

CSID 2666

**SITE HAZARD ASSESSMENT
WORKSHEET 1
SUMMARY SCORE SHEET**

Site Name/Location (Street, City, County, Section/Township/Range, Facility Site ID Number):

TD Auto Body & Repair
1209 East Fir Street
Seattle, WA 98122
King County
T-25N, R-4E, Sec-32
Facility Site ID#: 2501
Longitude: 122° 19' 25.97"
Latitude: 47° 31' 28.16"
Site assessed for February 26, 2002 update

Site Description (Include management areas, substances of concern, and quantities):

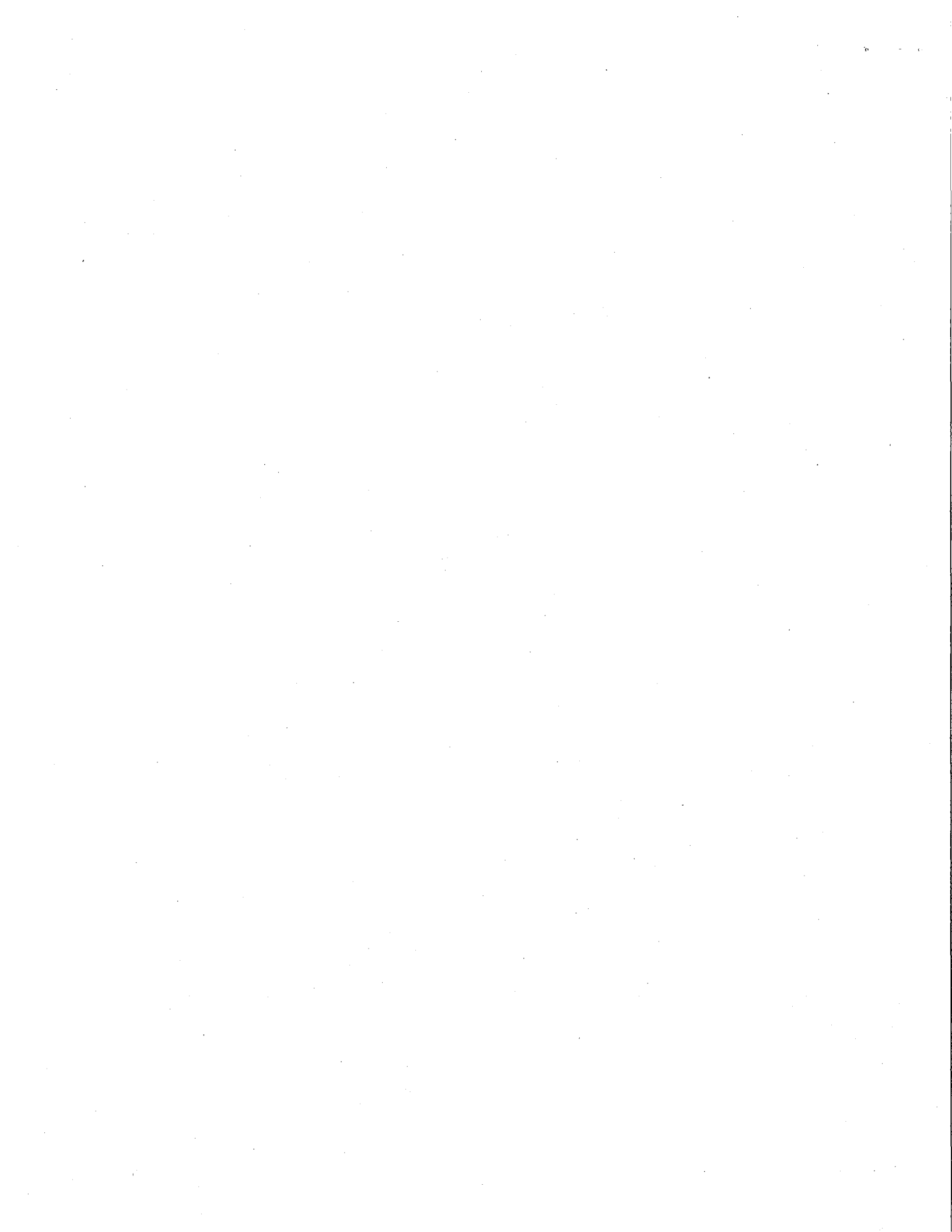
The TD Auto Body and Repair property located at 1209 East Fir Street Seattle, WA is an automotive repair and body shop business located in the Capitol Hill area of Seattle. The area consists of high-density buildings that contain small commercial businesses and a few residential properties. The area is served by municipal water and sewer systems.

The TD Auto Body and Repair property contains one building which houses the business work area, storage areas and offices. To the east of the site is another commercial business, to the west is a gravel parking area for a restaurant, to the north is East Fir Street and to the south is a sloping dirt area used for the collection of auto parts. All of the TD Auto Body and Repair property is covered by either cement or asphalt except for the dirt area on the south side of the site.

During the fall of 1993 the Washington State Department of Ecology (Ecology) received a complaint that personnel at TD Auto Body and Repair were dumping contaminated materials on the site. Ecology then referred the site to the King County Local Hazardous Waste Program (LHWP) for a site visit. The LHWP inspectors did notice some possibly contaminated soil at the site and reported their findings to Ecology. On September 8th 1994, Ecology listed the TD Auto Body and Repair property on the Integrated Site Information System (ISIS) list.

A site hazard assessment visit (SHA) was conducted by Carsten Thomsen and Yolanda King of the Public Health-Seattle & King County (PHSKC) on November 15, 2001. By the time that this visit took place, PHSKC had been unable to contact the site owner so very limited access to the property was available. During the visit some areas of stained soil were noticed on the site to the south of the building. A decision was then made to return to the site to collect soil samples for analysis.

On December 7, 2001 Carsten Thomsen and Yolanda King of the PHSKC met with the owner of the property and took three soil samples on the TD Auto Body & Repair site. All three samples were collected at depths ranging from six to ten inches. The three samples were collected on the soil slope located on the south side of the building. All of the samples were analyzed for Northwest Total Petroleum Hydrocarbons-Diesel Extended (NWTPH-Dx), Volatile Organic Compounds (VOC's) and total metals.



No VOC's were detected in any of the three samples. As shown in the table below, heavy oil was found in all three samples with sample #3 containing levels exceeding the Model Toxics Control Act (MTCA) Method A cleanup level of 2000 ppm. Lead was also found in all three samples with sample #3 containing levels exceeding the MTCA Method A cleanup level of 250 ppm.

	Heavy Oil (ppm)	Lead (ppm)
Sample #1	760	160
Sample #2	1700	120
Sample #3	3200	1000
MTCA Method A Cleanup Level	2000	250

On the basis of this SHA, completed by the PHSKC's Environmental Health Division, this site will be scored for the air and groundwater routes under the MTCA regulations. The surface water route will not be scored due to the layout of the site, which slopes to an enclosed area with no surface water escape.

Special Considerations (Include limitations in site file data or data which cannot be accommodated in the model, but which are important in evaluating the risk associated with the site, or any other factor(s) over-riding a decision of no further action for the site): N/A

ROUTE SCORES:

Surface Water/Human Health: NS

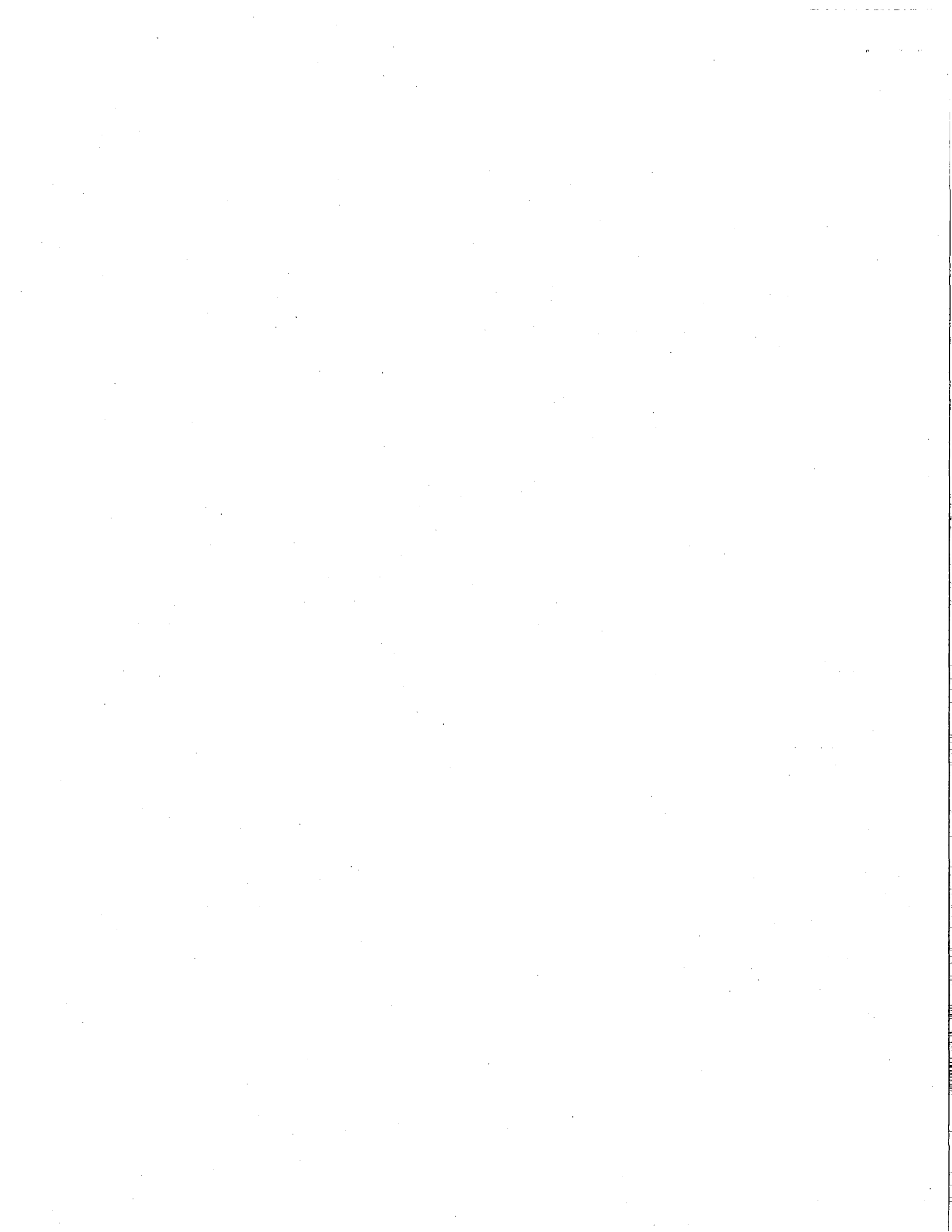
Surface Water/Environ.: NS

Air/Human Health: 27.5

Air/Environmental: NS

Ground Water/Human Health: 22.4

OVERALL RANK: 3



WORKSHEET 2
ROUTE DOCUMENTATION

1. SURFACE WATER ROUTE

List those substances to be considered for scoring: Source:

Due to conditions on the property this route will not be scored.

Explain basis for choice of substance(s) to be used in scoring.

List those management units to be considered for scoring: Source:

Explain basis for choice of unit to be used in scoring. Source:

2. AIR ROUTE

List those substances to be considered for scoring: Source: 2

Lead

Explain basis for choice of substance(s) to be used in scoring.

The above substance concentration is above MTCA Method A cleanup standards.

List those management units to be considered for scoring: Source: 3

Soil contamination

Explain basis for choice of unit to be used in scoring. Source: 3

Soil is exposed to weather with no containment.

3. GROUND WATER ROUTE

List those substances to be considered for scoring: Source: 2

Lead, NWTPH-Heavy Oil

Explain basis for choice of substance(s) to be used in scoring.

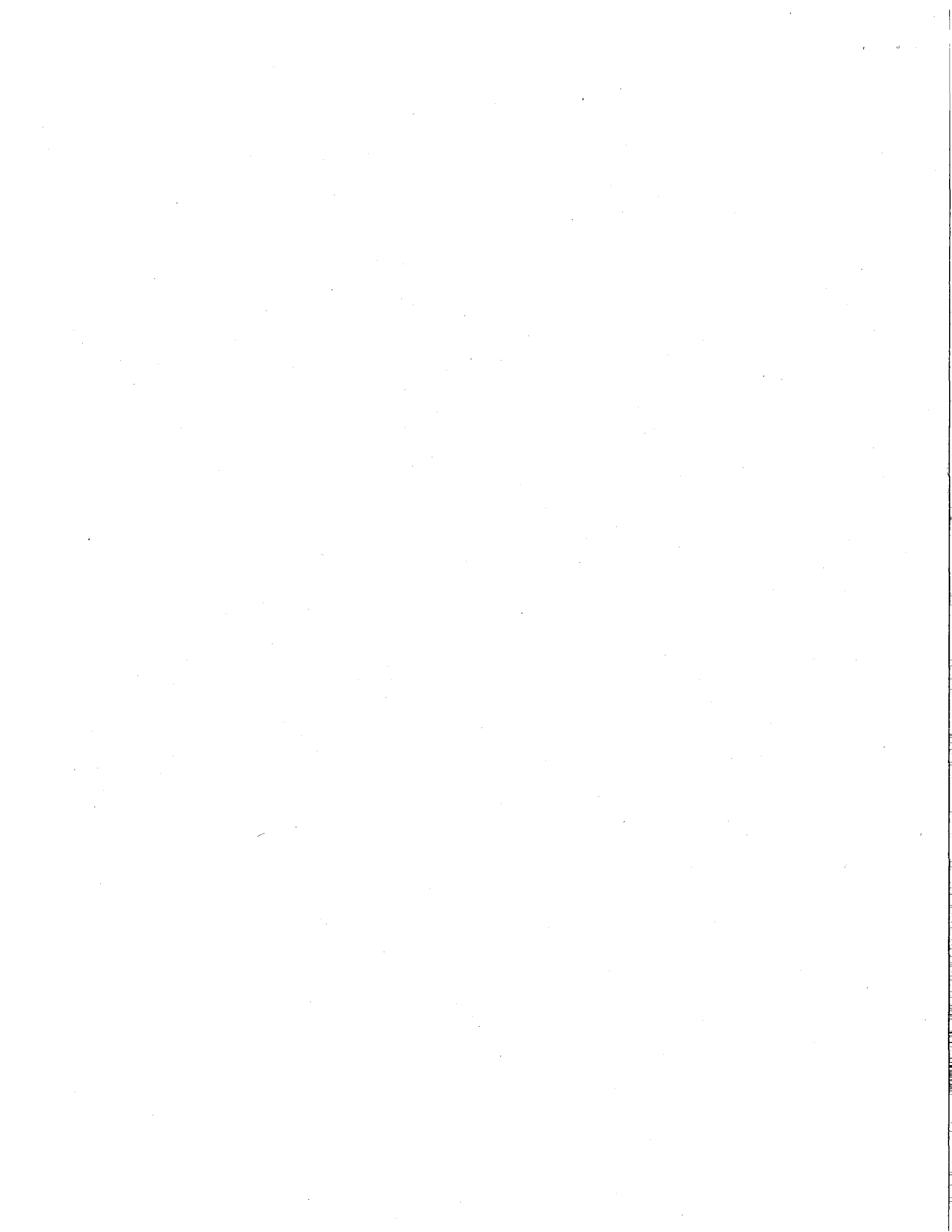
All of the above substance concentrations are above MTCA Method A cleanup standards.

List those management units to be considered for scoring: Source: 3

Surface soil contamination.

Explain basis for choice of unit to be used in scoring.

Surface soil is exposed to weather with no containment.



**WORKSHEET 3
AIR ROUTE**

1.0 SUBSTANCE CHARACTERISTICS

1.1 Introduction (WARM Scoring Manual) - Please review before scoring

1.2 Human Toxicity

Substance	Air Standard		Acute Toxicity		Chronic Toxicity		Carcinogenicity		
	(ug/m ³)	Val.	(mg/m ³)	Val.	(mg/kg/day)	Val.	WOE	PF*	Val.
1. Lead	0.05	10	ND	-	ND	-	B2	ND	-

*Potency Factor

Source: 1,2
Highest Value: 10
(Max.=10)
+2 Bonus Points? No
Final Toxicity Value: 10
(Max.=12)

1.3 Mobility (Use numbers to refer to above listed substances)

1.3.1 Gaseous Mobility

Vapor Pressure(s) (mmHg): 1= 9.5E+1 = 4; Source:
2= 1.0E+1= 3; 3= 0; 4= 2.0E-03= 0; 5= 8.2E-02= 4 Value:
(Max.=4)

1.3.2 Particulate Mobility

Soil type: sandy clay loam Source:3
Erodibility: 56 Value: 1
Climatic Factor: 1 to 10 (Max.=4)

1.4 Highest Human Health Toxicity/Mobility Matrix Value (from

Table A-7) equals **Final Matrix Value: 5**
(Max.=24)

1.5 Environmental Toxicity/Mobility

Source: 1,2,3

Substance	Non-human Mammalian Acute		(Table A-7)	
	Inhal. Toxicity (mg/m ³)	Value	Mobility (mmHg)	Value Matrix Value
1.ND				

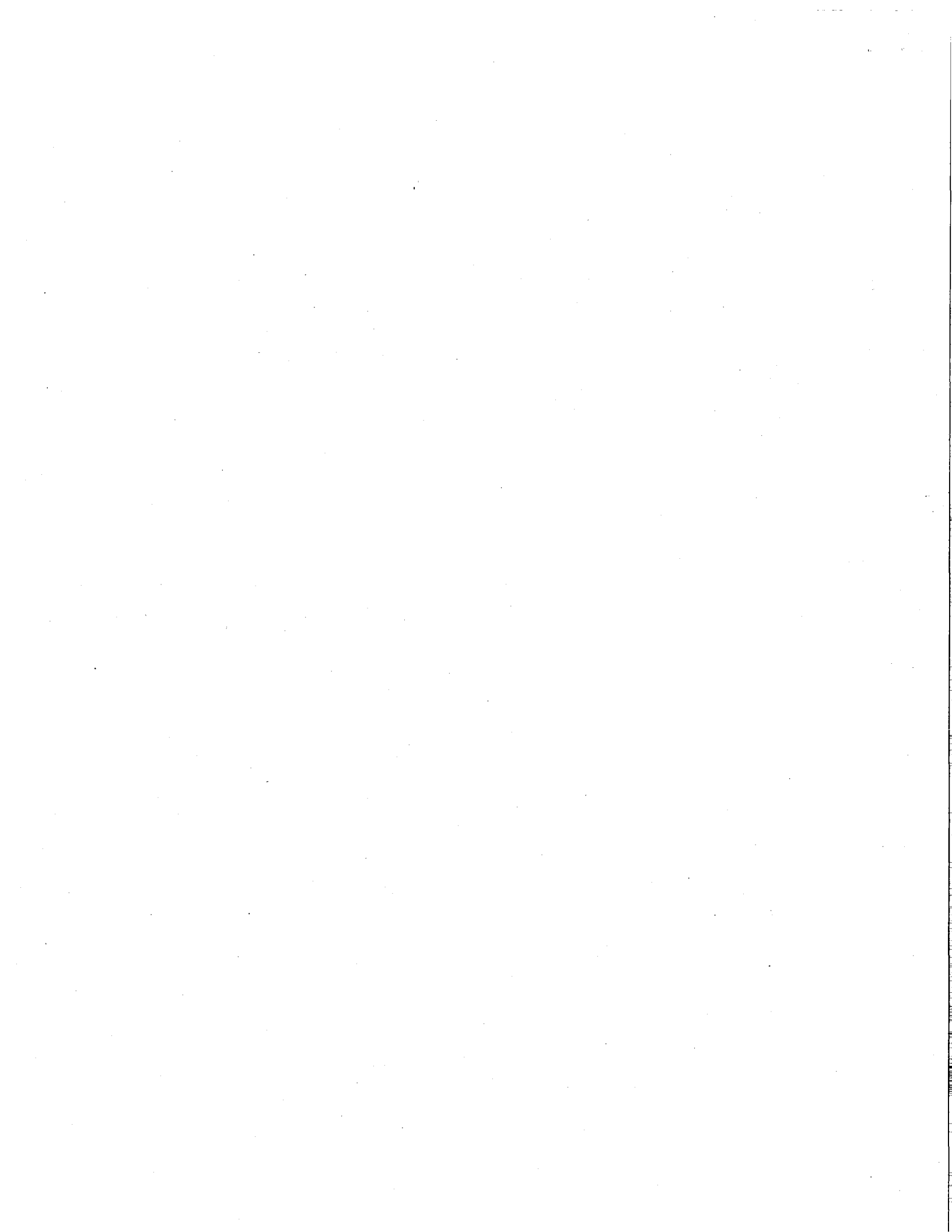
Highest Environmental Toxicity/Mobility Matrix Value

(From Table A-7) equals **Final Matrix Value: NS**
(Max.=24)

1.6 Substance Quantity: 600 square feet

Source: 3 Value: 4
(Max.=10)

Explain basis: 20'X30'=600 SQ ft



2.0 MIGRATION POTENTIAL

2.1 Containment: No cover. Discharge spills directly Source: 3 Value: **10**
onto ground. (Max.=10)

3.0 TARGETS

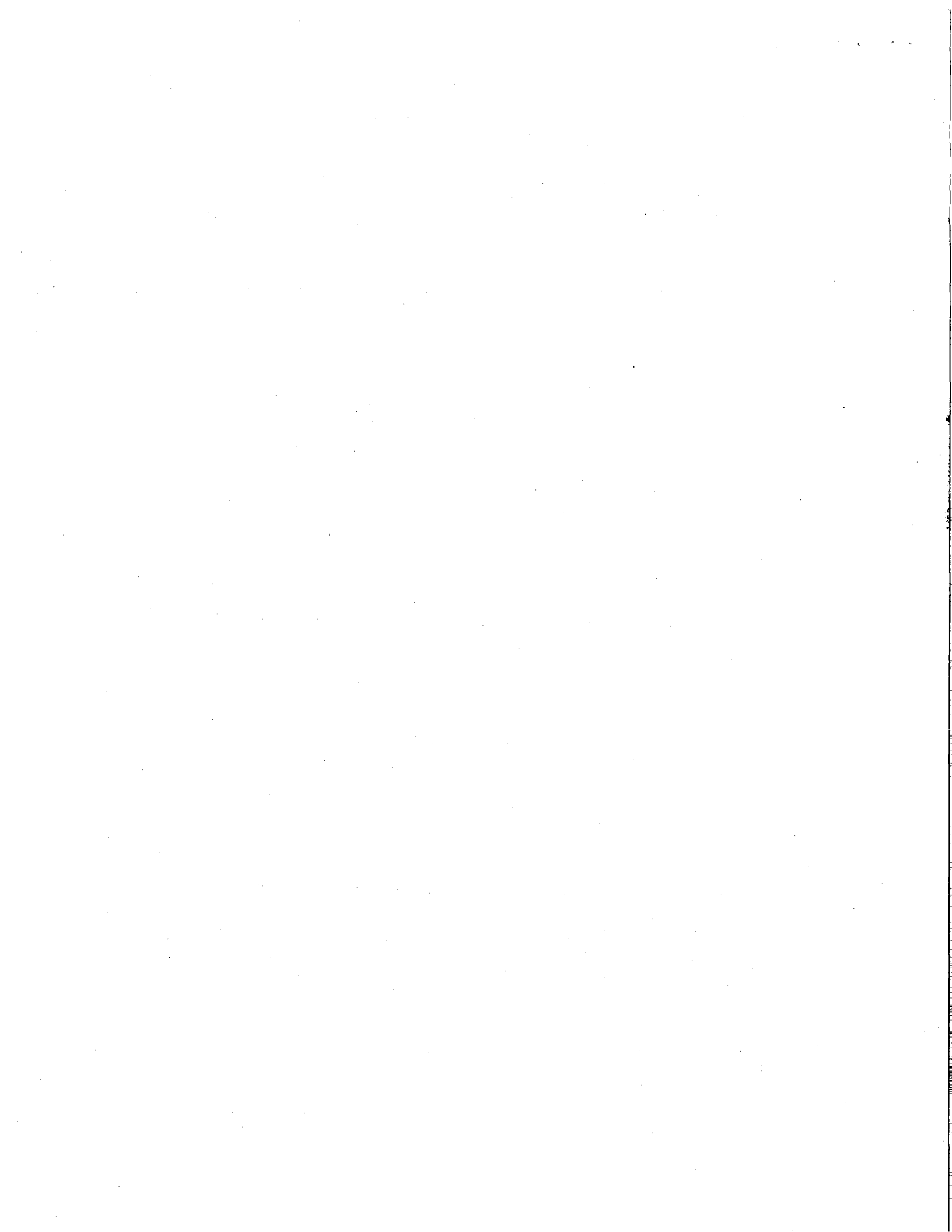
3.1 Nearest Population: < 1,000 feet Source: 3 Value: **10**
(Max.=10)

3.2 Distance to, and Name(s) of, Nearest Sensitive
Environment(s) First Hill Park >2,000 to 3,000 feet Source: 6 Value: **5**
(Max.=7)

3.3 Population within 0.5 miles: pop.= sq root 4500 = 67 Source: 3 Value: **67**
(Max.=75)

4.0 RELEASE

Explain basis for scoring a release to air: _____ Source: 3 Value: **0**
No confirmed release. (Max.=5)



**WORKSHEET 4
GROUND WATER ROUTE**

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Standard		Acute Toxicity		Chronic Toxicity		WOE	Carcinogenicity	
	(ug/l)	Val.	(mg/kg-bw)	Val.	(mg/kg/day)	Val.		PF*	Val.
1. Lead	5	8	ND	-	0.0003	5	B2	ND	-
2. NWTPH-Heavy Oil	ND	-	ND	-	2	1	ND	ND	-

*Potency Factor

Source: 1,2
Highest Value: 8
(Max.=10)

+2 Bonus Points? no
Final Toxicity Value: 8
(Max.=12)

1.2 Mobility (Use numbers to refer to above listed substances)

Cations/Anions: 1=2 ; 2=NA; 3= Source: 1 Value: 2
(Max.=3)

OR
Solubility(mg/l): 1= ; 2= ; 3=

1.3 Substance Quantity: 1800 cu ft=67 cu yds Source: 3 Value: 2
Explain basis: 600 sq ft X 3ft depth= 1800 cu ft (Max.=10)

2.0 MIGRATION POTENTIAL

2.1 Containment Source: 3 Value: 10
Explain basis: spill/discharge to ground (Max.=10)

2.2 Net Precipitation: 18.7 inches Source: 5 Value: 2
(Max.=5)

2.3 Subsurface Hydraulic Conductivity: clayey sand Source: 3 Value: 3
(Max.=4)

2.4 Vertical Depth to Ground Water: 8 to 10 feet Source: 3 Value: 8
(Max.=8)

3.0 TARGETS

3.1 Ground Water Usage: not usable Source: 8 Value: 1
(Max.=10)

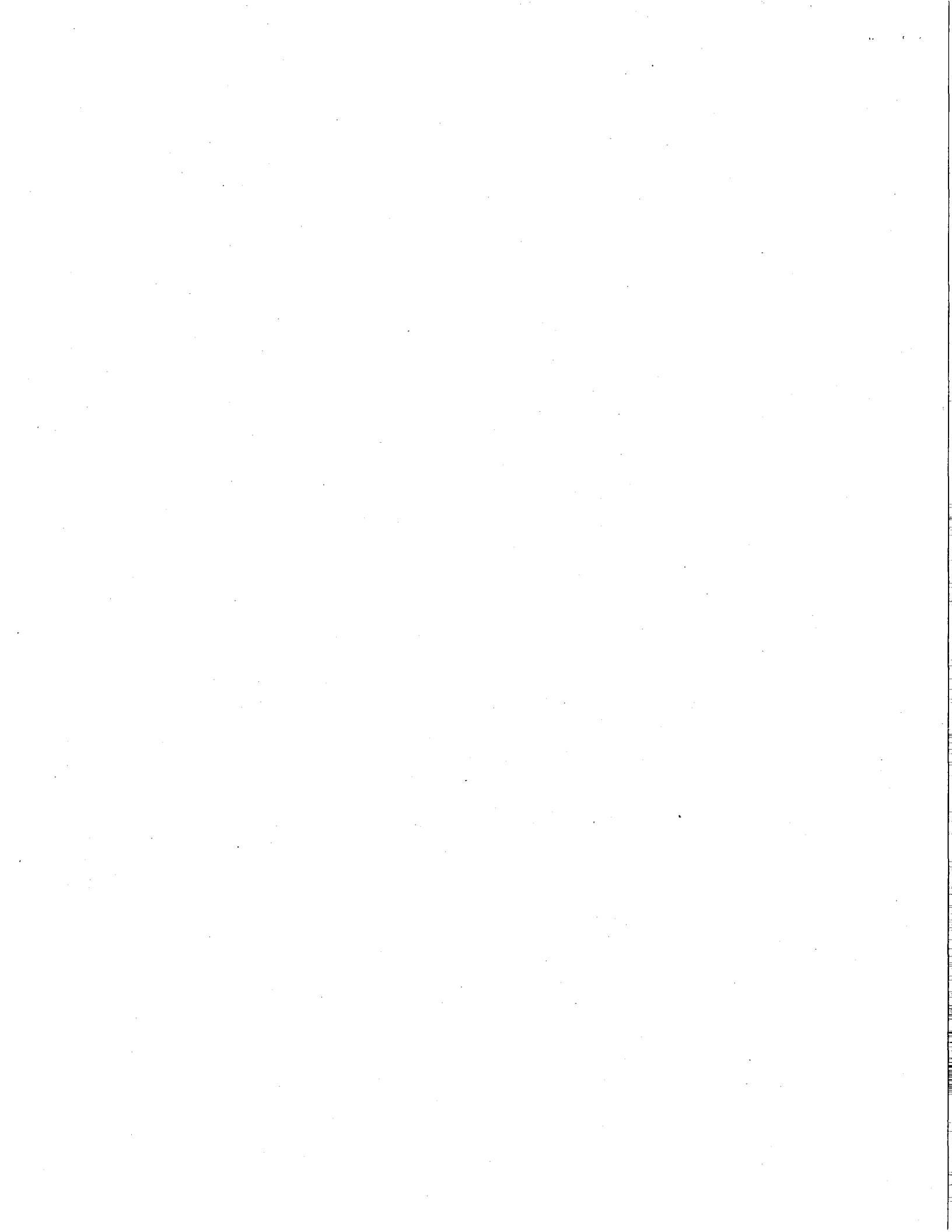
3.2 Distance to Nearest Drinking Water Well: >10,000ft Source: 8 Value: 0
(Max.=5)

3.3 Population Served within 2 Miles: pop.= = 0 Source: 8 Value: 0
(Max.=50)

3.4 Area Irrigated by (Groundwater) Wells
within 2 miles: 0.75 no.acres= Source: 7 Value: 0
0.75 =0.75 ()= 0 (Max.=100)

4.0 RELEASE

Explain basis for scoring a release to ground water: none confirmed Source: 3 Value: 0
(Max.=5)



SOURCES USED IN SCORING

1. Washington Ranking Method Toxicological Database.
2. Analytical Results for TD Auto Body, Onsite Environmental, December 14, 2001.
3. Site Hazard Assessment, Public Health-Seattle & King County, December 7, 2001
4. National Weather Service Data.
5. Isopluvials of 2-year, 24-hour Precipitation, NOAA Atlas 2, Volume IX.
6. Sensitive Areas Coverage, King County Geographic Information System Data.
7. Washington State Department of Health Public Water Supply Listing.
8. Washington State Water Use Data.

