
14						
16						
18						
20						

DATE: 8-24-06
TOTAL DEPTH: 12.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

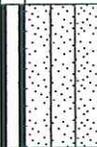
HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

PLATE

54

PROJECT NO. 74407.01

LOG OF GP-47

DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
	0					
2						Practical refusal at 2 feet. No free water encountered.
4						
6						
8						
10						
12						
14						
16						
18						
20						

DATE: 8-24-06
TOTAL DEPTH: 2.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

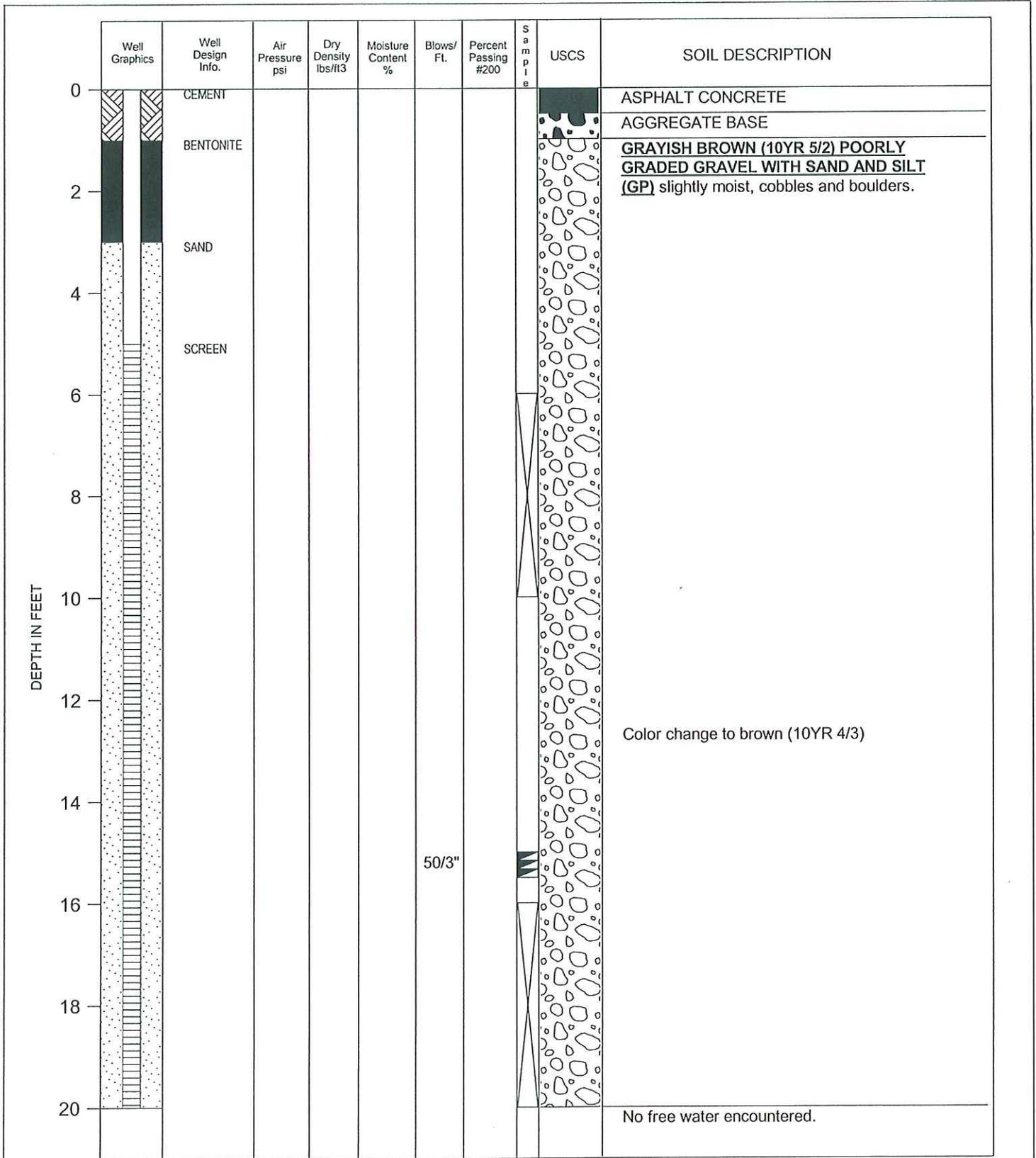
HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

PLATE

55

PROJECT NO. 74407.01

LOG OF GP-48



DATE: 10-4-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: P.TOUSIGNANT
EQUIPMENT: INGERSOLL RAND A-400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

PLATE

56

PROJECT NO. 74407.01

LOG OF GP-51

DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
	0					
2						DARK BROWN (10YR 3/3) SILTY SAND WITH GRAVEL (SM) slightly moist, dense, non-plastic fines, fine to coarse sand, fine gravel.
4						Mottled with 10YR 4/6 Mottled with dark brown (10YR 3/3)
6						Moist
8						Color change to brown (10YR 4/3), some mottling with 10YR 4/6, with cobbles
10						Practical refusal at 8 feet. No free water encountered.
12						
14						
16						
18						
20						

DATE: 8-24-06
TOTAL DEPTH: 8.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

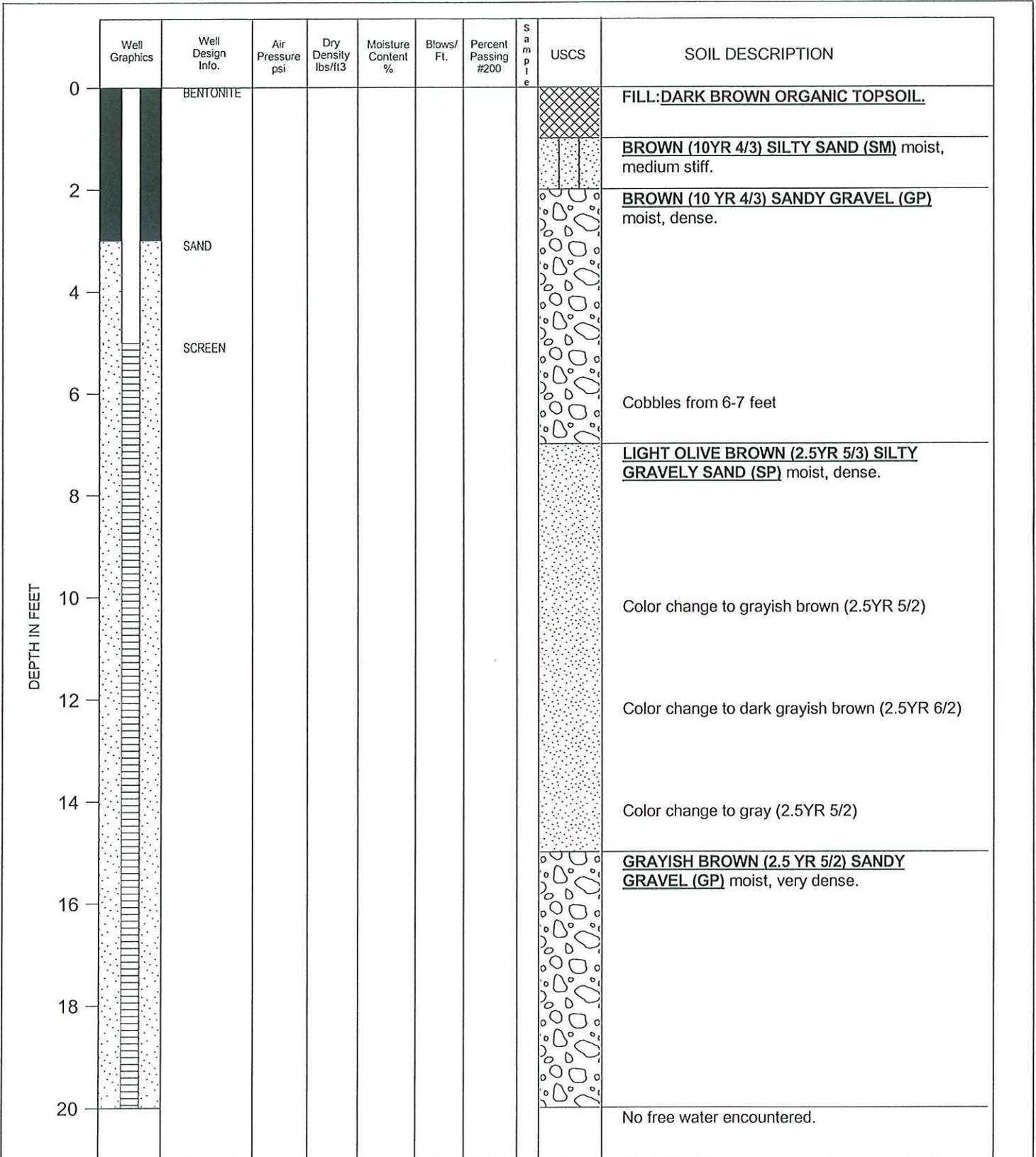
HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

PLATE

57

PROJECT NO. 74407.01

LOG OF GP-51-REFUSAL



DATE: 10-11-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: D. HERZOG
EQUIPMENT: INGERSOLL RAND A-400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

PLATE

58

PROJECT NO. 74407.01

LOG OF GP-52

DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
						0
						<u>FILL: DARK BROWN (10YR 3/3) SANDY SILTY GRAVEL (GM) slightly moist.</u>
2						<u>BROWN (10YR 4/3) SILTY SAND WITH GRAVEL (SM)</u> slightly moist, very dense, non-plastic fines, fine to coarse sand, fine to coarse gravel, cobbles.
4						
6						Color change to dark yellowish brown (10YR 3/6), with mottling (10YR 4/6)
6						Practical refusal at 6 feet.
8						No free water encountered.
10						
12						
14						
16						
18						
20						

DATE: 8-24-06
TOTAL DEPTH: 6.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

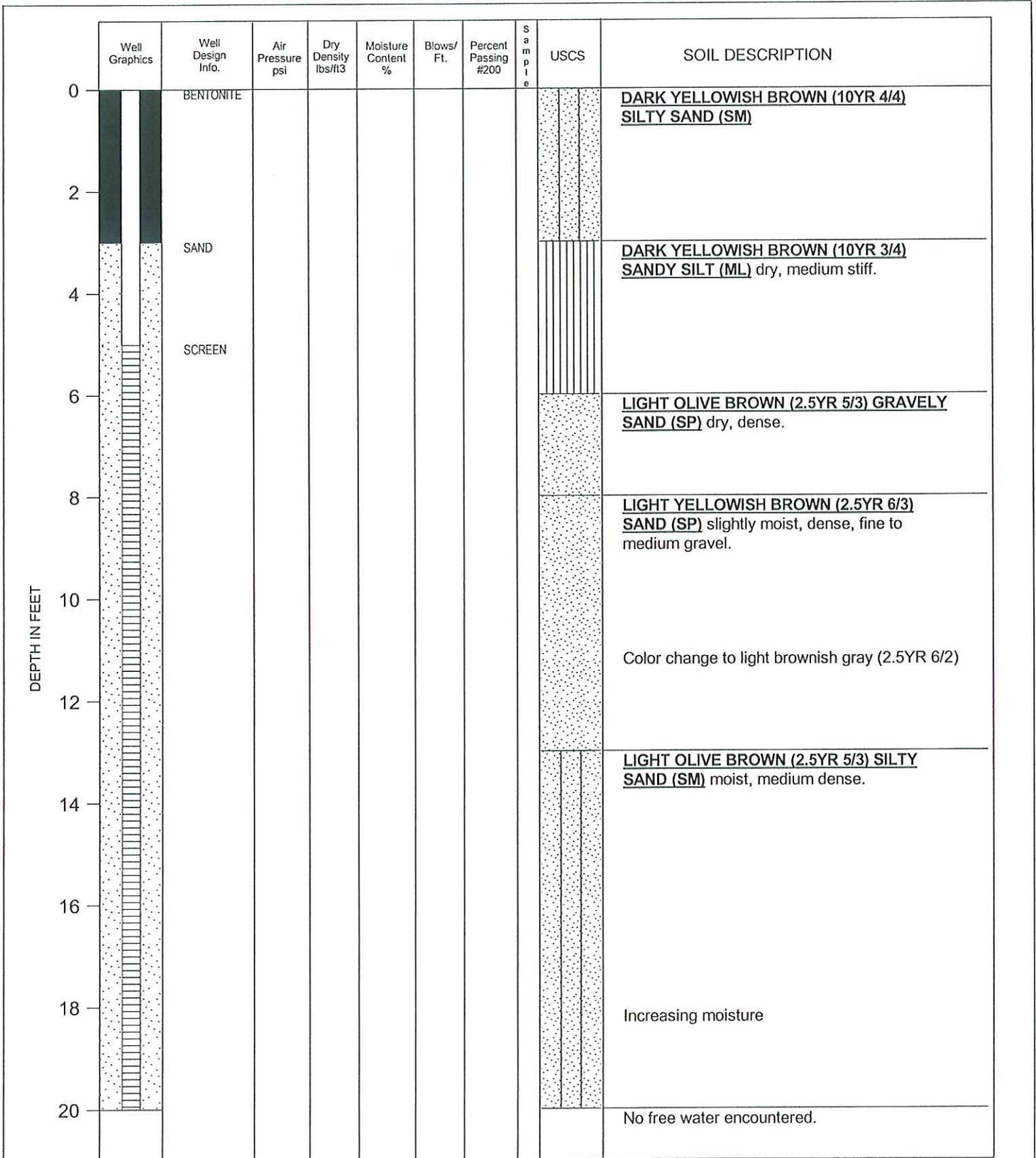
HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

PLATE

59

PROJECT NO. 74407.01

LOG OF GP-52-REFUSAL



DATE: 10-11-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: D. HERZOG
EQUIPMENT: INGERSOLL RAND A-400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

LOG OF GP-55

PLATE

60

PROJECT NO. 74407.01

DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
						0
2						Slightly moist
4						Color change to dark brown (10YR 3/3), yellowish brown mottling (10YR 4/6)
6						
8						Color change to dark yellowish brown (10YR 4/4), mottling (10YR 4/6)
10						
12						Color change to olive brown (2.5Y 5/3), no gravel
14						
16						Color change to grayish brown (2.5Y 5/2)
16						No free water encountered.
18						
20						

DATE: 8-24-06
TOTAL DEPTH: 16.0 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

PLATE

61

PROJECT NO. 74407.01

LOG OF GP-55-REFUSAL

Well Graphics	Well Design Info.	Air Pressure psi	Dry Density lbs/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	Sample	USCS	SOIL DESCRIPTION
	BENTONITE								<u>BROWN (10YR 4/3) SILTY GRAVEL (GM)</u> dry, dense.
	SAND								
	SCREEN								<u>DARK BROWN (10YR 3/3) SILTY SAND (SM)</u> moist, dense.
									<u>BROWN (10YR 4/3) SILTY GRAVEL (GM)</u> dry dense.
									<u>OLIVE BROWN (2.5YR 4/3) GRAVELY SAND (SP)</u> moist, dense.
									<u>DARK YELLOWISH BROWN (10YR 4/4) GRAVELY SILTY SAND (SM)</u> very moist, dense.
									No free water encountered.

DATE: 10-11-06
TOTAL DEPTH: 20.0 feet

LOGGED BY: D. HERZOG
EQUIPMENT: INGERSOLL RAND A-400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

HOMWOOD GROUNDWATER INVESTIGATION
HOMWOOD, CALIFORNIA

PLATE

62

PROJECT NO. 74407.01

LOG OF GP-56

DEPTH IN FEET	Dry Density lb/ft ³	Moisture Content %	Blows/ Ft.	Percent Passing #200	S a m p l e G R A P H I C L O G	SOIL DESCRIPTION
						0
2						
4						Color change to dark brown (10YR 3/3)
6						
8						Color change to very dark grayish brown (2.5YR 3/2)
10						
12						Practical refusal at 10.5 feet. No free water encountered.
14						
16						
18						
20						

DATE: 8-24-06
TOTAL DEPTH: 10.5 feet

LOGGED BY: B. WILLS
EQUIPMENT: GEOPROBE 5400

KLEINFELDER
4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 Fax (775) 689-7810
www.kleinfelder.com

HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

PLATE

63

PROJECT NO. 74407.01

LOG OF GP-58

THE UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES		
COARSE GRAINED SOIL More than 50% of the material is LARGER than the No. 200 sieve.	GRAVELS More than 50% of coarse part is LARGER than the No. 4 Sieve.	CLEAN GRAVELS Less than 5% finer than No. 200 Sieve.	PI<4 GW		Well graded gravels, gravel - sand mixtures, little or no fines, $Cu > 4$ & $1 < Cc > 3$	
		More than 12% finer than No. 200 Sieve.	PI>7 GP		Poorly graded gravels or gravel - sand mixtures, little or no fines $Cu < 4$ or $1 > Cc < 3$	
		GRAVEL More than 12% finer than No. 200 Sieve.	GM		Silty gravels, gravel - sand - silt mixtures	
		More than 50% of coarse part is SMALLER than the No. 4 Sieve.	GC		Clayey gravels, gravel - sand - clay mixtures	
	SANDS More than 50% of coarse part is SMALLER than the No. 4 Sieve.	CLEAN SANDS Less than 5% finer than No. 200 Sieve.	SW		Well graded sands, gravelly sands, little or no or no fines, $Cu > 6$ & $1 < Cc > 3$	
		More than 12% finer than No. 200 Sieve.	SP		Poorly graded sands or gravelly sands, little or no fines $Cu < 6$ or $1 > Cc < 3$	
		SAND More than 12% finer than No. 200 Sieve.	PI<4 SM		Silty sands, sand - silt mixtures	
		More than 50% of coarse part is LARGER than the No. 200 sieve.	PI>7 SC		Clayey sands, sand - clay mixtures	
		FINE GRAINED SOIL More than 50% of the material is SMALLER than the No. 200 sieve.	SILTS AND CLAYS Liquid limit LESS than 50	PI-Below A-Line ML		Inorganic silts, rock flour, or clayey silts of low plasticity
				PI-Above A-Line CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
OL				Organic silts & organic clays of low plasticity		
SILTS AND CLAYS Liquid limit GREATER than 50	PI-Below A-Line MH			Inorganic silts, clayey silts, or silts of high plasticity		
	PI-Above A-Line CH			Inorganic clays of high plasticity, fat clays		
	OH			Organic clays of medium to high plasticity, organic silts		
HIGHLY ORGANIC SOILS			PT		Peat & other highly organic soils	

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

PARTICLE SIZE LIMITS

BOULDERS	COBBLES	GRAVEL		SAND			SILT	CLAY
		Coarse	Fine	Coarse	Medium	Fine		
12"	3"	3/4"	#4	#10	#40	#200	0.002 mm	

DESCRIPTIVE TERMS USED WITH SOILS

CONSISTENCY & APPARENT DENSITY		
	SILTS & CLAYS	SANDS & GRAVELS
Strongest	Hard Very Stiff Stiff	Very Dense Dense Medium Dense
Weakest	Medium Stiff Soft Very Soft	Loose Very Loose

MOISTURE CONTENT	
Wettest	Wet Very Moist Moist
Driest	Slightly Moist Dry
▽	- Water Level Observed During Exploration
▼	- Water Level Observed After Exploration

KLEINFELDER

4835 Longley Lane
Reno, NV 89502
PH. (775) 689-7800 FAX. (775) 689-7810
www.kleinfelder.com

KEY TO SOIL CLASSIFICATION AND TERMS

HOMEWOOD GROUNDWATER INVESTIGATION
HOMEWOOD, CALIFORNIA

DRAWN BY: K. WUJCIK

REVISED BY: K. WUJCIK

CHECKED BY: D. HERZOG

PLATE

64

DRAWN: OCT. 2007

APPROVED BY: DH

PROJECT NO. 74407.02

FILE NAME: USCS

SYMBOLS



Disturbed Bag or Bulk Sample



Standard Penetration Sample
(1.4 inch I.D., 2.0 inch O.D.)



Modified California (Porter) Sample
(2.0 inch I.D., 2.56 inch O.D.)

*

No Sample Recovery



Water Level Observed During Drilling



Water Level Observed After Drilling

COMMENTS

NOTE: Blow count represents the number of blows required to drive a sampler through the last 12 inches of an 18 inch penetration. A standard 140 pound hammer with a 30.4 inch free fall is used to drive the sampler.

NOTE: The lines separating strata on the logs represent approximate boundaries only. The actual transition may be gradual. No warranty is provided as to the continuity of soil strata between borings.

CAD FILE: L:\2007\DRAWING\74407\USCS.dwg

KLEINFELDER 4835 Longley Lane Reno, NV 89502 PH. (775) 689-7800 FAX. (775) 689-7810 www.kleinfelder.com	KEY TO BORING LOGS	DRAWN BY: K. WUJCIK
	HOMEWOOD GROUNDWATER INVESTIGATION	REVISED BY: K. WUJCIK
	HOMEWOOD, CALIFORNIA	CHECKED BY: D. HERZOG
		PLATE
		65
DRAWN: OCT. 2007	APPROVED BY: <u>DH</u>	PROJECT NO. 74407.02
		FILE NAME: USCS