


**RAMCON**  
**Engineering & Environmental Contracting**  
**3751 Commerce Drive**  
**West Sacramento, CA 95691**

FAX # (916) 372-4209

Phone # (916) 372-7535

**FAX COVER SHEET**

<b>DATE:</b>	03-18-93
<b>TO:</b>	Ms Jennifer Eberte
<b>COMPANY:</b>	Alameda County, Department of Environmental Health
<b>FAX NUMBER:</b>	(501) 569-4757 Phone # (510) 271-4530
<b>FROM:</b>	Jaff Auchterlonie, RAMCON Project Geologist
<b>COMMENTS:</b>	DONGARY INVESTMENTS: Oakland- Site Assessment Data, RAMCON Job #476004
<p>As we discussed, I have included the bid package that has been sent out to prospective consultants. I will make every effort to complete the full report by the meeting on 03-23-93.</p> <p>If you have any questions please call.</p> <p>Sincerely, </p>	
Total Number of Pages (Including Cover Sheet): 12	
Document will not be followed up by: Mail <input type="checkbox"/> FED <input type="checkbox"/> COURIER <input type="checkbox"/>	

**IF THE COPY IS ILLEGIBLE OR PAGES ARE MISSING PLEASE CALL (916) 372-7535**

**RAMCON***Engineering & Environmental Contracting*

P.O. Box 1026  
3751 Commerce Drive  
West Sacramento, CA 95691

Phone (918) 372-7595  
Fax (918) 372-4209

February 3, 1993

**Prospective Site Clean-up Bidders**

**RE- SITE ASSESSMENT SUMMARY**

**DONGARY INVESTMENTS- OAKLAND**  
2225 7th Street  
Oakland, CA, 94607  
RAMCON Job #476003

Dear Bidders,

The attached information will assist in formulating a plan to clean-up the soil and groundwater at the subject. The site appears to have been impacted by the operation of a diesel fueling facility that contained eight underground storage tanks: 2,000 gallon waste oil tank, one 6,500 gallon bulk oil tank, and five 20,000 gallon diesel tanks. All eight tanks were removed on 7-27-92 and diesel was found floating on the surface of the water in the open excavation. To define the limits of the contamination at the site; 16 soil borings, (BH1 to BH16), were drilled and sampled using a continuous coring device. Three of the borings were converted to groundwater monitoring wells. Water samples were collected and analyzed. The monitor wells were also used to determine the groundwater gradient and flow direction.

Attached you will find the following information:

- 1) **RAMCON, 11-06-92, Soil & Ground Water Site Assessment Work Plan.**  
The report summarizes the removal of the underground storage tanks from the site and the analytical data from the soil samples collected after the removal of the tanks. In addition; a work plan to define the extent of the diesel contamination associated with the former fueling facility is presented.
- 2) A site map showing the location of the 13 soil borings, 3 monitor wells, excavations, two cross sections, and the estimated extent of the floating product on the water table.
- 3) Two Cross Sections, showing the lithology underlying the site.
- 4) An analytical summary of 19 soil samples analyzed for TPH as Diesel & Motor Oil and 13 soil samples analyzed for BTEX & TPH as Gasoline.
- ✓ 5) An analytical summary of the three water samples collected from the monitor wells.

Dongary Investments- Oakland  
February 3, 1993  
RAMCON Job #476004  
Page 2

- 6) Taber Consultants, 01-21-93, Sieve test of sand and permeability estimate.
- 7) Taber Consultants, 01-26-93, Results from groundwater gradient study.

All of the bore holes were drilled to a depth of 9 to 10 feet. Soil samples were collected using a continuous coring device from 4 to 9 feet. Three of the bore holes were drilled to 15 feet and converted to monitor wells: (BH15= MW-1, BH16= MW-2, and BH13= MW-3).

Based on study of the continuous cores collected from the 16 bore holes; ~~the contamination occurs from 4 feet to 7 feet.~~ The interval cored was 4 to 9 feet and in all the bore holes where the sand was encountered; no interval below the water table was recovered. The sand appears to liquify ahead of the auger flights when groundwater is encountered.

While drilling the soil borings, ~~the tidal influence in the area caused the groundwater level to rise and fall at least 6 inches.~~ On 12-14-92 at 8:00 AM the high water mark in the diesel tank pit was measured at 6' 6" and the actual water level was 7 feet.

Referring to the analytical summary in Table 1, bore holes (1, 2, 6, 9, 12, 13, 14, 15, and 16) did not contain free product. ~~Bore Holes (3, 4, 5, 7, 8, 10, and 11) contained free product.~~ 13 samples were analyzed for and did not detect BTEX and TPH as Gasoline above the laboratory detection limits.

The groundwater gradient, determined by Taber Consultants, is 0.0014 feet per foot and ~~the flow direction is S85W.~~ Note: an earlier study done on the Southern Pacific property, located on the east side of 7th street, measured a flow direction of North-Northwest. ~~Based on position of the diesel plume; it appears actual flow direction is to the North-West.~~ The difference in the flow direction may be caused by tidal effects or from percolating rain water causing local changes in the groundwater levels.

Referring to the analytical summary in Table 2, water samples collected from the three monitor wells were analyzed for and failed to detect BTEX, TPH as gasoline, TPH as Diesel & Motor Oil above the laboratory detection limits. (Note: undefined peaks, characteristic of Chlorinated Solvents, were present on all three of the BTEX G.C. curves. Consequently one water sample was analyzed for Volatile Organics (EPA method 624). ~~The following five solvents were detected C-1,2-DCE, 1,1-DCE, 1,1-DCA, TCE, and PCE.~~ Based on the undefined peaks occurring on BTEX G.C. curves; ~~the other two water samples appears to contain chlorinated solvents.~~

Dongary Investments- Oakland  
February 3, 1993  
RAMCON Job #476004  
Page 3

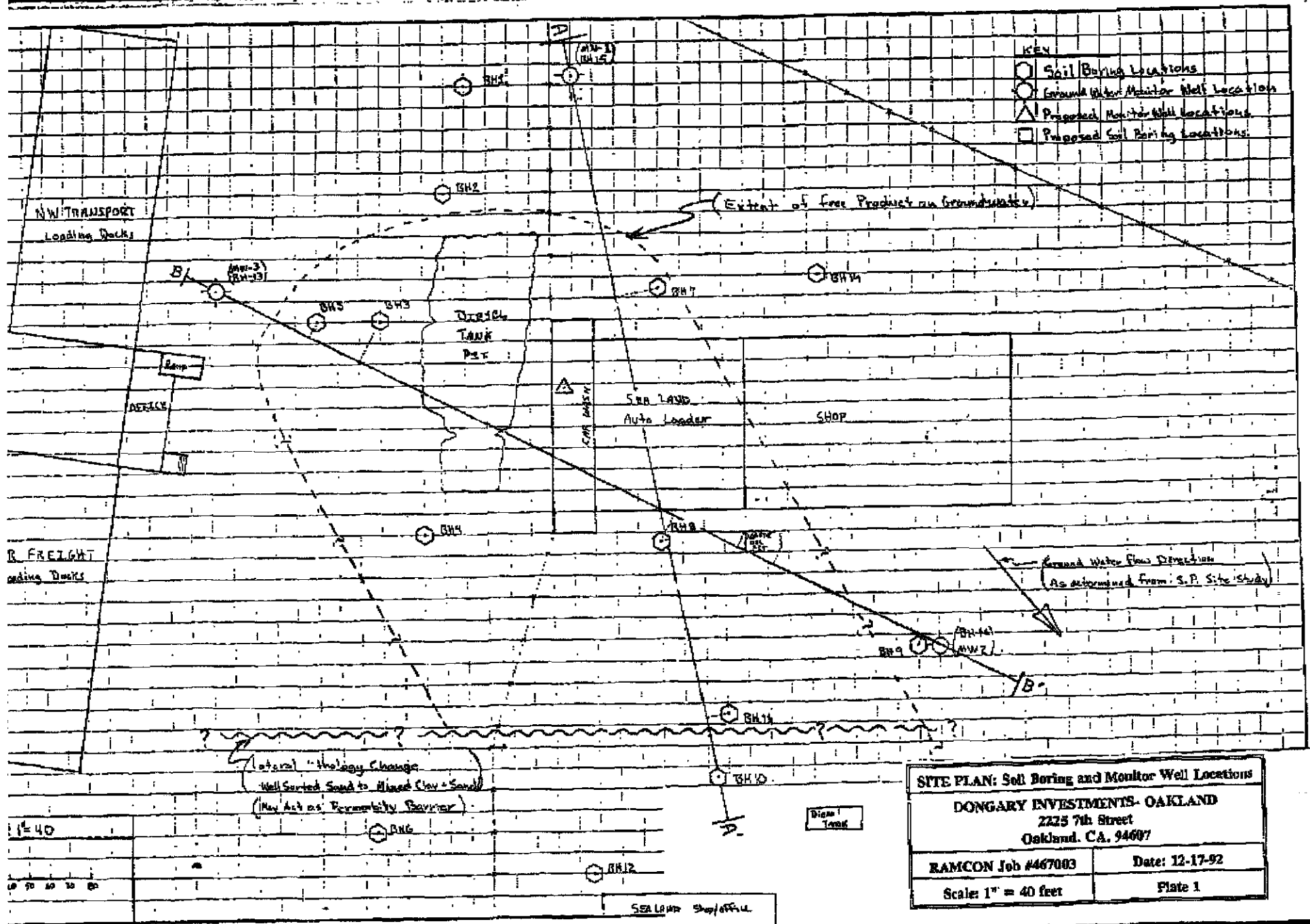
Referring to the site map and cross section A-A'; Bore holes (6, 10, and 12) encountered a mixed strata consisting of interbedded clay, sandy clay, gravel, and sand beds. Bore Hole 12 was left open over night and NO ground water came into the hole. The lateral stratigraphic change from well sorted sand to mixed clay and gravel may act as barrier to groundwater flow. The other 13 borings encountered a very uniform sand bed from 4 to 7 feet. The sand is well sorted and medium to fine grained.

If you have any questions please call Jaff Auchterlonie @ (916) 372-7535.

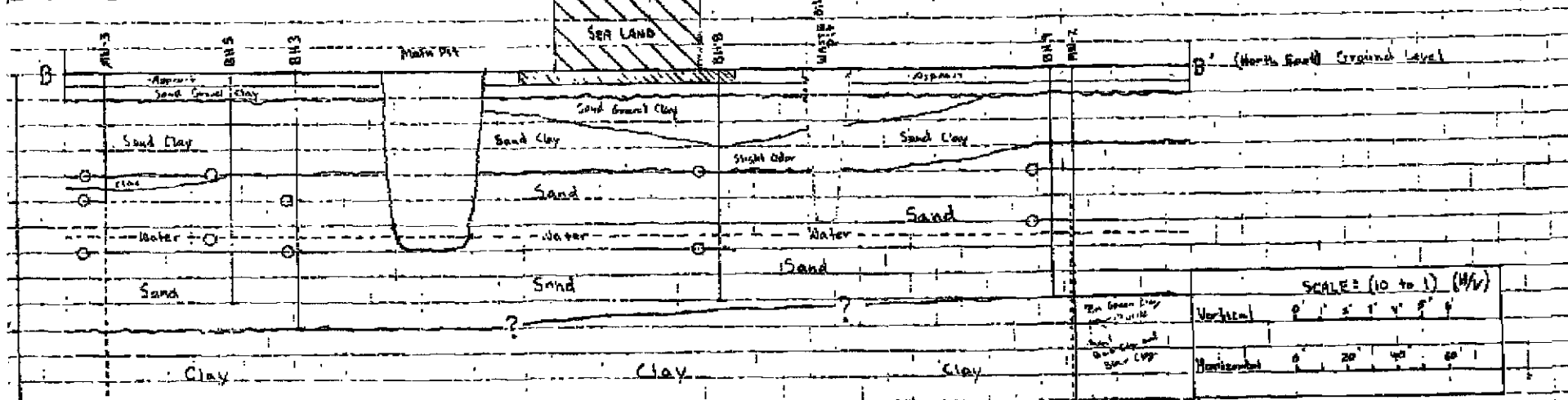
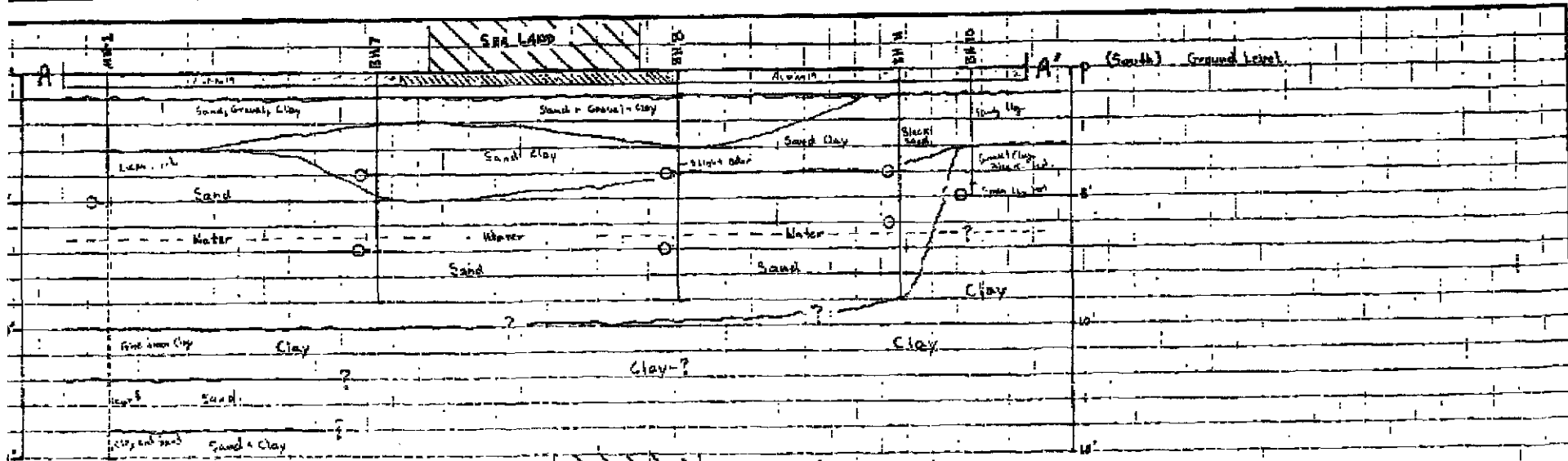
Sincerely,



Jaffrey S Auchterlonie  
RAMCON- Project Geologist



<b>SITE PLAN: Soil Boring and Monitor Well Locations</b> <b>DONGARY INVESTMENTS- OAKLAND</b> 2225 7th Street Oakland, CA. 94607	
<b>RAMCON Job #467003</b>	<b>Date: 12-17-92</b>
<b>Scale: 1" = 40 feet</b>	<b>Plate 1</b>



SCALE: (10 to 1) (H/V)

Vertical	0'	1'	2'	3'	4'	5'	6'
Horizontal	0'	20'	40'	60'			

1/2" Green Clay  
1/4" Sand  
1/8" Clay and  
Sand Clay

**CROSS SECTIONS A-A' & B-B'**

**DONGARY INVESTMENTS- OAKLAND**  
2225 7th Street  
Oakland, CA. 94607

<b>RAMCON Job #476093</b>	<b>Date: 01-21-93</b>
<b>Horizontal Scale: 1" = 40 feet</b>	<b>Plate 2</b>
<b>Vertical Scale: 1" = 4 feet</b>	

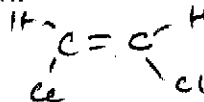
Small text at the bottom left corner, likely a scale or reference note.

TABLE 2: ANALYTICAL SUMMARY, DONGARY INVESTMENTS- Oakland				
3 Water Samples Collected 01-15-93, from Monitor Wells MW-1, MW-2, & MW-3 WEST, Sample Log #5701				
Sample #	Location	B - T - E - X	TPH as Diesel	TPH as Motor Oil
MW-1 *	115' South & 10' West	ND - ND - ND - ND ✓	ND ✓	ND ✓
MW-2 *	53' North & 180' West	ND - ND - ND - ND ✓	ND ✓	ND ✓
MW-3 *	15' South & 137' East	ND - ND - ND - ND ✓	ND ✓	ND ✓
Reporting Limits- ug/L or ppb		(0.30 ug/L)	( 50 ug/L)	

Note: All locations measured perpendicular from the North-East corner of the Car Wash.

\* = Laboratory noted discrete peaks on the BTEX G.C. curve. ~~Run sample MW-1 for Volatile Organics (EPA method 624) and detected the following solvents:~~

C-1,2- DCE 1.9 ug/L ✓  
 1,1- DCE 13 ug/L ✓  
 1,1- DCA 23 ug/L ✓  
 TCE 7.9 ug/L ✓  
 PCB 3.2 ug/L ✓



Based on preliminary field observation MW-1 and MW-3 are located up-gradient from the Diesel Pit. MW-2 is located down-gradient from the Diesel Pit and the Waste Oil Pit.

**Taber**  
Since 1954536 Galveston Street  
West Sacramento, CA 95691  
(916) 371-1690  
(707) 575-1568  
Fax (916) 371-7265

January 21, 1993

Ramcon  
P.O. Box 1026  
3751 Commerce Drive  
West Sacramento, California 95691

RECEIVED JAN 25 1993

Attention: Mr. Jaff Auchterlonie

Subject: Laboratory Test Results  
Oakland Site

2T2/393/04

Gentlemen:

Transmitted herewith are results of laboratory tests and permeability estimate per your request of December 22, 1992. The sample received was less than a full tube volume (disturbed). Laboratory tests include dry unit weight, moisture content, sieve analysis, specific gravity and porosity (calculated on the basis of full tube volume where applicable).

As requested, an estimate of permeability has been made for the sample submitted. The following estimate is based on Hazen's formula (which correlates permeability to grain size for clean sands), not on actual laboratory permeability testing. Permeability of the soil sample calculated on the basis of laboratory grain size analysis (attached) and the Hazen's formula is estimated at  $1 \times 10^{-2}$  cm/sec to  $1.5 \times 10^{-2}$  cm/sec. Permeability of actual on-site soils may vary significantly depending on density, fines content and/or other factors.

If you have any questions regarding the foregoing, please call. We appreciate this opportunity to be of service.

*Five to Medium Grained*

Very truly yours,

TABER CONSULTANTS

*Ralph J. Fisher*

Ralph J. Fisher

RJE/GDA/

Attachment: "Laboratory Test Results"

Distribution: Client (4)

Taber Consultants  
Engineers and Geologists





### GRAIN SIZE ANALYSIS

Client Ramcon Date \_\_\_\_\_ Job No. 2T2/393/04

Sample No.		1.92" Brass					
Sieve Opening	Sieve Size	% Passing	% Passing	% Passing	% Passing	% Passing	% Passing
Inches	m.m.						
4.00	101.6	4"					
3.00	76.2	3"					
2.50	63.5	2 1/2"					
2.00	50.8	2"					
1.50	38.1	1 1/2"					
1.00	25.4	1"					
.750	19.1	3/4"					
.500	12.7	1/2"					
.375	9.52	3/8"					
.312	7.93	5/16"					
.250	6.35	3					
.187	4.87	4					
.157	4.00	5					
.132	3.36	6					
.093	2.38	8					
.078	2.00	10	100	}			
.088	1.68	12					
.049	1.19	16			4%		
.033	.84	20					
.023	.59	30					
.016	.42	40	96				
.011	.29	50		}			
.009	.25	60			62%		
.008	.21	70					
.007	.17	80	34				
.006	.15	100		}			
.004	.10	140			30%		
.003	.07	200	4				
Sand Equivalent				}			
Sample Weight (grams)			365.9				

Additional Laboratory Tests

62% of Sample is (-2140.17 mm)

Dry Unit Weight = 89.5 #/ft<sup>3</sup>

Specific Gravity = 2.66

Moisture Content = 10.7%

Porosity = .458



536 Galveston Street  
West Sacramento, CA 95691  
(916) 371-1690  
(707) 575-1568  
Fax (916) 371-7265

January 26, 1993

Ramcon, Inc.  
3751 Commerce Drive  
West Sacramento, California 95691

RECEIVED JAN 27 1993

Attention: Mr. Michael Ramos

Subject: Environmental Services  
ANR Trucking Facility  
Oakland, California

2P3/392/94

Gentlemen:

This letter presents the results of environmental services performed by Taber Consultants at the above site. These services were performed pursuant to our proposal dated December 31, 1992 as authorized by your office.

Monitoring Wells MW-1, MW-2 and MW-3 were developed on January 8, 1993. Development was performed by mechanical surging and pumping using a 2-inch QED well development pump. Due to mechanical difficulties with the pump much of the development water was removed using a new, disposable polyethylene bailer for each well. Development water was collected and retained on site in 55-gallon drums. Development proceeded until the water yield was clear and relatively free of suspended material. Due to an obstruction in its screened section, well MW-3 was only developed to a depth approximately 9 feet below the casing top.

follow up

The top of casing elevation for each well was surveyed relative to a temporary benchmark established at the center of the top step of the office building entry. An elevation of 100.00 feet was assumed for the benchmark. The surveyed elevations are presented on Table-1, below.

Depth to groundwater from the top of casing was measured in each well using a Solonist water meter and the groundwater elevation calculated based upon the survey elevations. Results of the measurements are presented in Table-1, below. Based upon the surveyed elevations and the north arrow direction shown on the Site Plan provided to us by your office, a groundwater flow direction of S85°W was calculated. The groundwater

Taber Consultants  
Engineers and Geologists

Ramcon, Inc.  
January 26, 1993  
Page 2

**Taber**  
Since 1954  
2P3/392/94

gradient was calculated to be 0.0014 feet per foot. The well locations, groundwater elevations and groundwater flow direction are shown on Figure-1, which was adapted from your site plan.

TABLE 1

	<u>MW-1</u>	<u>MW-2</u>	<u>MW-3</u>
Top of Casing Elevation	97.72	98.59	99.22
Groundwater Depth	5.21	6.21	6.44
Groundwater Elevation	92.51 (+1.13')	92.38 (0)	92.78 (+1.40')

Note: All elevations in feet relative to temporary benchmark assumed elevation of 100.00 ft.

Groundwater samples for analytical testing were collected from the wells on January 15, 1993. Prior to sampling, each monitoring well was purged by evacuating a minimum of three well-casing volumes of water using a disposable bailer. During purging, groundwater was monitored for pH, electrical conductivity and temperature. Purged water was considered representative of fresh formation water when (1) the pH stabilized within  $\pm 0.2$  pH units, (2) electrical conductivity stabilized with  $\pm 5\%$  and (3) temperature was within  $\pm 1^\circ\text{C}$  for three consecutive field measurements.

Following purging, samples were collected with a new disposable polyethylene bailer for each well and decanted into one amber liter bottle and two 45 ml VOA vials. All samples collected in the field were immediately sealed, labeled and placed in an ice chest cooled to approximately  $4^\circ\text{C}$ , and transported to West Laboratory in Davis, California using proper chain-of-custody protocol.

The analyses requested for each sample included total petroleum hydrocarbons as diesel by Method 8015 (modified) and BTE & X by Method 8020. Results of the water analytical tests are to be forwarded directly to your office.

\* \* \* \* \*

Ramcon, Inc.  
January 26, 1993  
Page 3

**Taber**  
Since 1954  
2P3/392/94

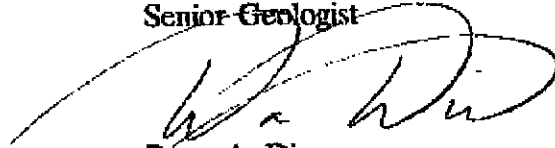
The opportunity to be of continued service is sincerely appreciated. If you have any questions regarding the above, do not hesitate to call us.

Very truly yours,

TABER CONSULTANTS

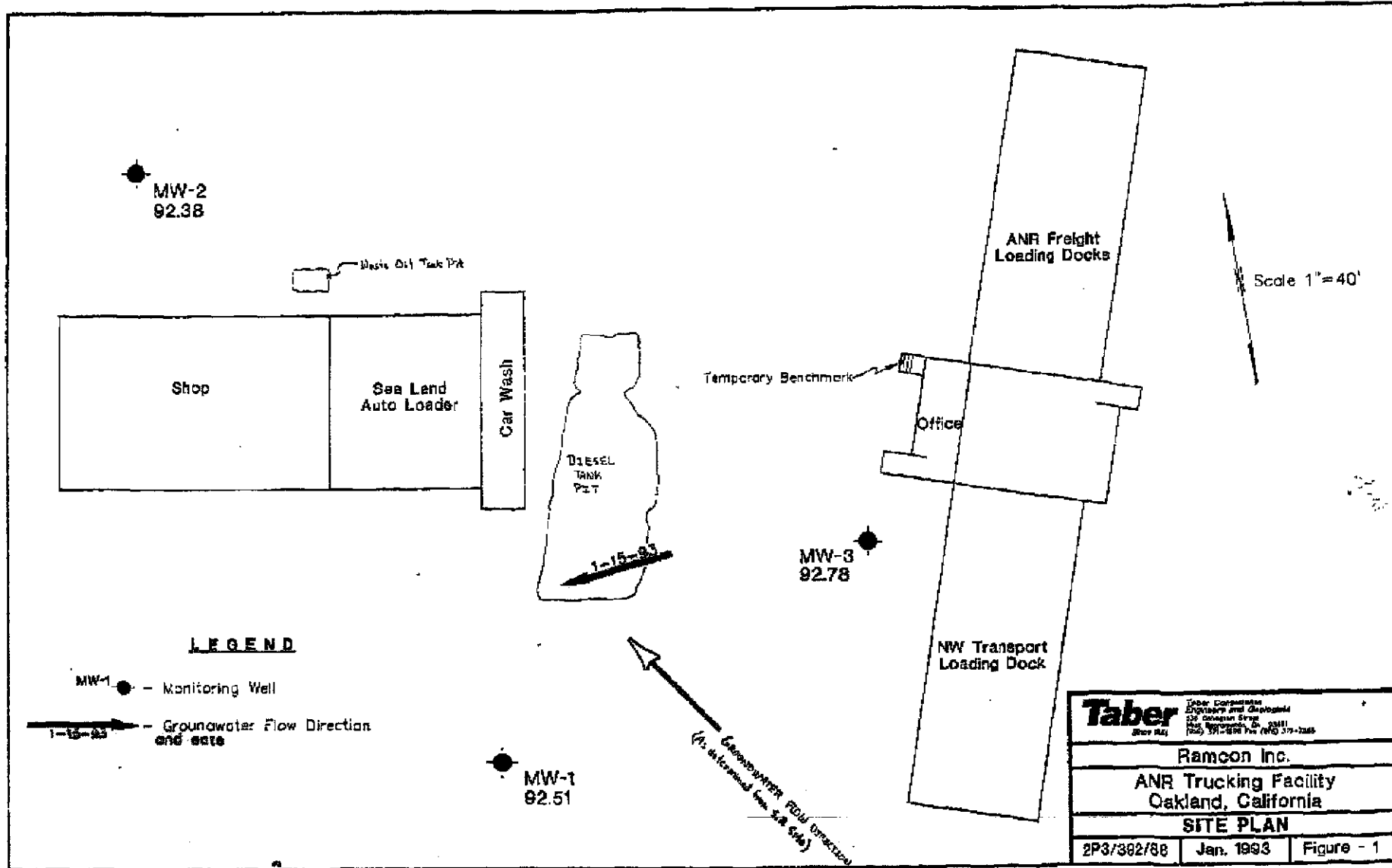


Thomas M. Skaug  
Senior Geologist



Dave A. Diem  
Environmental Manager

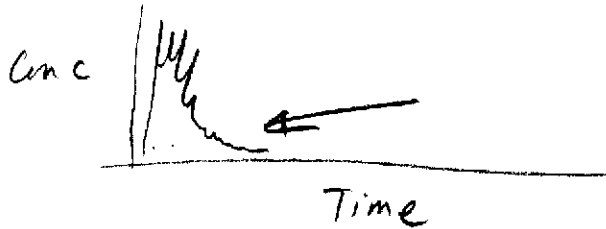
Distribution: Addressee (3)



<b>Taber</b> <small>Taber Engineering and Geologists        237 Colquhoun Street        Modesto, CA 95231        (916) 391-8881 Fax: (916) 379-2285</small>		
<b>Ramcon Inc.</b>		
<b>ANR Trucking Facility        Oakland, California</b>		
<b>SITE PLAN</b>		
2P3/382/88	Jan. 1993	Figure - 1

BTEX Curve = 5030, 8020  
Purge trap - PID

① 5030 8015 (gas) FID -



②

