

LOGGED BY P. Ryan	BEGIN DATE 7-26-08	COMPLETION DATE 7-27-08	BOREHOLE LOCATION (Lat/Long or North/East and Datum) N2120520.291 / E5994131.737 (NAD83)	HOLE ID RW5-R1
DRILLING CONTRACTOR Gregg Drilling and Testing, Inc.		BOREHOLE LOCATION (Offset, Station, Line) Offset 84ft R Sta 85+34 NB Alignment		SURFACE ELEVATION 93.094 ft (NAVD88)
DRILLING METHOD Mud Rotary		DRILL RIG Fraste Multi-drill (truck)		BOREHOLE DIAMETER 5 in. (soil); 4 in. (rock)
SAMPLER TYPE(S) AND SIZE(S) (ID)		SPT HAMMER TYPE Automatic, 140 lbs., 30-inch drop		HAMMER EFFICIENCY, ERI 76.2%
BOREHOLE BACKFILL AND COMPLETION Neat Cement Grout backfill		GROUNDWATER DURING DRILLING AFTER DRILLING (DATE) READINGS 11.1		TOTAL DEPTH OF BORING 46.2 ft

ELEVATION (ft)	DEPTH (ft)	Material Graphics	Description	Sample Location	Sample Number	Blows per 6 In	Blows per Foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (tsf)	Drilling Method	Casing Depth	Remarks
	0		4" ASPHALT CONCRETE, 6" UNREINFORCED CONCRETE, 3/4" BITUMENOUS LAYER.												
91.09	1		SANDY lean CLAY (CL), stiff, reddish brown, moist, SAND is fine.												
	2														
	3		SILTY SAND (SM), medium dense, dark yellowish brown, dry to moist, fine, soil appears to have been compacted. [COLMA SAND]	S1		20	56	100							
	4					26									
89.09	5					30									
	6			S2		7	18	89							
87.09	7		SANDY lean CLAY (CL), stiff, dark yellowish brown, moist, SAND is fine to medium.			8									
	8					10									
85.09	9		SEDIMENTARY ROCK (Sandstone), fine grained, intensely weathered, yellowish brown, very soft, very intensely fractured.	S3		41	50/	89							
	10		Moderately hard, intensely fractured, some fractures infilled with lean clay dipping ~45° up to 0.03' thick. 10.0', moderately fractured.	C4		50/	3.5"	94	33						
83.09	11														
	12			C5				86	50						
81.09	13		SEDIMENTARY ROCK (Sandstone Breccia), mylonized, pegmatic, with moderately soft fragments (gravel-size pieces of SANDSTONE), yellowish brown, moderately to slightly weathered, matrix is very soft, intensely fractured.												
	14														
79.09	15		SEDIMENTARY ROCK (Shale), 2-3" seam, moderately soft, intensely weathered, slickensides on fracture plane not parallel to shale bedding.												
	16														
77.09	17		SEDIMENTARY ROCK (Sandstone), fine to medium grained, moderately weathered, light grayish brown, moderately hard, moderately fractured, thin white vein fillings locally open.	C6				100	88						
	18														
75.09	19		17.8', slickensides on fracture plane.												
	20														
73.09	21		20.2', intensely fractured and broken.	C7				93	0						
	22		METAMORPHIC ROCK (Meta-Siltstone), dark gray, moderately weathered, moderately hard, intensely fractured and broken.												
71.09	23														
	24		METAMORPHIC ROCK (Meta-Graywacke Sandstone), fine to medium grained, moderately weathered, light grayish brown, moderately hard, very intensely fractured.	C8				82	0						End Box #1 at 21.8'
69.09	25		SANDSTONE BRECCIA, moderately weathered, moderately hard, pegmatic fragments in soft matrix. Mylonized from 23.65' to 26.1'.	C9				90							

(continued)

CALTRANS FORMAT DOYLEDRIVE ARUPLOGS 11-2-08.GPJ ARUP LIBRARY CALTRANS FORMAT.GLB 11/3/08



Department of Transportation
Division of Engineering Services
Geotechnical Services

REPORT TITLE BORING RECORD				HOLE ID RW5-R1	
DIST. 4	COUNTY S.F.	ROUTE 101	POSTMILE 8.3/9.4	EA 163701	
PROJECT OR BRIDGE NAME Doyle Drive Replacement Project					
BRIDGE NUMBER N/A		PREPARED BY T. Carroll		DATE 11-3-08	SHEET 1 of 2

Figure

ELEVATION (ft)	DEPTH (ft)	Material Graphics	Description	Sample Location	Sample Number	Blows per 6 In	Blows per Foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (tsf)	Drilling Method	Casing Depth	Remarks
67.09	25	•▲•▲	SANDSTONE BRECCIA, moderately weathered, moderately hard, pegmatic fragments in soft matrix.						22						
	26	••••	SEDIMENTARY ROCK (Sandstone), fine grained, moderately weathered, light grayish brown, moderately hard, intensely to moderately fractured.												
65.09	28	••••	Core run is broken into fragments up to 0.1' in diameter with occasional intact core lengths up to 0.4' long.	C10				100	0						Loss of fluid circulation; added drilling polymer
63.09	30	••••													
61.09	32	••••	32.0', occasionally vuggy, with gray lean CLAY on fracture surfaces, slightly weathered.	C11				100	0						
59.09	34	••••	35.0' - 35.5', steeply dipping fractures, slightly weathered to fresh, light grayish brown, continued white vein infilling.	C12				92	0						
57.09	36	••••													
55.09	38	••••	38.0', gold colored disseminated minerals noted (pyrite?)	C13				87	0						Mechanical break at 39'
	39	••••	38.6', moderately fractured, hard to moderately hard. Calcite vein dipping at 45°.												
53.09	40	••••	39.9', fracture dipping ~75° white vein infilling, intensely to moderately fractured.	C14				100	0						Continued circulation loss
	41	••••			C15				79	0					
51.09	42	••••	43.8' - 43.9', very fine grained. 44.0', mylonized zone.	C16				53	0						
	43	••••			C17				100	0					
49.09	44	••••		C18				100							
47.09	46	••••													
	47		Borehole terminated at a depth of 46.2 feet on 7/27/2008.												
45.09	48		See Boring Record Legend for soil classification chart and key to test data and sampler type.												



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Figure