Site Closure Report
ADEC File # L55.192

Johnson Nissan
4748 Old Seward Highway
Anchorage, Alaska

March 2004

ChemTrack
11711 S. Gambell St.
Anchorage, AK. 99515

Site Closure Report
Johnson Nissan
4748 Old Seward Highway
Anchorage, Alaska
March 2004

Introduction

This document presents site closure information for the former Nissan Johnson automobile dealership located in Anchorage, Alaska. This document was prepared in accordance with 18 AAC 75.380 *Final reporting Requirements and Site Closure,* ADEC's *Guidance Document SPAR 2000-1 Guidance on the Selection of Natural Attenuation*, and the EPA's *Groundwater Handbook EPA 12345.*

The legal description is:

Lot 14, Block B, Rosebud Subdivision
Anchorage, Alaska.

The physical address is:

4748 Old Seward Highway
Anchorage, AK. 99519

The property owner is:

Mr. Jim Johnson
4748 Old Seward Hwy.
Anchorage, AK 99519

The State of Alaska ADEC has assigned facility identification numbers as follows:

File # L55.192
Facility ID # 2470
Event ID #404
Reckey # 94 21 00 220 03

Initial Release and Product Recovery

In August 1994, two 5,000-gallon gasoline storage tanks were removed from the former Nissan Johnson Automobile dealership located at 4748 Old Seward Highway. The tanks were removed in accordance with ADEC UST requirements. UST removal activities were conducted by BC Excavating supervised by DOWL Engineering. DOWL Engineers prepared a UST Closure Report in September 1994. The report noted that the tanks contained gasoline and that diesel was not expected as a possible contaminant.

During removal activities, the tanks were inspected for potential leaks. A split pipe was identified in the west tank and a loose fitting was noted in the east tank. Obvious soil contamination was observed at each of these areas, however no free product was observed at that time and no groundwater was encountered during tank removal or soil excavation down to 15 feet below ground surface. See Figures 1, 2, and 3.

Recovery of Contaminated Soil

Approximately 280 cubic yards of fuel-impacted soil were excavated during tank removal activities.

Tank and Contaminated Soil Disposal

The two tanks were cut and cleaned by BC Excavating and delivered for scrap metal recycling to Alaska Metals Recycling in Anchorage, Alaska on August 9, 1994. The soils were transported to Alaska Soil Recycling, Anchorage, on July 2, 1996 for thermal remediation.

Remaining Product and Extent of Contamination

Field-screening and soil sample analysis of excavation floor and sidewall samples indicated that some fuel-impacted soils remained in the excavation.

Based on field-screening and laboratory analytical data the vertical extent of the impacted soils appeared to be only slightly deeper than 15 feet. Gasoline and benzene contaminants were greater in the east sidewalls of the excavation, but the lateral limits were not determined.

The excavation was lined with poly sheeting, backfilled with clean material, and paved for use as a parking area.

The DOWL Report reported that subsurface soils generally consisted of sandy gravelly fill to a depth of 3 to 7 feet which overlays a thin sporadic peat layer. The peat layer was approximately 1-foot thick at the south sidewall of the excavation. The DOWL report also noted that the split piping and loose fitting were located above this peat layer. The tanks themselves were inspected and no leaks were found in either tank.

Based on soil sample and field-screening data, the location of the leaking pipe/fitting, and subsurface soils, it appears that the peat layer confined the released product vertically in all areas except the original excavation for tank installation. Although the gross contamination (280 cy PCS) was excavated during tank removal activities, some of the remaining soil underlying and surrounding the former UST excavation will continue to be a source of groundwater contamination.

Contaminant Trends - Groundwater and Monitoring Well Data

On-site and off-site monitoring wells were installed and sampled starting in January 1995, and were periodically sampled by Shannon & Wilson through August 2000 as described in the Shannon & Wilson UST Release Investigation Report January 2001. See Table 1 and Figures 4, 5 and 6 for well locations and a summary of analytical data.

The Shannon & Wilson Report concluded that, based on previous site data and on groundwater data collected through November 2000, "Although contaminant trends in the impacted wells appear to exhibit seasonal influences and variability, it is our opinion that the overall groundwater contaminant concentrations are slowly declining. This decline in contaminant concentrations is assumed to be the result of natural attenuation associated with biodegradation".

ChemTrack installed addition wells on-site wells for hydraulic containment in May 2002
In addition, 2 additional wells were installed off-site and downgradient by ChemTrack in May 2002. See Figures 4, 5 and 6 for well locations a summary of site contaminant levels and Table 1 for a summary of Analytical Data.

Contaminant levels in off-site wells have always been lower than on-site wells. Contaminant levels measured over the last two sampling events indicate that GRO and DRO levels are have met the ADEC drinking water standards in July 2003 and January 2004 samples.

No 18 AAC 78

Analytical data indicates that contaminant levels in on-site wells have varied but are significantly decreasing compared to initial levels. Analytical data for off-site wells indicates that the data is consistently lower than data for on-site wells and that off-site migration for GRO and DRO is within drinking water standards.

18 AAC 78

Benzene levels were within ADEC drinking water standards in off-site well MW11 in July 2003 sample and were lower in the January 2004 sample. Benzene levels exceeded Drinking Water Standards in MW12, but were significantly decreased ($1/10^{th}$) compared to data from July 2003.

A summary of sample analytical data from off-site and downgradient wells MW11 and MW12 from July 2003 and January 2004 is presented in the following table:

Table 2: Summary of Off-site Well Data January 2004

Well	Date	GRO mg/L	DRO mg/L	Benzene mg/L
MW11	Jan 2004	ND	ND	0.00087
MW11	July 2003	ND	1.72	0.004
MW12	Jan 2004	ND	ND	0.237 0.0218 mg/L 0.0228 Dup.
MW12	July 2003	0.53	1.53	~~0.02280~~ 0.237
ND = Not Detected at the method detection limit				

Facility Well Data

There is an on-site well at this facility. The source of the well water is the lower confined aquifer. The well water has been periodically sampled and analyzed for hydrocarbon contamination. No hydrocarbon contaminants have ever been identified in any of the samples. The following table summarizes the well water analytical data:

Table 3: Summary of Facility Water Well Data 1996 - 2002					
Date	**GRO**	**Benzene**	**EthylBenzene**	**Toluene**	**Xylenes**
March 96	<MRL	<MRL	<MRL	<MRL	<MRL
Nov 99	<MRL	<MRL	<MRL	<MRL	<MRL
Aug 00	<MRL	<MRL	<MRL	<MRL	<MRL
Jun 02	<MRL	<MRL	<MRL	<MRL	<MRL
All results in mg/L MRL = Method Reporting Limit					

The facility well sample from June 2002 was also analyzed for DRO per method AK 102 and VOC's per method EPA 524.2. No DRO or VOC compounds were detected in the sample. The facility well data confirms that the aquifer that supplies the facility well has not been impacted by the near surface product release.

Public Wells

DOWL conducted a well survey in the vicinity of the site. A search of the groundwater site inventory database (GWSI) by the US Geological Survey indicated that 9 wells were located within 1500 feet of the site.

Five of the wells were located north of the site and believed to be upgradient of the identified groundwater flow. One of the four remaining wells was observed to be decommissioned. The remaining three properties are serviced by the Anchorage Water and Wastewater Utility.

Additional database search of the Department of Natural Resources Hydrologic Survey in June 2003 indicated that there are no public water systems within ¼ mile radius.

Municipal Water Supply

Water for the entire area is by the supplied by Municipality of Anchorage - Anchorage Water and Wastewater Utility.

Human Exposure Risk

The risk of exposure to fuel impacted soil and groundwater is very low because the site has been paved and no direct contact is possible. The following table summarizes the exposure for contact with the contaminated soil and or groundwater:

Table 4: Summary of Human Risk Exposure			
Matrix	**Exposure Type**	**Exposure Risk**	**Remarks**
Soil	Inhalation	none	No risk of exposure by inhalation or ingestion because the site is totally paved. Some exposure is possible if site is excavated.
Groundwater		none	
Soil	Ingestion	none	
Groundwater		none	

Ecological Exposure Risk

Ecological targets would include the nearest surface water body which is Campbell Creek which lies approximately ¼ mile south of the Johnson property. PLEASE NOTE: there are at least three identified fuel-contaminated sites that are located between the Johnson Site and Campbell Creek. These sites - two former gasoline service stations and one active gasoline service station – have impacted the groundwater downgradient from the Johnson site and immediately upgradient from Campbell Creek.

Based on off-site groundwater contaminant data, it is extremely unlikely that contaminant migration from the Johnson site could travel 1500 feet through subsurface soils and adversely impact Campbell Creek surface water.

Clean Up Operations

Groundwater remediation was conducted by ChemTrack Inc, Anchorage from June 02 through September 2003. Activities included injection of a nutrient/surfactant solution into on-site wells to facilitate contaminant solubilization. Groundwater was extracted from on-site wells, processed through granular carbon filtration units and discharged in the sewer system per an AWWU discharge permit.

These cleanup operations removed additional source from the soils that were left in place during tank removal.

Regional Hydrogeology

In general, regional hydrogeology is bounded by the Chugach Mountains to the east and the Cook Inlet to the west. Regional groundwater occurs in two aquifers at this site. The upper aquifer is unconfined and is mainly a sheet of outwash 10 to 50 feet thick that thins toward the Cook Inlet coast. The lower aquifer is confined and consists of interfingered and intercalated sands, gravels, and tills that thin and merge with the materials making up the upper aquifer near the mountain front on the east. The intervening confining layer is a continuous layer of clay and silt known as the Bootleggers Cove formation. This formation grades eastward to tills and till-like deposits and terminates near the base of the Chugach Mountains.

Site Hydrogeology

The DOWL Engineer site assessment report stated that the USGS map titled *Map Showing Depth to Groundwater, Anchorage Area, Alaska (USGS 1974)* indicated that groundwater at this location was less than 10 feet below ground surface, however, groundwater was not identified during the UST removal down to about 15 feet below ground surface. The difference may have been attributable to apparent fill that existed at the site. The groundwater associated with the upper aquifer is not a current or future source of drinking water.

Groundwater measurements conducted by Shannon & Wilson in August /November 2000 and by ChemTrack in summer 2002 indicated that gradient at this site ranges from 0.024 to 0.027 vertical feet per one-foot horizontal. The hydraulic conductivity is 0.00022 feet per second based on a soil porosity of 35%. Based on this data, the groundwater is moving at a rate of approximately 150 to 200 ft per year. Over the last 10 years the BTEX plume should have migrated well beyond the downgradient monitoring wells (MW8, MW11, MW12). Analytical sample data indicates that the contaminant plume is not migrating downgradient at this rate due to biodegradation and sorption. This indicates that the plume is stationary and decreasing due to natural attenuation.

Natural Attenuation Indicators

The Shannon & Wilson UST Release Investigation Report (January 2001) conducted field measurements of natural attenuation parameters including dissolved oxygen, temperature, nitrate, and pH. The report concluded that a "relatively slow reduction of contaminant concentrations by biodegradation is supported by measured natural attenuation indicators". ChemTrack periodically measured water quality parameters including Dissolved Oxygen, pH, and temperature, and nutrient levels during field activities in 2002 and 2003. Typical measurements are presented in the following table:

Table 5: Typical Water Quality Parameters

Well	Dissolved O_2	pH	Temperature	Nitrate*
MW2	~ 3 ppm	6-7 units	45° F	7 ppm
MW-8	~ 6 ppm	6-7 units	42° F	8 ppm
MW-6	~ 6 ppm	6-7 units	45° F	6 ppm

***ChemTrack added nitrate (<10 ppm) and phosphate (5ppm) in 2002 activities / Measured with kit**

Impracticality of Soil Excavation

Shannon & Wilson reviewed the feasibility of site excavation for complete removal of the contaminant source. Excavation of impacted soil below the water table would require dewatering, possible aboveground treatment of the water, discharge through the public sewer system, and possibly soil stabilization to prevent sloughing and undermining adjacent structures. The report further noted that the proximity of adjacent structures will limit soil excavation at the property and soil contamination extends beyond the property boundaries into the right-of-way of 48th Avenue. Excavation activities will result in significant site disruption and aside from removing a portion of the source material, will not directly address the groundwater contamination.

Summary

Contaminated soils were observed during removal of two gasoline tanks in August 1994. At that time approximately 280 cubic yards of contaminated soils were excavated. Some fuel-impacted soils were left in place and have impacted local groundwater. Additional source was removed during aquifer remediation activities conducted by ChemTrack in 2002 and 2003.

During subsequent release investigations on-site and off-site monitoring wells were installed and groundwater monitoring was conducted. Analytical data collected from January 1995 through January 2004 confirmed that contaminant levels have decreased in all wells compared to initial levels. Off-site well data collected from MW11 and MW12 in January 2004 indicates that GRO and DRO levels are within ADEC Drinking Water Standards. Benzene levels detected in January 2004 are within ADEC Drinking Water Standards at MW11 and have decreased 10 fold in MW12. Off-site well MW8 was not sampled in January 2004 due to snow cover, however, The benzene level in July 2003 (0.33mg/L) was significantly lower than the benzene level measured in June 2002 (3.60 mg/L).

Studies conducted by Shannon & Wilson indicated that the conditions for natural attenuation are present at this site and that some degradation due to natural attenuation has already occurred. ChemTrack field measurements have indicated that dissolved oxygen, groundwater pH, and temperature are sufficient to promote aerobic degradation in at least some of the wells. Contaminant data trends indicate that some degradation has already occurred and will continue to occur.

The fuel-impacted groundwater at this site is part of an upper unconfined aquifer and is not the source of water for the facility well. The facility drinking water well has been routinely sampled and analyzed for hydrocarbon contaminants. No contaminants have been detected in any of the facility well samples. No public well systems are located within ¼ mile of this site. Drinking water for this entire area is provided by the Municipality of Anchorage – Water and Wastewater Utility. The groundwater associated with the upper unconfined aquifer is not a current or future source of drinking water.

Summary (cont'd)

No human exposure of contaminated soils or groundwater by ingestion or inhalation is anticipated because the site has been paved. The property owner is aware that institutional controls may be required to provide safe conditions if the site was excavated and soil/groundwater contact was possible.

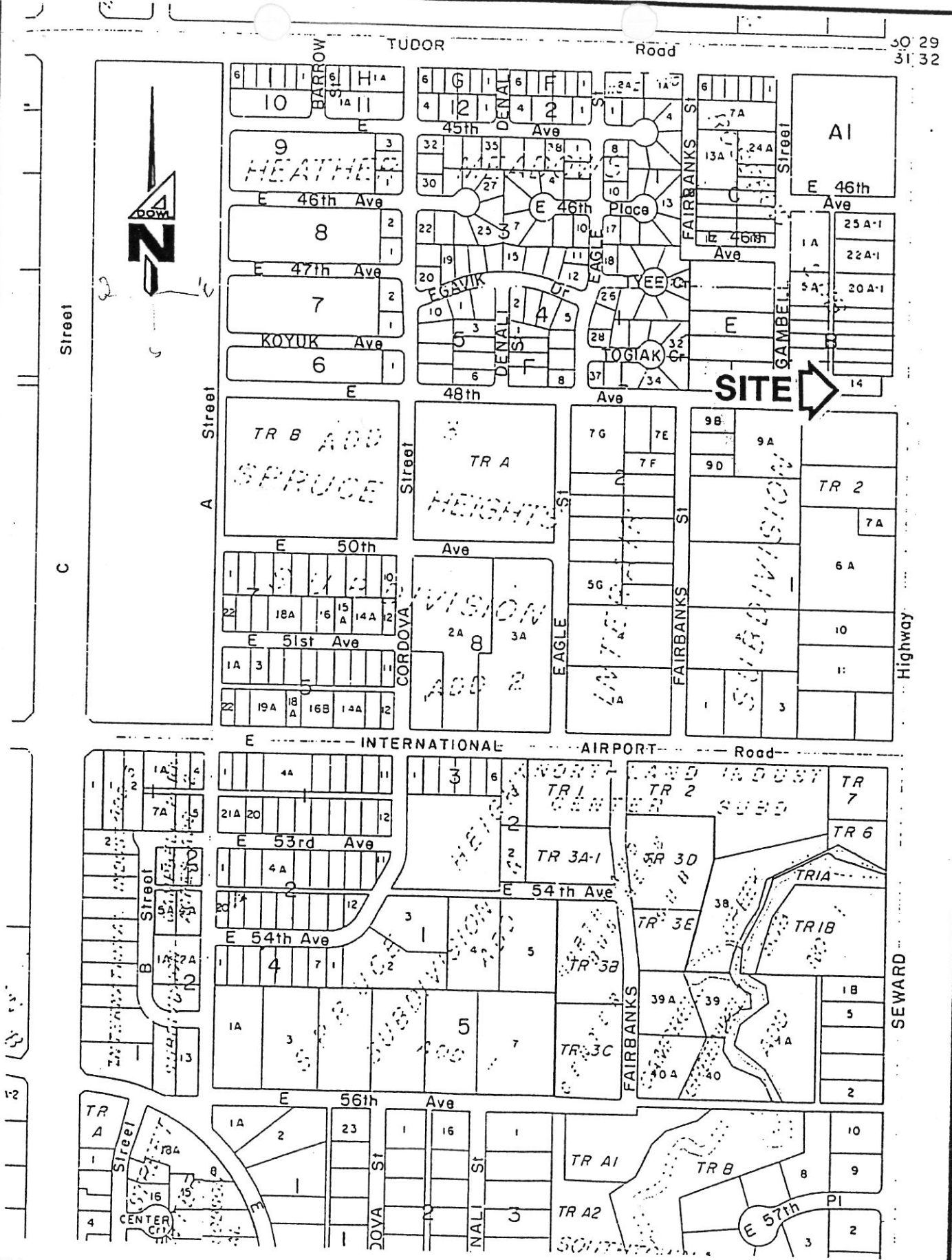
The closest surface water body is Campbell Creek located approximately 1500 feet downgradient from the Johnson site. Based on site groundwater data and the distance to this receptor, it is extremely unlikely that contaminants migrating from the Johnson site could impact Campbell Creek. Please note that there are three known contaminated sites that are located between the Johnson site and Campbell Creek.

Shannon & Wilson evaluated remedial alternatives in their January 2001 report and concluded that additional soil excavation was impractical for this site.

Based on the above information the owner is requesting that a finding of 'no further remedial action planned' (NFRAP) for this site. The owner acknowledges that some institutional controls may be appropriate for this site.

Former Johnson Nissan Facility

Installing Monitoring Wells May 2002



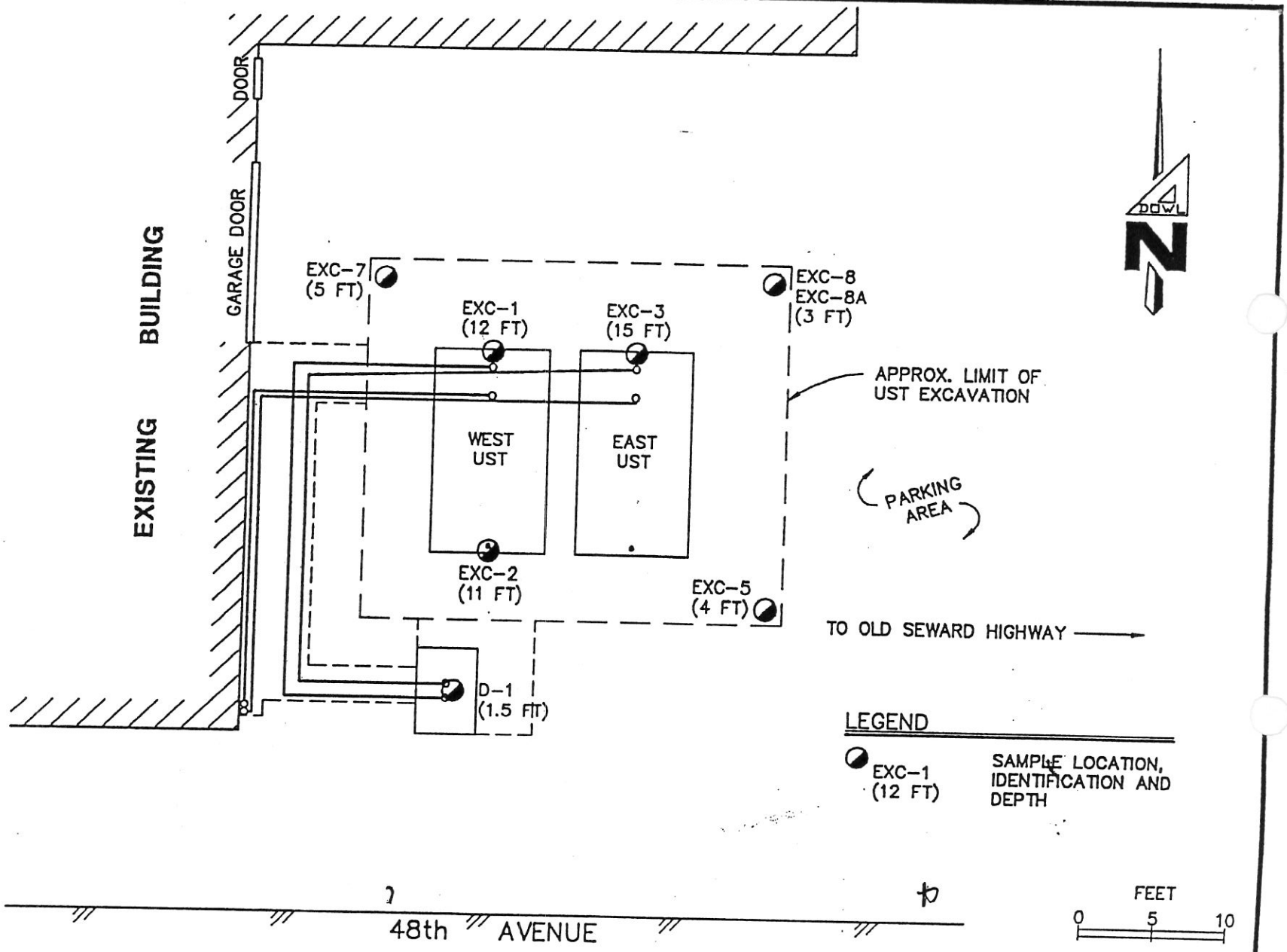
W.O. NO. D55025

SCALE: 1"= 100'

DOWL ENGINEERS

UST CLOSURE PROGRAM
4748 OLD SEWARD HIGHWAY

FIGURE 1
VICINITY MAP

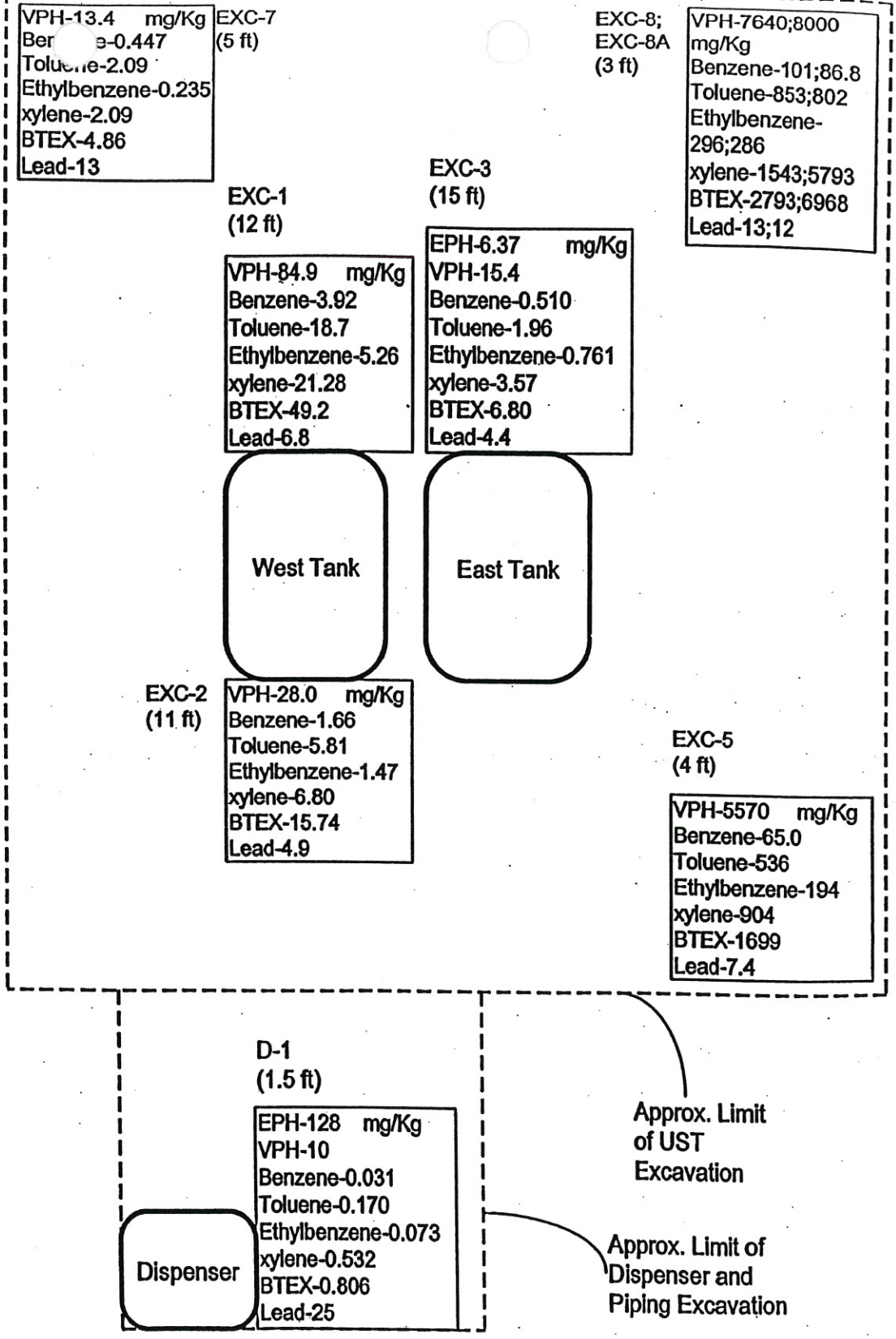


W.O. NO. D55025

DOWL ENGINEERS

UST CLOSURE PROGRAM
4748 OLD SEWARD HIGHWAY

FIGURE 2
SAMPLE LOCATION MAP



ChemTrack

Figure 3
Excavation Sample Locations
and Contaminant Data

ChemTrack

0 ft. 20 ft. 40 ft. 60 ft. 80 ft.

HISTORICAL DATA
1995 - 2000
Shannon & Wilson

GRO MW-2
156 Jan 95
108 Jul 95
152 Dec96
58.5 Aug 00
162 Nov 00

GRO MW-8
3.45 Jan 95
3.92 Jul 95
9.89 Mar 96
1.8 Nov 99
1.19 Aug 00
5.34 Nov 00

Former Johnson Nissan Facility

MW 10 ND Jun-02

MW-1
48 mg/L (Jun 02)
37 mg/L (Sep 02)

B6/VE-4in
15 mg/L (Jun 02)
153 mg/L (Sep 02)

MW-13
NS

MW-14
223 (Oct 02)

MW-5

MW-3
ND Jun-02

MW-2
89.5 mg/L (Jun 02)
77.6 mg/L (Sep02)
88.4 mg/L (Jul 03)

MW-15
78.4 mg/L (July 03)

Groundwater Flow

48th Street

Old Seward Hwy.

MW-9
ND (Jun 02)

MW-8
9.5 mg/L (Jun 02)
2.5 mg/L (Sep 02)
2.1 mg/L (Nov 02)
3.8 mg/L (May 03)
0.8 mg/L (July 03)

MW-11
ND (Jun 02)
ND (May 03)
ND (July 03)
ND (JAN 04)

MW-12
ND (Jun 02)
0.43 (May 03)
0.53 (July 03)
ND (JAN 04)
ND Duplicate

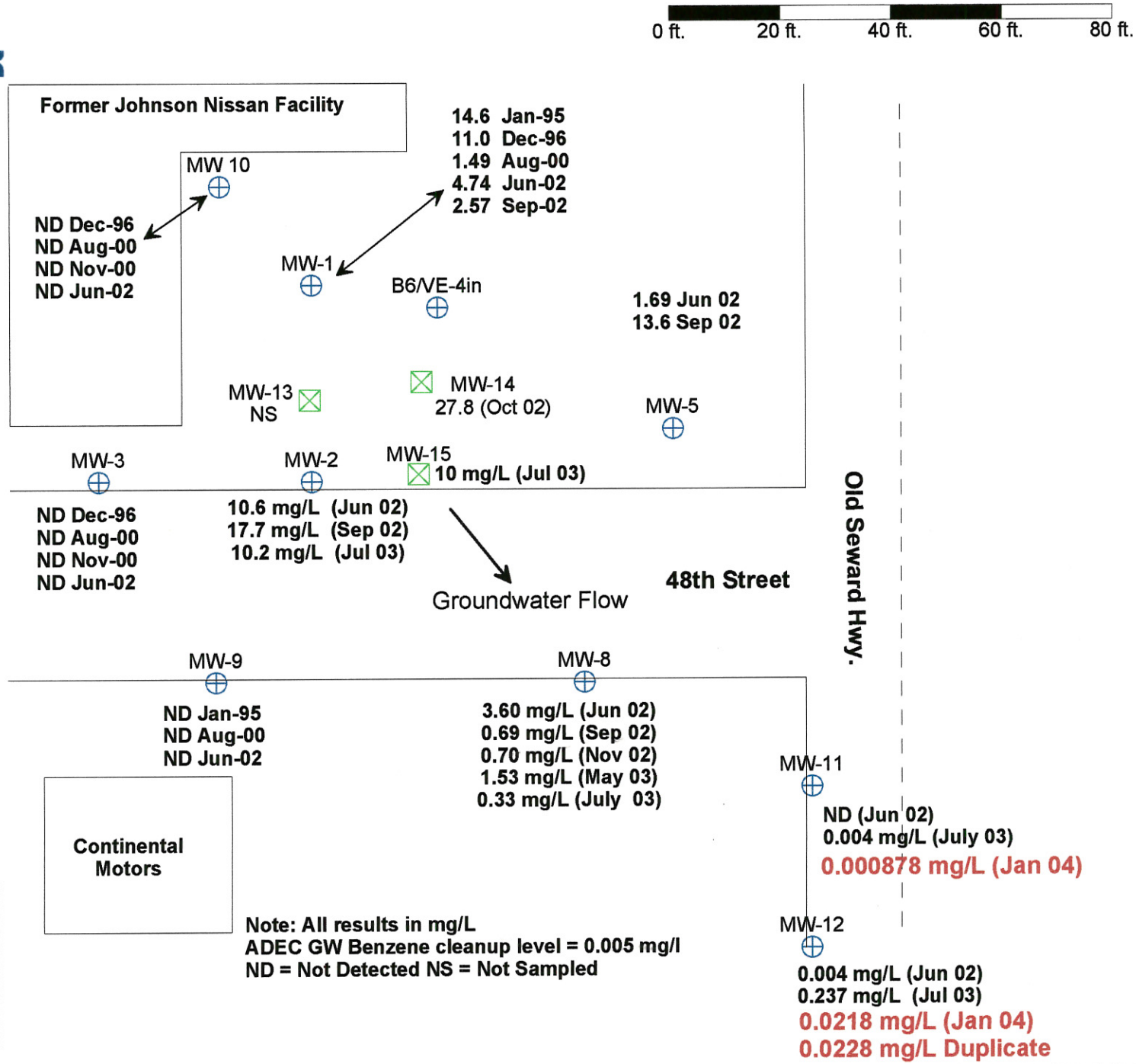
Continental Motors

Note: All results in mg/L
ADEC GW GRO cleanup level = 1.3 mg/l
ND = Not Detected
NS = Not Sampled
September Data for MW-1, MW-2, MW-6, MW-8
U = undetected at limit of detetcion

Figure 4
GRO Levels mg/L
Johnson Nissan
June 02 - Jan 04

GRO History

ChemTrack



HISTORICAL DATA
1995 - 2000
Shannon & Wilson

Benzene MW-2
32.8 Jan 95
20.7 Jul 95
25.8 Dec96
5.23 Aug 00
28.5 Nov 00

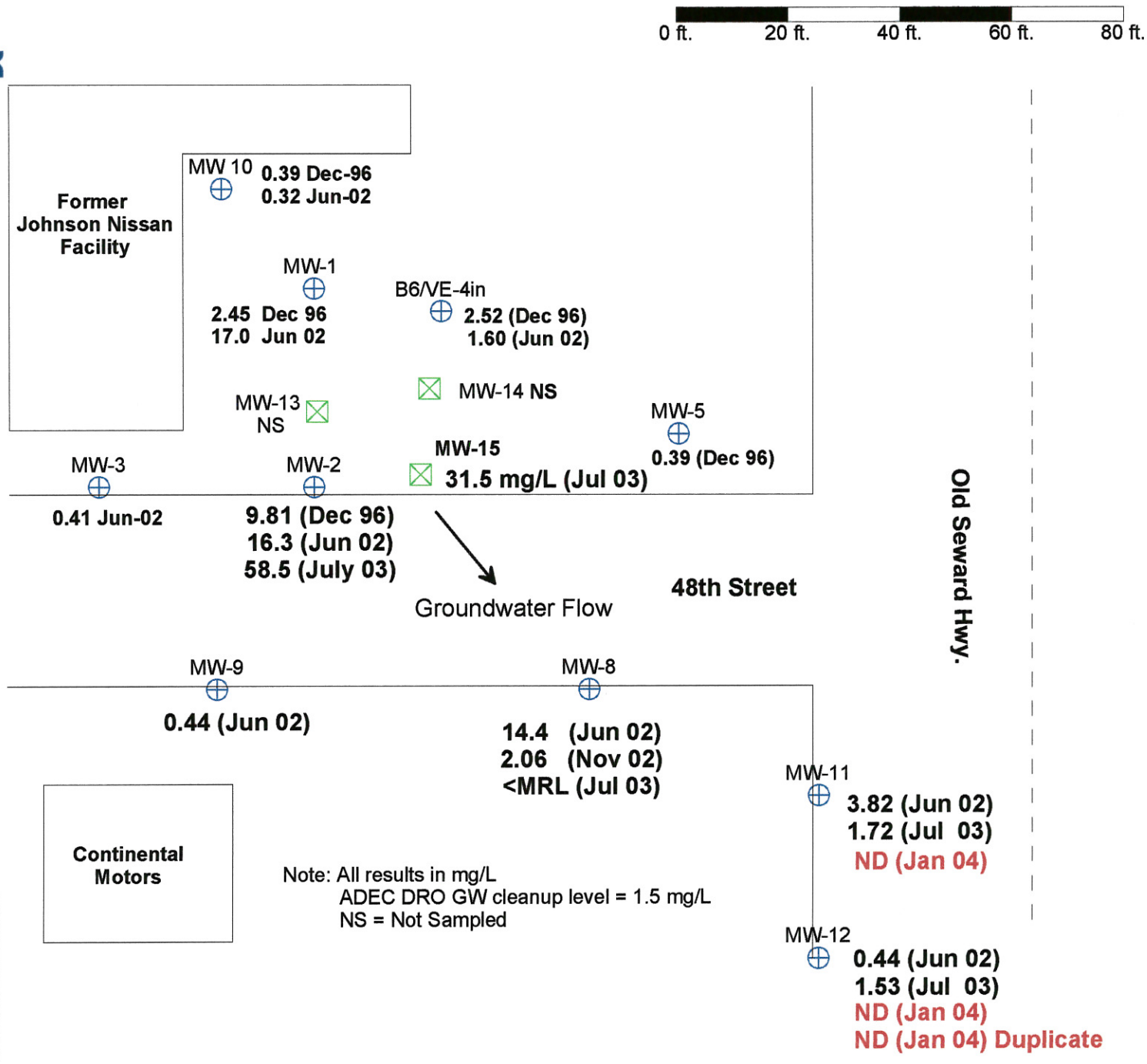
Benzene MW-8
1.51 Jan 95
2.49 Jul 95
4.91 Mar 96
0.69 Nov 99
0.50 Aug 00
2.31 Nov 00

Note: All results in mg/L
ADEC GW Benzene cleanup level = 0.005 mg/l
ND = Not Detected NS = Not Sampled

Figure 5
Benzene Levels mg/L
Johnson Nissan
Jun 02 - Jan 04

Benzene History

ChemTrack



Note: All results in mg/L
ADEC DRO GW cleanup level = 1.5 mg/L
NS = Not Sampled

Figure 6
DRO Levels mg/L
Johnson Nissan
Dec 1996 - Jan 2004

DRO History

Table 1: Summary of Analytical Data
Johnson Nissan
January 1995 - January 2004

DRO mg/L

MRL = Method Reporting Limit NS = Not Sampled <MRL = Not Detected

Well	Dec-96	Jun-02	Nov-02	Jul-03	Jan-04
MW1 (B-1)	2.45	17	NS	NS	NS
MW2 (B-2)	9.81	16.3	NS	58*	NS
MW3 (B-3)	NS	0.41	NS	NS	NS
MW5 (B-5)	0.39	NS	NS	NS	NS
MW6 B6VE	2.52	1.6	NS	NS	NS
MW8 (B-8)	NS	14.4	2.06	<MRL	NS
MW9 (B-9)	NS	0.44	NS	NS	NS
MW 10 (B-10)	0.39	0.32	NS	NS	NS
MW11	NS	3.82	NS	1.72	<MRL
MW12	NS	0.44	NS	1.53	<MRL
TAP Well	NS	<MRL	NS	NS	NS

GRO

MRL = Method Reporting Limit NS = Not Sampled <MRL = Not Detected

Well	Jan-95	Jul-95	Mar-96	Dec-96	Nov-99	Aug-00	Nov-00	Jun-02	Jul-03	Jan-04
MW1 (B-1)	97.6	NS	NS	66.9	NS	14.5	NS	48	NS	NS
MW2 (B-2)	156	108	NS	152	NS	58.5	162	89.5	88	NS
MW3 (B-3)	<MRL	NS	NS	NS	NS	<MRL	NS	<MRL	NS	NS
MW5 (B-5)	0.244	0.287	0.462	0.303	0.7	<MRL	0.148	NS	NS	NS
MW6 B6VE	20.7	23	13.5	18.6	24	42.1	25.9	15	NS	NS
MW8 (B-8)	3.45	3.92	9.89	NS	1.8	1.2	5.3	9.5	0.8	NS
MW9 (B-9)	<MRL	NS	NS	NS	NS	<MRL	NS	<MRL	NS	NS
MW 10 (B-10)	NS	NS	NS	<MRL	NS	<MRL	<MRL	<MRL	NS	NS
MW11	NS	NS	NS	NS	NS	NS	NS	<MRL	<MRL	<MRL
MW12	NS	NS	NS	NS	NS	NS	NS	<MRL	0.53	<MRL
TAP Well	NS	NS	<MRL	NS	<MRL	<MRL	NS	<MRL	NS	NS

Benzene

MRL = Method Reporting Limit NS = Not Sampled <MRL = Not Detected

Well	Jan-95	Jul-95	Mar-96	Dec-96	Nov-99	Aug-00	Nov-00	Jun-02	Jul-03	Jan-04
MW1 (B-1)	14.6	NS	NS	11	NS	1.49	NS	4.7	NS	NS
MW2 (B-2)	32.8	20.7	NS	25.8	NS	5.23	28.5	10.4	10.2	NS
MW3 (B-3)	<MRL	NS	NS	NS	NS	<MRL	NS	<MRL	NS	NS
MW5 (B-5)	0.13	0.18	0.243	0.157	0.272	0.011	0.079	NS	NS	NS
MW6 B6VE	1.53	3.11	1.34	2.29	1.75	3.82	2.5	1.69	NS	NS
MW8 (B-8)	1.51	2.49	4.91	NS	0.69	0.5	2.31	3.6	0.33	NS
MW9 (B-9)	<MRL	NS	NS	NS	NS	<MRL	NS	<MRL	NS	NS
MW 10 (B-10)	NS	NS	NS	<MRL	NS	<MRL	<MRL	<MRL	NS	NS
MW11	NS	NS	NS	NS	NS	NS	NS	<MRL	0.004	<MRL
MW12	NS	NS	NS	NS	NS	NS	NS	<MRL	0.237	0.00218
TAP Well	NS	NS	<MRL	NS	<MRL	<MRL	NS	<MRL	NS	NS

Toluene

MRL = Method Reporting Limit NS = Not Sampled <MRL = Not Detected

Well	Jan-95	Jul-95	Mar-96	Dec-96	Nov-99	Aug-00	Nov-00	Jun-02	Jul-03	Jan-04
MW1 (B-1)	27.6	NS	NS	16.8	NS	1.68	NS	8.4	NS	NS
MW2 (B-2)	44	NA	NS	36.7	NS	7.48	28.7	10.6	10.2	NS
MW3 (B-3)	<MRL	NS	NS	NS	NS	<MRL	NS	0.0008	NS	NS
MW5 (B-5)	<MRL	NS	<MRL	<MRL	<MRL	<MRL	<MRL	NS	NS	NS
MW6 B6VE	3.74	NS	2.21	4	3.12	4.48	3.16	1.9	NS	NS
MW8 (B-8)	0.0027	NS	NS	NS	NS	NS	NS	0.016	0.0008	NS
MW9 (B-9)	<MRL	NS	NS	NS	NS	<MRL	NS	<MRL	NS	NS
MW 10 (B-10)	NS	NS	NS	<MRL	NS	<MRL	<MRL	<MRL	NS	NS
MW11	NS	NS	NS	NS	NS	NS	NS	0.0027	<MRL	<MRL
MW12	NS	NS	NS	NS	NS	NS	NS	<MRL	<MRL	<MRL
TAP Well	NS	NS	<MRL	NS	<MRL	<MRL	NS	<MRL	NS	NS

Ethylbenzene

MRL = Method Reporting Limit NS = Not Sampled <MRL = Not Detected

Well	Jan-95	Jul-95	Mar-96	Dec-96	Nov-99	Aug-00	Nov-00	Jun-02	Jul-03	Jan-04
MW1 (B-1)	2.79	NS	NS	2.23	NS	0.41	NS	1.1	NS	NS
MW2 (B-2)	3.4	NA	NS	4.4	NS	1.4	2.5	1.3	10.2	NS
MW3 (B-3)	<MRL	NS	NS	NS	NS	NS	NS	<MRL	NS	NS
MW5 (B-5)	<MRL	NS	<MRL	<MRL	<MRL	<MRL	<MRL	NS	NS	NS
MW6 B6VE	NS	NS	NS	NS	NS	NS	NS	0.231	NS	NS
MW8 (B-8)	0.004	NA	0.1	<MRL	<MRL	<MRL	<MRL	0.021	<MRL	NS
MW9 (B-9)	<MRL	NS	NS	NS	NS	<MRL	NS	<MRL	NS	NS
MW 10 (B-10)	NS	NS	NS	<MRL	NS	<MRL	<MRL	<MRL	NS	NS
MW11	NS	NS	NS	NS	NS	NS	NS	<MRL	<MRL	<MRL
MW12	NS	NS	NS	NS	NS	NS	NS	<MRL	<MRL	<MRL
TAP Well	NS	NS	<MRL	NS	<MRL	<MRL	NS	<MRL	NS	NS

Xylenes

MRL = Method Reporting Limit NS = Not Sampled <MRL = Not Detected

Well	Jan-95	Jul-95	Mar-96	Dec-96	Nov-99	Aug-00	Nov-00	Jun-02	Jul-03	Jan-04
MW1 (B-1)	14.8	NS	NS	11.63	NS	2.15	NS	6.1	NS	NS
MW2 (B-2)	17.5	NA	NS	21.9	NS	9.47	13.45	7.5	10.2	NS
MW3 (B-3)	<MRL	NS	NS	NS	NS	<MRL	NS	<MRL	NS	NS
MW5 (B-5)	<MRL	NS	<MRL	<MRL	<MRL	<MRL	<MRL	NS	NS	NS
MW6 B6VE	3.51	NA	2.2	2.3	2.9	3.36	2.9	1.5	NS	NS
MW8 (B-8)	0.007	NA	0.23	<MRL	<MRL	<MRL	<MRL	0.34	<MRL	NS
MW9 (B-9)	<MRL	NS	NS	NS	NS	<MRL	NS	<MRL	NS	NS
MW 10 (B-10)	NS	NS	NS	<MRL	NS	<MRL	<MRL	<MRL	NS	NS
MW11	NS	NS	NS	NS	NS	NS	NS	<MRL	<MRL	<MRL
MW12	NS	NS	NS	NS	NS	NS	NS	<MRL	<MRL	<MRL
TAP Well	NS	NS	<MRL	NS	<MRL	<MRL	NS	<MRL	NS	NS