

*Guide for Using the Hydrogeologic Classification System for Logging Water Well Boreholes by Thomas M. Hanna NGWA Press

TWP 95-15

63.5/45.6

25240

RECOVERY WELL R- 45

Depth in Feet	Sample Location	Blow Counts	PID Readings (pp)	USCS	Well Construction	DATE BEGAN: 8/21/96 DATE FINISHED: 8/21/96 GEOLOGIST: C. SULLIVAN EDITED BY: C. SULLIVAN CHECKED BY: S. KENT	NORTH COORDINATE: 9168.98 EAST COORDINATE: 7462.89 CASING ELEVATION: 97.31 GROUND ELEVATION: 94.8
0						Description	
5				SP		Dark brown to reddish brown, loose to medium dense, gravelly SAND with silt, moist, no odor, abundant organic debris (roots, wood and charcoal). SAND is moderately graded, fine to coarse grained, predominantly fine to medium grained, micaceous. GRAVEL is moderately graded, fine to medium, subrounded basalt.	
10							
15							
20							
25				SW		Olive gray, medium dense, gravelly SAND, moist, no odor. SAND is moderately to well graded, fine to medium grained, slightly weathered, micaceous. GRAVEL is moderately graded, fine to medium, rounded basalt.	
30				SW		Olive gray, salt and pepper, medium dense, gravelly SAND, moist, no odor. SAND is moderately to well graded, fine to medium grained, slightly weathered, micaceous. GRAVEL is moderately graded, fine to medium, rounded basalt.	
35							

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CLIENT: TESORO ALASKA PETROLEUM COMPANY

Project No: 06792-056-005

SEE LEGEND FOR EXPLANATION OF SYMBOLS AND TERMS

DAMES & MOORE

SB 7-12-a1 DACC

RECOVERY WELL R - 45

Depth in Feet	Sample Location	Blow Counts	PID Readings (pp)	USCS	Well Construction	DATE BEGAN: 8/21/96 DATE FINISHED: 8/21/96 GEOLOGIST: C. SULLIVAN EDITED BY: C. SULLIVAN CHECKED BY: S. KENT NORTH COORDINATE: 9168.98 EAST COORDINATE: 7462.89 CASING ELEVATION: 97.31 GROUND ELEVATION: 94.8
35						Description
40				SP		Olive gray, salt and pepper, medium dense, gravelly SAND, moist, no odor. SAND is poorly to moderately graded, fine to medium grained, slightly weathered, micaceous. GRAVEL is poorly graded, fine to medium, rounded basalt.
45				▼		
50				SW		Olive gray, medium dense, SAND with gravel, moist, no odor. SAND is well graded, fine to coarse grained, pred. quartz, micaceous slightly to moderately weathered. GRAVEL is moderately graded, fine to medium, well rounded.
55						
60		61	0	CL		Dark gray, stiff CLAY, moist-damp, no odor, no sheen. CLAY is massive, with traces of very fine sand in upper 2 inches of sample, micaceous. CLAY is slightly to moderately plastic (upper clay aquitard)

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Project No: 06792-056-005

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DAMES & MOORE

SB 7-12-21 DACB

RECOVERY WELL R - 45

Depth in Feet	Sample Location	Blow Counts	PID Readings (pp)	USCS	Well Construction	DATE BEGAN: 8/21/96	NORTH COORDINATE: 9168.98
						DATE FINISHED: 8/21/96	EAST COORDINATE: 7462.89
						GEOLOGIST: C. SULLIVAN	CASING ELEVATION: 97.31
						EDITED BY: C. SULLIVAN	GROUND ELEVATION: 94.8
						CHECKED BY: S. KENT	
						Description	
Boring terminated at 63.5 feet below ground surface. Groundwater encountered at 45 feet bgs during drilling. Static water measured at 45.68 on August 24, 1996. <u>WELL CONSTRUCTION DETAILS</u> BOREHOLE DIAMETER: Hollow stem auger drilling, CME-75. Auger flights: 8.25-inch inside diameter, 10.25-inch outside diameter. GROUT: Volclay grout, placed using 2" tremie pipe. Approximately 60 gallons of grout used (25 feet to 1 foot bgs). SEAL: (3) 50# bags of medium 3/8-inch bentonite chips, placed using 2" tremie pipe (45-48 feet bgs). FILTER PACK: (21) 50# bags of 10-20 Grade Colorado Silica Sand (63.5 feet to 28 feet bgs). Placed using 2" tremie pipe. WELL MONUMENT: Above ground steel riser, 8-inch diameter, set in concrete 2 feet bgs. Completed as recovery well, piped to existing recovery system. WELL CASING: 6-inch Schedule 40 PVC, flush-threaded. SCREENED CASING: 30 feet of 6", 0.020-inch slotted, continuously wound wire screen, flush-threaded, includes 6" diameter, flush-threaded PVC bottom cap. SCREENED INTERVAL: 32 to 62 feet below ground surface. WELL DEVELOPMENT: Approximately 275 gallons of water removed with bailer and submersible pump. Solids removed with sand bailer; screened interval developed using 4" submersible pump.							

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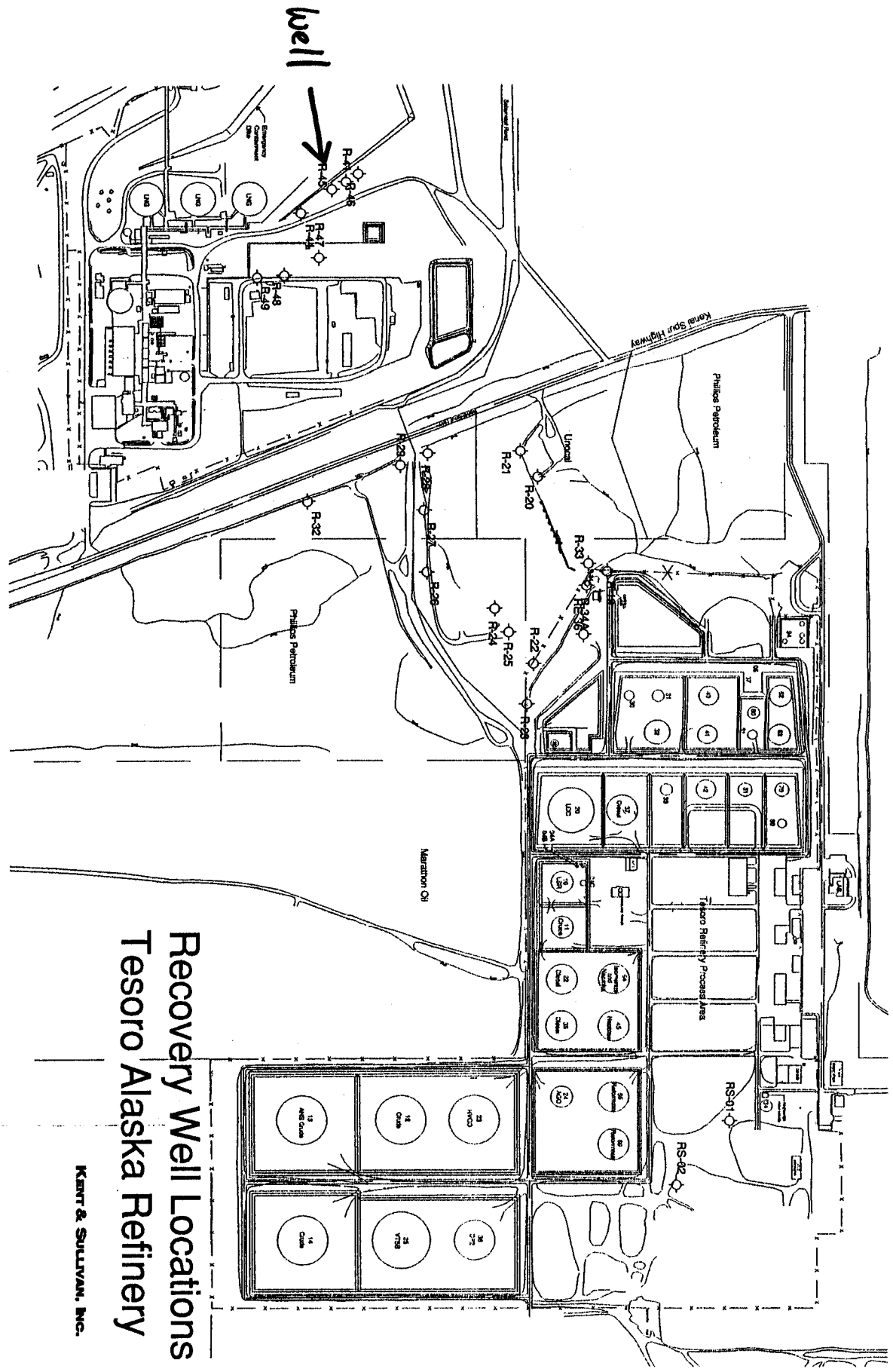
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Project No: 06792-056-005

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DAMES & MOORE

SB 7-12-21 D A C B



Recovery Well Locations
Tesoro Alaska Refinery

KENT & SULLIVAN, INC.