ROUX

SYMBOL KEY

LITHOLOGIC SYMBOL KEY
(Unified Soil Classification System)


Fill


SW *Well Graded Sand*


SP *Poorly Graded Sand*


SM *Silty Sand*


SC *Clayey Sand*


PT *Peat*


OL *Low Plasticity Organic Silt*


OH *High Plasticity Organic Silt*


ML *Low Plasticity Silt*


MH *High Plasticity Silt*


GW *Well Graded Gravel*


GP *Poorly Graded Gravel*


GM *Silty Gravel*


GC *Clayey Gravel*


CL *Low Plasticity Clay*


CH *High Plasticity Clay*

SAMPLER SYMBOL KEY


Continuous Core Barrel

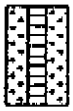

Standard Penetration Test

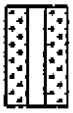

Modified California Sampler


Shelby Sampler


Auger Cuttings

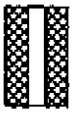
WELL CONSTRUCTION SYMBOL KEY


Sand Pack w/Slotted Casing


Sand Pack


Concrete Grout/Fill


Bentonite Grout/Seal


Cement/Bentonite Grout

WATER LEVEL SYMBOL KEY


Water Level at Time of Drilling.

Stabilized Water Level.

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions			Group Symbols	Typical Names	Field Identification Procedures (excluding particles larger than 3 inches and basing fractions on estimated weights)			Information Required for Describing Soils
1	2		3	4	5			6
Coarse-grained Soils: More than half of material is larger than No. 200 sieve size. The No. 200 sieve size is about the smallest particle visible to the naked eye.	Gravels: More than half of coarse fraction is larger than No. 4 sieve size. (For visual classification, the 1/4-in. size may be used as equivalent to the No. 4 sieve size.)	Clean Gravels (Little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.	Wide range in grain sizes and substantial amounts of all intermediate particle sizes.			For undisturbed soils add information on stratification, degree of compactness, cementation, moisture conditions, and drainage characteristics.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.			
		Gravels with Fines (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixture.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below)			Give typical name: indicate approximate percentage of sand and gravel, maximum size; angularity, surface condition, and hardness of the coarse grains; local or geologic name and other pertinent descriptive information; and symbol in parentheses.
			GC	Clayey gravels, gravel-sand-clay mixtures.	Plastic fines (for identification see CL below)			
	Sands: More than half of coarse fraction is smaller than No. 4 sieve size	Clean Sands (Little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines.	Wide range in grain size and substantial amounts of all intermediate particle sizes.			
			SP	Poorly graded sands or gravelly sands, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.			
		Sands with Fines (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below)			Example: Silty sand, gravelly; about 20% hard, angular gravel particles 1/2 in. maximum size; rounded and subangular sand grains, coarse to fine; about 15% nonplastic fines with low dry strength; well compacted and moist in place; alluvial sand; (SM).
			SC	Clayey sands, sand-clay mixtures.	Plastic fines (for identification procedures see CL below)			
Fine-grained Soils: More than half of material is smaller than No. 200 sieve size.					Identification Procedures on Fraction Smaller than No. 40 Sieve Size			
					Dry Strength (Crushing characteristics)	Dilatancy (Reaction to shaking)	Toughness (Consistency near PL)	
	Silts and Clays: Liquid limit is less than 50		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.	None to slight	Quick to slow	None	For undisturbed soils add information on structure, stratification, consistency in undisturbed and remolded states, moisture and drainage conditions.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.	Medium to high	None to very slow	Medium	
			OL	Organic silts and organic silty clays of low plasticity.	Slight to medium	Slow	Slight	Give typical name; indicate degree and character of plasticity; amount and maximum size of coarse grains; color in wet condition; odor, if any; local or geologic name and other pertinent descriptive information; and symbol in parentheses.
	Silts and Clays: Liquid limit is greater than 50		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	Slight to medium	Slow to none	Slight to medium	
			CH	Inorganic clays of high plasticity, fat clays.	High to very high	None	High	
			OH	Organic clays and silts of medium to high plasticity.	Medium to high	None to very slow	Slight to medium	Example: Clayey silt, brown; slightly plastic; small percentage of fine sand; numerous vertical root holes; firm and dry in place; loess; (ML).
Highly Organic Soils			Pt	Peat and other highly organic soils.	Readily identified by color, odor, spongy feel and frequently by fibrous texture.			

ROUX

Project: UNOCAL SERVICE STATION #1871 96 MACARTHUR BLVD., OAKLAND	Log of Well No. MW-2
Date Started: 10/5/92 Completed: 10/5/92	Measuring Point Elevation (ft): 76.61 Total Depth (ft): 25.0
Logged By: K. Bishop Checked By: T. Ramsden	Water Level During Drilling (ft): 14.0 Stabilized (ft): 12.4
Drilling Co: Gregg Drilling	Casing: 4" Schedule 40 PVC Drill Bit Diameter (in): 10
Drilling Method: Hollow Stem Auger	Perforation: 0.020 from 25 ft to 10 ft
Drilling Equipment: Mobile B-61	Pack: #3 Lone Star Sand from 25 ft to 9 ft
Sampler: CA Modified Split Spoon	Seal: Bentonite Pellots from 9 ft to 7 ft
	Cement Grout from 7 ft to 0 ft

Depth (feet)	LITHOLOGIC DESCRIPTION	Lithology	Monitoring Well Construction	Sample	Blow Counts	OVM (ppm)	Recovery (%)	REMARKS
	Asphalt Basecrock SILTY SAND, Medium brown, 80% sandy, 20% silt, dry, no odor.	SM						– OVM malfunction; no readings taken.
	CLAY, Grey blue, 90 clay, 10 silt, damp, no odor, red/brown weathering. SANDY CLAY, Medium brown, 80% clay, 20% sand, damp, no odor, some 1/4" gravel. CLAYEY SAND, Light brown, 60% sand, 40% clay, damp, no odor, red/brown staining.	CL			5 16 32	--	67	
5								
		GP						
	GRAVELLY SAND, Yellow brown with blue-grey weathering, 60% sand, 40% gravel, damp, no odor.				25 30 34	--	67	
10								
	SANDY GRAVEL, Grey blue, 50% sand, 50% gravel, wet, no odor. GRAVELLY SAND, Yellow brown with blue-grey weathering, 60% sand, 40% gravel, damp, no odor.				37 50 50/3	--	56	
15								
	SILTY CLAY, Medium brown, 90% clay, 10% silt, wet, no odor.	CL			5 10 15	--	100	
20								
	Cuttings- SILTY CLAY, Medium brown, 90% clay, 10% silt, wet, no odor.				10 15 25		100	
25	Bottom of Hole at 25.0'							

ROUX

Project: UNOCAL SERVICE STATION #1871 96 MACARTHUR BLVD., OAKLAND	Log of Well No. MW-3
Date Started: 10/6/92 Completed: 10/6/92	Measuring Point Elevation (ft): 77.48 Total Depth (ft): 25.5
Logged By: K. Bishop Checked By: T. Ramsden	Water Level During Drilling (ft): 15.0 Stabilized (ft): 14.6
Drilling Co: Gregg Drilling	Casing: 4" Schedule 40 PVC Drill Bit Diameter (in): 10
Drilling Method: Hollow Stem Auger	Perforation: 0.020 from 24 ft to 9 ft
Drilling Equipment: Mobile B-61	Pack: #3 Lone Star Sand from 24 ft to 8 ft
Sampler: CA Modified Split Spoon	Seal: Bentonite Pellots from 8 ft to 6 ft
	Cement Grout from 6 ft to 0 ft

Depth (feet)	LITHOLOGIC DESCRIPTION	Lithology	Monitoring Well Construction	Sample	Blow Counts	OVM (ppm)	Recovery (%)	REMARKS
	Asphalt Baserock GRAVELLY CLAYEY SAND, Dark brown, 40% sand 40% gravel, 20% clay, damp, no odor.	GC						– OVM malfunction; no readings taken.
	SANDY CLAY, Black, 80% clay, 20% sand, damp, no odor.	CL			8	--	100	
	GRAVELLY COARSE SAND, Light brown, damp, no odor, 1/4" gravel.	SP			27 32			
5	Same as above.				27 30 32	–	67	
	Same as above.				27	--	67	
	GRAVELLY SAND, Blue-grey, 60% coarse sand, 30% gravel, 10% clay, damp, no odor, red-brown weathering.				39 50/5			
	GRAVELLY SAND, Blue-grey, 60% coarse sand, 40% gravel, dry, slight odor.				28 50	–	67	
10	Same as above. Varying amounts of Sand.				50/2 22 40	–	100	
	Same as above. Wet with Strong hydrocarbon odor.				50 22 32	–	89	
	COARSE SAND and SILT, Blue-grey, 90% sand, 10% silt, wet, no odor, some gravel.	SC			50/5" 15	--	100	
15	Same as above.				31 42 20	–	100	
	CLAY, Medium brown, wet, no odor.	CL			30 38			
20	SILTY CLAY, Medium brown, 90% clay, 10% silt, wet, no odor.				10 16 27	--		
	SILTY SAND, Medium brown, 60% sand, 30% silt, 10% clay, wet, no odor, 1/4" occasional gravels.	SC			18 32	–		
25	Bottom of Boring 25.5'.				50/3"			

BORING LOG

Project No. KEI-P94-0601.P2	**Boring Diameter** 8.75"	**Logged By** T.S. TGG EC1633
	Casing Diameter NA"	
Project Name Unocal S/S #1871	**Well Cover Elevation**	**Date Drilled**
96 MacArthur Blvd., Oakland	N/A	3/20/96
Boring No. EB1	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Pene-tration blows/6"	G.W. level	O.V.M. (ppm)	Depth (feet) Samples	Stratigraphy USCS	Description
			0		Concrete slab over sand base.
				CL	Clay, estimated at 5-15% sand, firm, moist, dark greenish gray.
9/13/22			5		Clay, estimated at 10-15% fine-grained sand, very stiff to hard, moist, greenish gray.
				ML	Clayey silt, estimated at 10-20% fine-grained sand, very stiff, moist, pale olive.
9/12/16				SP	Poorly graded sand, sand is very fine to fine-grained, trace silt, medium dense, moist to wet, light olive gray.
			10		
7/13/14	▽			ML	Clayey silt, estimated at 10-20% silt, sand is very fine to fine-grained, medium dense, wet, gray.
5/10/16					Silty sand, estimated at 15-20% silt, sand is very fine to fine-grained, medium dense, wet, gray.
					TOTAL DEPTH: 13.5'
			15		
			20		

BORING LOG

Project No. KEI-P94-0601.P2	**Boring Diameter** 8.75" **Casing Diameter** NA"	**Logged By** T.S. JBC CEC 1633
Project Name Unocal S/S #1871 96 MacArthur Blvd., Oakland	**Well Cover Elevation** N/A	**Date Drilled** 3/20/96
Boring No. EB2	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Pene-tration blows/6"	G.W. level	O.V.M. (ppm)	Depth (feet) Samples	Stratigraphy USCS	Description
			0		A.C. pavement over sand and gravel base.
					Sand and gravel fill, debris.
					Native soil
				CL	Clay with silt, trace sand and gravel, firm, moist, dark greenish gray.
9/13/16			5	SM	Silty sand, sand is predominantly fine-grained, trace granules, medium dense, olive gray.
7/11/13	▽		10	ML	Silt, estimated at 20-30% very fine to fine-grained sand, and 10-20% clay, very stiff, moist, greenish gray.
8/18/24				SW-SM	Well graded sand with silt and gravel, estimated at 25-30% gravel to 1 inch in diameter, and 5-15% silt, medium dense to dense, wet to saturated, greenish gray.
			15		TOTAL DEPTH: 14'
			20		

BORING LOG

Project No. KEI-P94-0601.P2	**Boring Diameter** 8.75" **Casing Diameter** 2"	**Logged By** T.S. JGG CEC 1633
Project Name Unocal S/S #1871 96 MacArthur Blvd., Oakland	**Well Cover Elevation** N/A	**Date Drilled** 3/20/96
Boring No. MW4	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Pene-tration blows/6"	G.W. level	O.V.M. (ppm)	Depth (feet) Samples	Stratigraphy USCS	Description
			0		Asphalt over base gravel.
				CL	Clay with sand, estimated at 15-25% fine-grained sand, firm, moist, dark greenish gray.
8/13/16			5		Sandy clay, estimated at 25-30% very fine to coarse-grained sand, and 5-10% gravel to 3/4 inch in diameter, very stiff, moist, light olive brown.
8/10/13	▽		10	SP-SM	Poorly graded sand with silt, sand is predominantly fine-grained, estimated at 5-15% silt, medium dense, moist to wet, greenish gray.
7/11/14					Poorly graded sand with silt, predominantly fine-grained, estimated at 5-10% silt, medium dense, wet, greenish gray.
16/32/40			15	GC	Clayey gravel with sand, gravel to 1 1/4 inches in diameter, estimated at 25-30% well graded fine to coarse-grained sand, and 10-20% clay, dense to very dense, saturated, yellowish brown.
12/19/30				CL	Clay, trace sand, very stiff to hard, moist, light olive brown.
6/13/22			20		Clay, estimated at 5-10% fine-grained sand, very stiff to hard, moist, light olive brown.
					TOTAL DEPTH: 20'

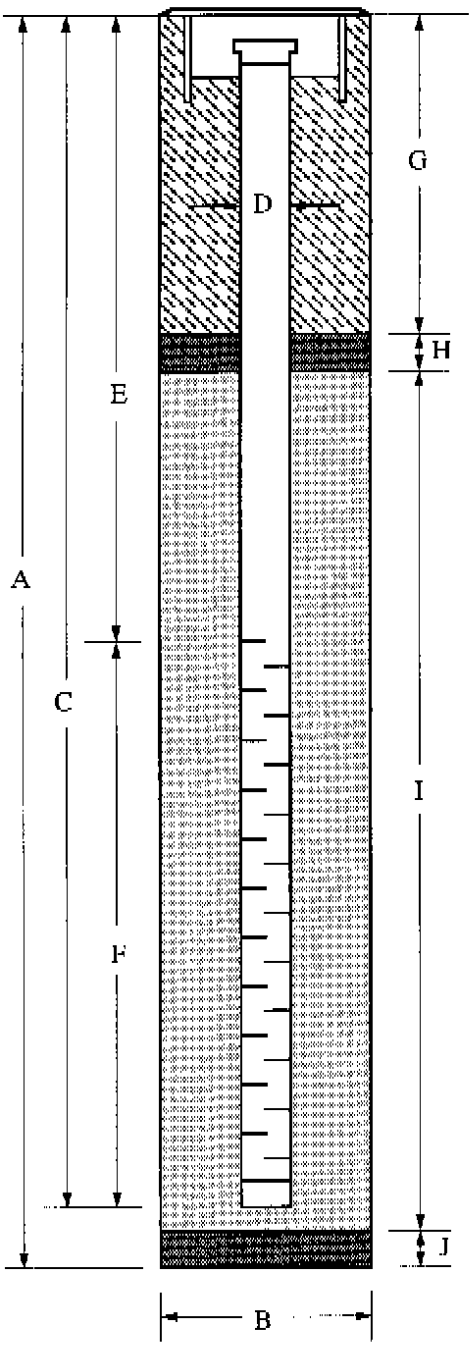
WELL CONSTRUCTION DIAGRAM

PROJECT NAME: Unocal S/S #1871, 96 MacArthur Blvd., Oakland **WELL NO.:** MW4

PROJECT NUMBER: KEI-P94-0601.P2

WELL PERMIT NO.: ACFC & WCD #96164

Flush-mounted Well Cover



A. Total Depth : 20'

B. Boring Diameter: 8.75"

Drilling Method: Hollow Stem Auger

C. Casing Length: 20'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 5'

F. Perforated Length: 15'

Perforation Type: Machine Slotted

Perforation Size: 0.010"

G. Surface Seal: 3'

Seal Material: Neat Cement

H. Seal: 1'

Seal Material: Bentonite

I. Filter Pack: 16'

Pack Material: RMC Lonestar Sand

Size: #2/12

J. Bottom Seal: None

Seal Material: N/A

BORING LOG

Project No. KEI-P94-0601.P2	**Boring Diameter** 8.75" **Casing Diameter** 2"	**Logged By** T.S. JG G CE 6 1633
Project Name Unocal S/S #1871 96 MacArthur Blvd., Oakland	**Well Cover Elevation** N/A	**Date Drilled** 3/20/96
Boring No. MW5	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling

Pene-tration blows/6"	G.W. level	O.V.M. (ppm)	Depth (feet) Samples	Stratigraphy USCS	Description
			0		A.C. pavement over sand and gravel.
				CL	Clay, estimated at 10-15% fine to medium-grained sand, trace gravel to 1 inch in diameter, soft, moist, greenish gray.
5/12/17			5	ML	Silt, estimated at 10-20% clay, and 10-20% fine-grained sand, firm, moist, olive. Silty sand, estimated at 15-25% silt, sand is very fine to fine-grained, medium dense, moist, grayish green.
9/14/16					Silty sand, estimated at 15-20% silt, sand is predominantly fine-grained, medium dense, moist, grayish green.
10/12/18	▽		10	SP-SM	Poorly graded sand, sand is predominantly fine-grained, estimated at 5-10% silt, medium dense, moist, greenish gray.
14/26/31			15	SW-SM	Well graded sand with silt and gravel, estimated at 10-20% gravel to 1 1/2 inches in diameter, 5-15% silt, dense to very dense, wet, dark greenish gray.
				CL	
9/14/17			20		Clay, very stiff, moist, pale olive.
					TOTAL DEPTH: 20'

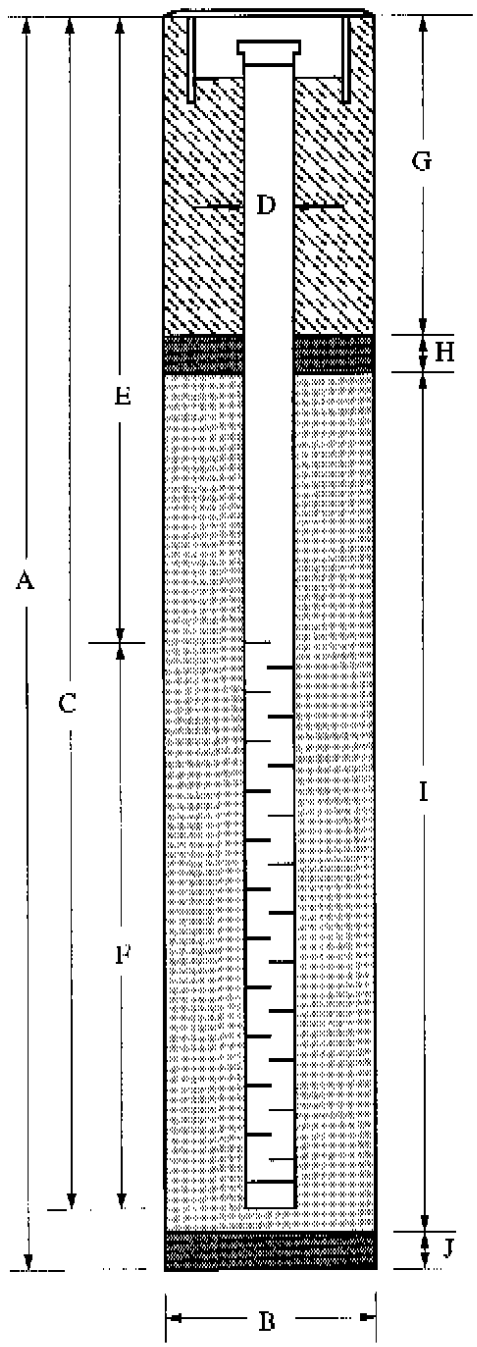
WELL CONSTRUCTION DIAGRAM

PROJECT NAME: Unocal S/S #1871, 96 MacArthur Blvd., Oakland **WELL NO.:** MW5

PROJECT NUMBER: KEI-P94-0601.P2

WELL PERMIT NO.: ACFC & WCD #96164

Flush-mounted Well Cover



A. Total Depth : 20'

B. Boring Diameter: 8.75"

Drilling Method: Hollow Stem Auger

C. Casing Length: 20'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 5'

F. Perforated Length: 15'

Perforation Type: Machine Slotted

Perforation Size: 0.010"

G. Surface Seal: 3'

Seal Material: Neat Cement

H. Seal: 1'

Seal Material: Bentonite

I. Filter Pack: 16'

Pack Material: RMC Lonestar Sand

Size: #2/12

J. Bottom Seal: None

Seal Material: N/A

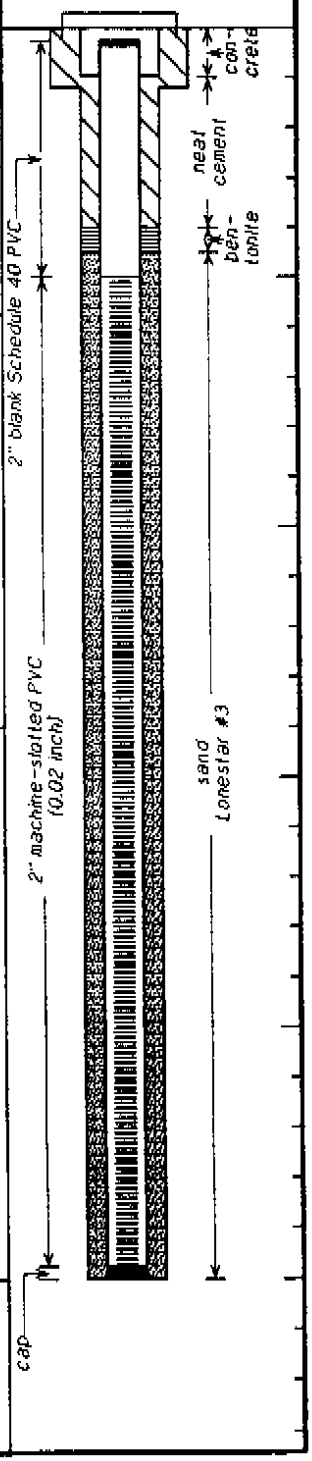
Gettler-Ryan Inc.

Log of Boring MW-6

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *96 Mac Arthur Blvd., Oakland, CA*
PROJECT NO.: *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/03/99*	WL (ft. bgs): *11.3* DATE: *06/04/99* TIME: *1:30 pm*
DATE FINISHED: *06/03/99*	WL (ft. bgs): *9.12* DATE: *06/04/99* TIME: *4:00 pm*
DRILLING METHOD: *8" hollow-stem auger*	TOTAL DEPTH: *25 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Concrete over silty sand and gravel.
						ML	CLAYEY SILT (ML) – greenish gray (5GY 5/1), moist, stiff: FILL OR DISTURBED NATIVE SOIL.
							NATIVE SOIL.
5	14	50	MW-6-6			SM	SILTY SAND (SM) – dark greenish gray (5GY 4/1), moist, very dense, 10–15% silt, trace clay, predominantly fine to medium sand, angular gravel in shoe, slight hydrocarbon odor.
							Becomes wet to saturated, strong hydrocarbon odor.
10	>442	58	MW-6-11				SAND (SM) – dark greenish gray (5GY 4/1), saturated, very dense, locally with up to 20% angular gravel to 3/8" diameter, trace silt, very fine to coarse sand, well graded.
	388	61					
						ML	
15	104	47	MW-6-15.5				CLAYEY SILT (ML) – reddish gray (5YR 5/2), saturated, hard, slight hydrocarbon odor.
							No odor.
20	20	48	MW-6-20.5				
	3		MW-6-24				
25							* Converted to standard penetration blows/foot.

WELL DIAGRAM



JOB NUMBER: *140165.04-1*

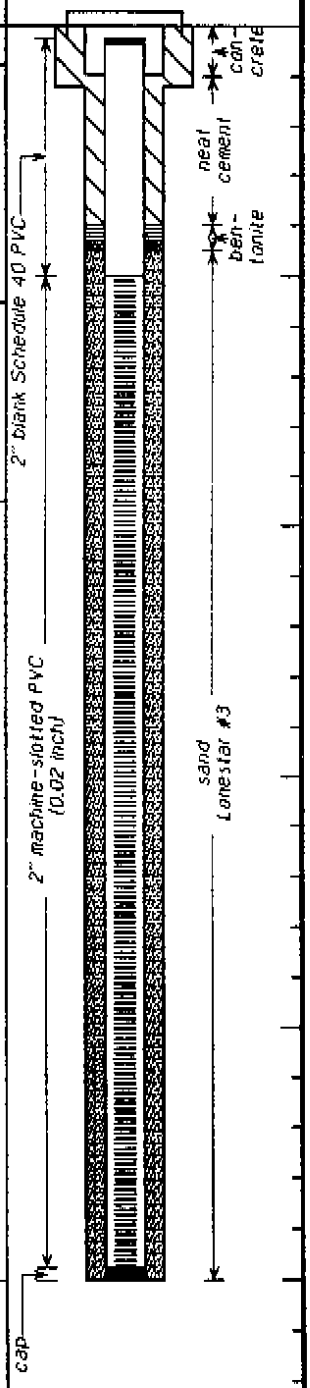
Gettler-Ryan Inc.

Log of Boring MW-7

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *96 Mac Arthur Blvd., Oakland, CA*
PROJECT NO.: *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/11/99*	WL (ft. bgs): *11* DATE: TIME:
DATE FINISHED: *06/11/99*	WL (ft. bgs): *8.53* DATE: *06/11/99* TIME: *11:00 am*
DRILLING METHOD: *8" hollow-stem auger*	TOTAL DEPTH: *25 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT.*	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Concrete.
						ML	CLAYEY SANDY SILT WITH GRAVEL (ML) - brown (7.5YR 6/4), moist, stiff, estimated up to 10% clay, 10-15% very fine to coarse sand, 15% subangular gravel to 3/4" diameter: FILL.
5	0	33				SM	SILTY SAND LOCALLY WITH GRAVEL (SM) - dark gray (5GY 4/1), moist to very moist, hard, estimated 15% silt, trace clay, variable gravel content up to 20%, gravel subangular, weathered, and fractured, very fine to coarse gravel to >2" diameter.
10	3	26				ML	SILT WITH SAND AND GRAVEL (ML) - brown (7.5YR 4/4), gradational from SILTY SAND above, wet to saturated, hard, mottled with weathered gravel clasts, estimated at 15-25% fine to coarse sand, trace clay, 15-25% subangular gravel to 1/2" diameter, gravel highly weathered, fractured.
15	4	29					Becomes saturated. CLAYEY SILT (ML) - light gray (10YR 7/2), saturated, hard, homogenous.
20	0	27					
25	0	18					Trace to 10% very fine sand.
							* Converted to standard penetration blows/foot.

WELL DIAGRAM



JOB NUMBER: *140165.04-1*

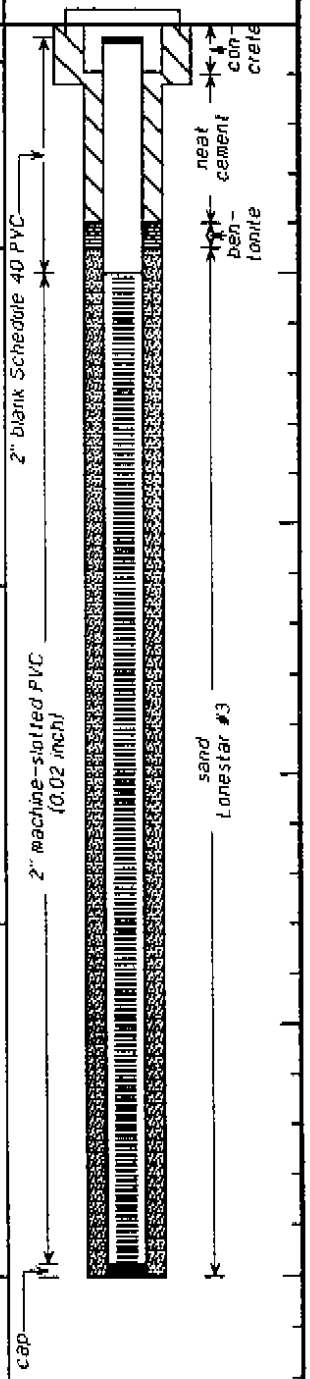
Gettler-Ryan Inc.

Log of Boring MW-8

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *96 Mac Arthur Blvd., Oakland, CA*
PROJECT NO.: *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/03/99*	WL (ft. bgs): *9.0* DATE: *06/04/99* TIME: *4:00 pm*
DATE FINISHED: *06/03/99*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *8" hollow-stem auger*	TOTAL DEPTH: *25 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SOIL CLASS	GEOLOGIC DESCRIPTION
					Concrete.
				ML	CLAYEY SANDY SILT WITH GRAVEL (ML) – light brownish gray (2.5Y 6/2), moist, stiff, estimated at 10% clay, 10-15% very fine to coarse sand, 15% subangular gravel to 3/8" diameter: FILL.
5	0				CLAYEY SANDY SILT WITH GRAVEL (ML) – light brownish gray (2.5Y 6/2), moist, very stiff, estimated up to 10% clay, 10% very fine to coarse sand, 25% angular gravel to 1-3/4" diameter.
10	0	26	MW-8-10.5		CLAYEY SILT (ML) – light gray (10YR 7/2), moist, hard, homogenous, trace sand.
				SM	SILTY SAND (SM) – pale brown (10YR 6/3), very moist, very dense, very fine to fine sand, estimated at 30% silt.
15	0	83	MW-8-15.5		SILTY SAND WITH GRAVEL (SM) – saturated, very dense, estimated at 15% silt, 35-45% subangular gravel to 3/4" diameter, highly weathered gravel, fine to coarse sand.
				ML	
20		50			CLAYEY SILT (ML) – light gray (10YR 7/2), saturated, hard, homogenous.
		36			
25					* Converted to standard penetration blows/foot.

WELL DIAGRAM



Gettler-Ryan Inc.

Log of Boring B-4

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *96 Mac Arthur Blvd., Oakland, CA*
PROJECT NO. : *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/01/99*	WL (ft. bgs): *10.5* DATE: *06/01/99* TIME: *7:50 am*
DATE FINISHED: *06/01/99*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2" geoprobe*	TOTAL DEPTH: *16 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							2" turf over 4" of broken concrete.	
						ML	SANDY CLAYEY SILT (ML) - grayish brown (10YR 5/2), slightly moist, stiff, estimated at 30% very fine to fine sand, 15-25% clay: FILL.	
						SC	CLAYEY SAND (SC) - light yellowish brown (10YR 6/4), moist, medium dense, estimated 10-15% clay, 10% silt, predominantly very fine to fine: FILL.	
5						SM	SILTY SAND WITH GRAVEL (SM) - brown (10YR 5/3), very moist, medium dense, estimated at 20% silt, trace clay, 15% subrounded to subangular gravel to 1 1/4" diameter, fine to coarse sand.	
	0		B-4-7.5			GW GM	GRAVEL WITH SAND (GW-GM) - yellowish brown (10YR 5/4), very moist, dense, estimated at 35% very fine to coarse sand, 10% silt & clay, subangular deeply weathered gravel to 3/4" diameter.	
	0		B-4-9					
10						ML	SILT (ML) - light yellowish brown (2.5Y 6/4) to light brownish gray (2.5Y 6/2), wet to saturated at 10.5 feet, very stiff, trace clay & very fine sand.	Water sample B-4-10.5
	0		B-4-11.5					
	0							
15	0							
20								
25								

JOB NUMBER: *140165.04-1*

Gettler-Ryan Inc.

Log of Boring B-5

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *96 Mac Arthur Blvd., Oakland, CA*
PROJECT NO.: *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/01/99*	WL (ft. bgs): *10.5* DATE: *06/01/99* TIME: *9:40 am*
DATE FINISHED: *06/01/99*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2" geoprobe*	TOTAL DEPTH: *16 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							Asphaltic concrete.	
						SM	SILTY SAND (SM) - light yellowish brown (10YR 6/4), moist, medium dense, estimated 15% silt, predominantly very fine to fine sand: FILL.	
						SP	SAND WITH GRAVEL (SP) - light yellowish brown (10YR 6/4), moist to very moist, medium dense, estimated at 10-15% subrounded to angular gravel to 3/8" diameter, very fine to fine sand, poorly graded: FILL.	
5								
	0		B-5-7.5			ML	SILT (ML) - 2" lens.	
						SP	SAND WITH GRAVEL (SP) - light yellowish brown (10YR 6/4), moist to very moist, medium dense, estimated at 10-15% subrounded to angular gravel to 3/8" diameter, very fine to fine sand, poorly graded.	
						GW GM		
10	0		B-5-10.5				GRAVEL WITH SAND (GW-GM) - yellowish brown (10YR 5/4), very moist, dense, estimated at 40% very fine to coarse sand, 10% silt, trace clay, subangular gravel to 1 1/4" diameter, deeply weathered.	Water sample B-5-11.35
	0					SW SM		
						GW GM	SAND WITH GRAVEL (SW-SM) - estimated at 40% gravel, otherwise as above.	
	0						GRAVEL WITH SILT AND SAND (GW-GM) - yellowish brown (10YR 5/4), saturated, dense, 25% fine to coarse sand, 15% silt & clay, well graded.	
15	0					ML	SILT (ML) - brown (10YR 5/3), saturated, very stiff, trace clay.	
20								
25								

Gettler-Ryan Inc.

Log of Boring B-6

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *96 Mac Arthur Blvd., Oakland, CA*
PROJECT NO.: *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/01/99*	WL (ft. bgs): *11.7* DATE: *06/01/99* TIME: *10:15 am*
DATE FINISHED: *06/01/99*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2" geoprobe*	TOTAL DEPTH: *14 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							Asphaltic concrete.	
						SP	SAND (SP) - yellowish brown (10YR 6/4), moist, medium dense, very fine to fine sand, poorly graded: FILL.	
5								
	0					GW GM SW SM	GRAVEL WITH SAND AND SILT (GW-GM) - yellowish brown (10YR 6/4), moist, medium dense to dense, estimated 35% very fine to coarse sand, 10-15% silt, subangular gravel to 3/4" diameter, deeply weathered gravel, well graded.	
10	0					GW GM	SAND WITH GRAVEL (SW-SM) - dark yellowish brown (10YR 4/6), moist, medium dense, estimated 15% subrounded gravel to 3/4" diameter, predominantly medium sand, poorly graded.	
	0		B-6-11.4				▽ GRAVEL WITH SAND AND SILT (GW-GM) - yellowish brown (10YR 6/4), moist, medium dense to dense, estimated 35% very fine to coarse sand, 10-15% silt, subangular gravel to 3/4" diameter, deeply weathered gravel, well graded.	Water sample B-6-11.7
15								
20								
25								

JOB NUMBER: *140165.04-1*

Gettler-Ryan Inc.

Log of Boring B-7

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *96 Mac Arthur Blvd., Oakland, CA*
PROJECT NO.: *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/01/99*	WL (ft. bgs): *10* DATE: *06/01/99* TIME: *10:50 am*
DATE FINISHED: *06/01/99*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2" geoprobe*	TOTAL DEPTH: *16 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							Concrete.	
						SM	SILTY SAND WITH GRAVEL (SM) – dark brown (10YR 3/3) changing to grayish brown (10YR 5/4) at 2 feet, sightly moist to moist, dense, estimated 20% silt, 25% subangular gravel to 1-3/4" diameter, predominantly very fine to fine sand: FILL.	
						ML	SILT (ML) – black (10YR 2/0), moist, stiff, trace clay & fine sand.	
5							SANDY SILT (ML) – yellowish brown (10YR 5/4), moist, stiff, estimated 15-20% very fine sand, up to 10% subangular gravel to 1/4" diameter, gravel highly weathered.	
10	0		B-7-9.5				▽ Becomes very moist. Color change to grayish brown (2.5Y 5/2), becomes saturated, only trace gravel below 11 feet.	Water sample B-7-10
15						GW GM	GRAVEL WITH SAND AND SILT (GW-GM) – yellowish brown (10YR 5/4), saturated, medium dense to dense.	
						ML	CLAYEY SILT (ML) – grayish brown (10YR 5/2), saturated, very stiff.	
20								
25								

JOB NUMBER: *140165.04-1*

Gettler-Ryan Inc.

Log of Boring B-8

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *98 Mac Arthur Blvd., Oakland, CA*
PROJECT NO.: *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/01/99*	WL (ft. bgs): *8.5* DATE: *06/03/99* TIME: *12:10 am*
DATE FINISHED: *06/01/99*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2" geoprobe*	TOTAL DEPTH: *12 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						ML	CLAYEY SILT (ML) - dark grayish brown (2.5Y 3/2) changing to light olive brown (2.5Y 5/4) at 1.5 feet: FILL OR DISTURBED NATIVE SOIL.	
5							Color change to olive (5Y 5/2).	Poor recovery.
			B-8-8				▽ CLAYEY SILT WITH GRAVEL (ML) - olive (5Y 5/2), saturated, estimated 10% clay, 15-35% subangular gravel to 1-3/4" diameter, highly weathered gravel.	Water sample B-8-8.5
10								
15								
20								
25								

Gettler-Ryan Inc.

Log of Boring B-9

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *96 Mac Arthur Blvd., Oakland, CA*
PROJECT NO. : *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/01/99*	WL (ft. bgs): *13.5* DATE: *06/01/99* TIME: *12:45 pm*
DATE FINISHED: *06/01/99*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2" geoprobe*	TOTAL DEPTH: *14 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						SM	SILTY SAND WITH GRAVEL (SM) - dark yellowish brown (10YR 4/6), moist, dense, estimated 15% silt, very fine to coarse sand, up to 30% subangular gravel to 2" diameter: FILL.	
						ML	CLAYEY SILT WITH GRAVEL (ML) - dark greenish gray (5GY 4/1), moist, firm.	
5								
	0		B-9-7.5				CLAYEY SILT (ML) - dark greenish gray (5GY 4/1) changing to black (2.5YR N2 5/) at 6.5 feet, moist, firm, organic odor.	
							SANDY CLAYEY SILT (ML) - dark gray (N4 /), very moist to wet, firm, estimated 15-20% very fine to fine sand, 10% clay, trace gravel.	
10	0		B-9-11					
	0		B-9-13				▽	Water sample B-9-13.5
	0							
15								
20								
25								

Gettler-Ryan Inc.

Log of Boring B-10

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *96 Mac Arthur Blvd., Oakland, CA*
PROJECT NO.: *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/01/99*	WL (ft. bgs): *15.2* DATE: *08/03/99* TIME: *7:40 am*
DATE FINISHED: *06/01/99*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2" geoprobe*	TOTAL DEPTH: *18 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
0						ML	SANDY CLAYEY SILT WITH GRAVEL (ML) - yellowish brown (10YR 5/8), very moist, firm, estimated at 15-30% very fine to medium sand, 10% clay, 10-15% subrounded gravel to 3/4" diameter: FILL.	
5	0						Color change to very dark gray (5YR 3/1) at 3.5 feet. SANDY SILT (ML) - light brownish gray (2.5Y 6/2), moist, firm to stiff, estimated at 25-30% fine to medium sand, trace gravel.	
10	0							
	29						SANDY SILT WITH GRAVEL (ML) - greenish gray (5G 6/1), moist to very moist, stiff, estimated at 25-30% fine to medium sand, trace clay, variable gravel content to 10%, subangular gravel, highly weathered, slight hydrocarbon odor.	
	440		B-10-14			GW GM	CLAYEY SILT (ML) - light brownish gray (2.5Y 6/2), moist, firm to stiff, trace very fine sand.	
15							GRAVEL WITH SAND (GW-GM) - dark greenish gray (5G 4/1), very moist, dense to very dense, estimated 30-40% very fine to coarse sand, trace silt & clay, subangular gravel to 3/4" diameter, highly weathered and fractured, strong hydrocarbon odor.	Water sample B-10-15.2
	386		B-10-17.5				Becomes 10% silt, 10% clay, 35% very fine to predominantly medium to coarse sand, strong hydrocarbon odor, wet to saturated around gravel.	
20								
25								

JOB NUMBER: *140165.04-1*

Gettler-Ryan Inc.

Log of Boring B-11

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *98 Mac Arthur Blvd., Oakland, CA*
PROJECT NO.: *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/03/99*	WL (ft. bgs): *16.2* DATE: *06/03/99* TIME: *11:30 am*
DATE FINISHED: *06/03/99*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *8" hollow-stem auger*	TOTAL DEPTH: *31.5 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						ML	GRAVELLY SILT (ML) - very dark gray (5YR 3/1), slightly moist, stiff, estimated at 15-30% subangular gravel to 1-3/4" diameter, trace sand: FILL.	
5	0					CL	SILTY CLAY (CL) - yellowish brown (10YR 5/6), moist to very moist, stiff, trace very fine to medium sand.	
10	0		B-11-10.5			SW SC	SAND WITH CLAY AND GRAVEL (SW-SC) - yellowish brown (10YR 5/6), very moist to wet along clasts, very dense, estimated 10% clay, 35% subangular gravel to 3/4" diameter, very fine to coarse sand, well graded.	
	0		B-11-14			ML	CLAYEY SILT (ML) - grayish brown (10YR 5/2), very moist to wet, stiff.	
15	6					SW SM ML	SAND WITH SILT AND GRAVEL (SW-SM) - yellowish brown (10YR 5/6), wet, estimated 10-15% silt, 30-40% subangular gravel to 3/8" diameter, very fine to coarse sand, well graded.	Water sample B-11-16.2
20	0						CLAYEY SILT (ML) - yellowish brown (10YR 5/6), saturated, very stiff, homogenous.	
25	0		B-11-24.5					

Gettler-Ryan Inc.

Log of Boring B-11

PROJECT: *Former Tosco 76 Branded Facility No. 1871*

LOCATION: *96 Mac Arthur Blvd., Oakland, CA*

DEPTH feet	PID (ppm)	BLOWS/FT. #	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
	0		B-11-29			ML	CLAYEY SILT (ML) – dark greenish gray (5G 4/1), saturated, very stiff, homogenous.	Hydropunch attempt from 29.5 to 31.5 feet; no water after 1/2 hour.
33								
38								
43								
48								
53								
58								

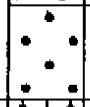
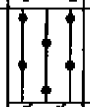
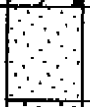
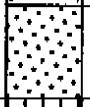
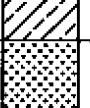
Gettler-Ryan Inc.

Log of Boring B-12

PROJECT: *Former Tosco 76 Branded Facility No. 1871*	LOCATION: *98 Mac Arthur Blvd., Oakland, CA*
PROJECT NO.: *140165.04-1*	CASING ELEVATION:
DATE STARTED: *06/04/99*	WL (ft. bgs): *19.5* DATE: *06/04/99* TIME: *2:15 pm*
DATE FINISHED: *06/04/99*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *6" hollow-stem auger*	TOTAL DEPTH: *26.5 Feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Joel Greger*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						ML	Concrete. CLAYEY SILT (ML) – dark yellowish brown (10YR 4/6), moist, stiff: FILL.	
						SM	SILTY SAND (SM) – strong brown (10YR 4/6), moist, dense, estimated 20% silt, trace to 10% subangular gravel to 1/4" diameter, very fine to medium sand: FILL.	
5	0	27				ML	CLAYEY SILT WITH GRAVEL (ML) – dark gray (7.5YR N4/), very moist, hard, estimated at 30% angular gravel to 1.5" diameter: DISTURBED NATIVE SOIL.	
10	0	34	B-12-11.5				SANDY SILT WITH GRAVEL (ML) – strong brown (10YR 4/6), very moist, hard, estimated at 15% very fine sand, 25% subangular gravel to 3/4" diameter, gravel highly weathered.	
15	0	25	B-12-15.5				CLAYEY SILT (ML) – gray (5Y 5/1), wet to saturated, very stiff, homogenous.	
20	0	41	B-12-20.5				▽ Trace very fine to coarse sand.	Water sample B-12-19.5 (slurry); water came in after 2.5 hours, hole caved below 19.5 feet.
25	0	40	B-12-25 B-12-25.5 B-12-26				As above except no sand.	

JOB NUMBER: *140165.04-1*

MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS (MORE THAN HALF IS COARSER THAN NO. 200 SIEVE)	GRAVELS (MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE)	CLEAN GRAVELS WITH LITTLE OR NO FINES		GW	Well graded gravels with or without sand, little or no fines
				GP	Poorly graded gravels with or without sand, little or no fines
		GRAVELS WITH OVER 15% FINES		GM	Silty gravels, silty gravels with sand
				GC	Clayey gravels, clayey gravels with sand
	SANDS (MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE)	CLEAN SANDS WITH LITTLE OR NO FINES		SW	Well graded sands with or without gravel, little or no fines
				SP	Poorly graded sands with or without gravel, little or no fines
		SANDS WITH OVER 15% FINES		SM	Silty sands with or without gravel
				SC	Clayey sands with or without gravel
FINE-GRAINED SOILS (MORE THAN HALF IS FINER THAN NO. 200 SIEVE)	SILTS AND CLAYS (LIQUID LIMIT 50% OR LESS)			ML	Inorganic silts and very fine sands, rock flour, silts with sands and gravels
				CL	Inorganic clays of low to medium plasticity, clays with sands and gravels, lean clays
				OL	Organic silts or clays of low plasticity
	SILTS AND CLAYS (LIQUID LIMIT GREATER THAN 50%)			MH	Inorganic silts, micaceous or diatomaceous, fine sandy or silty soils, elastic silts
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic silts or clays of medium to high plasticity
HIGHLY ORGANIC SOILS				PT	Peat and other highly organic soils

PID	Volatile vapors in ppm
(2.5YR 6/2)	Soil color according to Munsell Soil Color Charts (1993 Edition)
BLOWS/FT.	Sample drive hammer weight – 140 pounds falling 30 inches. Blows required to drive sampler 1 foot are indicated on the logs.

———	Observed contact
– – – –	Inferred contact
▨	No soil sample recovered
■	"Undisturbed" sample
▽	First encountered groundwater level
▼	Static groundwater level

GETTLER - RYAN INC.
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UNIFIED SOIL CLASSIFICATION
ASTM D 2488-85
AND
KEY TO SAMPLING DATA

Gettler-Ryan, Inc.

Log of Boring SP-A

PROJECT: *Former Tosco (76) Service Station No. 1871*	LOCATION: *96 MacArthur Bouldvard, Oakland, California*
GR PROJECT NO. : *140165.10*	CASING ELEVATION:
DATE STARTED: *03/20/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/20/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *28 feet*
DRILLING COMPANY: *Cascade Drilling*	GEOLOGIST: *Clyde Galantine*

DEPTH (feet)

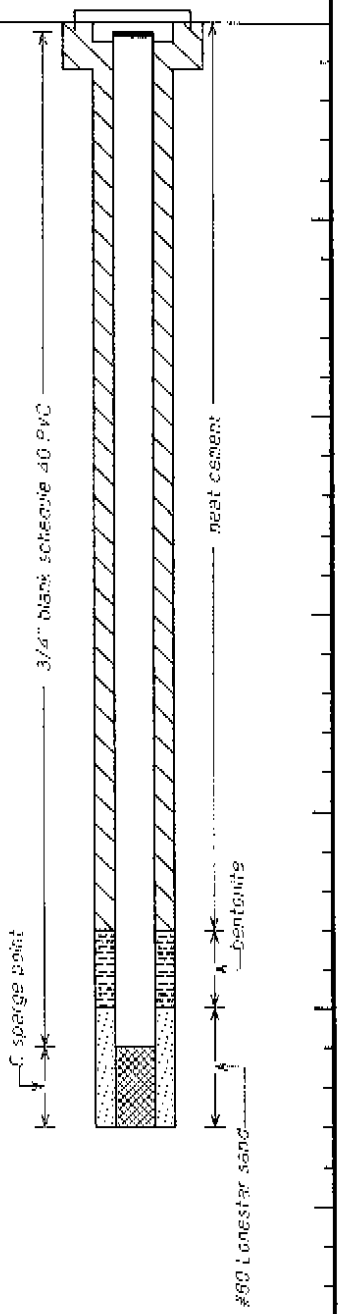
GEOLOGIC DESCRIPTION

Concrete and rebar – 6 inches thick.

Well boring was not logged or sampled.

Bottom of boring at 28 feet bgs.

WELL DIAGRAM



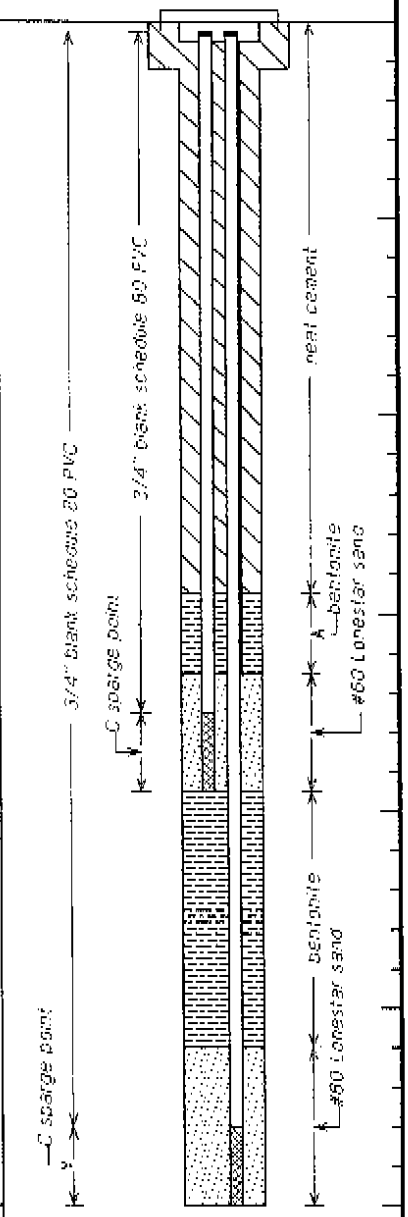
JOB NUMBER: *140165.10*

Gettler-Ryan, Inc.

Log of Boring SP-BD/BS

PROJECT: *Former Tosco (76) Service Station No. 1871*	LOCATION: *96 MacArthur Boulevard, Oakland, California*
GR PROJECT NO.: *140165.10*	CASING ELEVATION:
DATE STARTED: *03/20/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/20/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *30 feet*
DRILLING COMPANY: *Cascade Drilling*	GEOLOGIST: *Clyde Galantine*

DEPTH (feet)	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
0			Asphalt – 6 inches thick.	
			Well boring was not logged or sampled.	
5				
10				
15				
20				
25				
30			Bottom of boring at 30 feet bgs.	
35				



JOB NUMBER: *140165.10*

Gettler-Ryan, Inc.

Log of Boring SP-C

PROJECT: *Former Tosco (76) Service Station No. 1871*	LOCATION: *96 MacArthur Bouldvard, Oakland, California*
GR PROJECT NO.: *140165.10*	CASING ELEVATION:
DATE STARTED: *03/20/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/20/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *28 feet*
DRILLING COMPANY: *Cascade Drilling*	GEOLOGIST: *Clyde Galantine*

DEPTH (feet)

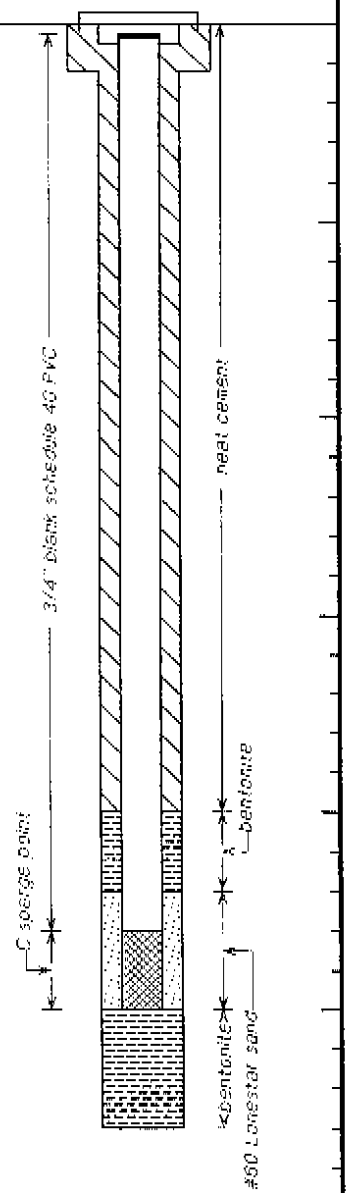
GEOLOGIC DESCRIPTION

Asphalt – 6 inches thick.

Well boring was not logged or sampled.

Bottom of boring at 28 feet bgs.

WELL DIAGRAM



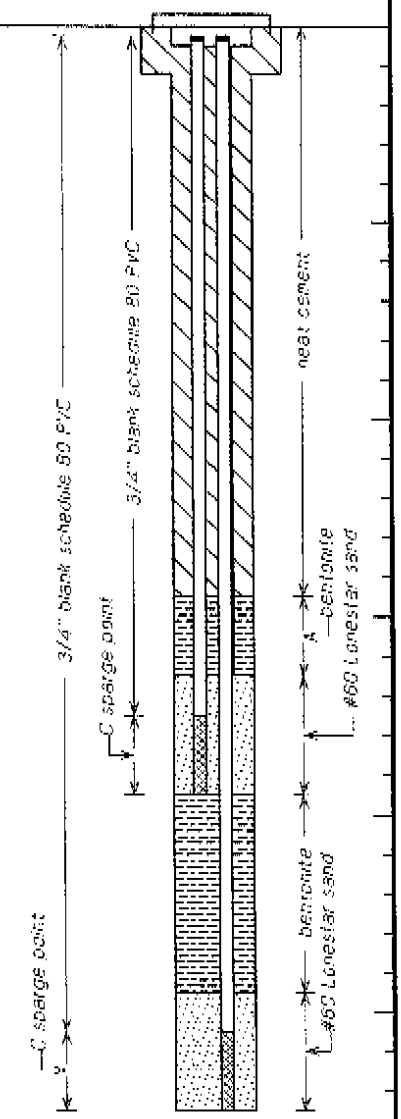
JOB NUMBER: *140165.10*

Gettler-Ryan, Inc.

Log of Boring SP-DD/DS

PROJECT: *Former Tosco (76) Service Station No. 1871*	LOCATION: *96 MacArthur Boulevard, Oakland, California*
GR PROJECT NO.: *140165.10*	CASING ELEVATION:
DATE STARTED: *03/18/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/18/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *27.5 feet*
DRILLING COMPANY: *Cascade Drilling*	GEOLOGIST: *Clyde Galantine*

DEPTH (feet)	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
0			Asphalt - 6 inches thick.	
			Well boring was not logged or sampled.	
5				
10				
15				
20				
25				
			Bottom of boring at 27.5 feet bgs.	
30				
35				



JOB NUMBER: *140165.10*

Gettler-Ryan, Inc.

Log of Boring SP-E

PROJECT: *Former Tosco (76) Service Station No. 1871*	LOCATION: *96 MacArthur Bouldvard, Oakland, California*
GR PROJECT NO. : *140165.10*	CASING ELEVATION:
DATE STARTED: *03/18/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/18/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *28 feet*
DRILLING COMPANY: *Cascade Drilling*	GEOLOGIST: *Clyde Galantine*

DEPTH (feet)

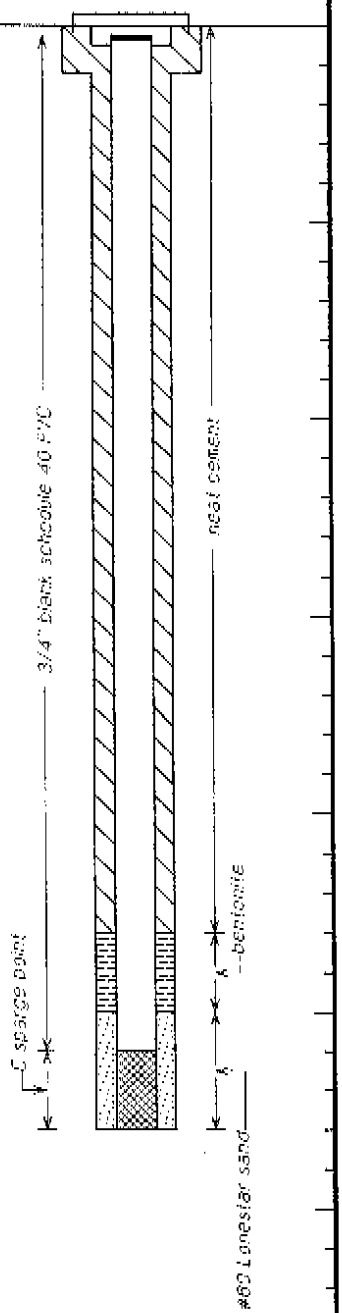
GEOLOGIC DESCRIPTION

Asphalt - 6 inches thick.

Well boring was not logged or sampled.

Bottom of boring at 28 feet bgs.

WELL DIAGRAM



JOB NUMBER: *140165.10*

Gettler-Ryan, Inc.

Log of Boring SP-F

PROJECT: *Former Tosco (76) Service Station No. 1871*	LOCATION: *96 MacArthur Bouldvard, Oakland, California*
GR PROJECT NO.: *140165.10*	CASING ELEVATION:
DATE STARTED: *03/19/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/19/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *28 feet*
DRILLING COMPANY: *Cascade Drilling*	GEOLOGIST: *Clyde Galantine*

DEPTH (feet)

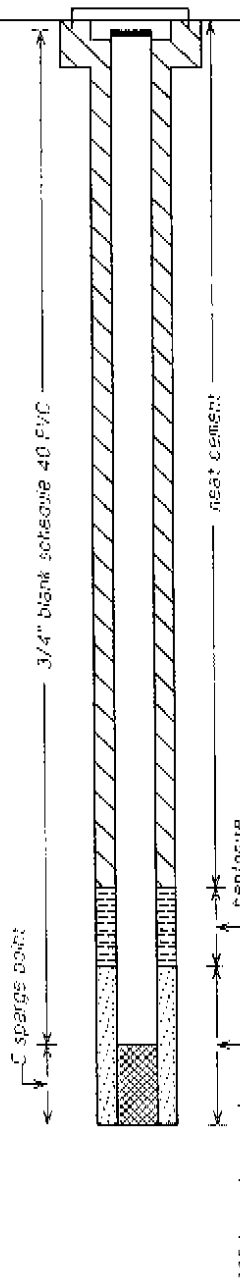
GEOLOGIC DESCRIPTION

Asphalt – 6 inches thick.

Well boring was not logged or sampled.

Bottom of boring at 28 feet bgs.

WELL DIAGRAM



JOB NUMBER: *140165.10*

Gettler-Ryan, Inc.

Log of Boring SP-G

PROJECT: *Former Tosco (76) Service Station No. 1871*	LOCATION: *96 MacArthur Bouldvard, Oakland, California*
GR PROJECT NO. : *140165.10*	CASING ELEVATION:
DATE STARTED: *03/20/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/20/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *28 feet*
DRILLING COMPANY: *Cascade Drilling*	GEOLOGIST: *Clyde Galantine*

DEPTH (feet)

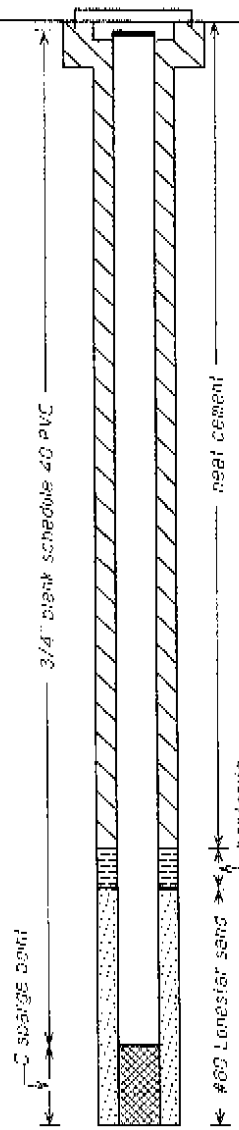
GEOLOGIC DESCRIPTION

Asphalt - 4 inches thick.

Well boring was not logged or sampled.

Bottom of boring at 28 feet bgs.

WELL DIAGRAM



JOB NUMBER: *140165.10*

Gettler-Ryan, Inc.

Log of Boring SP-H

PROJECT: *Former Tosco (76) Service Station No. 1871*	LOCATION: *96 MacArthur Boulevard, Oakland, California*
GR PROJECT NO.: *140165.10*	CASING ELEVATION:
DATE STARTED: *03/19/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/19/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *27 feet*
DRILLING COMPANY: *Cascade Drilling*	GEOLOGIST: *Clyde Galantine*

DEPTH (feet)

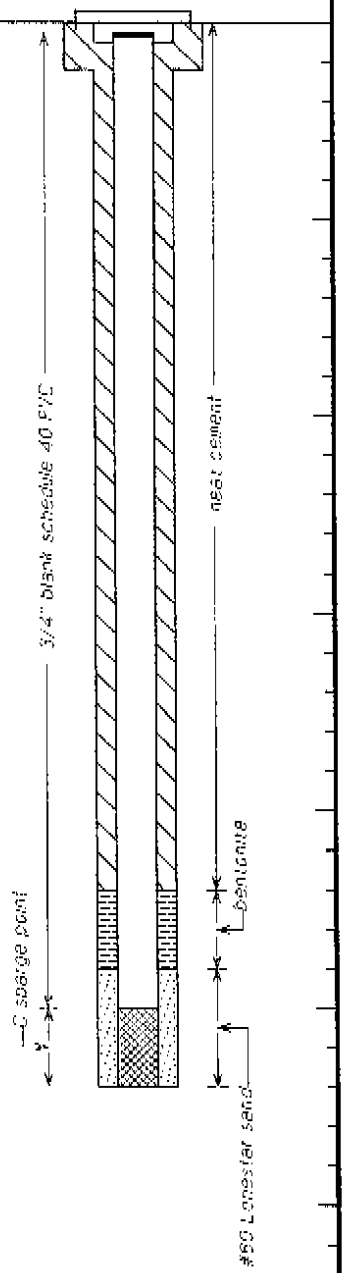
GEOLOGIC DESCRIPTION

Asphalt - 4 inches thick.

Well boring was not logged or sampled.

Bottom of boring at 27 feet bgs.

WELL DIAGRAM



JOB NUMBER: *140165.10*