

EPMI

Environmental Project Management, Inc.



January 2, 1997

Mr. Jim Nelson
Project Manager
Johnson Nissan
4660 Gambell Street
Anchorage, Alaska 99503

Re: Remediation Estimate

Dear Mr. Nelson:

Environmental Project Management, Inc. (EPMI) is using the data collected during the drilling operations to produce a cost estimate for conducting remediation at your site. The estimate pertains to the costs (labor, equipment, materials, product) associated with using the UC-40 bioaugmentation technology. As we discussed in our recent telephone conversation, we are making some inquiries and running additional test related to the nutrient content in your soil. EPMI is performing these services at no additional costs to Johnson Nissan.

EPMI has estimated that the contaminated soil ranges in depth from approximately two (2) to approximately nineteen (19) feet below ground surface. An approximate estimate of the volume of contaminated soil on your property is approximately 1,040 cubic yards. EPMI will base the remediation estimate on treating the contamination on your property. The contamination concentrations of gasoline, diesel, and total BTEX vary widely. We have attached a table which tabulates the samples results for your review.

EPMI asked the laboratory to test a few soil and groundwater samples for solvents. No solvents were detected in the samples tested by the laboratory.

The nutrients in the soils seems to be higher than what we would expect to encounter at your site. I bring this to your attention, because the nutrient content can effect our estimate. The estimate is based on the volume of Oil Breaker, O2TR, Microbes, and Nutrient required to degrade the hydrocarbons. EPMI needs to investigate the elevated nutrient content in the soil. The nutrient content in the soil helps us determine the proper application procedures. EPMI will provide Johnson Nissan with an estimate as soon as possible after we finish our inquires.

Prior to starting the project, EPMI will need to speak to the Alaska Department of Environmental Conservation (DEC) to establish the "No Further Action" criteria. Before beginning the remediation effort, EPMI will require and assist Johnson Nissan with establishing the remediation levels and monitoring required by the Alaska DEC. The criteria will need to be agreed upon in writing. By establishing the criteria, the project can be completed efficiently. Establishing the criteria will require submitting a Corrective Action Plan (CAP) to the DEC. EPMI will submit our CAP to the DEC. At that time, the DEC will have questions and possibly require some modifications to the plan.

Due to your construction schedule, EPMI suggests moving forward with the project in January. This will provide time for the paper work with the DEC to be completed, contracts to be finalized, the remediation to be completed by spring, and the confirmation sampling to be completed. Attached is an estimated time line for completing the remediation.

If you have any questions, please contact me at 208/338-5974.

Sincerely,



Mike Lester
Sr. Project Manager

Attachments

GEOLOGIC LOG OF BORING

Boring No. B-15
Sheet 1 of 1

Project Name: EDM F Johnson / USGS Start Date 11/5/96 Hour 1315
 Project Location: 4660 Campbell, Ancl Finish Date 11/5/96 Hour 1515
 Project No.: _____ Driller Discovery
 Logged by: Cam/Pas Drill Type/Method Moore B-61
 Sampling Method SSAD w/ 300/B
 Boring Diameter 8" nominal
 Total Depth 21.5'
 Depth to Water _____ Date/Hour _____

PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description Lithology, (USCS classification), color, constituents, density, moisture, other features, (Interpretation)	Summary Log
	G	S	F						
373				S-1 1330 hrs		0 1 2 3 4 5 5 6 7	22 22 12 9	Brown Gravelly Sand	
1290				S-2(2A) 1340 hrs		8 9 10 10 11 12	4 4 6 8	* Note: Sample S-2A from ~9.5 to 10' (Gravelly Sand) 2 Samples from 9.5-11.5' 2 1/2" A Brown Gravelly Sand Grades to Gray Sand with Gravel incl Gray Sandy Silt Layers Saturated (H.C. odor)	
911				S-3 1355 hrs		13 14 15	8 8 6 9	Gray Silt, incl. Sand Layers Saturated (Mod H.C. odor)	
1412				S-4 1410 hrs		16 17 18	6 10 9 9	Gray Silt w/ Sand Layers & Gravelly Sand Layers, Saturated (H.C. odor)	
95				S-5 1425 hrs		19 20 21	6 9 10 12	Gray Silt, Mod Partic, Hard	
94				S-6 1445 hrs		22	6	Gray Clayey Silt, Hard	(BIS S-6 = Dup-2)

Environmental
Sampling

GEOLOGIC LOG OF BORING

Boring No. B-10/MS
Sheet 1 of 1

Project Name: EPRI Johnson/Nissan
Project Location: 4660 Embury Ave
Project No.: _____
Logged by: Law/DES

Start Date 4/14/96 Hour ~0945
Finish Date 4/14/96 Hour _____
Driller Discovery
Drill Type/Method Mobile B-61
Sampling Method SHD w/ 300 LB
Boring Diameter 8" NOMINAL
Total Depth _____
Depth to Water _____ Date/Hour WELL

Petrolog	PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description Lithology, (USCS classification), color, constituents, density, moisture, other features, (Interpretation)	DETAIL Summary Log
		G	S	F						
						0				
						1				
						2				
	19				S-1	3	11	SANDY GRAVEL		
					1005 hrs	4	21			
						5	13			
						6	10			
	26				S-2	5	4	GRAVELLY SAND		
					1015 hrs	6	3			
						7	1	~6 to 7' PEAT LAYER		
						8	1			
	36				S-3	8	2	BROWNISH GREY MOTTLED SILT TO SANDY SILT w/ TR ORGANICS		
					1025 hrs	9	4			
						10	5			
						11	4			
	41				S-4	10	5	BROWN TO GRAY SILTY SAND		
					1035 hrs	11	4			
						12	5	(SATURATED)		
						13	6			
	59				S-5	13	6	GRAY SILTY CLAY, MOIST, HARD		
					1050 hrs	14	14	~13.5 TO 14.5 GRAVELLY SAND TO SANDY GRAVEL, TR SILT 6% 1 1/2"		
						15	15	~14.5 TO 16.5 GRAY SAND		
						16	8	GRAY SILT, HARD (~16.5 TO 17')		
	8.7				S-6	15	8			
					1105 hrs	16	8			
						17	11			
						18				
						19				
						20				

Environmental
Sampling

GEOLOGIC LOG OF BORING

Boring No. B-11

Sheet 1 of 1

Project Name: EPINE JOHNSEN/NISSEN
 Project Location: 4660 CAMBELL
 Project No.: _____
 Logged by: GM/RES

Start Date 1/14/96 Hour 1330
 Finish Date 1/14/96 Hour 1515
 Driller DESCOBY
 Drill Type/Method MOBILE B-61
 Sampling Method SSHD w/ 300 LB
 Boring Diameter 8" NOMINAL
 Total Depth ~19'
 Depth to Water _____ Date/Hour _____

Pitot Reading	PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description Lithology, (USCS classification), color, constituents, density, moisture, other features, (Interpretation)	Summary Log
		G	S	F						
						0				
						1				
						2				
	89			S-1 1340 hrs		3	10	Brown silty sandy gravel w/ trace organics. 1 1/2" gravel		
						4	11			
						5	10			
	218			S-2 1350 hrs		6	7	Sandy silt at ~5.5' w/ brown mottling & TR organics, stiff, wet Driller notes put ~6 to 7' Brown		
						7	5			
						8	2			
	130			S-3 1400 hrs		9	3	Brown silt to sandy silt w/ TR organics, TR gray mottling		
						10	7	marginally plastic, mild dilatant saturated		
						11	6			
	92			S-4 1415 hrs		12	5	Brown fine to med sand w/ some gravel, moist		
						13	7			
						14	7			
	13			S-5 1425 hrs		15	7	gray silt to clayey silt w/ random gravels 1" and fine sand layers		
						16	9			
						17	8			
	13			S-6 1435 hrs		18	4	gray fine to med sand, saturated includes silt layer at ~16'		
						19	6			
						20	12			
						21	11			
	19			S-7 1445 hrs		22	9	gray clayey silt CL to CL-ML		
						23	11	hard, wet		
						24	12			
						25	-	(Spoon Full)		

GEOLOGICAL LOG OF BORING

Project Name: EPMI Johnson/Visa Start Date: 11/14/96 Hour: 1330
 Project Location: 4660 Campbell Finish Date: 11/14/96 Hour: 1515
 Project No.: _____ Driller: Discovery
 Logged by: AM/ORS Drill Type/Method: MOBILA B-61
 Sampling Method: SSHAD w/ 300 LB
 Boring Diameter: 8" NOMINAL
 Total Depth: ~191
 Depth to Water: _____ Date/Hour: _____

Vertical Scale	PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description	
		G	S	F					Lithology, (USCS classification), color, constituents, density, moisture, other features, (interpretation)	Summary Log
	8.9				S-1 1340 hrs	0 1 2 3 4	10 11 10 7	BROWN SILTY SANDY GRAVEL w/ TRACE ORGANICS. 1 1/2" GVL		
	218				S-2 1350 hrs	5 6 7	5 4 4 5	SANDY SILT AT ~5.5' w/ BROWN MOTTLING & TR ORGANICS, STIFF, WET DRILLER NOTES THAT ~6 TO 7' BROWN		
	130				S-3 1400 hrs	8 9 10	2 3 7 6	BROWN SILT TO SANDY SILT w TR ORGANICS, TR GRAY MOTTLING MARGINALLY PLASTIC, MED DILATANT SATURATED		
	92				S-4 1415 hrs	1 2	5 7 7	BROWN FINE TO MED SAND w/ SOME GRAVEL, MOIST		
	13				S-5 1425 hrs	3 4	7 9 8 8	GRAY SILT TO CLAYY SILT w/ RANDOM GRAVELS 1" AND FINE SAND LAYERS		
	13				S-6 1435 hrs	15 6 7	4 6 12 11	GRAY FINE TO MED SAND, SATURATED INCLUDES SILT LAYER AT ~16'		
	19				S-7 1445 hrs	8 9	9 11 12	GRAY CLAYY SILT CL TO CL-ML HARD, WET (SPOON FULL)		
						2.0				

Project Name: EPRI Topping/Nostr
Project Location: 4660 Cambell Area
Project No.: _____
Logged by: Cam/ORS

Start Date 11/14/96 Hour 1520
Finish Date 11/14/96 Hour 1730
Driller Discovery
Drill Type/Method Mobil B-61
Sampling Method SSHD w/ 300 LB
Boring Diameter 8" NOMINAL
Total Depth ~19.5
Depth to Water _____ Date/Hour _____

Pit Log	PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description Lithology, (USCS classification), color, constituents, density, moisture, other features, (interpretation)	Summary Log
		G	S	F						
						0				
						1				
						2				
	330			S-1 1545 hrs		3	12 7			* Dup-1 = 5-
						4	6 4		Feet Log at ~4.5'	
						5	12			
	1710			S-2 (1600 hrs)		6	6 4		BROWN SILT TO SANDY SILT Layered w/ silty sand, incl.	
						7	8		Grey mottling w TR ORGANICS	
	1530			S-3 1620		8	2 6		Brown with grey mottling silt to sandy silt with fine silty	
						9	6 7		sand layers & TR ORGANICS	
						10	6			
	1480			S-4 1630 hrs		1	6 8		Grey med to fine sand (sp) SATURATED	
						2	7			
						3	12 12		Grey sand, dense, saturated	
	149			S-5 1640 hrs		4	14 14			
						15	6		Grey sand to ~15.5'	
	38			S-6 1700 hrs		6	6 11 12		Grey clayey silt (CL-ML) HARD, SATURATED, MOD PLASTIC	
						7				
	14			S-7 1715 hrs		8	8 9		Grey clayey silt, HARD	
						9	5 13			
						0				

GEOLOGIC LOG OF BORING

Boring No. B-13
Sheet 1 of 1

Project Name: EPRI Johnson/Nissan
Project Location: 4660 Campbell Ave
Project No.: _____
Logged by: LAN/QLS

Start Date 11/15/96 Hour 0925
Finish Date 11/15/96 Hour 1105
Driller Discovery
Drill Type/Method MOBILE B-61
Sampling Method SSAB w/ 300 LB
Boring Diameter 5" NOMINAL
Total Depth ~19 ft
Depth to Water _____ Date/Hour _____

PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description Lithology, (USCS classification), color, constituents, density, moisture, other features, (interpretation)	Summary Log
	G	S	F						
956				S-1 0945 hrs		0 1 2 3 4 5	7 4 3 5	GRAY SANDY GRAVEL GRADES TO SANDY ORGANIC SILT 2" peat layer at ~ 4.5'	
650				S-2 0955 hrs		6 7 8	6 7 8	BROWN SILT INCL. GRAY MOTTLING & RANDOM GRAVEL & SILTY SAND LAYERS	
1038				S-3 1005 hrs		8 9 10	4 11 10	GRAY SAND GRADES TO SANDY GRAVEL w/ TR SILT, 6VL 1 1/2" WRT, (FANT H.C. ODOR)	
318				S-4 1010 hrs		10 11 12	5 6 12	GRAY SAND w/ 1" SILT LAYER SATURATED (FANT H.C. ODOR)	
570				S-5 1020 hrs		13 14	8 13 12 13	GRAY SAND, SATURATED (FANT H.C. ODOR)	
760				S-6 1030 hrs		15 16	5 13 14 14	GRAY SAND, SATURATED (FANT H.C. ODOR)	
680				S-7 1040 hrs		17 18 19	5 9 11	GRAY SAND GRADING TO GRAY CLAYEY SILT (CL-MC TO CL)	

GEOLOGIC LOG OF BORING

Boring No. B-14
Sheet 1 of 1

Project Name: EPRI Johnson/Nelson
Project Location: 4660 Campbell Ave
Project No.: _____
Logged by: cmu/ORS

Start Date 11/15/96 Hour 1120
Finish Date 11/15/96 Hour 1250
Driller Discovery
Drill Type/Method 1165112 B-61
Sampling Method SHD w/ 300 LB
Boring Diameter 8" nominal
Total Depth ~1625
Depth to Water _____ Date/Hour _____

PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description Lithology, (USCS classification), color, constituents, density, moisture, other features, (interpretation)	Summary Log
	G	S	F						
110				S-1 1130 hrs		0 1 2 3 4	16 13 5 3	Gray Sandy Gravel to ~3.5' Silt from ~3.5' to 4'	
40				S-2 1145 hrs		5 6 7	3 4 4 5	Gray silt to sandy silt, Mottled, 14% moist, some incl roots	
84				S-3 1200 hrs		8 9	3 5 6 7	Gray & Brown Sandy Silt, with silty sand layers at top saturated	
68				S-4 1210 hrs		10 11 12	5 11 13 13	Gray Gravely Sand, Gr 1 1/2" saturated (faint H.C. odor)	
129				S-5 1220 hrs		13 14 15	8 9 10 11 4	Gray Clay + Clay Silt saturated, grades to gray clay	
43				S-6 1230 hrs		16 17	8 9 10	Gray silt to clay/silt	

JOHNSON NISSAN

SAMPLE ID	SAMPLE DEPTH	PID	PETRO FLAG	HCID			GRO	Benzene	Toluene	AK101			Total BTEX	AK102 DRO	8240
				Gas	Diesel	Oil				Ethylbenzene	P & M Xylene	o-Xylene			
B-10/S1	2.5-4.5	19													
B-10/S2	5.0-7.0	26		ND	ND	ND	1.64	.0356 J	0.0452	ND	0.0415	ND	6.08		
B-10/S3	7.5-9.5	36													
B-10/S4	10.0-12.0	41													
B-10/S5	12.5-14.5	5.9													
B-10/S6	15.0-17.0	8.7					1.29	0.0623	0.113	ND	0.0846	0.0519	ND		
B-11/S1	2.5-4.5	8.9													
B-11/S2	5.0-7.0	218					6.80	3.08	ND	ND	ND	ND	11.1		
B-11/S3	7.5-9.5	130													
B-11/S4	10.0-12.0	92	0	ND	ND	ND									
B-11/S5	12.5-14.5	13													
B-11/S6	15.0-17.0	13													
B-11/S7	17.5-19.0	19	23				0.652	ND	ND	ND	ND	ND	ND		
B-12/S1	2.5-4.5	330	2098												
B-12/S2	5.0-7.0	1710	600	Detect	ND	ND	7550	87.6	575	7.99	613	220	1210		
B-12/S3	7.5-9.5	1530					2030	43.6	213	54.2	200	77	30.3		ND
B-12/S4	10.0-12.0	1480													
B-12/S5	12.5-14.5	149					51.3	6.23	10.7	1.42	5.28	1.98	4.75		
B-12/S6	15.0-17.0	38	38	ND	ND	ND									
B-12/S7	17.5-19.5	14					2.82	0.103	0.25	0.0703	0.293	0.121	9.33		
B-13/S1	2.5-4.5	956		Detect	ND	ND									
B-13/S2	5.0-7.0	650					5.87	0.111	0.317	0.153	0.475	0.179	44.7		
B-13/S3	7.5-9.5	1038		ND	ND	ND									
B-13/S4	10.0-12.0	318					21.9	1.89	0.486	0.83	2.58	0.661	5.33		
B-13/S5	12.5-14.5	270	39	ND	ND	ND									
B-13/S6	15.0-17.0	760													
B-13/S7	17.5-19.5	680	91	(clay in Petroflag sample)			1.23	0.0532	ND	ND	0.0480	ND	8.58		
B-13/S8	17.5-19.6	14	14	(sandy Petroflag sample)											
B-14/S1	2.5-4.5	110		ND	ND	ND									
B-14/S2	5.0-7.0	40					0.917	0.0956	ND	ND	ND	ND	ND		
B-14/S3	7.5-9.5	84		ND	ND	ND									
B-14/S4	9.5-11.5	68	14	ND	ND	ND									
B-14/S5	12.5-14.5	129		ND	ND	ND	11.0	0.385	0.133	0.583	0.207	0.0621	8.87		
B-14/S6	14.5-16.0	43					2.58	0.134	0.0980	ND	ND	ND	6.94		
B-15/S1	4.5-6.5	373		ND	ND	ND	18.7	1.19	2.48	0.460	1.77	0.770	ND		
B-15/S2A	7.5-9.5	No Recovery													
B-15/S2	9.5-10.0	1290	2549				936	44.4	77.8	8.53	78.8	61.9	120		
B-15/S3	10.5-12.0	711		Detect	ND	ND	1740	39.3	195	50.7	211	85.1	169		ND
B-15/S4	12.5-14.5	142													
B-15/S5	14.5-16.5	95													
B-15/S6	17.0-19.0	94													
B-15/S6	19.5-21.5	94					2.26	0.0600 J	0.103	ND	0.116	ND	6.67		
B-15/S6	DUP	2											8.67		

dup 414

TRANSMITTAL**EPMI****LETTER 6030.14**

To: Mr. Jim Nelson
Project Manager
Johnson Nissan
4660 Gambell Street
Anchorage, Alaska 99503

907/762-5242 Phone
907/762-5212 Fax

cc: Project File - EPMI

From: Mike Lester
EPMI
200 N 3rd, Suite 3
Boise, Idaho 83702

208/338-5974 Phone
208/343-4925 Fax

323-0946

Date: December 30, 1996

Project: Johnson Nissan Remediation

Subject: Cost Estimate

Shipment: Facsimile - 13, pages including this cover.

COMMENT

Pursuant to your request, EPMI has attached the documents pertaining to the work completed at your site. We are looking forward to preparing a cost estimate for you. EPMI is looking into the nutrient content of your soil and will provide you with a cost estimate once our analysis are completed.

ATTACHMENTS

- 1) Letter
- 2) Analytical Results (Table - lab report hard copies to be mailed)
- 3) Gantt Chart (Draft)
- 4) Boring Field Logs

JOHNSON NISSAN COST ESTIMATE

Submitted by EPMI

ITEM NO.	DESCRIPTION	EST. QTY.	UNIT	UNIT PRICE	TOTAL AMOUNT
1	Work Plans	3	each	\$ 3,945.93	\$ 11,837.78
2	Mobe/Demobe	1	each	\$ 14,159.32	\$ 14,159.32
3 Treatment					
3.1	1 Personnel	1		\$ 61,721.40	\$ 61,721.40
3.2	1 Equipment/Materials/Subs	1		\$ 27,348.00	\$ 27,348.00
3.3	1 Products	1		\$ 63,914.40	\$ 63,914.40
3.4	3 Per Diem	30		\$ 168.00	\$ 15,120.00
Subtotal:					\$ 168,103.80
4	Report	1	each	\$ 3,945.93	\$ 3,945.93
Estimated Total =					\$ 198,046.83

17-20

JOHNSON NISSAN

SAMPLE ID	SAMPLE DEPTH	PID	PETRO FLAG	HCID		Oil	GRO	Benzene	Toluene	AK101			Total BTEX	AK102 DRO	8240
				Gas	Diesel					Ethylbenzene	P & M Xylene	o-Xylene			
B-10/S1	2.5-4.5	19		ND	ND	ND	1.64	.0356 J	0.0452	ND	0.0415	ND	6.08		
B-10/S2	5.0-7.0	26													
B-10/S3	7.5-9.5	36													
B-10/S4	10.0-12.0	41													
B-10/S5	12.5-14.5	5.9													
B-10/S6	15.0-17.0	8.7													
B-10/S7	17.5-19.0														
B-11/S1	2.5-4.5	8.9					6.80	3.08	ND	ND	ND	ND	11.1		
B-11/S2	5.0-7.0	218													
B-11/S3	7.5-9.5	130													
B-11/S4	10.0-12.0	92	0	ND	ND	ND									
B-11/S5	12.5-14.5	13													
B-11/S6	15.0-17.0	13													
B-11/S7	17.5-19.0	19	23												
B-12/S1	2.5-4.5	330	2098				7550	87.6	575	7.99	613	220	1210		
B-12/S2	5.0-7.0	1710	600	Detect	ND	ND	2030	43.6	213	54.2	200	77	30.3	ND	
B-12/S3	7.5-9.5	1530													
B-12/S4	10.0-12.0	1480													
B-12/S5	12.5-14.5	149					51.3	6.23	10.7	1.42	5.28	1.98	4.75		
B-12/S6	15.0-17.0	38	38	ND	ND	ND									
B-12/S7	17.5-19.5	14					2.82	0.103	0.25	0.0703	0.293	0.121	9.33		
B-13/S1	2.5-4.5	956		Detect	ND	ND	5.87	0.111	0.317	0.153	0.475	0.179	44.7		
B-13/S2	5.0-7.0	650													
B-13/S3	7.5-9.5	1038		ND	ND	ND	21.9	1.89	0.486	0.83	2.58	0.661	5.33		
B-13/S4	10.0-12.0	318													
B-13/S5	12.5-14.5	270	39	ND	ND	ND									
B-13/S6	15.0-17.0	760													
B-13/S7	17.5-19.5	680	91	(clay in Petroflag sample)			1.23	0.0532	ND	ND	0.0480	ND	8.58		
B-13/S8	17.5-19.6		14	(sandy Petroflag sample)											
B-14/S1	2.5-4.5	110		ND	ND	ND	0.917	0.0356	ND	ND	ND	ND	ND		
B-14/S2	5.0-7.0	40													
B-14/S3	7.5-9.5	84		ND	ND	ND									
B-14/S4	9.5-11.5	68	14	ND	ND	ND									
B-14/S5	12.5-14.5	129		ND	ND	ND	11.0	0.385	0.133	0.583	0.207	0.0621	8.87		
B-14/S6	14.5-16.0	43		2.58	0.134	0.0980							6.94		
B-15/S1	4.5-6.5	373		ND	ND	ND	18.7	1.19	2.48	0.460	1.77	0.770	ND		
B-15/S2A	7.5-9.5	No Recovery													
B-15/S2	9.5-10.0														
B-15/S3	10.5-12.0	1290	2549	936	44.4	77.8							120		
B-15/S4	12.5-14.5	711		1740	39.3	195							169		
B-15/S5	14.5-16.5	142		Detect	ND	ND									
B-15/S6	17.0-19.0	95													
B-15/S6	19.5-21.5	94		2.26	0.0600 J	0.103							8.67		
B-15/S6	DUP	94											8.67		

dup 414



CT&E Ref.# 966183001
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-10MW S-4
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:37
 Collected Date/Time 11/14/96 10:35
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By

Sample Remarks:
 DRO - Heavier hydrocarbon contributing to diesel range quantitation.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	85.17		%	SM18 2540G			11/20/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	1.64	0.732	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
Benzene	0.0356 J	0.0366	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
Toluene	0.0452	0.0366	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
Ethylbenzene	0.0366 U	0.0366	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
P & M -Xylene	0.0415	0.0366	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
o-Xylene	0.0366 U	0.0366	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
Diesel Range Organics	6.08	4.67	mg/Kg	AK102 DRO		11/22/96	11/26/96	MMP



CT&E Ref.# 966183002
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-10MW S-6
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:37
 Collected Date/Time 11/14/96 11:05
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	87.89		%	SM18 2540G			11/20/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	1.29	0.658	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
Benzene	0.0623	0.0329	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
Toluene	0.113	0.0329	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
Ethylbenzene	0.0329 U	0.0329	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
P & M -Xylene	0.0946	0.0329	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
o-Xylene	0.0519	0.0329	mg/Kg	AK101/8020		11/14/96	11/26/96	MMP
Diesel Range Organics	4.46 U	4.46	mg/Kg	AK102 DRO		11/22/96	11/26/96	MMP



CT&E Ref.# 966183003
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-11 S-2
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:37
 Collected Date/Time 11/14/96 13:50
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:
 DRO - Heavier hydrocarbons contributing to diesel range quantitation.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	80.29		%	SM18 2540G			11/20/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	6.80	0.846	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Benzene	3.08	0.0423	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Toluene	0.0423 U	0.0423	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Ethylbenzene	0.0423 U	0.0423	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
P & M -Xylene	0.0423 U	0.0423	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
o-Xylene	0.0423 U	0.0423	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Diesel Range Organics	11.1	4.90	mg/Kg	AK102 DRO		11/22/96	11/26/96	MMP



CT&E Ref.# 966183004
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-11 S-6
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/03/96 11:00
 Collected Date/Time 11/14/96 14:35
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C. Ede*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	83.36		%	SM18 2540G			11/20/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	0.652	0.559	mg/Kg	AK101/8020		11/14/96	11/30/96	MMP
Benzene	0.0280 U	0.0280	mg/Kg	AK101/8020		11/14/96	11/30/96	MMP
Toluene	0.0280 U	0.0280	mg/Kg	AK101/8020		11/14/96	11/30/96	MMP
Ethylbenzene	0.0280 U	0.0280	mg/Kg	AK101/8020		11/14/96	11/30/96	MMP
P & M -Xylene	0.0280 U	0.0280	mg/Kg	AK101/8020		11/14/96	11/30/96	MMP
o-Xylene	0.0280 U	0.0280	mg/Kg	AK101/8020		11/14/96	11/30/96	MMP
Diesel Range Organics	4.64 U	4.64	mg/Kg	AK102 DRO		11/22/96	11/26/96	MMP



CT&E Ref.# 966183005
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-12 S-1
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/03/96 11:00
 Collected Date/Time 11/14/96 15:45
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C. Ede*

Sample Remarks:
 DRO - Pattern appears to be consistent with weathered gasoline.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	92.72		%	SM18 2540G			11/20/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	7550	141	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Benzene	87.6	7.04	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Toluene	575	7.04	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Ethylbenzene	7.99	7.04	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
P & M -Xylene	613	7.04	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
o-Xylene	220	7.04	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Diesel Range Organics	1210	422	mg/Kg	AK102 DRO		11/22/96	11/26/96	MMP



CT&E Ref.# 966183006
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-12 S-2
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/03/96 11:00
 Collected Date/Time 11/14/96 16:00
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By

Sample Remarks:

DRO - Pattern appears to be consistent with a weathered gasoline.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	85.81		%	SM18 2540G			11/20/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	2030	105	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Benzene	43.6	5.26	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Toluene	213	5.26	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Ethylbenzene	54.2	5.26	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
P & M -Xylene	200	5.26	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
o-Xylene	77.0	5.26	mg/Kg	AK101/8020		11/14/96	11/27/96	MMP
Volatiles by GC/MS								
Bromochloromethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Chloromethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Vinyl chloride	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Bromomethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Chloroethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,1-Dichloroethene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Carbon disulfide	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Methylene chloride	0.58 U	0.58	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
trans-1,2-Dichloroethene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,1-Dichloroethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
2-Butanone (MEK)	0.58 U	0.58	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Bromochloromethane <IS>	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Chloroform	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,1,1-Trichloroethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Carbon tetrachloride	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Benzene	5.2	1.2	mg/Kg	SW846-8240		11/19/96	11/26/96	MCM
1,2-Dichloroethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Trichloroethene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM



CT&E Ref.# 966183006
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-12 S-2
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/03/96 11:00
 Collected Date/Time 11/14/96 16:00
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C. Ede*

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Bromodichloromethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
cis-1,3-Dichloropropene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
4-Methyl-2-pentanone	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Toluene	40.1	1.2	mg/Kg	SW846-8240		11/19/96	11/26/96	MCM
trans-1,3-Dichloropropene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,1,2-Trichloroethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Tetrachloroethene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
2-Hexanone	0.58 U	0.58	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Dibromochloromethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Chlorobenzene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Ethylbenzene	13.3	1.2	mg/Kg	SW846-8240		11/19/96	11/26/96	MCM
P & M -Xylene	49.2	1.2	mg/Kg	SW846-8240		11/19/96	11/26/96	MCM
o-Xylene	18.9	1.2	mg/Kg	SW846-8240		11/19/96	11/26/96	MCM
Styrene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Bromoform	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Bromobenzene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,1,2,2-Tetrachloroethane	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,3-Dichlorobenzene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,4-Dichlorobenzene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,2-Dichlorobenzene	0.058 U	0.058	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Diesel Range Organics	30.3	4.58	mg/Kg	AK102 DRO		11/22/96	11/27/96	MMP



CT&E Ref.# 966183008
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-13 S-1
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:38
 Collected Date/Time 11/15/96 09:45
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By

Stephen C Ede

Sample Remarks:

DRO - Heavier hydrocarbons contributing to diesel range quantitation.
 GRO8020 - Difluorobenzene surrogate for FID does not meet QC goals due to matrix interference

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init.
Total Solids	82.15		%	SM18 2540G			11/20/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	177	2.47	mg/Kg	AK101/8020		11/15/96	11/28/96	MMP
Benzene	5.52	0.124	mg/Kg	AK101/8020		11/15/96	11/28/96	MMP
Toluene	0.987	0.124	mg/Kg	AK101/8020		11/15/96	11/28/96	MMP
Ethylbenzene	6.45	0.124	mg/Kg	AK101/8020		11/15/96	11/28/96	MMP
P & M -Xylene	11.5	0.124	mg/Kg	AK101/8020		11/15/96	11/28/96	MMP
o-Xylene	3.47	0.124	mg/Kg	AK101/8020		11/15/96	11/28/96	MMP
Diesel Range Organics	44.7	4.85	mg/Kg	AK102 DRO		11/22/96	11/26/96	MMP



CT&E Ref.# 966183010
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-13 S-7
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/03/96 11:00
 Collected Date/Time 11/15/96 10:40
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C. Ede*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	78.83		%	SM18 2540G			11/20/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	1.23	0.896	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Benzene	0.0532	0.0448	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Toluene	0.0448 U	0.0448	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Ethylbenzene	0.0448 U	0.0448	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
P & M -Xylene	0.0480	0.0448	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
o-Xylene	0.0448 U	0.0448	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Diesel Range Organics	8.58	5.06	mg/Kg	AK102 DRO		11/22/96	11/26/96	MMP



CT&E Ref.# 966183011
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-14 S-1
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:38
 Collected Date/Time 11/15/96 11:30
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	97.47		%	SM18 2540G			11/20/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	0.917	0.646	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Benzene	0.0356	0.0323	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Toluene	0.0323 U	0.0323	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Ethylbenzene	0.0323 U	0.0323	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
P & M -Xylene	0.0323 U	0.0323	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
o-Xylene	0.0323 U	0.0323	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Diesel Range Organics	3.99 U	3.99	mg/Kg	AK102 DRO		11/22/96	11/27/96	MMP



CT&E Ref.# 966183012
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-14 S-5
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:38
 Collected Date/Time 11/15/96 12:20
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:
 DRO - Heavier hydrocarbons contributing to diesel range quantitation.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	79.81		%	SM18 2540G			11/20/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	11.0	0.952	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Benzene	0.385	0.0476	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Toluene	0.133	0.0476	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Ethylbenzene	0.583	0.0476	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
P & M -Xylene	0.207	0.0476	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
o-Xylene	0.0621	0.0476	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Diesel Range Organics	8.87	5.00	mg/Kg	AK102 DRO		11/22/96	11/27/96	MMP



CT&E Ref.# 966183013
Client Name EPMI
Project Name/# Johnson/Nissan, 4660 Gambell
Client Sample ID B-14 S-6
Matrix Soil
Ordered By
PWSID

Client PO#
Printed Date/Time 12/02/96 16:38
Collected Date/Time 11/15/96 12:30
Received Date/Time 11/18/96 17:00
Technical Director: Stephen C. Ede

Released By [Signature]

Sample Remarks:

Table with 10 columns: Parameter, Results, PQL, Units, Method, Allowable Limits, Prep Date, Analysis Date, Init. Rows include Total Solids, GRO/8020 Combo, Volatile Pet. Hydrocarbons, Benzene, Toluene, Ethylbenzene, P & M -Xylene, o-Xylene, Diesel Range Organics.



CT&E Ref.# 966183015
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-15 S-2A
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:38
 Collected Date/Time 11/15/96 13:40
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:

DRO - Pattern appears to be consistent with weathered gasoline.
 DRO - Heavier hydrocarbons contributing to diesel range quantitation.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	91.27		%	SM18 2540G			11/21/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	936	66.0	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Benzene	44.4	3.30	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Toluene	77.8	3.30	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Ethylbenzene	8.53	3.30	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
P & M -Xylene	78.8	3.30	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
o-Xylene	61.9	3.30	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Diesel Range Organics	120	4.34	mg/Kg	AK102 DRO		11/22/96	11/27/96	MMP



CT&E Ref.# 966183016
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID B-15 S-2
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:38
 Collected Date/Time 11/15/96 13:40
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By

Sample Remarks:

DRO - Pattern appears to be consistent with weathered gasoline.
 DRO - Heavier hydrocarbons contributing to diesel range quantitation.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	87.89		%	SM18 2540G			11/21/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	1740	74.4	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Benzene	39.3	3.72	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Toluene	195	3.72	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Ethylbenzene	50.7	3.72	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
P & M -Xylene	211	3.72	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
o-Xylene	85.1	3.72	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Volatiles by GC/MS								
Bromochloromethane	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Chloromethane	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Vinyl chloride	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Bromomethane	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Chloroethane	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,1-Dichloroethene	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Carbon disulfide	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Methylene chloride	0.55 U	0.55	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
trans-1,2-Dichloroethene	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,1-Dichloroethane	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
2-Butanone (MEK)	0.55 U	0.55	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Bromochloromethane <IS>	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Chloroform	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
1,1,1-Trichloroethane	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Carbon tetrachloride	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM
Benzene	14.1	5.5	mg/Kg	SW846-8240		11/19/96	11/26/96	MCM
1,2-Dichloroethane	0.055 U	0.055	mg/Kg	SW846-8240		11/19/96	11/25/96	MCM



CT&E Ref.# 966183017
Client Name EPMI
Project Name/# Johnson/Nissan, 4660 Gambell
Client Sample ID B-15 S-6
Matrix Soil
Ordered By
PWSID

Client PO#
Printed Date/Time 12/02/96 16:38
Collected Date/Time 11/15/96 14:45
Received Date/Time 11/18/96 17:00
Technical Director: Stephen C. Ede

Released By [Signature]

Sample Remarks:

Table with 10 columns: Parameter, Results, PQL, Units, Method, Allowable Limits, Prep Date, Analysis Date, Init. Rows include Total Solids, GRO/8020 Combo, Volatile Pet. Hydrocarbons, Benzene, Toluene, Ethylbenzene, P & M -Xylene, o-Xylene, Diesel Range Organics.



CT&E Ref.# 966183018
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID DUP-1
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:38
 Collected Date/Time
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:
 DRO - Pattern appears to be consistent with weathered gasoline.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	91.74		%	SM18 2540G			11/21/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	6630	91.1	mg/Kg	AK101/8020		11/15/96	12/02/96	MMP
Benzene	56.0	4.56	mg/Kg	AK101/8020		11/15/96	12/02/96	MMP
Toluene	517	4.56	mg/Kg	AK101/8020		11/15/96	12/02/96	MMP
Ethylbenzene	164	4.56	mg/Kg	AK101/8020		11/15/96	12/02/96	MMP
P & M -Xylene	681	4.56	mg/Kg	AK101/8020		11/15/96	12/02/96	MMP
o-Xylene	256	4.56	mg/Kg	AK101/8020		11/15/96	12/02/96	MMP
Diesel Range Organics	414	4.31	mg/Kg	AK102 DRO		11/22/96	11/27/96	MMP



CT&E Ref.# 966183019
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID DUP-2
 Matrix Soil
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:38
 Collected Date/Time
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Total Solids	76.95		%	SM18 2540G			11/21/96	DAV
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	2.71	1.46	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Benzene	0.0817	0.0732	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Toluene	0.132	0.0732	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Ethylbenzene	0.0732 U	0.0732	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
P & M -Xylene	0.111	0.0732	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
o-Xylene	0.0732 U	0.0732	mg/Kg	AK101/8020		11/15/96	11/27/96	MMP
Diesel Range Organics	10.3	5.15	mg/Kg	AK102 DRO		11/22/96	11/27/96	MMP



CT&E Ref.# 966183021
Client Name EPMI
Project Name/# Johnson/Nissan, 4660 Gambell
Client Sample ID TRIP BLANK
Matrix Water (Surface, Eff., Ground)
Ordered By
PWSID

Client PO#
Printed Date/Time 12/02/96 16:38
Collected Date/Time
Received Date/Time 11/18/96 17:00
Technical Director: Stephen C. Ede

Released By [Signature: Stephen C Ede]

Sample Remarks:

Table with 10 columns: Parameter, Results, PQL, Units, Method, Allowable Limits, Prep Date, Analysis Date, Init. Rows include GRO/8020 Combo, Volatile Pet. Hydrocarbons, Benzene, Toluene, Ethylbenzene, P & M -Xylene, and o-Xylene.



CT&E Ref.# 966183022
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID FIELD BLANK
 Matrix Water (Surface, Eff., Ground)
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:38
 Collected Date/Time
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	0.0200 U	0.0200	mg/L	AK101/8020			11/27/96	MMP
Benzene	0.00100 U	0.00100	mg/L	AK101/8020			11/27/96	MMP
Toluene	0.00100 U	0.00100	mg/L	AK101/8020			11/27/96	MMP
Ethylbenzene	0.00100 U	0.00100	mg/L	AK101/8020			11/27/96	MMP
P & M -Xylene	0.00100 U	0.00100	mg/L	AK101/8020			11/27/96	MMP
o-Xylene	0.00100 U	0.00100	mg/L	AK101/8020			11/27/96	MMP



CT&E Ref.# 966183023
 Client Name EPMI
 Project Name/# Johnson/Nissan, 4660 Gambell
 Client Sample ID METHANOL BLANK
 Matrix Water (Surface, Eff., Ground)
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/02/96 16:38
 Collected Date/Time
 Received Date/Time 11/18/96 17:00
 Technical Director: Stephen C. Ede

Released By

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	0.0954	0.0200	mg/L	AK101/8020			12/02/96	MMP
Benzene	0.00100 U	0.00100	mg/L	AK101/8020			12/02/96	MMP
Toluene	0.00212	0.00100	mg/L	AK101/8020			12/02/96	MMP
Ethylbenzene	0.00284	0.00100	mg/L	AK101/8020			12/02/96	MMP
P & M -Xylene	0.00531	0.00100	mg/L	AK101/8020			12/02/96	MMP
o-Xylene	0.00511	0.00100	mg/L	AK101/8020			12/02/96	MMP



CT&E Environmental Services Inc.

CT&E Ref.# 966183024
Client Name EPMI
Project Name/# Johnson/Nissan, 4660 Gambell
Client Sample ID B-12 S-4
Matrix Soil
Ordered By
PWSID

Client PO#
Printed Date/Time 12/02/96 16:38
Collected Date/Time 11/14/96 16:30
Received Date/Time 11/18/96 17:00
Technical Director: Stephen C. Ede

Released By

Signature of Stephen C. Ede

Sample Remarks:

Table with 10 columns: Parameter, Results, PQL, Units, Method, Allowable Limits, Prep Date, Analysis Date, and Init. Rows include Total Solids, GRO/8020 Combo, and various hydrocarbons like Toluene, Benzene, and Diesel Range Organics.



CHAIN OF CUSTODY

PO#: _____

Reports to: (Original) MR. MIKE LESTER
EPMI
200 N. 3RD ST. SUITE 3
BOISE, IDAHO 83702
Phone (208) 338-5974 Fax (208) 343-4925

Contact person for questions concerning these samples: MIKE LESTER
Phone (208) 338-5974 Fax (208) 343-4925

Special Instructions: "PLEASE FAX FINAL REPORTS TO MIKE LESTER AT (208) 343-4925
AND JOHN GAMBLE AT (907) 862-5615. STANDARD TURNAROUND LEVEL I REPORT

Laboratory: Page 1 of 3
CT&E Environmental Services Inc.
200 W Potter Dr.
Anchorage, AK 99518-1605
Phone (907) 562-2343 Fax: (907) 561-5301

Project Name/Number JOHNSON/NISSAN, 4660 GAMBLE
Sampled By: Clifford Maxwell/DES

Lab #	Sample #	Date/Time Sampled	# of Containers	Sample Matrix	Comments
1	B-10MW S-4	11/14/96 1035	2-402	SOIL	AK101 (GRA/RO) ✓
2	B-10MW S-6	11/14/96 1105	6	6	AK102 (DRO) ✓
3	B-11 S-2	11/14/96 1350			AK102 (DRO) ✓
4	B-11 S-6	11/14/96 1435	6	6	AK102 (DRO) ✓
5	B-12 S-1	11/14/96 1545			AK102 (DRO) ✓
6	B-12 S-2	11/14/96 1600	6	6	AK102 (DRO) ✓
7	B-12 S-7	11/14/96 1715			AK102 (DRO) ✓
8	B-13 S-1	11/15/96 0945	6	6	AK102 (DRO) ✓
9	B-13 S-3	11/15/96 1005			AK102 (DRO) ✓
10	B-13 S-7	11/15/96 1040	6	6	AK102 (DRO) ✓

Sample Receipt:	Relinquished By:
Number of Containers	Signature: _____ Time: _____
COC Seals/Intact Y/N/A	Printed Name: _____ Date: _____
Temperature <u>61.4</u>	Received By: _____
Turnaround Required	Signature: _____ Time: _____
Data Deliverables Required Level I Level II Level III	Printed Name: _____ Date: _____

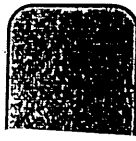


CT&E Environmental Services Inc.

Laboratory Division



96.6183



CHAIN OF CUSTODY

Reports to:

Invoice to:

Laboratory:

Page 2 of 3

CT&E Environmental Services Inc.

200 W Potter Dr.

Anchorage, AK 99518-1605

Phone (907) 562-2343 Fax: (907) 561-5301

Phone: _____ Fax: _____ QUOTE # _____

Contact person for questions concerning these samples: _____

Special Instructions: _____

Project Name/Number

Sampled By:

SEE PAGE 1 2 3

AK 101 (BNA/Geo) EPA 8240

Lab #	Sample #	Date/Time Sampled	# of Containers	Sample Matrix	Comments
(11)	B-14 S-1	11/15/96 1130	2-402	Soil	✓
(12)	B-14 S-5	11/15/96 1230	✓	✓	✓
(13)	B-14 S-6	11/15/96 1230	✓	✓	✓
(14)	B-15 S-1	11/15/96 1330	✓	✓	✓
(15)	B-15 S-2A	11/15/96 1340	✓	✓	✓
(16)	B-15 S-2	11/15/96 1340	✓	✓	✓
(17)	B-15 S-6	11/15/96 1445	✓	✓	✓
(18)	Dup-1	—	✓	✓	✓
(19)	Dup-2	—	✓	✓	✓
(20)	DEION BLANK	—	1 Vol	WATER	✓

Number of Containers	Signature: _____	Time: _____	Relinquished By: _____	Signature: _____	Time: _____
COC Seals/Intact Y/N/NA	Printed Name: _____	Date: _____	Received By: _____	Printed Name: _____	Date: _____
Temperature	Signature: _____	Time: _____	Relinquished By: _____	Signature: _____	Time: _____
Turnaround Required	Printed Name: _____	Date: _____	Received By: _____	Printed Name: _____	Date: _____
Data Deliverables Required	Signature: _____	Time: _____	Relinquished By: _____	Signature: _____	Time: _____
Level I Level II Level III	Printed Name: _____	Date: _____	Received By: _____	Printed Name: _____	Date: _____



CT&E Ref.# 966539001
 Client Name BPMI
 Project Name/# Johnson, Nissan Facility
 Client Sample ID B-10/MW
 Matrix Water (Surface, Eff., Ground)
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/20/96 16:57
 Collected Date/Time 12/12/96 11:30
 Received Date/Time 12/12/96 14:15
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable		Prep		Analysis	
					Limits	Date	Date	Init		
GRO/8020 Combo										
Volatile Pet. Hydrocarbons	0.0200 U	0.0200	mg/L	AK101/8020					12/19/96	MMP
Benzene	0.00100 U	0.00100	mg/L	AK101/8020					12/19/96	MMP
Toluene	0.00100 U	0.00100	mg/L	AK101/8020					12/19/96	MMP
Ethylbenzene	0.00100 U	0.00100	mg/L	AK101/8020					12/19/96	MMP
P & M -Xylene	0.00100 U	0.00100	mg/L	AK101/8020					12/19/96	MMP
o-Xylene	0.00100 U	0.00100	mg/L	AK101/8020					12/19/96	MMP
Diesel Range Organics	0.393	0.100	mg/L	AK102 DRO			12/15/96	12/15/96		WAA



CT&E Ref.# 966539002
 Client Name EPMI
 Project Name/# Johnson, Nissan Facility
 Client Sample ID B-5/MW
 Matrix Water (Surface, Eff., Ground)
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/20/96 16:57
 Collected Date/Time 12/12/96 10:40
 Received Date/Time 12/12/96 14:15
 Technical Director: Stephen C. Ede

Released By

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	0.303	0.0200	mg/L	AK101/8020			12/19/96	MMP
Benzene	0.157	0.00100	mg/L	AK101/8020			12/19/96	MMP
Toluene	0.00100 U	0.00100	mg/L	AK101/8020			12/19/96	MMP
Ethylbenzene	0.00100 U	0.00100	mg/L	AK101/8020			12/19/96	MMP
P & M -Xylene	0.00148	0.00100	mg/L	AK101/8020			12/19/96	MMP
o-Xylene	0.00100 U	0.00100	mg/L	AK101/8020			12/19/96	MMP
Diesel Range Organics	0.391	0.100	mg/L	AK102 DRO		12/15/96	12/16/96	WAA



CT&E Ref.# 966539003
 Client Name EPMT
 Project Name/# Johnson, Nissan Facility
 Client Sample ID B-1/MW
 Matrix Water (Surface, Eff., Ground)
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/20/96 16:57
 Collected Date/Time 12/12/96 13:30
 Received Date/Time 12/12/96 14:15
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:
 DRO-Typical pattern for gasoline.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	66.9	4.00	mg/L	AK101/8020			12/19/96	MMP
Benzene	11.0	0.200	mg/L	AK101/8020			12/19/96	MMP
Toluene	16.8	0.200	mg/L	AK101/8020			12/19/96	MMP
Ethylbenzene	2.23	0.200	mg/L	AK101/8020			12/19/96	MMP
P & M -Xylene	8.57	0.200	mg/L	AK101/8020			12/19/96	MMP
o-Xylene	3.06	0.200	mg/L	AK101/8020			12/19/96	MMP
Diesel Range Organics	2.45	0.100	mg/L	AK102 DRO		12/15/96	12/15/96	WAA



CT&E Ref.# 966539004
 Client Name BPMI
 Project Name/# Johnson, Nissan Facility
 Client Sample ID B-2/MW
 Matrix Water (Surface, Eff., Ground)
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/23/96 11:46
 Collected Date/Time 12/12/96 12:30
 Received Date/Time 12/12/96 14:15
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:
 DRO-Typical pattern for gasoline.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	152	4.00	mg/L	AK101/8020			12/19/96	MMP
Benzene	25.8	0.200	mg/L	AK101/8020			12/19/96	MMP
Toluene	36.7	0.200	mg/L	AK101/8020			12/19/96	MMP
Ethylbenzene	4.41	0.200	mg/L	AK101/8020			12/19/96	MMP
P & M -Xylene	15.4	0.200	mg/L	AK101/8020			12/19/96	MMP
o-Xylene	6.89	0.200	mg/L	AK101/8020			12/19/96	MMP
Volatiles by GC/MS								
Bromochloromethane	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
Chloromethane	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
Vinyl chloride	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
Bromomethane	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
Chloroethane	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
1,1-Dichloroethene	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
Carbon disulfide	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
Methylene chloride	10 U	10	mg/L	SW846-8240			12/20/96	MCM
trans-1,2-Dichloroethene	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
1,1-Dichloroethane	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
2-Butanone (MEK)	10 U	10	mg/L	SW846-8240			12/20/96	MCM
Chloroform	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
1,1,1-Trichloroethane	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
Carbon tetrachloride	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
Benzene	27.5	1.0	mg/L	SW846-8240			12/20/96	MCM
1,2-Dichloroethane	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
Trichloroethene	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
Bromodichloromethane	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
cis-1,3-Dichloropropene	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM
4-Methyl-2-pentanone	1.0 U	1.0	mg/L	SW846-8240			12/20/96	MCM



CT&E Ref.# 966539004
 Client Name EPMI
 Project Name/# Johnson, Nissan Facility
 Client Sample ID B-2/MW
 Matrix Water (Surface, Eff., Ground)
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/23/96 11:46
 Collected Date/Time 12/12/96 12:30
 Received Date/Time 12/12/96 14:15
 Technical Director: Stephen C. Ede

Released By

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Toluene	35.7		1.0 mg/L	SW846-8240			12/20/96	MCM
trans-1,3-Dichloropropene	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
1,1,2-Trichloroethane	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
Tetrachloroethene	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
2-Hexanone	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
Dibromochloromethane	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
Chlorobenzene	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
Ethylbenzene	4.0		1.0 mg/L	SW846-8240			12/20/96	MCM
P & M -Xylene	13.6		1.0 mg/L	SW846-8240			12/20/96	MCM
o-Xylene	5.9		1.0 mg/L	SW846-8240			12/20/96	MCM
Styrene	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
Bromoform	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
Bromobenzene	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
1,1,2,2-Tetrachloroethane	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
1,3-Dichlorobenzene	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
1,4-Dichlorobenzene	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
1,2-Dichlorobenzene	1.0 U		1.0 mg/L	SW846-8240			12/20/96	MCM
Diesel Range Organics	9.81	0.100	mg/L	AK102 DRO		12/15/96	12/15/96	WAA



CT&E Ref.# 966539005
 Client Name EPMI
 Project Name/# Johnson, Nissan Facility
 Client Sample ID B-6/VE
 Matrix Water (Surface, Eff., Ground)
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/20/96 16:57
 Collected Date/Time 12/12/96 13:40
 Received Date/Time 12/12/96 14:15
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:
 DRO-Typical pattern for gasoline.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	18.6	2.00	mg/L	AK101/8020			12/20/96	MMP
Benzene	2.29	0.100	mg/L	AK101/8020			12/20/96	MMP
Toluene	4.00	0.100	mg/L	AK101/8020			12/20/96	MMP
Ethylbenzene	0.184	0.100	mg/L	AK101/8020			12/20/96	MMP
P & M -Xylene	0.184	0.100	mg/L	AK101/8020			12/20/96	MMP
o-Xylene	2.15	0.100	mg/L	AK101/8020			12/20/96	MMP
Diesel Range Organics	2.52	0.100	mg/L	AK102 DRO		12/15/96	12/15/96	WAA



CT&E Ref.# 966539006
 Client Name EPMI
 Project Name/# Johnson, Nissan Facility
 Client Sample ID Dup-1
 Matrix Water (Surface, Eff., Ground)
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/20/96 16:57
 Collected Date/Time 12/12/96 00:00
 Received Date/Time 12/12/96 14:15
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:
 DRO-Typical pattern for gasoline.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	163	4.00	mg/L	AK101/8020			12/19/96	MMP
Benzene	29.3	0.200	mg/L	AK101/8020			12/19/96	MMP
Toluene	40.6	0.200	mg/L	AK101/8020			12/19/96	MMP
Ethylbenzene	4.52	0.200	mg/L	AK101/8020			12/19/96	MMP
P & M -Xylene	15.6	0.200	mg/L	AK101/8020			12/19/96	MMP
o-Xylene	6.89	0.200	mg/L	AK101/8020			12/19/96	MMP
Diesel Range Organics	6.38	0.100	mg/L	AK102 DRO		12/15/96	12/15/96	WAA



CT&E Ref.# 966539007
 Client Name EPMI
 Project Name/# Johnson, Nissan Facility
 Client Sample ID Trip Blank
 Matrix Water (Surface, Eff., Ground)
 Ordered By
 PWSID

Client PO#
 Printed Date/Time 12/20/96 16:57
 Collected Date/Time
 Received Date/Time 12/12/96 14:15
 Technical Director: Stephen C. Ede

Released By *Stephen C Ede*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
GRO/8020 Combo								
Volatile Pet. Hydrocarbons	0.0200 U	0.0200	mg/L	AK101/8020			12/20/96	MMP
Benzene	0.00100 U	0.00100	mg/L	AK101/8020			12/20/96	MMP
Toluene	0.00100 U	0.00100	mg/L	AK101/8020			12/20/96	MMP
Ethylbenzene	0.00100 U	0.00100	mg/L	AK101/8020			12/20/96	MMP
P & M -Xylene	0.00100 U	0.00100	mg/L	AK101/8020			12/20/96	MMP
o-Xylene	0.00100 U	0.00100	mg/L	AK101/8020			12/20/96	MMP



CT&E Environmental Services Inc.
 Laboratory Division

96.6539

PO#: _____

CT&

Page 2 of 2

Reports to:

Invoice to:

Laboratory:

Page 2 of 2

MIKE LESTER

MIKE LESTER

CT&E Environmental Services Inc.

200 N 3RD ST, SUITE 3

200 N 3RD ST, SUITE 3

200 W Potter Dr.

BOISE, IDAHO

BOISE, IDAHO 83702

Anchorage, AK 99518-1605

Phone: (208) 338-5974 Fax: (208) 343-4925

QUOTE #

Phone (907) 562-2343

Fax: (907) 561-5301

Contact person for questions concerning these samples:

MIKE LESTER

Phone: (208) 338-5974 Fax: (208) 343-4925

Special Instructions: PLEASE "Fax" Final Report to Mike Lester at (208) 343-4925 and Text Carat at (207) 862-5615.

CHAIN OF CUSTODY

Lab #	Sample #	Date/Time Sampled	# of Containers	Sample Matrix	AK101 (Vol/Box)	AK102 (Dro)	ETA 8240	Comments
①	B-10/mw	12-12-96 11:30	2 V09 1-11	Water	✓	✓		
②	B-5/mw	12-12-96 10:40	2 V09 1-11		✓	✓		
③	B-1/mw	12-12-96 1:30	2 V09 1-11		✓	✓		
④	B-2/mw	12-12-96 12:30	2 V09 1-11		✓	✓		
⑤	B-6/VE	12-12-96 1:30	2 V09 1-11		✓	✓		
⑥	Duo-1	12-12-96	2 V09 1-11		✓	✓		
⑦	TRIP Blank		2 V09		✓	✓		

Project Name/Number: JOHNSON NISSAN SERVICE CENTER 4748 2ND SEWARD HWY, ANCHORAGE		Sampled By: LITE HARRISON / Pat Strimon	
Number of Containers: 21		Signature: [Signature] Time: 1/15	
COC Seals/Intact Y/N/NA: [NA]		Printed Name: [Name] Date: 1/15	
Temperature: 0.6 °C		Signature: [Signature] Time: _____	
Turnaround Required: _____		Printed Name: _____ Date: _____	
Data Deliverables Required: (Level I) Level II Level III		Signature: [Signature] Time: _____	
Relinquished By: [Signature] Time: _____		Signature: [Signature] Time: _____	
Relinquished at Laboratory By: [Signature] Date: 12/12/96		Signature: [Signature] Time: _____	

GROUNDWATER SAMPLES
DECEMBER 1996

JOHNSON NISSAN

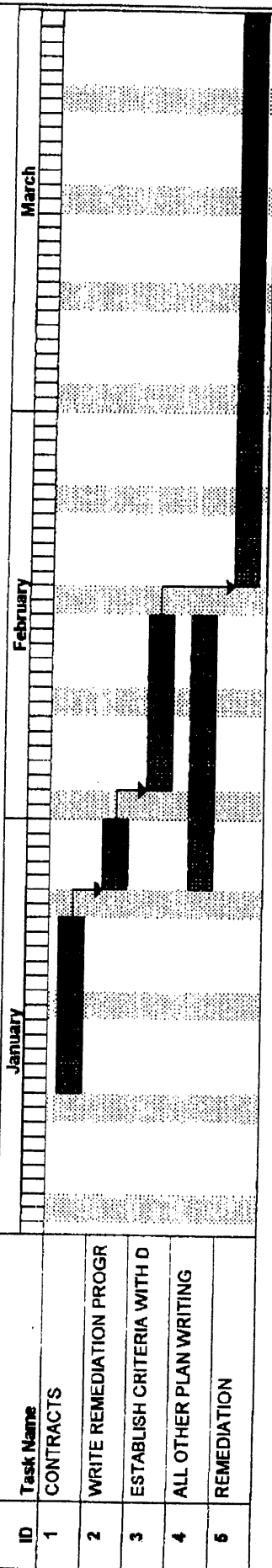
SAMPLE EVENT ORDER	SAMPLE LOCATION	AK101										AK102	8240
		GRO ppm	Benzene ppm	Toluene ppm	Ethylbenzene ppm	P & M Xylene ppm	o- Xylene ppm	Total BTEX ppm	DRO ppm	ppm			
1	B-5/MW	0.303	0.157	ND	ND	0.00148	ND	0.15848	0.391				
2	B-6/VE	18.6	2.29	4.0	0.184	0.184	2.15	8.808	2.52				
3	B-10/MW	ND	ND	ND	ND	ND	ND	ND	0.393				
4	B-7/VE	Dry											
5	B-1/MW	66.9	11.0	16.8	2.23	8.57	3.06	41.7	2.145				
6	B-2/MW	152	25.8	36.7	4.41	15.4	6.89	89.2	9.81			ND	

GROUNDWATER SAMPLES
DECEMBER 1996

JOHNSON NISSAN

SAMPLE EVENT ORDER	SAMPLE LOCATION	AK101										AK102 DRO ppm	8240 ppm
		GRO ppm	Benzene ppm	Toluene ppm	Ethylbenzene ppm	P & M Xylene ppm	o-Xylene ppm	Total BTEX ppm					
1	B-5/MW	0.303	0.157	ND	ND	0.00148	ND	0.15848	0.391	0.391	0.15848		
2	B-6/VE	18.6	2.29	4.0	0.184	0.184	0.184	8.808	2.52	2.15	8.808		
3	B-10/MW	ND	ND	ND	ND	ND	ND	ND	0.393	ND	ND		
4	B-7/VE	Dry											
5	B-1/MW	66.9	11.0	16.8	2.23	8.57	2.23	41.7	9.81	3.06	41.7		
6	B-2/MW	152	25.8	36.7	4.41	15.4	4.41	89.2	9.81	6.89	89.2		ND

JOHNSON NISSAN
BIOAUGMENTATION



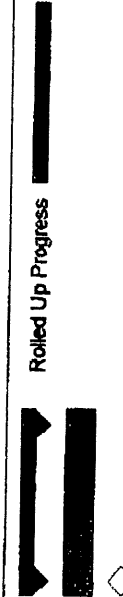
DRAFT

Project: DRAFT
Date: 12/30/96

Task
Progress
Milestone



Summary
Rolled Up Task
Rolled Up Milestone



**Environmental
Sampling**

GEOLOGIC LOG OF BORING

Boring No. B-12

Sheet 1 of 1

Project Name: EPRI Johnson Nuclear
 Project Location: 4660 Cambridge Ave
 Project No.: _____
 Logged by: Cam/DAS

Start Date 11/14/96 Hour 1520
 Finish Date 11/14/96 Hour 1730
 Driller Discovery
 Drill Type/Method Mobile B-61
 Sampling Method SSHD w/ 3" CB
 Boring Diameter 8" Nominal
 Total Depth ~19.5'
 Depth to Water _____ Date/Hour _____

Penetration	PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description Lithology, (USCS classification), color, constituents, density, moisture, other features, (interpretation)	Summary Log
		G	S	F						
						0				
						1				
						2				
	330			S-1 1545 hrs		3	12			
						4	7			
						5	6			
						6	4			
						7	4	Part layer at ~4.5'		
						8	12			
	1710			S-2 1600 hrs		9	6	Brown silt to sandy silt		
						10	4	Layered w/ silty sand, incl.		
						11	8	Grey mottling w/ TR organics		
						12	2			
	1530			S-3 1620		13	6	Brown with grey mottling silt		
						14	6	to sandy silt with fine silty		
						15	6	sand layers & TR organics		
						16	7			
						17	6			
	1480			S-4 1630 hrs		18	6	Grey med to fine sand (sp)		
						19	6	Saturated		
						20	8			
						21	7			
						22	12			
	149			S-5 1640 hrs		23	12	Grey sand, dense, saturated		
						24	12			
						25	14			
						26	14			
						27				
	38			S-6 1700 hrs		28	6	Grey sand to ~15.5'		
						29	6	Grey clayey silt (CL-ML)		
						30	11	Hard, saturated, mod plastic		
						31	12			
						32				
	14			S-7 1715 hrs		33	8	Grey clayey silt, hard		
						34	9			
						35	5			
						36	13			
						37				
						38				

* Dup-1 = S-1

Quality
Environmental
Sampling

GEOLOGIC LOG OF BORING

Boring No. B-13

Sheet 1 of 1

Project Name: EPRI Johnson/Niscom
 Project Location: 4660 Cambridge Ave
 Project No.: _____
 Logged by: Cam/CRS

Start Date 11/15/96 Hour 0925
 Finish Date 11/15/96 Hour 1105
 Driller Discorany
 Drill Type/Method 1 1/2" Bauer B-61
 Sampling Method SSHB w/ .300 LB
 Boring Diameter 8" NOMINAL
 Total Depth ~19 ft
 Depth to Water _____ Date/Hour _____

PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description Lithology, (USCS classification), color, constituents, density, moisture, other features, (interpretation)	Summary Log
	G	S	F						
956				S-1 0945 hrs		0 1 2 3 4 5	7 4 3 5	Grey sandy gravel grades to sandy organic silt 2" part layer at ~4.5'	
650				S-2 0955 hrs		6 7 8	6 7 8	Brown silt incl. grey mottling & random gravel & silty sand layers	
1038				S-3 1005 hrs		8 9 10	4 11 10	Grey sand gravel to sandy gravel w/ tr silt, bvl 1 1/2" w/ tr, (faint H.C. odor)	
318				S-4 1010 hrs		10 11 12	5 6 12 8	Grey sand w/ 1" silt layer saturated (faint H.C. odor)	
270				S-5 1020 hrs		13 14	8 13 12 13	Grey sand, saturated (faint H.C. odor)	
760				S-6 1030 hrs		15 16	5 13 14 14	Grey sand, saturated (faint H.C. odor)	
680				S-7 1040 hrs		17 18	5 9 11	Grey sand grading to grey clayey silt (CL-MC to CL)	

Quality
Environmental
Sampling

GEOLOGIC LOG OF BORING

Boring No. B-14
Sheet 1 of 1

Project Name: EPRI Jefferson/Nissen
Project Location: 4660 Campbell Ave
Project No.: _____
Logged by: cmw/DRS

Start Date 11/5/96 Hour 1120
Finish Date 11/5/96 Hour 1250
Driller Discovny
Drill Type/Method 11/8" A-61
Sampling Method SPT w/ 300LB
Boring Diameter 8" nominal
Total Depth ~165'
Depth to Water _____ Date/Hour _____

PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description Lithology, (USCS classification), color, constituents, density, moisture, other features, (Interpretation)	Summary Log
	G	S	F						
110				S-1 1130 hrs		3 16 13 4 5 3	6" Gray Sandy Gravel to ~3.5' SPT from ~3.5' to 4'		
40				S-2 1145 hrs		5 3 4 6 4 5	Gray silt to sandy silt, Mottled, moist, some incl roots		
84				S-3 1200 hrs		8 3 5 6 7 5	Gray & Brown Sandy Silt, with silty sand layers at top saturated		
68				S-4 1210 hrs		10 5 11 13 13	Gray Gravelly Sand, Gr 1 1/2" Saturated (Faint H.C. odor)		
129				S-5 1220 hrs		3 8 9 10 4 11	Gray clay + clayey silt Saturated, Grades to gray clay		
43				S-6 1230 hrs		5 4 8 9 10	Gray silt to clayey silt		
						7			
						8			
						9			
						0			

Quality
Environmental
Sampling

GEOLOGIC LOG OF BORING

Boring No. B-15
Sheet 1 of 1

Project Name: EDM I Johnson / M&B
Project Location: 4660 Campbell, Anch
Project No.: _____
Logged by: Cam/Dat

Start Date 11/15/96 Hour 1315
Finish Date 11/15/96 Hour 1515
Driller Discovery
Drill Type/Method Mogor B-61
Sampling Method S4D w/ 300LB
Boring Diameter 8" nominal
Total Depth 22.5'
Depth to Water _____ Date/Hour _____

PID Reading	Grain Size (%)			Sample Number	Sample Recovery	Depth	Penetration Resistance	Description Lithology, (USCS classification), color, constituents, density, moisture, other features, (interpretation)	Summary Log
	G	S	F						
373				S-1 1330 hrs		0 1 2 3 4 5 6	22 22 12 9	Brown Gravelly Sand	
1290				S-2 (2A) 1340 hrs		5 6 7 8 9 10 11	4 4 6 8	* Note: Sampler S-2A from ~9.5 to 10' (Gravelly Sand) 2 Samples from 9.5 to 11.5' 2' 2A Brown Gravelly Sand Grades to Gray Sand with Gravel incl Gray Sandy Silt layers Saturated (H.C. odor)	
711				S-3 1355 hrs		10 11 12	8 8 6 9	Gray Silt, incl. Sand layers Saturated (Mod H.C. odor)	
1412				S-4 1410 hrs		13 14	6 10 9 9	Gray Silt w/ Sand layers & Gravelly Sand layers, Saturated (H.C. odor)	
95				S-5 1425 hrs		15 16	6 9 10	Gray Silt, Mod Plastic, Hard	
94				S-6 1445 hrs		17 18 19 20	6 7 12 6	Gray clayey Silt, Hard	(BIS S-6 = Dup-2)

alt 8

