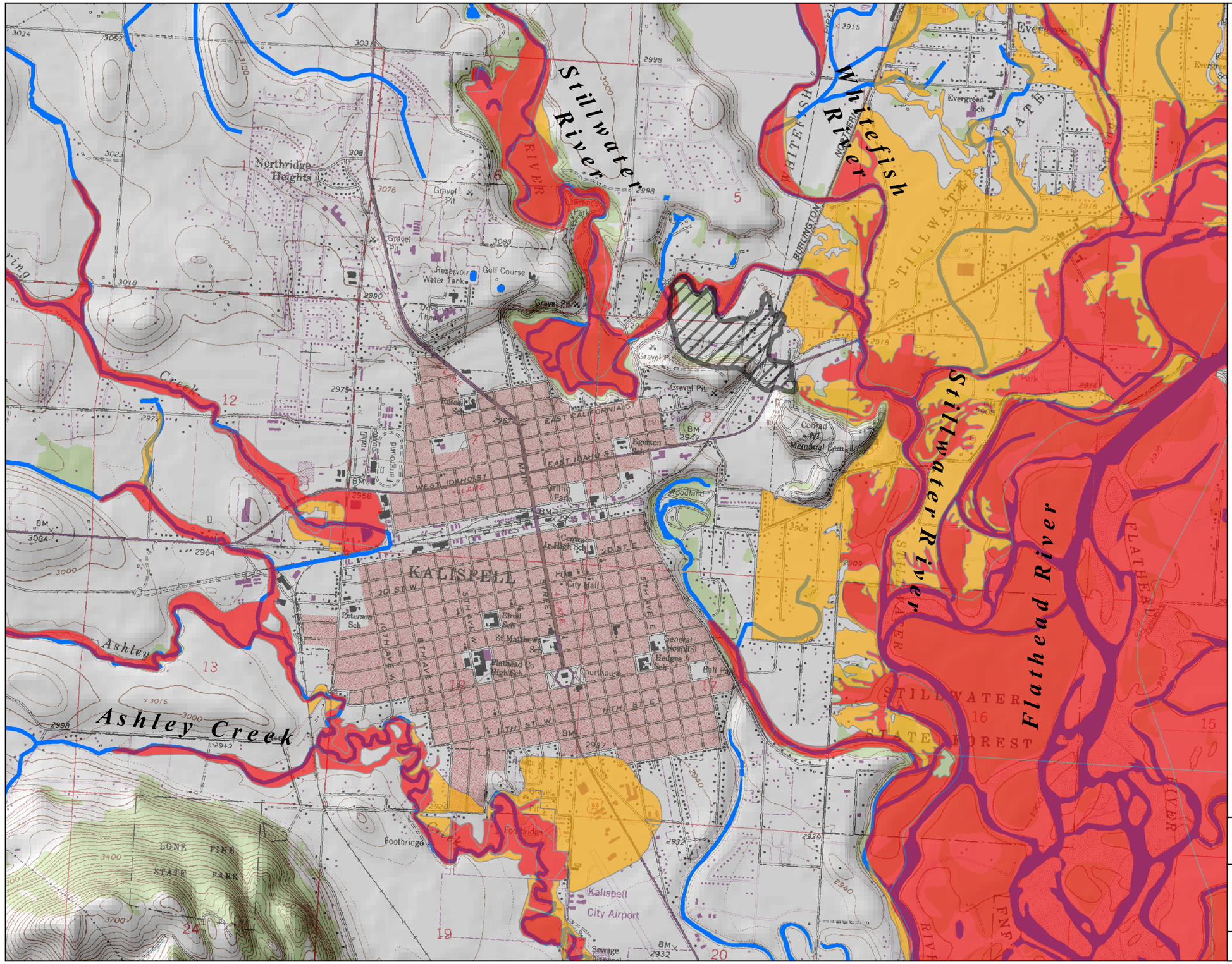
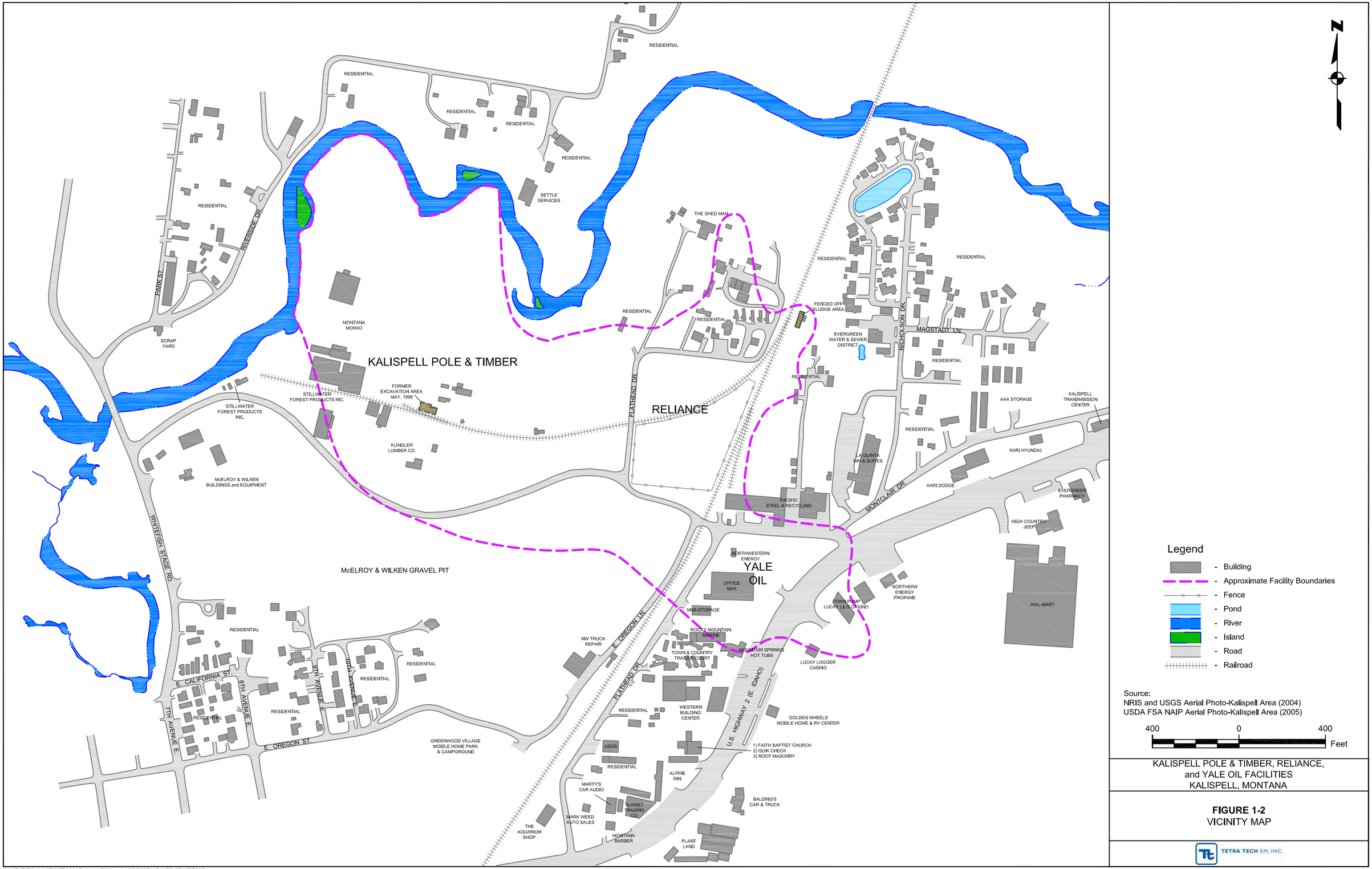


KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 1-1
SITE LOCATION MAP

TETRA TECH EM, INC.

GIS map by Ed Madej Ttemi-HE
Fig1-1_KPT_site_location_map_012507.mxd



Legend

- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

Source:
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)

400 0 400 Feet

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 1-2
VICINITY MAP

TETRA TECH EM, INC.

RIWP-FIG2-1_VICINITY MAP.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

McELROY & WILKEN BUILDINGS and EQUIPMENT

KLINGLER LUMBER CO.

STILLWATER FOREST PRODUCTS INC.

STILLWATER FOREST PRODUCTS INC.

FORMER EXCAVATION AREA MAY, 1999

FORMER EXCAVATION AREA MAY, 1999

KRY553 LOCATED 227' NORTH

KRY553 (Actual Location)

KRY553 LOCATED 227' NORTH

KRY562 LOCATED 600' SOUTH

MONTANA MOKKO

SETTLE SERVICES

THE SHED MAN

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

PACIFIC STEEL & RECYCLING

NORTHWESTERN ENERGY

OFFICE MAX

MINI-STORAGE

ROCKY MOUNTAIN MARINE

TOWN & COUNTRY TRAILER COURT

MOUNTAIN SPRINGS HOT TUBS

WESTERN BUILDING CENTER

NW TRUCK REPAIR

LA QUINTA INN & SUITES

KARI HYUNDAI

KARI DODGE

HIGH COUNTRY JEEP

NORTHERN ENERGY PROPANE

TOWN PUMP LUCKY LIL'S CASINO

LUCKY LOGGER CASINO

WAL-MART

AAA STORAGE

GOLDEN WHEELS MOBILE HOME & RV CENTER

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

USGS

SCRAP YARD

RESIDENTIAL

RIVERSIDE DR.

PARK ST.

WHITEFISH STAGE RD.

FLATHEAD DR.

E. OREGON LN.

U.S. HIGHWAY 2 (E. IDAHO)

MAGSTADT LN.

NICHOLSON DR.

MONTCLAIR DR.

Legend

- Soil Sampling Location (TtEMI 2006)
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

Source:
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)

300 0 300 Feet

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 2-1
SOIL SAMPLING LOCATIONS

TETRA TECH EM, INC.

FIG 2-1_SOIL SAMPLING LOCATIONS.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

KRY200 LOCATED 135' WEST (NEAR BRIDGE)

KRY201 KRY202 KRY203 KRY204 KRY100A KRY101A KRY101B KRY102A KRY102B KRY103A KRY103B KRY104A KRY105A KRY106A KRY106B KRY107A KRY107B KRY108A KRY109A KRY110A KRY110B KRY111A KRY111B KRY112A KRY112B KRY113A KRY113B KRY114A KRY114B KRY115A KRY115B KRY116A KRY116B KRY117A KRY118A KRY118B KRY119A KRY120A KRY121A KRY121B KRY122A KRY122B KRY123A KRY125A KRY125B KRY126A KRY127A KRY128A KRY128B KRY129A KRY129B KRY130A KRY130B KRY132A KRY133A KRY134A KRY135A KRY136A KRY137A KRY138A KRY139A KRY139B

IW-1 IW-2 IW-4 IW-5 IW-6 IW-7 IW-8

RW-1 RW-2 RW-3 RW-4 RW-5 RW-6 RW-7 RW-8 RW-9 RW-9A RW-10 RW-11 RW-12 RW-13

PWS-1 PWS-2

GW-1 GW-5

GWY-10 GWY-12 GWY-13 GWY-14

GWRR-1 GWRR-2 GWRR-3 GWRR-4 GWRR-5 GWRR-6 GWRR-7 GWRR-8 GWRR-9

GWRM-1 GWRM-2

KPT-1 KPT-2 KPT-3 KPT-4 KPT-5 KPT-6 KPT-7 KPT-8 KPT-9 KPT-10 KPT-11 KPT-12 KPT-13 KPT-14 KPT-15 KPT-16 KPT-17 KPT-18 KPT-19 KPT-20 KPT-21 KPT-22

OMW-1 OMW-2 OMW-3 OMW-4 OMW-5 OMW-6

OSW-1 OSW-2

SBM-1 SBM-2

NTL-MW-3 NTL-MW-4

PW-1 PW-3

SW-9

CLCW-1

RIVERSIDE DR.
PARK ST.
STEELFISH STAGE RD.
FLATHEAD DR.
NICHOLSON DR.
MAGSTADT LN.
MONTCLAIR DR.
E. OREGON LN.
E. CALIFORNIA ST.
E. OREGON ST.
7TH AVENUE E.
8TH AVENUE E.
9TH AVENUE E.
10TH AVENUE E.
U.S. HIGHWAY 2 (E. IDAHO)

RESIDENTIAL
SETTLE SERVICES
THE SHED MAN
FENCED OFF SLUDGE AREA
EVERGREEN WATER & SEWER DISTRICT
AAA STORAGE
KARI HYUNDAI
LA QUINTA INN & SUITES
KARI DODGE
PACIFIC STEEL & RECYCLING
HIGH COUNTRY JEEP
WAL-MART
NORTHWESTERN ENERGY
NORTHERN ENERGY PROPANE
OFFICE MAX
MINI-STORAGE
TOWN PUMP LUCKY LILS CASINO
ROCKY MOUNTAIN MARINE
NW TRUCK REPAIR
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
LUCKY LOGGER CASINO
WESTERN BUILDING CENTER
GOLDEN WHEELS MOBILE HOME & RV CENTER
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY
SCRAP YARD
MONTANA MOKKO
STILLWATER FOREST PRODUCTS INC.
FORMER EXCAVATION AREA MAY, 1999
KLINGLER LUMBER CO.
McELROY & WILKEN BUILDINGS and EQUIPMENT
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
USGS

N

Legend

- Monitoring Well (Installed by TtEMI in 2006)
- Monitoring Well (Installed Previously)
- Surface Water / Sediment Sample (TtEMI 2006)
- Industrial Well
- Public Water Supply Well
- Residential Well
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

Source:
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

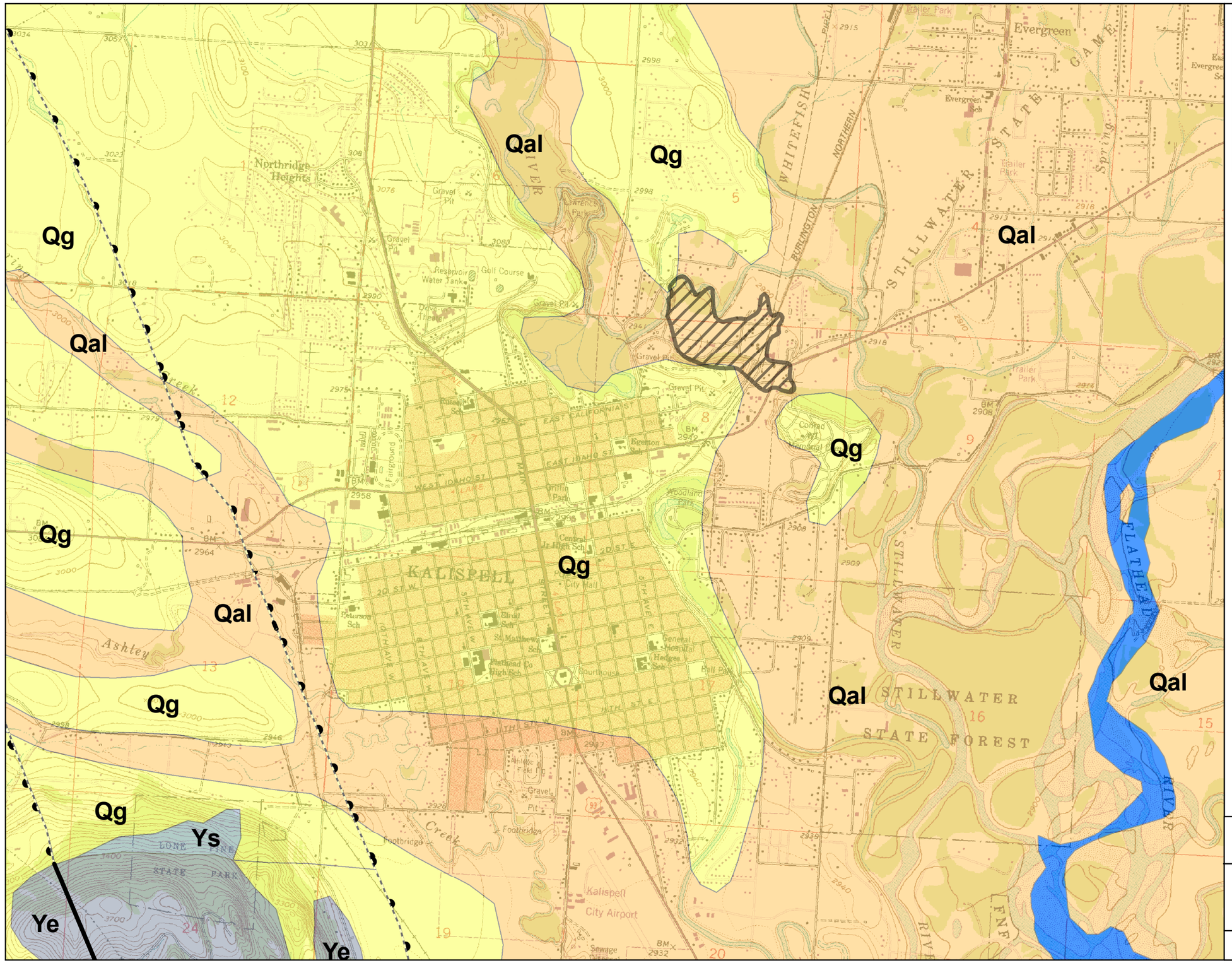
300 0 300 Feet

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 2-2
GROUNDWATER, SURFACE WATER AND SEDIMENT SAMPLING AND MONITORING LOCATIONS

TETRA TECH EM, INC.

FIG 2-2_WATER SAMPLING LOCATIONS.dwg - DWH - 01/22/2007 - S1176-37-KPT005



N

Legend

Approximate Facility Boundaries

Geologic Units

Qal - Alluvial deposits

Qg - Glacial and fluvioglacial deposits

Ye - Empire Formation

Ys - Spokane Formation

Faults

Fault, unknown offset; dotted where concealed.

High-angle fault, known offset; dotted where concealed. Ball on downthrown side.

Source:
Harrison, J.E., Cressman, E.R., Whipple, J.W., 1992, Geologic and structure maps of Kalispell 1- by 2- degree quadrangle, Montana and Alberta, British Columbia, United States Geological Survey: Miscellaneous Geologic Investigation 2267, 1 sheet(s), 1:250,000

2,300 0 2,300 Feet

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 3-1
GENERAL GEOLOGY

TETRA TECH EM, INC.

GIS map by Ed Madej Ttemi-HE
Fig3-1_KPT_general_geology2_012507.mxd

N

RESIDENTIAL
RESIDENTIAL
SETTLE SERVICES
RESIDENTIAL
RIVERSIDE DR.
PARK ST.
KRY103A
KRY103B
KRY105A
KRY100A
MONTANA MOKKO
SCRAP YARD
KRY106A
KRY106B
B
KRY101B
KRY101A
KALISPELL POLE & TIMBER
KRY132A
GW-1
KPT-1
KRY113A
KRY113B
KRY108A
STILLWATER FOREST PRODUCTS INC.
STILLWATER FOREST PRODUCTS INC.
KPT-2
KPT-6
KPT-8
KPT-7
FORMER EXCAVATION AREA MAY, 1999
KLINGLER LUMBER CO.
KPT-5
KRY114B
KRY114A
KRY134A
GW-5
KPT-15
KPT-12
KPT-3
KRY133A
KPT-4
KPT-16
KRY111A
GWRR-8
KRY111B
McELROY & WILKEN BUILDINGS and EQUIPMENT
A
KRY102A
KRY102B
KRY107A
KRY107B
KRY104A
WHITEFISH STAGE RD.
McELROY & WILKEN GRAVEL PIT
KRY115B
KRY115A
KRY112B
KRY112A
KRY116A
KRY116B
D
NW TRUCK REPAIR
RESIDENTIAL
E. CALIFORNIA ST.
8TH AVENUE E.
9TH AVENUE E.
10TH AVENUE E.
7TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
RESIDENTIAL
RESIDENTIAL
E. OREGON ST.
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
USGS
D'
KRY109A
RESIDENTIAL
KRY110A
KRY110B
KPT-9
KPT-13
KPT-22
KPT-20
KPT-21
KPT-10
KPT-14
KPT-11
KRY117A
GWRR-1
KPT-17
KPT-18
KRY119A
KRY123A
KRY126A
GWRR-4
RELIANCE
KRY135A
GWRR-3
GWRR-7
KRY137A
KRY136A
GWRR-5
GWRR-6
GWRR-2
GWRR-9
KRY138A
KRY121A
KRY121B
GWY-12
THE SHED MAN
KRY118A
C'
KRY118B
RESIDENTIAL
KRY127A
FENCED OFF SLUDGE AREA
FLATHEAD DR.
E. OREGON LN.
GWY-13
NORTHWESTERN ENERGY
GWY-14
CLCW-1
GWY-4
GWY-3
OFFICE MAX
YALE OIL
GWY-10
MINI-STORAGE
GWRM-2
GWRM-1
KRY125A
KRY125B
ROCKY MOUNTAIN MARINE
GWY-9
GWY-11
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
KRY122B
C
KRY122A
RESIDENTIAL
WESTERN BUILDING CENTER
U.S. HIGHWAY 2 (E. IDAHO)
GOLDEN WHEELS MOBILE HOME & RV CENTER
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY
LUCKY LOGGER CASINO
NTL-MW-3
NTL-MW-4
A'
KRY129B
KRY129A
TOWN PUMP LUCKY LIL'S CASINO
NORTHERN ENERGY PROPANE
PW-3
PW-1
SW-9
KRY139A
KRY139B
B'
WAL-MART
KRY128A
KRY128B
LA QUINTA INN & SUITES
KRY130A
KRY130B
MONTCLAIR DR.
PACIFIC STEEL & RECYCLING
KARI DODGE
KARI HYUNDAI
HIGH COUNTRY JEEP
RESIDENTIAL
RESIDENTIAL
EVERGREEN WATER & SEWER DISTRICT
NICHOLSON DR.
MAGSTADT LN.
RESIDENTIAL
RESIDENTIAL
AAA STORAGE

Legend
- Monitoring Well (Installed by TtEMI in 2006)
- Monitoring Well (Installed Previously)
- Abandoned Monitoring Well
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

Source:
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

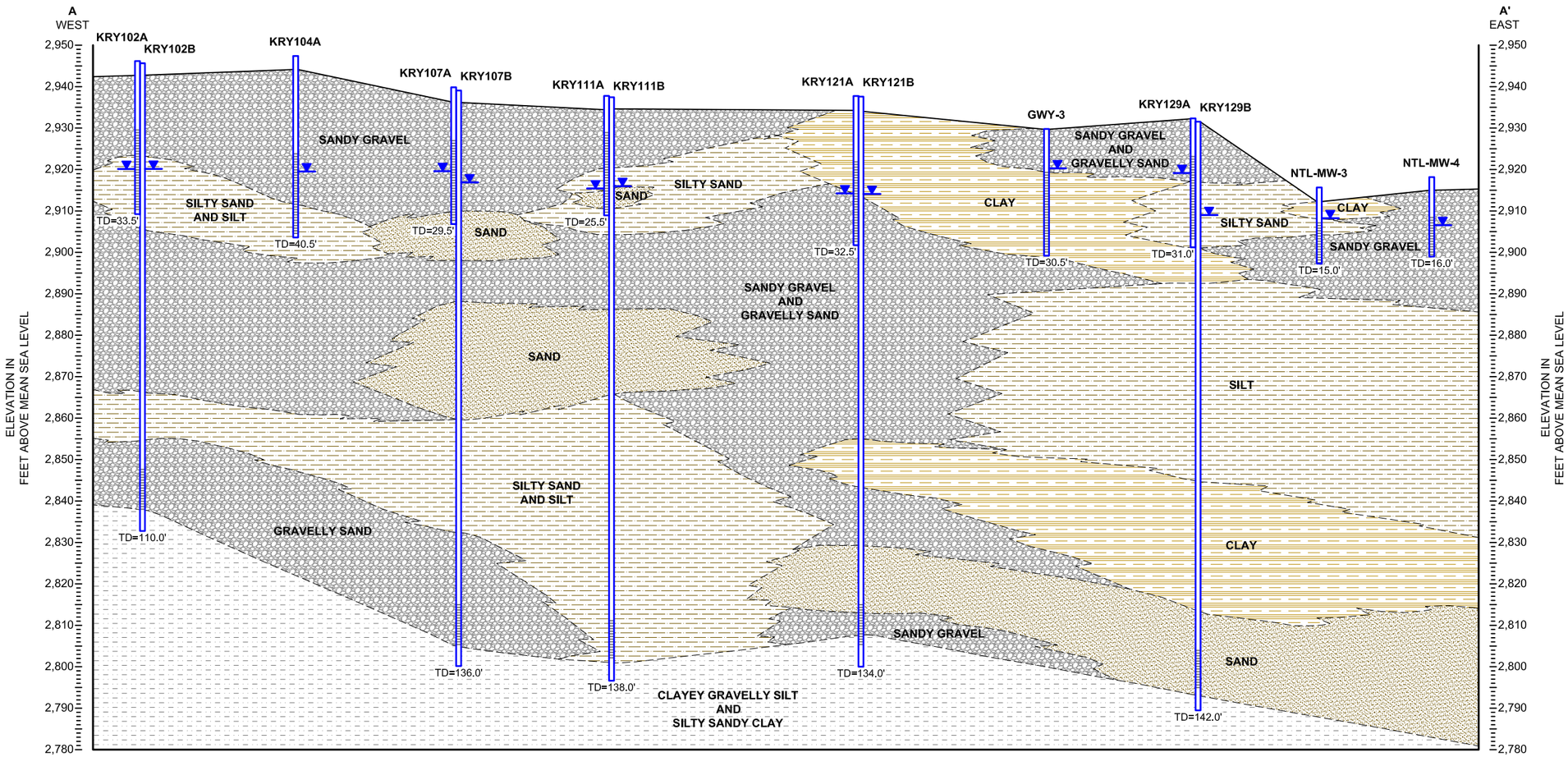
300 0 300 Feet

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 3-2
GEOLOGIC CROSS-SECTION PLAN MAP

TETRA TECH EM, INC.

FIG 3-2_XSECT PLAN MAP.dwg - DWH - 01/22/2007 - S1176-37-KPT005



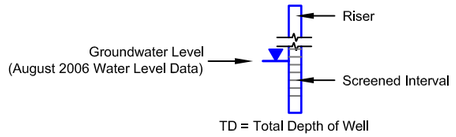
300 0 300 Feet

Vertical Scale Exaggerated 10X

Legend

- Sandy Gravel and/or Gravelly Sand
- Silty Sand and/or Silt
- Sand
- Clay
- Clayey Gravelly Silt and Silty Sandy Clay
- Lithologic Contact, Located Approximately or Inferred

Monitoring Well Detail



TD = Total Depth of Well

NOTES:
This Cross-Section Represents One Interpretation Based on Available Data;
Other Interpretations Are Possible.

Source:
Interpreted From Borehole Logs - Appendix D
RETEC 1995
ThermoRetec 2001

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 3-3
GEOLOGIC CROSS-SECTION A-A'

TETRA TECH EM, INC.

B
WEST

B'
EAST

ELEVATION IN
FEET ABOVE MEAN SEA LEVEL

2,950
2,940
2,930
2,920
2,910
2,900
2,890
2,880
2,870
2,860
2,850
2,840
2,830
2,820
2,810
2,800
2,790
2,780
2,770
2,760
2,750
2,740
2,730

STILLWATER RIVER

KRY101B
KRY101A
KRY113A
KRY113B
KPT-2
KRY114B
KRY114A
KRY136A
KRY137A
KRY128A
KRY128B
KRY130B
KRY130A
KRY139B
KRY139A

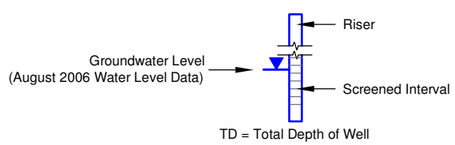
SILTY SAND
TD=31.0'
TD=37.0'
SAND
SAND
TD=29.0'
SILT
SAND
TD=29.0'
CLAY
TD=25.0'
SANDY GRAVEL
AND
GRAVELLY SAND
TD=25.0'
TD=27.5'
CLAY
SILT
SAND
SANDY GRAVEL
TD=29.0'
SAND
CLAY
TD=45.0'
SAND
SILTY SAND
CLAY
SANDY GRAVEL
AND
GRAVELLY SAND
SILT
SAND
TD=100.0'
TD=117.0'
SILTY SAND
AND SILT
TD=122.0'
SAND
CLAY
SILT
CLAYEY GRAVELLY SILT
AND
SILTY SANDY CLAY
SAND
TD=160.0'
CLAY
TD=168.0'
TD=181.0'

300 0 300
Feet
Vertical Scale Exaggerated 10X

Legend

- Sandy Gravel and/or Gravelly Sand
- Silty Sand and/or Silt
- Sand
- Clay
- Clayey Gravelly Silt and Silty Sandy Clay
- Lithologic Contact, Located Approximately or Inferred

Monitoring Well Detail



TD = Total Depth of Well

NOTES:
This Cross-Section Represents One Interpretation Based on Available Data;
Other Interpretations Are Possible.

Source:
Interpreted From Borehole Logs - RI - Appendix D
RETEC 1995
ThermoRetec 2001

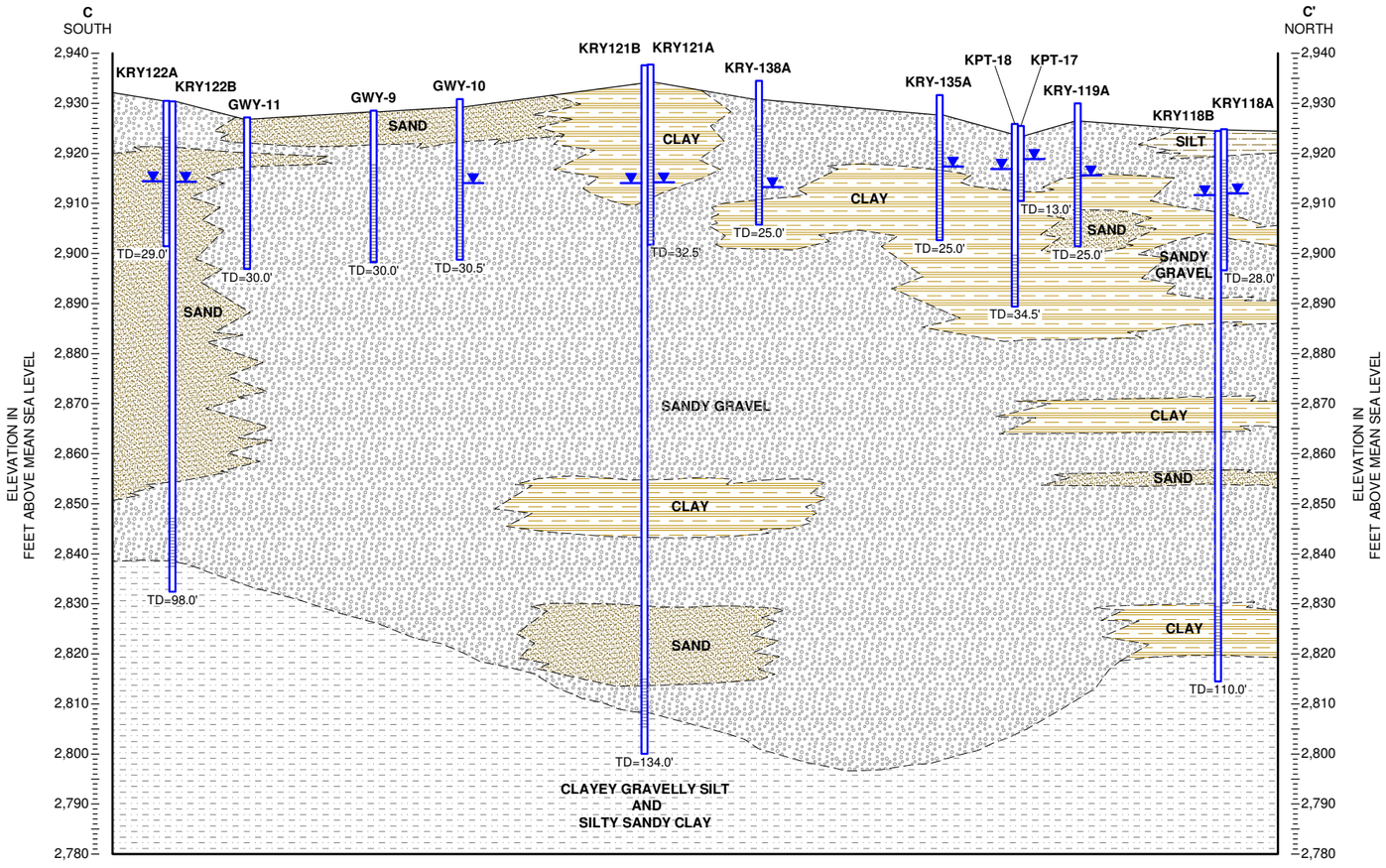
NOTES:

1. BASE FIGURE PROVIDED BY TETRA TECH
2. CROSS-SECTION HATCHES WERE MODIFIED BY TRIHYDRO CORPORATION

KALISPELL POLE & TIMBER, RELIANCE,
and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 3-4
GEOLOGIC CROSS-SECTION B-B'

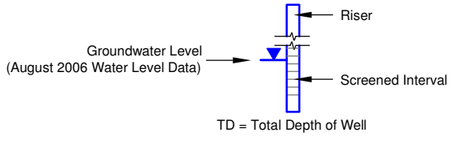
G:\Admin\Templates\Logos\TriHydro_Horiz_75_RAB_tm.RGB.logo.jpg



Legend

- Sandy Gravel and/or Gravelly Sand
- Silty Sand and/or Silt
- Sand
- Clay
- Clayey Gravelly Silt and Silty Sandy Clay
- Lithologic Contact, Located Approximately or Inferred

Monitoring Well Detail



NOTES:
This Cross-Section Represents One Interpretation Based on Available Data;
Other Interpretations Are Possible.

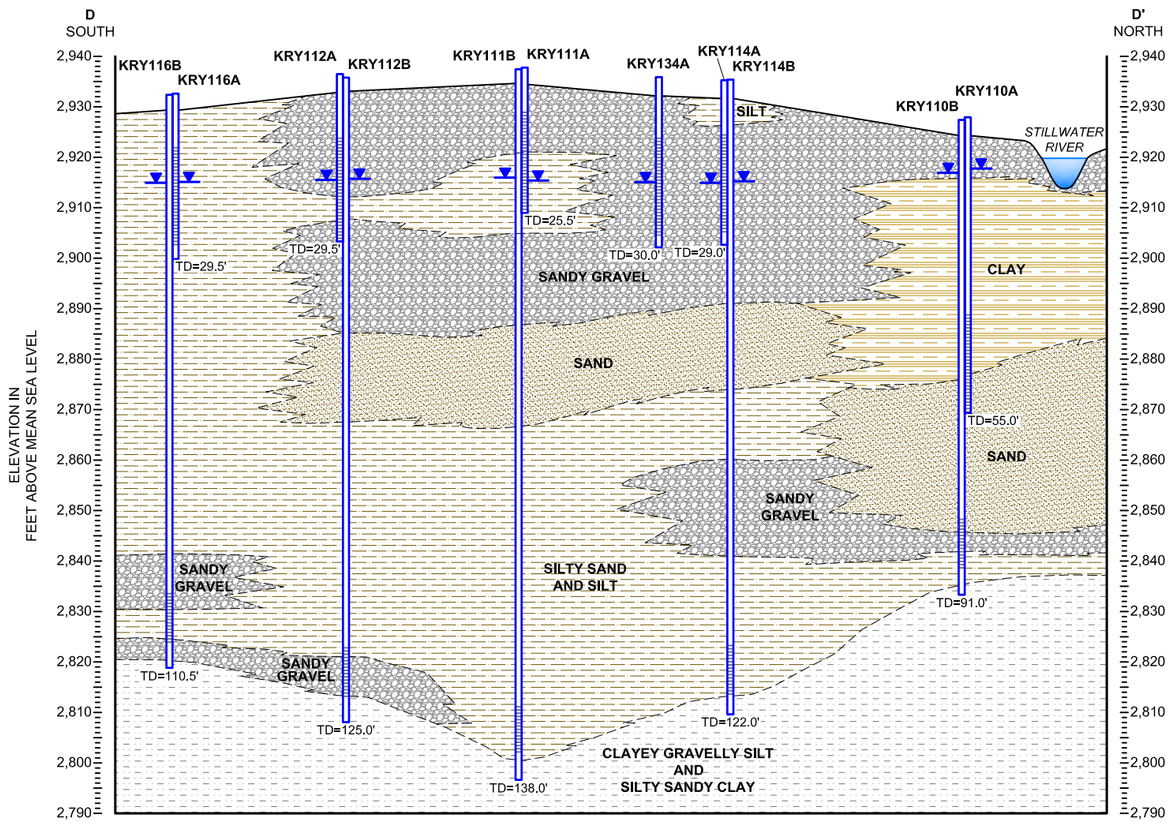
Source:
Interpreted From Borehole Logs - RI - Appendix D
RETEC 1995
ThermoRetec 2001

NOTES:

1. BASE FIGURE PROVIDED BY TETRA TECH
2. CROSS-SECTION HATCHES WERE MODIFIED BY TRIHYDRO CORPORATION

KALISPELL POLE & TIMBER, RELIANCE,
and YALE OIL FACILITIES
KALISPELL, MONTANA

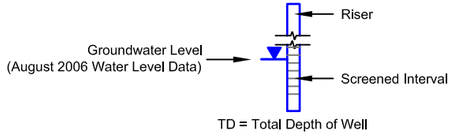
FIGURE 3-5
GEOLOGIC CROSS-SECTION C-C'



Legend

- Sandy Gravel and/or Gravelly Sand
- Silty Sand and/or Silt
- Sand
- Clay
- Clayey Gravelly Silt and Silty Sandy Clay
- Lithologic Contact, Located Approximately or Inferred

Monitoring Well Detail



TD = Total Depth of Well

NOTES:
This Cross-Section Represents One Interpretation Based on Available Data;
Other Interpretations Are Possible.

Source:
Interpreted From Borehole Logs - Appendix D
RETEC 1995
ThermoRetec 2001

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 3-6
GEOLOGIC CROSS-SECTION D-D'

TETRA TECH EM, INC.

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

RESIDENTIAL

SETTLE SERVICES

THE SHED MAN

RIVERSIDE DR.

PARK ST.

SCRAP YARD

MONTANA MOKKO

STILLWATER FOREST PRODUCTS INC.

LOCATED 135' WEST (NEAR BRIDGE)

KLINGLER LUMBER CO.

FORMER EXCAVATION AREA MAY, 1999

McELROY & WILKEN BUILDINGS and EQUIPMENT

WHITEFISH STAGE RD.

E. CALIFORNIA ST.

E. OREGON ST.

E. OREGON LN.

7TH AVENUE E.

8TH AVENUE E.

9TH AVENUE E.

10TH AVENUE E.

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

FLATHEAD DR.

U.S. HIGHWAY 2 (E. IDAHO)

NW TRUCK REPAIR

ROCKY MOUNTAIN MARINE

TOWN & COUNTRY TRAILER COURT

MOUNTAIN SPRINGS HOT TUBS

LUCKY LOGGER CASINO

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

USGS

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

NICHOLSON DR.

MAGSTADT LN.

AAA STORAGE

KARI HYUNDAI

LA QUINTA INN & SUITES

KARI DODGE

MONTCLAIR DR.

PACIFIC STEEL & RECYCLING

HIGH COUNTRY JEEP

NORTHWESTERN ENERGY

OFFICE MAX

MINI-STORAGE

TOWN PUMP LUCKY LIL'S CASINO

NORTHERN ENERGY PROPANE

WAL-MAR

KRY200 2931.57
KRY201 2927.85
KRY202 2924.05
KRY203 2919.41
KRY204 2910.96
KRY100A 2925.72
KRY101A 2923.77
KRY101B
KRY102A 2920.12
KRY102B
KRY103A 2926.85
KRY103B
KRY104A 2919.50
KRY105A 2923.97
KRY106A 2920.80
KRY106B
KRY107A 2919.60
KRY107B
KRY108A 2919.76
KRY109A 2918.15
KRY110A 2917.77
KRY110B
KRY111A 2915.40
KRY111B
KRY112A 2915.51
KRY112B
KRY113A 2919.79
KRY113B
KRY114A 2914.94
KRY114B
KRY115A 2914.36
KRY115B
KRY116A 2915.11
KRY116B
KRY117A 2914.18
KRY118A 2912.00
KRY118B
KRY119A 2915.61
KRY121A 2914.21
KRY121B
KRY122A 2914.42
KRY122B
KRY123A 2911.08
KRY125A 2918.94
KRY125B
KRY126A 2910.99
KRY127A 2909.45
KRY128A 2911.83
KRY128B
KRY129A 2919.15
KRY129B
KRY130A 2910.51
KRY130B
KRY132A 2920.24
KRY133A 2919.62
KRY134A 2915.06
KRY135A 2917.36
KRY136A 2914.34
KRY137A 2918.40
KRY138A 2913.27
KRY139A 2907.36
KRY139B
GW-1 2919.58
GW-5 2914.39
GWY-3 2920.28
GWY-4 2914.07
GWY-10 2914.07
GWY-12 2914.15
GWY-13 2914.10
GWY-14 2910.62
GWRR-1 2915.02
GWRR-2 2914.21
GWRR-3 2917.10
GWRR-4 2919.30
GWRR-5 2914.21
GWRR-6 2919.97
GWRR-7 2919.38
GWRR-8 2914.30
GWRR-9 2914.18
IW-1
IW-2
IW-4
IW-5
IW-6
IW-7
IW-8
KPT-1 2919.69
KPT-2 2919.56
KPT-3 2919.08
KPT-4 2916.13
KPT-5 2915.57
KPT-6 2919.03
KPT-7
KPT-8 2916.83
KPT-9 2918.36
KPT-10 2915.07
KPT-11
KPT-12 2919.58
KPT-13 2918.36
KPT-14
KPT-15
KPT-16 2914.39
KPT-17 2918.88
KPT-18
KPT-19 2914.91
KPT-20 2915.42
KPT-21 2914.86
KPT-22 2915.11
NTL-MW-3 2908.23
NTL-MW-4 2906.57
NW-4 2906.28
PW-1
PW-3
PWS-1
PWS-2
R-1
RW-6
RW-8
RW-9
RW-9A
RW-10
RW-11
RW-12
RW-13
SW-9 2907.33

Legend

- Monitoring Well (Installed by TtEMI in 2006
- Monitoring Well (Installed Previously)
- 2907.36 - Groundwater Elevation in Feet Above Mean Sea Lev
- Surface Water / Sediment Sample (TtEMI 2006)
- 2910.96 - Surface Water Elevation in Feet Above Mean Sea Lev
- Industrial Well
- Public Water Supply Well
- Residential Well
- 2906 - Groundwater Elevation Contour (Located Approximately; Dashed Where Inferred)
- Groundwater Flow Directio
- Building
- Approximate Facility Boundary
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. This Groundwater Elevation Contour Ma Represents One Interpretation Based on Available Data; Other Interpretations Are Possible.
2. Water Elevation Data Collected on August 1, 2, 3, 2006.

Source:
Interpreted From Table 3-2
NRIS and USGS Aerial Photo-Kalispell Area (200
USDA FSA NAIP Aerial Photo-Kalispell Area (200
ThermoRetec 2001

300 0 300 Feet

NOTES:

1. BASE FIGURE PROVIDED BY TETRA TECH
2. FLOW ARROWS WERE MODIFIED BY TRIHYDRO CORPORATION

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 3-7A
GROUNDWATER ELEVATION CONTOUR MAP
UPPER PORTION OF UNCONFINED AQUIFER
AUGUST 2006

FIG 2-7_GW ELEV CONT-AUG 06_UPPER.dwg - DWH - 07/24/2007 - S1176-37-KPT010

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

KRY200 2931.24
LOCATED 135' WEST (NEAR BRIDGE)
KRY201 2928.18
KRY202 2923.97
KRY203 2918.92
KRY204 2910.91
KRY101A 2923.39
KRY102A 2919.75
KRY103A 2926.53
KRY104A 2919.11
KRY105A 2923.72
KRY106A 2920.48
KRY107A 2919.28
KRY108A 2919.38
KRY109A 2917.86
KRY110A 2917.48
KRY111A 2915.38
KRY112A 2915.37
KRY113A 2919.45
KRY114A 2915.10
KRY115A 2914.47
KRY116A 2914.86
KRY117A 2914.27
KRY118A 2912.99
KRY119A 2915.46
KRY120A 2913.84
KRY121A 2914.35
KRY122A 2914.12
KRY123A 2912.52
KRY125A 2918.46
KRY126A 2912.48
KRY127A 2912.52
KRY128A 2913.15
KRY129A 2920.29
KRY130A 2910.54
KRY132A 2919.93
KRY133A 2919.29
KRY134A 2915.13
KRY135A 2916.93
KRY136A 2914.49
KRY137A 2917.83
KRY138A 2913.84
KRY139A 2907.10
GW-1 2919.23
GWY-3 2919.35
GWY-4 2914.18
GWY-10 2914.15
GWY-12 2914.24
GWY-13 2914.20
GWY-14 2911.41
GWRR-1 2915.09
GWRR-2 2914.33
GWRR-3 2917.07
GWRR-4 2918.32
GWRR-5 2914.34
GWRR-6 2919.45
GWRR-7 2918.90
GWRR-8 2914.39
GWRR-9 2914.29
GW-5 2914.48
KPT-1 2919.33
KPT-2 2919.21
KPT-3 2918.77
KPT-4 2916.00
KPT-5 2915.57
KPT-6 2918.72
KPT-7 2916.75
KPT-9 2918.89
KPT-10 2915.16
KPT-12 2919.26
KPT-16 2914.45
KPT-17 2918.47
KPT-19 2915.01
KPT-20 2915.44
KPT-21 2914.94
KPT-22 2915.20
NTL-MW-3 2906.37
NTL-MW-4 2906.37
PW-1 2906.89
PW-3 2905.76
SW-9 2907.33
CLCW-1 2911.97
IW-1
IW-2
IW-4
IW-5
IW-6
IW-7
IW-8
RW-1
RW-6
RW-8
RW-9
RW-9A
RW-10
RW-11
RW-12
RW-13
PWS-1
PWS-2

RESIDENTIAL
SETTLE SERVICES
THE SHED MAN
SCRAP YARD
PARK ST.
RIVERSIDE DR.
MONTANA MOKKO
STILLWATER FOREST PRODUCTS INC.
FORMER EXCAVATION AREA MAY, 1999
KLINGLER LUMBER CO.
McELROY & WILKEN BUILDINGS and EQUIPMENT
FENCED OFF SLUDGE AREA
EVERGREEN WATER & SEWER DISTRICT
NICHOLSON DR.
MAGSTADT LN
AAA STORAGE
LA QUINTA INN & SUITES
KARI HYUNDAI
KARI DODGE
MONTCLAIR DR.
HIGH COUNTRY JEEP
PACIFIC STEEL & RECYCLING
NORTHWESTERN ENERGY
OFFICE MAX
MINI-STORAGE
NORTHERN ENERGY PROPANE
TOWN PUMP LUCKY LIL'S CASINO
WAL-MART
ROCKY MOUNTAIN MARINE
NW TRUCK REPAIR
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
LUCKY LOGGER CASINO
WESTERN BUILDING CENTER
GOLDEN WHEELS MOBILE HOME & RV CENTER
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY
USGS
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
WHITEFISH STAGE RD.
E. CALIFORNIA ST.
E. OREGON ST.
E. OREGON LN.
FLATHEAD DR.
U.S. HIGHWAY 2 (E. IDAHO)
7TH AVENUE E.
8TH AVENUE E.
9TH AVENUE E.
10TH AVENUE E.

N

Legend
- Monitoring Well
2907.10 - Groundwater Elevation in Feet Above Mean Sea Level
- Surface Water / Sediment Sample (TtEMI 2006)
2910.91 - Surface Water Elevation in Feet Above Mean Sea Level
- Industrial Well
- Public Water Supply Well
- Residential Well
2906 - Groundwater Elevation Contour (Located Approximately; Dashed Where Inferred)
- Groundwater Flow Direction
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. This Groundwater Elevation Contour Map Represents One Interpretation Based on Available Data; Other Interpretations Are Possible.
2. Water Elevation Data Collected on October, 2006.

Source:
Interpreted From Table 3-2
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 3-7B
GROUNDWATER ELEVATION CONTOUR MAP
UPPER PORTION OF UNCONFINED AQUIFER
OCTOBER 2006

TETRA TECH EM, INC.

FIG 3-7B_GW ELEV CONT-OCT 06_UPPER.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

RESIDENTIAL

SETTLE SERVICES

THE SHED MAN

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

MAGSTADT LN

NICHOLSON DR.

RIVERSIDE DR.

PARK ST.

SCRAP YARD

MONTANA MOKKO

STILLWATER FOREST PRODUCTS INC.

LOCATED 135' WEST (NEAR BRIDGE)

FORMER EXCAVATION AREA MAY, 1999

KLINGLER LUMBER CO.

McELROY & WILKEN BUILDINGS and EQUIPMENT

FLATHEAD DR.

E. OREGON LN.

NW TRUCK REPAIR

ROCKY MOUNTAIN MARINE

TOWN & COUNTRY TRAILER COURT

MOUNTAIN SPRINGS HOT TUBS

LUCKY LOGGER CASINO

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

U.S. HIGHWAY 2 (E. IDAHO)

MONTCLAIR DR.

LA QUINTA INN & SUITES

PACIFIC STEEL & RECYCLING

KARI DODGE

KARI HYUNDAI

HIGH COUNTRY JEEP

AAA STORAGE

NORTHWESTERN ENERGY

OFFICE MAX

MINI-STORAGE

NORTHERN ENERGY PROPANE

TOWN PUMP LUCKY LIL'S CASINO

WAL-MART

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

USGS

WHITEFISH STAGE RD.

E. CALIFORNIA ST.

E. OREGON ST.

7TH AVENUE E.

8TH AVENUE E.

9TH AVENUE E.

10TH AVENUE E.

KRY200 KRY201 KRY202 KRY203 KRY204

KRY100A KRY101A KRY101B 2923.40 KRY102A KRY102B 2920.15 KRY103A KRY103B 2926.96

KRY104A KRY105A KRY106A KRY106B 2921.02 KRY107A KRY107B 2916.88

KRY108A KRY109A KRY110A KRY110B 2916.92 KRY111A KRY111B 2915.96

KRY112A KRY112B 2915.74 KRY113A KRY113B 2919.43 KRY114A KRY114B 2915.24

KRY115A KRY115B 2914.71 KRY116A KRY116B 2914.94 KRY117A KRY118A KRY118B 2911.67

KRY119A KRY120A KRY121A KRY121B 2914.09 KRY122A KRY122B 2914.33

KRY123A KRY124A KRY125A KRY125B 2910.19 KRY126A KRY127A KRY128A KRY128B 2910.07

KRY129A KRY129B 2909.00 KRY130A KRY130B 2909.34 KRY132A KRY133A KRY134A KRY135A

KRY136A KRY137A KRY138A KRY139A KRY139B 2907.72

GW-1 GW-5 GWRR-1 GWRR-2 GWRR-3 GWRR-4 GWRR-5 GWRR-6 GWRR-7 GWRR-8 GWRR-9

GWY-3 GWY-4 GWY-10 GWY-12 GWY-13 GWY-14 CLCW-1

RW-1 RW-6 RW-8 RW-9 RW-9A RW-10 RW-11 RW-12 RW-13

PWS-1 PWS-2 PW-1 PW-3 SW-9

NTL-MW-3 NTL-MW-4

KPT-1 KPT-2 KPT-3 KPT-4 KPT-5 KPT-6 KPT-7 KPT-8 2916.75 KPT-9 KPT-10 KPT-11 2915.00 KPT-12 KPT-13 2917.87 KPT-14 2914.99 KPT-15 2914.32 KPT-16 KPT-17 KPT-18 KPT-19 KPT-20 KPT-21 KPT-22

IW-1 IW-2 IW-4 IW-5 IW-6 IW-7 IW-8

2926 2925 2924 2923 2922 2921 2920 2919 2918 2917 2916 2915 2914 2913 2912 2911 2910 2909 2908

Legend

- Monitoring Well (Installed byTtEMI in 2006)
- Monitoring Well (Installed Previously)
- 2907.72 - Groundwater Elevation in Feet Above Mean Sea Level
- Surface Water / Sediment Sample (TtEMI 2006)
- Industrial Well
- Public Water Supply Well
- Residential Well
- 2908 - Groundwater Elevation Contour (Located Approximately; Dashed Where Inferred)
- Groundwater Flow Direction
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. This Groundwater Elevation Contour Map Represents One Interpretation Based on Available Data; Other Interpretations Are Possible.
2. Water Elevation Data Collected on August 1, 2, 3, 2006.

Source:
Interpreted From Table 3-2
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 3-8
GROUNDWATER ELEVATION CONTOUR MAP
LOWER PORTION OF UNCONFINED AQUIFER
AUGUST 2006

TETRA TECH EM, INC.

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

FIG 3-8_GW ELEV CONT-AUG 06_LOWER.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

RESIDENTIAL

SETTLE SERVICES

THE SHED MAN

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

MAGSTADT LN

NICHOLSON DR.

RIVERSIDE DR.

PARK ST.

SCRAP YARD

MONTANA MOKKO

STILLWATER FOREST PRODUCTS INC.

LOCATED 135' WEST (NEAR BRIDGE)

FORMER EXCAVATION AREA MAY, 1999

KLINGLER LUMBER CO.

McELROY & WILKEN BUILDINGS and EQUIPMENT

WHITEFISH STAGE RD.

FLATHEAD DR.

E. OREGON LN.

E. OREGON ST.

E. CALIFORNIA ST.

7TH AVENUE E.

8TH AVENUE E.

9TH AVENUE E.

10TH AVENUE E.

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

NW TRUCK REPAIR

MINI-STORAGE

ROCKY MOUNTAIN MARINE

TOWN & COUNTRY TRAILER COURT

MOUNTAIN SPRINGS HOT TUBS

LUCKY LOGGER CASINO

TOWN PUMP LUCKY LIL'S CASINO

NORTHERN ENERGY PROPANE

NORTHWESTERN ENERGY

OFFICE MAX

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

PACIFIC STEEL & RECYCLING

LA QUINTA INN & SUITES

KARI HYUNDAI

KARI DODGE

HIGH COUNTRY JEEP

WAL-MART

AAA STORAGE

MONTCLAIR DR.

USGS

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

KRY200 KRY201 KRY202 KRY203 KRY204

KRY100A KRY101A KRY101B KRY102A KRY102B KRY103A KRY103B KRY104A KRY105A KRY106A KRY106B KRY107A KRY107B KRY108A KRY109A KRY110A KRY110B KRY111A KRY111B KRY112A KRY112B KRY113A KRY113B KRY114A KRY114B KRY115A KRY115B KRY116A KRY116B KRY117A KRY118A KRY118B KRY119A KRY120A KRY121A KRY121B KRY122A KRY122B KRY123A KRY125A KRY125B KRY126A KRY127A KRY128A KRY128B KRY129A KRY129B KRY130A KRY130B KRY132A KRY133A KRY134A KRY135A KRY136A KRY137A KRY138A KRY139A KRY139B

IW-1 IW-2 IW-4 IW-5 IW-6 IW-7 IW-8

KPT-1 KPT-2 KPT-3 KPT-4 KPT-5 KPT-6 KPT-7 KPT-8 KPT-9 KPT-10 KPT-11 KPT-12 KPT-13 KPT-14 KPT-15 KPT-16 KPT-17 KPT-18 KPT-19 KPT-20 KPT-21 KPT-22

GW-1 GW-5

GWRR-1 GWRR-2 GWRR-3 GWRR-4 GWRR-5 GWRR-6 GWRR-7 GWRR-8 GWRR-9

GWY-3 GWY-4 GWY-10 GWY-12 GWY-13 GWY-14

CLCW-1

RW-1 RW-6 RW-9 RW-9A RW-10 RW-11 RW-12 RW-13

PWS-1 PWS-2

PW-1 PW-3

SW-9

NTL-MW-3 NTL-MW-4

0.17 0.02 0.94 0.39 0.03 0.05 0.01

Legend

- Monitoring Well (Installed by TtEMI in 2006)
- Monitoring Well (Installed Previously)
- Surface Water / Sediment Sample (TtEMI 2006)
- Industrial Well
- Public Water Supply Well
- Residential Well
- 0.01 - LNAPL Thickness in Feet
- Approximate Extent of LNAPL in Monitoring Wells
- LNAPL - Light Nonaqueous Phase Liquid
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 3-9
ESTIMATED EXTENT OF LNAPL CONTAMINATION IN GROUNDWATER
AUGUST 2006

TETRA TECH EM, INC.

FIG 3-9_LNAPL EXTENT.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

YALE OIL

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

RESIDENTIAL

SETTLE SERVICES

THE SHED MAN

RIVERSIDE DR.

PARK ST.

SCRAP YARD

MONTANA MOKKO

STILLWATER FOREST PRODUCTS INC.

LOCATED 135' WEST (NEAR BRIDGE)

FORMER EXCAVATION AREA MAY, 1999

KLINGLER LUMBER CO.

McELROY & WILKEN BUILDINGS and EQUIPMENT

FEATHERHEAD DR.

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

NICHOLSON DR.

MAGSTADT LN

AAA STORAGE

LA QUINTA INN & SUITES

KARI HYUNDAI

KARI DODGE

MONTCLAIR DR.

PACIFIC STEEL & RECYCLING

HIGH COUNTRY JEEP

NORTHWESTERN ENERGY

OFFICE MAX

NORTHERN ENERGY PROPANE

TOWN PUMP LUCKY LILY'S CASINO

WAL-MART

MINI-STORAGE

NW TRUCK REPAIR

ROCKY MOUNTAIN MARINE

TOWN & COUNTRY TRAILER COURT

MOUNTAIN SPRINGS HOT TUBS

LUCKY LOGGER CASINO

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

USGS

E. OREGON LN.

E. OREGON ST.

E. CALIFORNIA ST.

WHITEFISH STAGE RD.

FLATHEAD DR.

U.S. HIGHWAY 2 (E. IDAHO)

7TH AVENUE E.

8TH AVENUE E.

9TH AVENUE E.

10TH AVENUE E.

KRY103A 0.1U
KRY103B 0.1U
KRY202
KRY204
IW-4 0.1U
KRY105A 0.1U
KRY203
KRY109A 0.1U
KRY100A 0.1U
KRY201
KRY106A 0.1U
KRY106B 0.1U
IW-5 0.1U
KRY110A 0.1U
KRY110B 0.1U
KPT-10 0.1U
KPT-14 0.2
KPT-11 0.1U
KRY117A
KRY119A
KRY123A 0.1U
KRY127A 0.1U
RW-12 0.56
RW-13 0.1U
RW-10 0.1U
KRY118A 0.1U
KRY118B 0.1U
RW-1 0.11
PWS-2 0.1U
PWS-1 0.1U
RW-9A 0.1U
RW-9 0.1U
KRY101B 0.1U
KRY101A 0.1UJ
IW-6 0.1U
IW-2 0.1U
KRY200
IW-1 0.1U
KPT-1 0.1U
GW-1 0.1U
KRY132A
KPT-9 0.084J
KPT-13 0.036U
KPT-22 0.1U
KRY113A 0.33
KRY113B 0.1U
KRY108A 0.1U
KPT-2 16,300
KPT-6 3.9
KPT-8 0.054
KPT-7 3.8
KPT-20 110
KPT-19 18
KPT-21 62
GWRR-1 0.1U
GWRR-4 0.1U
KPT-17 0.1U
KPT-18 0.35
KRY126A 0.1U
GWRR-3 0.1UJ
KRY135A
GWRR-7 0.1U
KRY137A
KRY114B 8.1U
KRY114A 427
KPT-5 7.4
GW-5 18
KPT-15 8.1U
KRY134A
KRY136A
GWRR-6 0.1U
GWRR-5 0.1U
GWRR-2 0.1U
KRY128A 0.1U
KRY128B 0.1U
KPT-12 0.12
KPT-3 344
KRY133A
KPT-4 34
KPT-16 0.15
GWRR-9 0.17
KRY138A
GWRR-8 0.1U
KRY111A 2,390
KRY111B 8.1U
IW-7 0.1U
IW-8 0.1U
KRY102A 0.1U
KRY102B 0.1U
KRY107A 0.076J
KRY107B 0.1U
KRY104A 0.1U
KRY121A 0.25
KRY121B 0.13
GWY-12 0.1U
KRY130A 0.1U
KRY130B 0.1U
GWY-13 0.1U
GWY-14 0.75
CLCW-1 0.096J
PW-3 0.1U
PW-1 0.1U
SW-9 0.1U
KRY139A 0.1U
KRY139B 0.1U
KRY115B 0.1U
KRY115A 0.1U
KRY112B 0.1U
KRY112A 0.1U
GWY-4 0.1U
GWY-3 0.1U
GWY-10 1
KRY116A 0.1U
KRY116B 0.1U
GWRM-2 0.1U
GWRM-1 0.1U
KRY125A 0.1U
KRY125B 0.1U
KRY129B 40
KRY129A 0.1U
NTL-MW-3
NTL-MW-4 0.1U
RW-8 0.1U
KRY122B 0.1UJ
KRY122A 0.1U
RW-6 0.1U
RW-11 0.1U

Legend

- Monitoring Well (Installed by TtEMI in 2006)
- Monitoring Well (Installed Previously)
- Surface Water / Sediment Sample (TtEMI 2006)
- Industrial Well
- Public Water Supply Well
- Residential Well
- 0.1U - Sampling Result (Upper Portion of Aquifer)
- 0.1U - Sampling Result (Lower Portion of Aquifer)
- U - Analyte Not Detected at Limit Shown
- J - Estimated
- Approximate Extent of Groundwater with Concentrations of Pentachlorophenol Above DEQ-7 Standard (Upper Portion of Aquifer)
- Approximate Extent of Groundwater with Detectable Concentrations of Pentachlorophenol (Upper Portion or Aquifer)
- Approximate Extent of Groundwater with Concentrations of Pentachlorophenol Above DEQ-7 Standard (Lower Portion of Aquifer)
- Approximate Extent of Groundwater with Detectable Concentrations of Pentachlorophenol (Lower Portion of Aquifer)
- DEQ-7 - Montana Department of Environmental Quality Circular 7
- NA - Not Available
- ? - Extent in Area Indicated May be a Data Gap
- (S) - Septic Tank
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
All Results in Micrograms per Liter.
(Parts Per Billion)
Sampling Conducted in June and July 2006.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

SCREENING CRITERIA	
EPA REGION 9 TAP WATER LEVEL	DEQ-7 HUMAN HEALTH STANDARD
0.56	1.0

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-1
GROUNDWATER SAMPLING RESULTS
PENTACHLOROPHENOL -
UPPER AND LOWER PORTION OF UNCONFINED AQUIFER

TETRA TECH EM, INC.

FIG 4-1_GW RESULTS-PCP.dwg - DWH - 01/22/2007 - S1176-37-KPT005

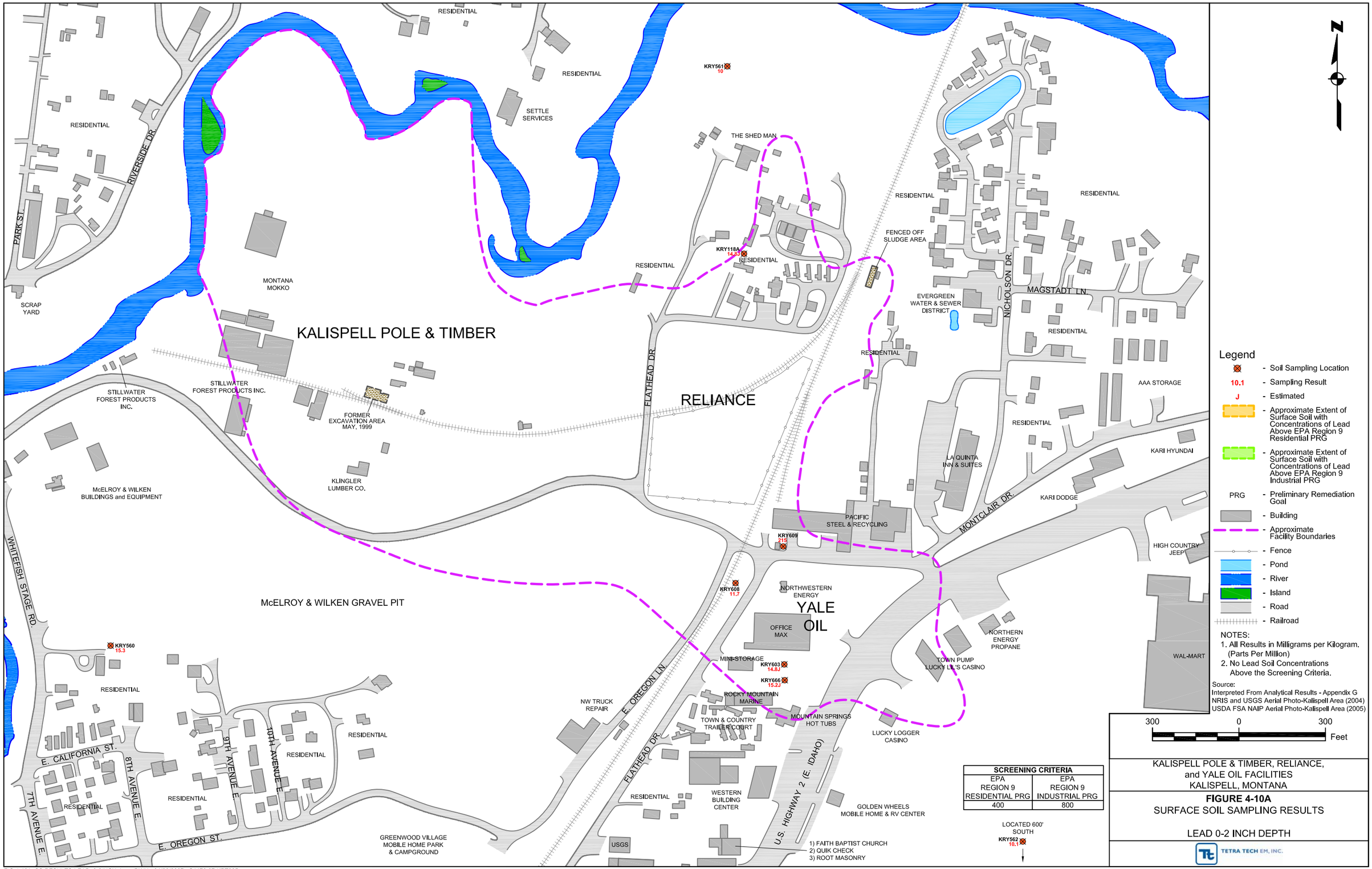


FIG 4-10A_SS RESULTS-LEAD_0-2INCH.dwg - DWH - 01/22/2007 - S1176-37-KPT005

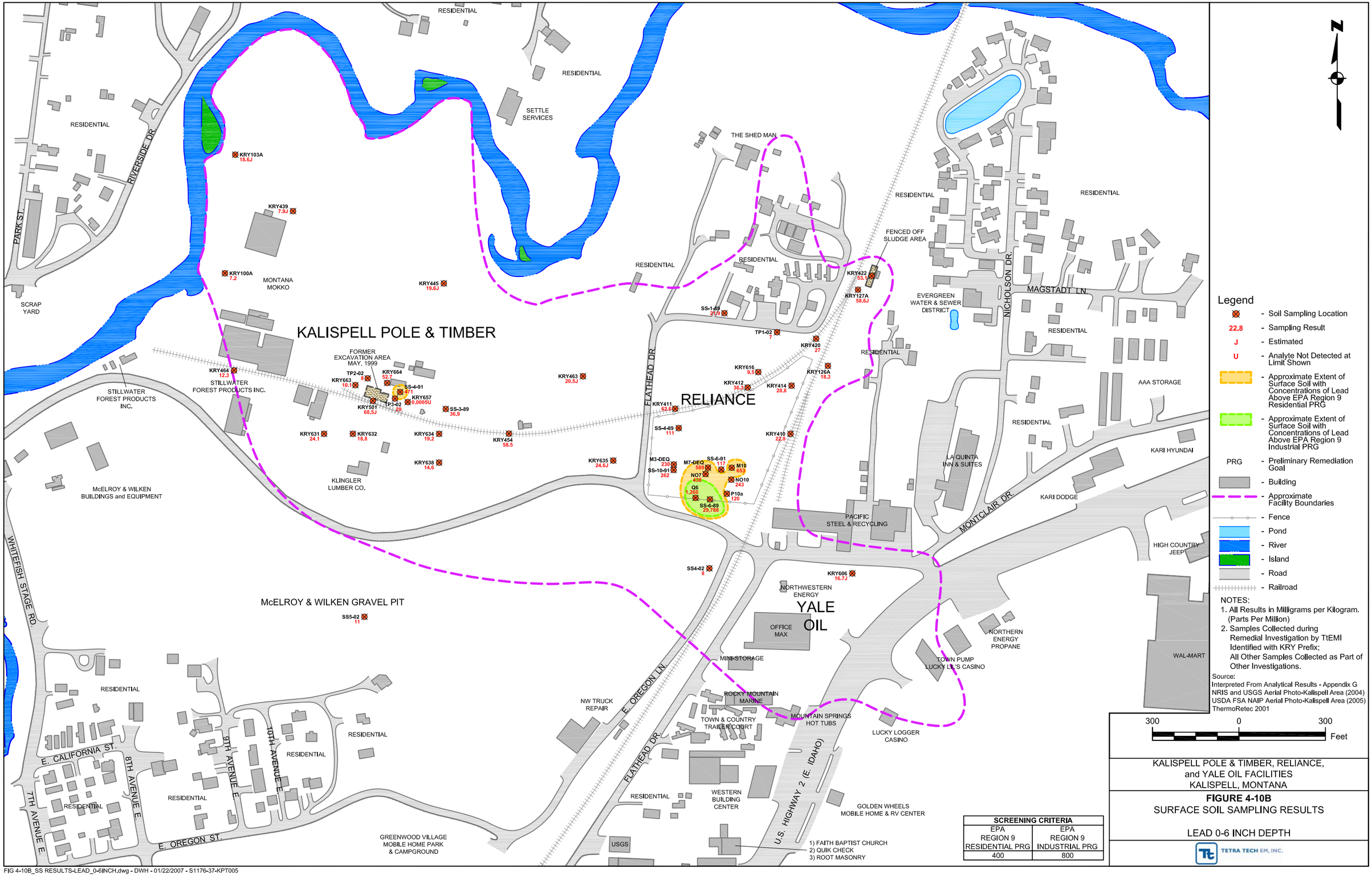


FIG 4-10B_SS RESULTS-LEAD_0-6INCH.dwg - DWH - 01/22/2007 - S1176-37-KPT005

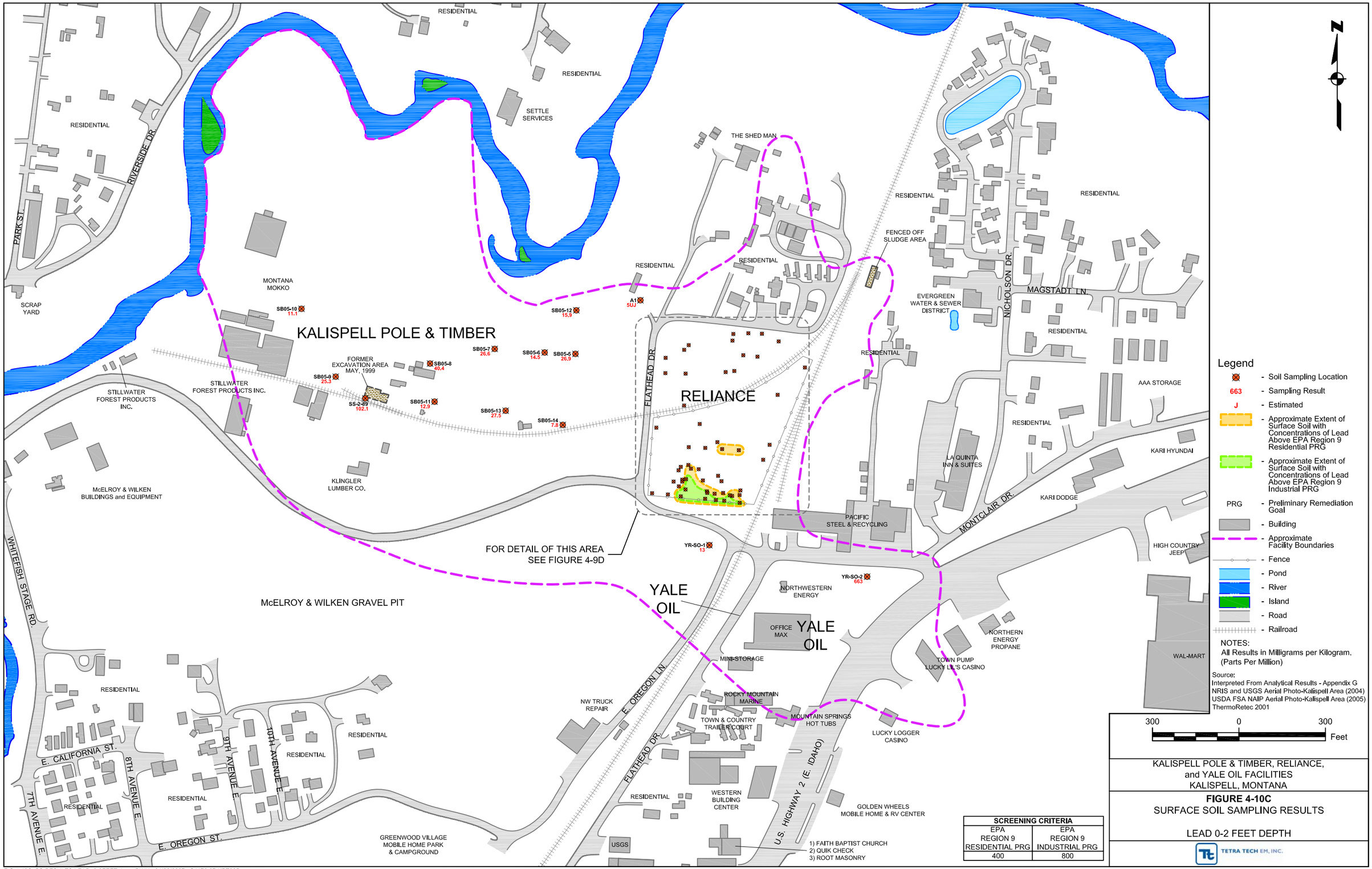


FIG 4-10C_SS RESULTS-LEAD_0-2FEET.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

RESIDENTIAL

RESIDENTIAL

FLATHEAD DR.

PACIFIC
STEEL & RECYCLING

DETAIL AREA
FROM FIGURE 4-9C

A1 5UJ
SB05-12 15.9
SB05-6 14.5
SB05-5 26.9
SB05-14 7.8
TP05-5 9.1
TP05-6 10
TP05-9 52.7
A3 15J
A5 5UJ
TP05-10 21.3
SB05-3 30.5
SB05-15 14
SB05-2 414
SB05-1 8.8
TP05-24 22
TP05-25 21.2
B3 5UJ
SB05-16 28.1
X18 14J
D15 78J
PIPE GALLERY 95.8
H6 25J
I1 11J
J8 51J
K5 380J
K7 140J
K9 660J
K11 490J
J15 10J
L14 85J
M5-DEQ 397
NM3 459
NM4 530
NM6 53
N4 50J
N8/9 196
NO9 37
O4a 13
O4b 30
O5 6,990J
O7 350J
O3-DEQ 542
P4 11J
P4/5 44,300
P7a 5,780
P7b 2,910
P9 140
QP8 679
P10/11 408
P10b 1,510
P12 380J
P11 329
Q1 100J
Q3 260J
Q5 1,580J
Q7-DEQ 1,470
Q8 1,300
Q9/10 958
Q11-DEQ 1,110
YR-SO-1 13

SCREENING CRITERIA	
EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
400	800

N

Legend

- Soil Sampling Location
- 13 - Sampling Result
- J - Estimated
- Approximate Extent of Surface Soil with Concentrations of Lead Above EPA Region 9 Residential PRG
- Approximate Extent of Surface Soil with Concentrations of Lead Above EPA Region 9 Industrial PRG
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
All Results in Milligrams per Kilogram. (Parts Per Million)

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

100 0 100 Feet

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-10D
SURFACE SOIL SAMPLING RESULTS
RELIANCE AREA
LEAD 0-2 FEET DEPTH

TETRA TECH EM, INC.

FIG 4-10D_SS RESULTS-LEAD_0-2FEET_RELIANCE.dwg - DWH - 01/22/2007 - S1176-37-KPT005

RESIDENTIAL
RESIDENTIAL
SETTLE SERVICES
RESIDENTIAL
RIVERSIDE DR.
PARK ST.
SCRAP YARD
MONTANA MOKKO
KALISPELL POLE & TIMBER
STILLWATER FOREST PRODUCTS INC.
STILLWATER FOREST PRODUCTS INC.
FORMER EXCAVATION AREA MAY, 1999
McELROY & WILKEN BUILDINGS and EQUIPMENT
KLINGLER LUMBER CO.
WHITEFISH STAGE RD.
McELROY & WILKEN GRAVEL PIT
RESIDENTIAL
E. CALIFORNIA ST.
8TH AVENUE E.
7TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
9TH AVENUE E.
10TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
E. OREGON ST.
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
THE SHED MAN
RESIDENTIAL
RESIDENTIAL
FLATHEAD DR.
RELIANCE
NW TRUCK REPAIR
E. OREGON LN.
NORTHWESTERN ENERGY
YALE OIL
OFFICE MAX
MINI-STORAGE
ROCKY MOUNTAIN MARINE
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
RESIDENTIAL
WESTERN BUILDING CENTER
USGS
FLATHEAD DR.
U.S. HIGHWAY 2 (E. IDAHO)
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY
GOLDEN WHEELS MOBILE HOME & RV CENTER
LUCKY LOGGER CASINO
PACIFIC STEEL & RECYCLING
FENCED OFF SLUDGE AREA
RESIDENTIAL
RESIDENTIAL
EVERGREEN WATER & SEWER DISTRICT
NICHOLSON DR.
MAGSTADT LN.
RESIDENTIAL
RESIDENTIAL
AAA STORAGE
RESIDENTIAL
LA QUINTA INN & SUITES
KARI HYUNDAI
MONTCLAIR DR.
KARI DODGE
HIGH COUNTRY JEEP
NORTHERN ENERGY PROPANE
TOWN PUMP LUCKY LIL'S CASINO
WAL-MART

N

Legend

- Approximate Extent of Surface Soil with Concentrations of Lead Above EPA Region 9 Residential PRG
- Approximate Extent of Surface Soil with Concentrations of Lead Above EPA Region 9 Industrial PRG
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)

300 0 300 Feet

AREA OF CONCERN	
EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
38,244.35 - FT²	15,570.17 - FT²
4,249.37 - YD²	1,730.02 - YD²
0.88 - AC	0.36 - AC

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-10E
SURFACE SOIL SAMPLING RESULTS
LEAD
COMPOSITE OF 0-2 FEET DEPTH

TETRA TECH EM, INC.

FIG 4-10E_SS RESULTS-LEAD_COMPOSITE.dwg - DWH - 01/22/2007 - S1176-37-KPT005

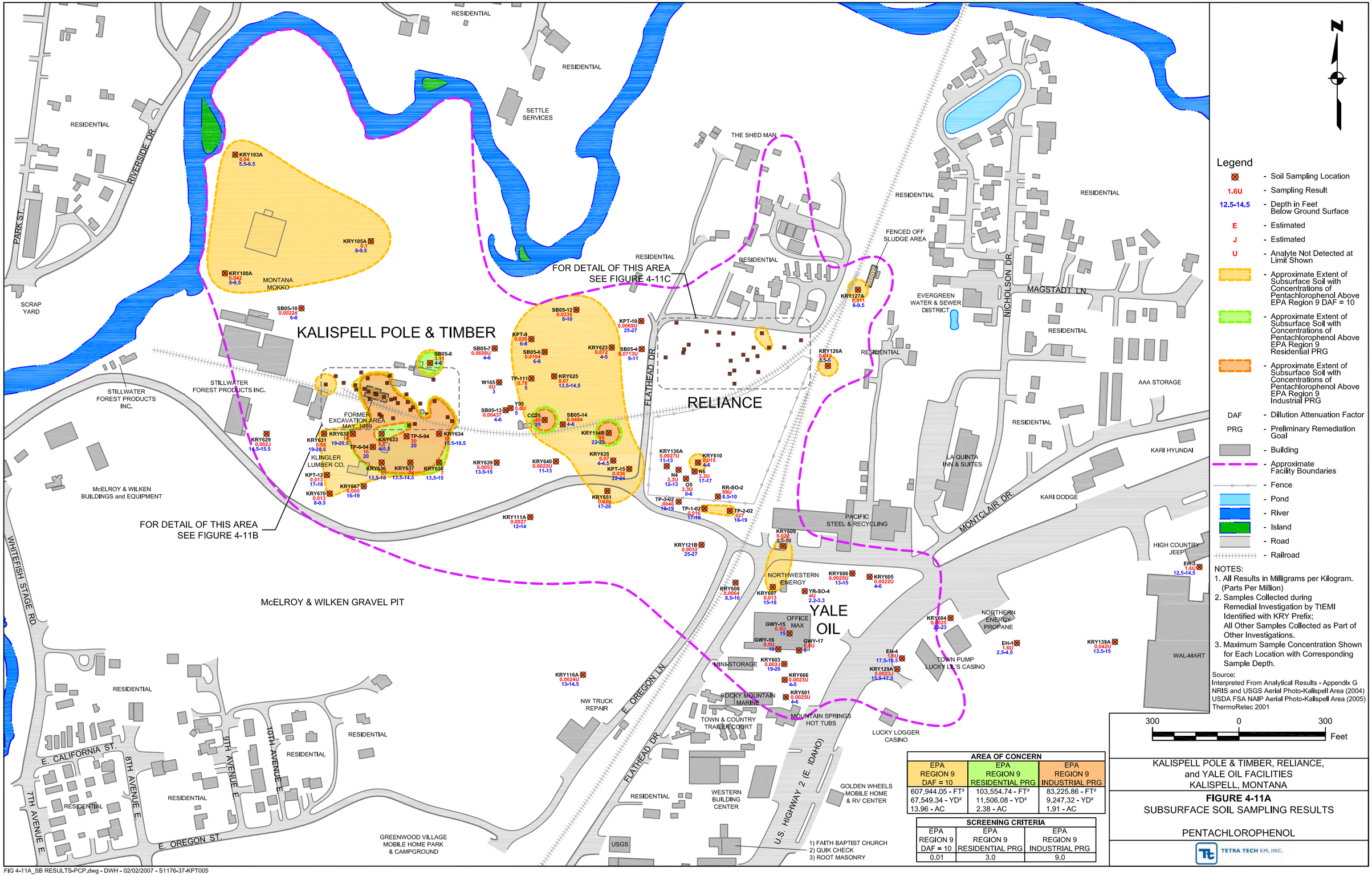
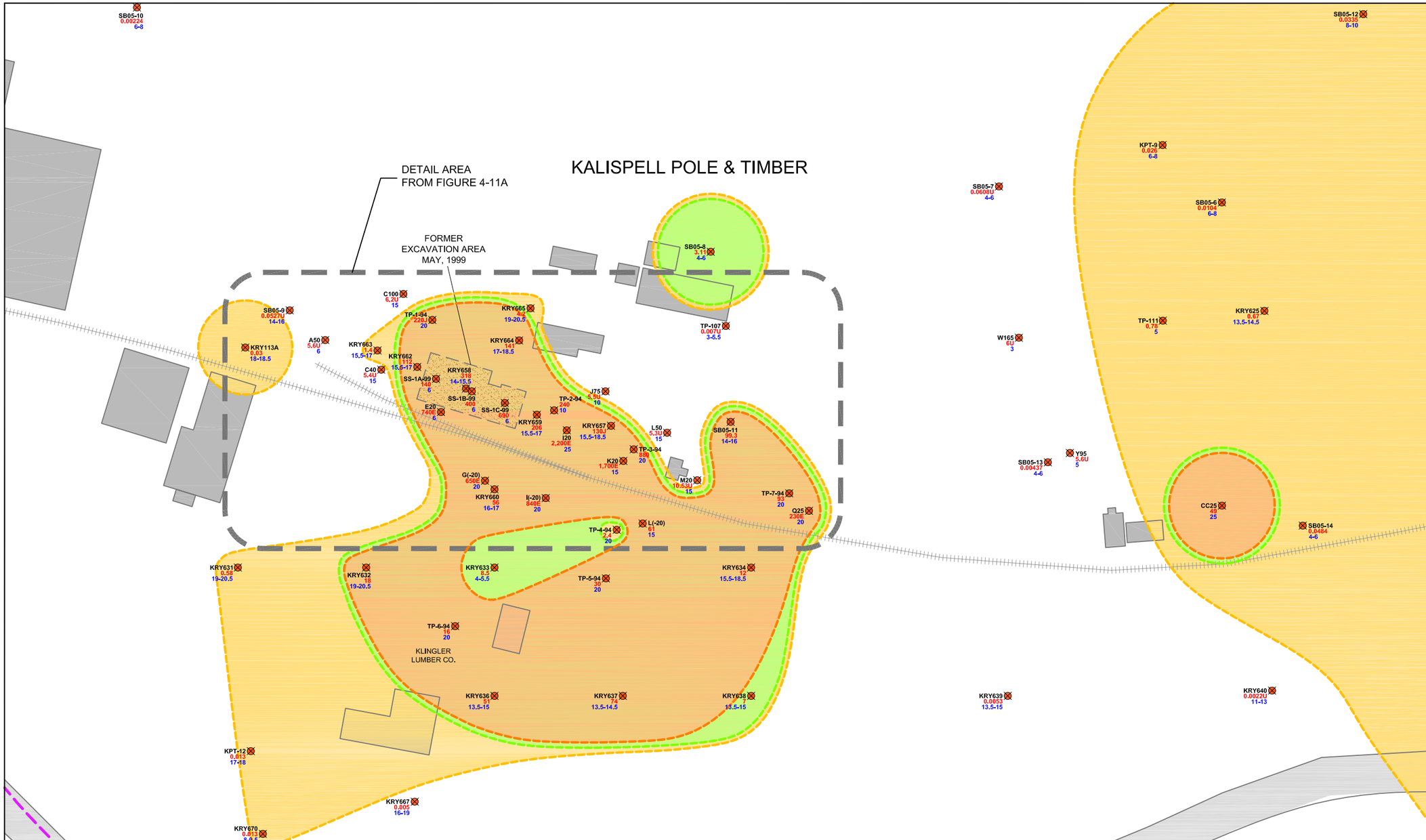


FIG 4-11A_SB RESULTS-PCP.dwg - DWH - 02/02/2007 - S1176-37-KPT005



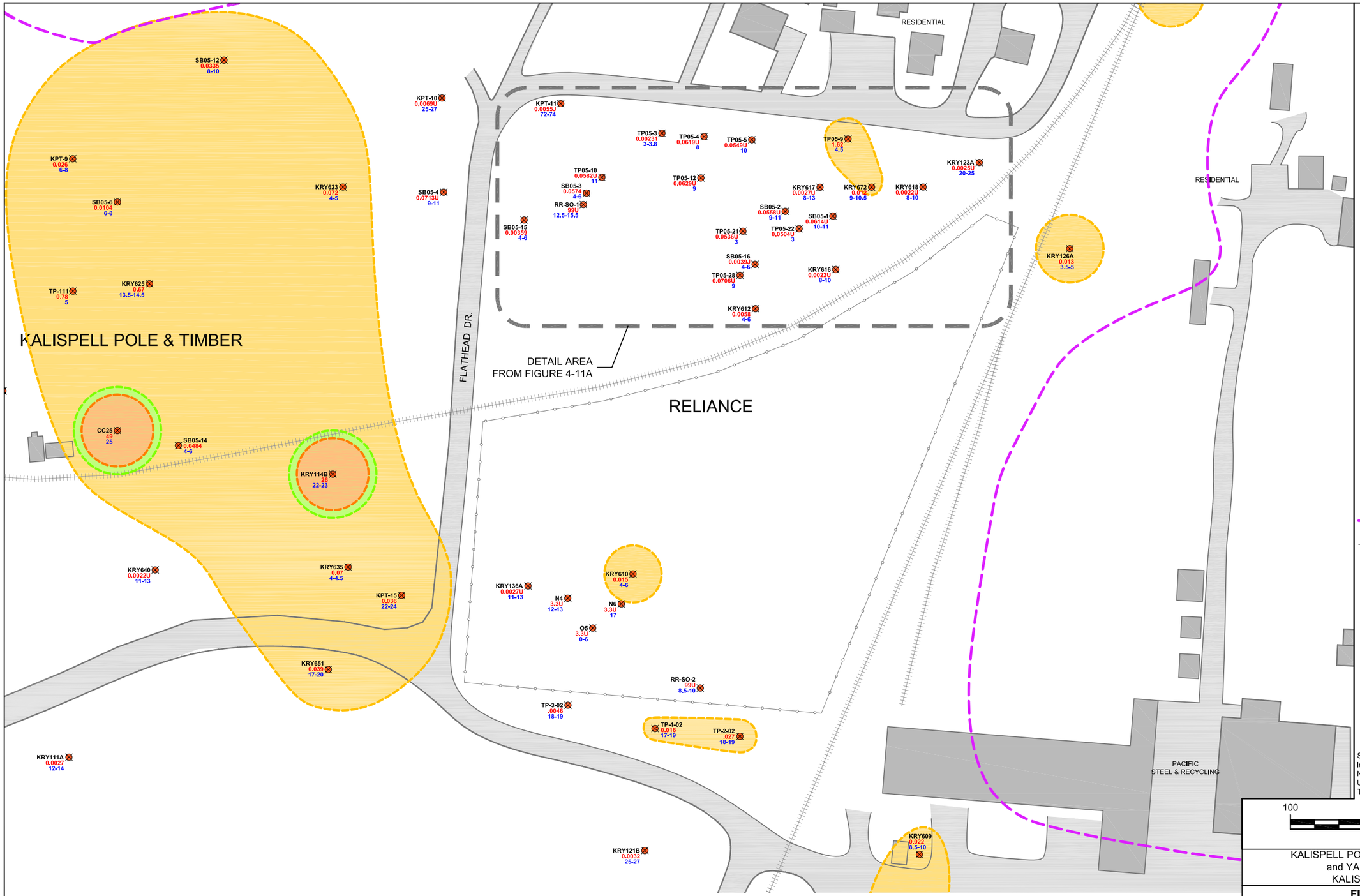
SCREENING CRITERIA		
EPA REGION 9 DAF = 10	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
0.01	3.0	9.0

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-11B
SUBSURFACE SOIL SAMPLING RESULTS
KPT AREA
PENTACHLOROPHENOL

TETRA TECH EM, INC.

FIG 4-11B_SB RESULTS-PCP_KPT.dwg - DWH - 02/02/2007 - S1176-37-KPT005



SCREENING CRITERIA		
EPA REGION 9 DAF = 10	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
0.01	3.0	9.0

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-11C
SUBSURFACE SOIL SAMPLING RESULTS
RELIANCE AREA
PENTACHLOROPHENOL

TETRA TECH EM, INC.

FIG 4-11C_SB RESULTS-PCP_RELIANCE.dwg - DWH - 02/02/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

RESIDENTIAL

RIVERSIDE DR.

PARK ST.

SCRAP YARD

SETTLE SERVICES

THE SHED MAN

MONTANA MOKKO

STILLWATER FOREST PRODUCTS INC.

FORMER EXCAVATION AREA MAY, 1999

KLINGLER LUMBER CO.

McELROY & WILKEN BUILDINGS and EQUIPMENT

FLATHEAD DR.

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

NICHOLSON DR.

MAGSTADT LN.

AAA STORAGE

KARI HYUNDAI

LA QUINTA INN & SUITES

MONTCLAIR DR.

KARI DODGE

PACIFIC STEEL & RECYCLING

HIGH COUNTRY JEEP

WAL-MAR

NORTHWESTERN ENERGY

NORTHERN ENERGY PROPANE

OFFICE MAX

MINI-STORAGE

TOWN PUMP LUCKY LIL'S CASINO

ROCKY MOUNTAIN MARINE

MOUNTAIN SPRINGS HOT TUBS

LUCKY LOGGER CASINO

TOWN & COUNTRY TRAILER COURT

NW TRUCK REPAIR

E. OREGON LN.

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

U.S. HIGHWAY 2 (E. IDAHO)

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

USGS

WHITEFISH STAGE RD.

E. CALIFORNIA ST.

E. OREGON ST.

7TH AVENUE E.

8TH AVENUE E.

9TH AVENUE E.

10TH AVENUE E.

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

FOR DETAIL OF THIS AREA SEE FIGURE 4-12B

FOR DETAIL OF THIS AREA SEE FIGURE 4-12C

FOR DETAIL OF THIS AREA SEE FIGURE 4-12D

KRY103A 0.0195U 5.5-6.5

KRY105A 0.00284U 4-6

KRY100A 0.00221U 8-9.5

KRY127A 0.00194U 8-9.5

KRY126A 0.00224U 9-10

KRY623 0.00237U 8.5-9.5

KRY625 0.00251U 13.5-14.5

W165 6U 3

Y95 5.6U 5

CC25 5.5U 25

KRY632 0.117 19-20.5

KRY631 0.0997 19-20.5

KRY633 0.0124U 15-16.5

TP-5-94 0.44U 20

TP-6-94 2.2U 20

KRY634 0.00235U 4-5.5

KRY629 0.00216U 14.5-15.5

KRY114B 0.0945U 22-23

KRY635 0.00232U 4-4.5

KRY636 0.0276 13.5-15

KRY637 0.0568 13.5-14.5

KRY638 0.0223U 13.5-15

KRY639 0.00224U 13.5-15

KRY640 0.00219U 11-13

KRY667 0.00945U 16-19

KRY670 0.0021U 8-9.5

KRY651 0.00236U 17-20

KRY111A 0.0114U 12-14

GWY-8 1U 23

KRY121B 0.00233U 25-27

GWY-12 2U 16

KRY609 0.0125 2.5-4.5

GWY-11 1U 20

KRY116A 0.00244U 13-14.5

KRY604 0.00196U 22-23

EH-1 0.33U 2.5-4.5

KRY139A 0.00249U 13.5-15

EH-3 0.33U 12.5-14.5

NOTES:

1. BASE FIGURE PROVIDED BY TETRA TECH
2. DETAIL CALLOUTS WERE MODIFIED BY TRIHYDRO CORPORATION

N

Legend

- Soil Sampling Location
- 0.14U - Sampling Result
- 12.5-14.5 - Depth in Feet Below Ground Surface
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Subsurface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Residential RBSL
- Approximate Extent of Subsurface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Commercial RBSL
- Approximate Extent of Subsurface Soil with Concentrations of Benzo(A)Pyrene Above EPA Region 9 DAF = 10
- DAF - Dillution Attenuation Factor
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:

1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.
3. Maximum Sample Concentration Shown for Each Location with Corresponding Sample Depth.
4. No Sample Concentrations Above DEQ Subsurface Soil RBSL.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

AREA OF CONCERN		
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 DAF = 10
34,568.42 - FT²	8,635.44 - FT²	1,361.15 - FT²
3,840.94 - YD²	959.49 - YD²	151.24 - YD²
0.79 - AC	0.20 - AC	0.03 - AC

SCREENING CRITERIA			
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 DAF = 10	DEQ SUBSURFACE SOIL RBSL
0.08	0.60	4.0	10.0

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-12A
SUBSURFACE SOIL SAMPLING RESULTS

BENZO(A)PYRENE

KALISPELL POLE & TIMBER

DETAIL AREA
FROM FIGURE 4-12A

FORMER
EXCAVATION AREA
MAY, 1999

KLINGLER
LUMBER CO.

C100 6.2U 15
TP-1-94 12 20
KRY665 0.0186 19-20.5
KRY664 0.0108U 17-18.5
KRY113A 0.00243U 18-18.5
A50 5.6U 6
KRY663 0.0817 15.5-17
KRY662 0.0793 15.5-17
C40 5.4U 15
SS-1A-99 0.5 6
KRY658 0.7 14-15.5
SS-1B-99 0.98 6
SS-1C-99 0.7 6
E20 27U 6
KRY659 0.0125U 15.5-17
TP-2-94 1.1U 10
I20 28U 10
J75 5.5U 10
KRY657 0.0111U 15.5-18.5
TP-3-94 2.2U 20
K20 28U 15
L50 5.3U 6
M20 10.53U 15
G(-20) 5.3U 15
KRY660 0.144 16-17
I(-20) 5.4U 10
TP-4-94 0.21U 20
L(-20) 5.5U 6
TP-7-94 2.1U 20
Q25 5.4U 15
KRY631 0.0997 19-20.5
KRY632 0.117 19-20.5
KRY633 0.0124U 15-16.5
TP-5-94 0.44U 20
KRY634 0.00235U 4-5.5
TP-6-94 2.2U 20
KRY636 0.0276 13.5-15
KRY637 0.0568 13.5-14.5
KRY638 0.0223U 13.5-15
KRY639 0.00224U 13.5-15
KRY640 0.00219U 11-13
KRY667 0.00945U 16-19
KRY670 0.0021U 8-9.5
W165 6U 3
KRY625 0.00251U 13.5-14.5
Y95 5.6U 5
CC25 5.9U 25

NOTES:

1. BASE FIGURE PROVIDED BY TETRA TECH
2. DETAIL CALLOUTS WERE MODIFIED BY TRIHYDRO CORPORATION

N

Legend

- Soil Sampling Location
- 0.00219U - Sampling Result
- 11-13 - Depth in Feet Below Ground Surface
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Subsurface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Residential RBSL
- Approximate Extent of Subsurface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Commercial RBSL
- Approximate Extent of Subsurface Soil with Concentrations of Benzo(A)Pyrene Above EPA Region 9 DAF = 10
- DAF - Dillution Attenuation Factor
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:

1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.
3. Maximum Sample Concentration Shown for Each Location with Corresponding Sample Depth.
4. No Sample Concentrations Above DEQ Subsurface Soil RBSL.

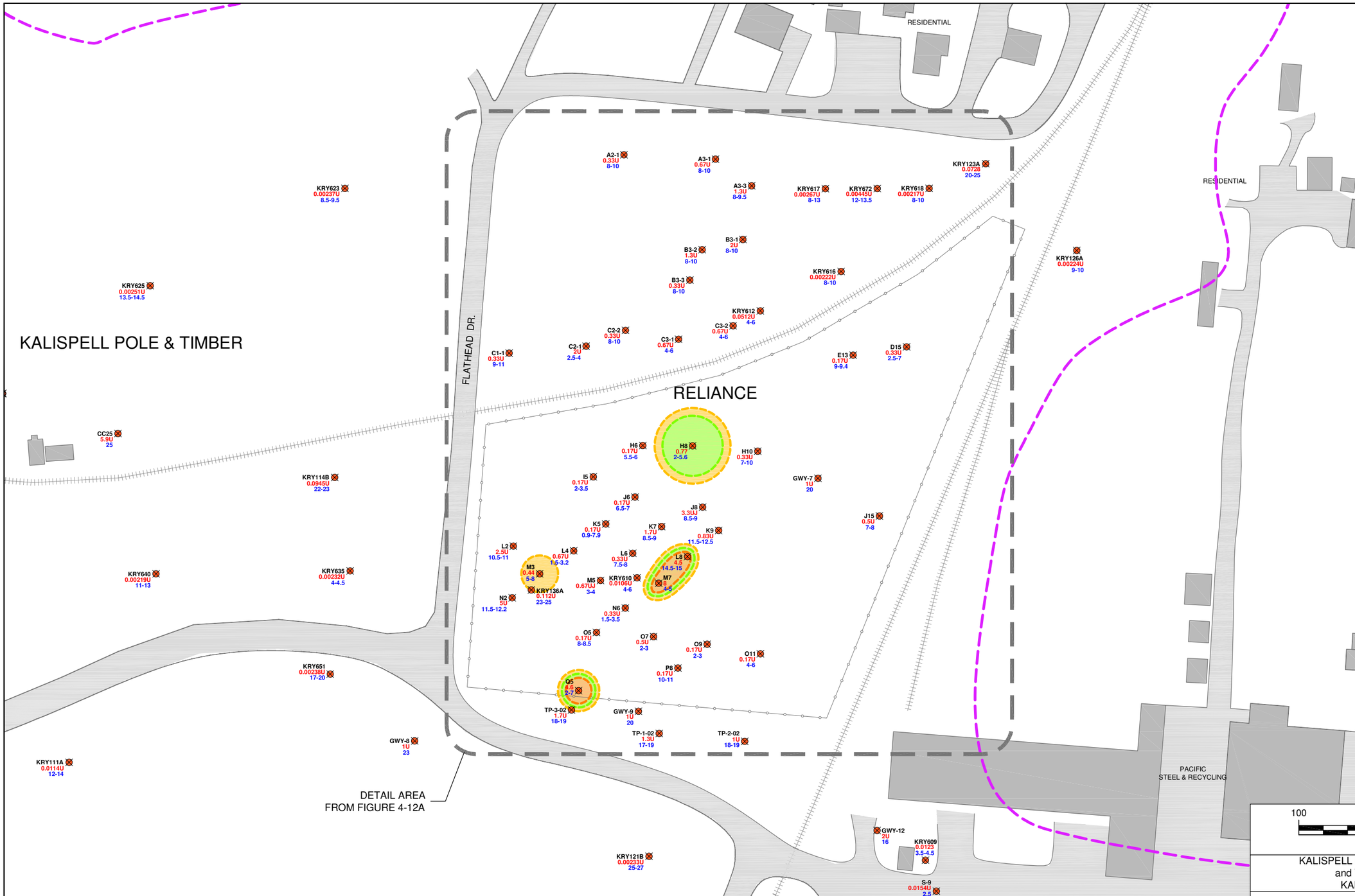
Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

80 0 80
Feet

SCREENING CRITERIA			
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 DAF = 10	DEQ SUBSURFACE SOIL RBSL
0.08	0.60	4.0	10.0

KALISPELL POLE & TIMBER, RELIANCE,
and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-12B
SUBSURFACE SOIL SAMPLING RESULTS
KPT AREA
BENZO(A)PYRENE



NOTES:

1. BASE FIGURE PROVIDED BY TETRA TECH
2. DETAIL CALLOUTS WERE MODIFIED BY TRIHYDRO CORPORATION

N

Legend

- Soil Sampling Location
- 0.33U - Sampling Result
- 2.5-7 - Depth in Feet Below Ground Surface
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Subsurface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Residential RBSL
- Approximate Extent of Subsurface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Commercial RBSL
- Approximate Extent of Subsurface Soil with Concentrations of Benzo(A)Pyrene Above EPA Region 9 DAF = 10
- DAF - Dillution Attenuation Factor
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:

1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.
3. Maximum Sample Concentration Shown for Each Location with Corresponding Sample Depth.
4. No Sample Concentrations Above DEQ Subsurface Soil RBSL.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

100 0 100 Feet

SCREENING CRITERIA			
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 DAF = 10	DEQ SUBSURFACE SOIL RBSL
0.08	0.60	4.0	10.0

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-12C
SUBSURFACE SOIL SAMPLING RESULTS
RELIANCE AREA
BENZO(A)PYRENE

FIG 4-12C_SB RESULTS-BAP_RELIANCE.dwg - DWH - 02/02/2007 - S1176-37-KPT005

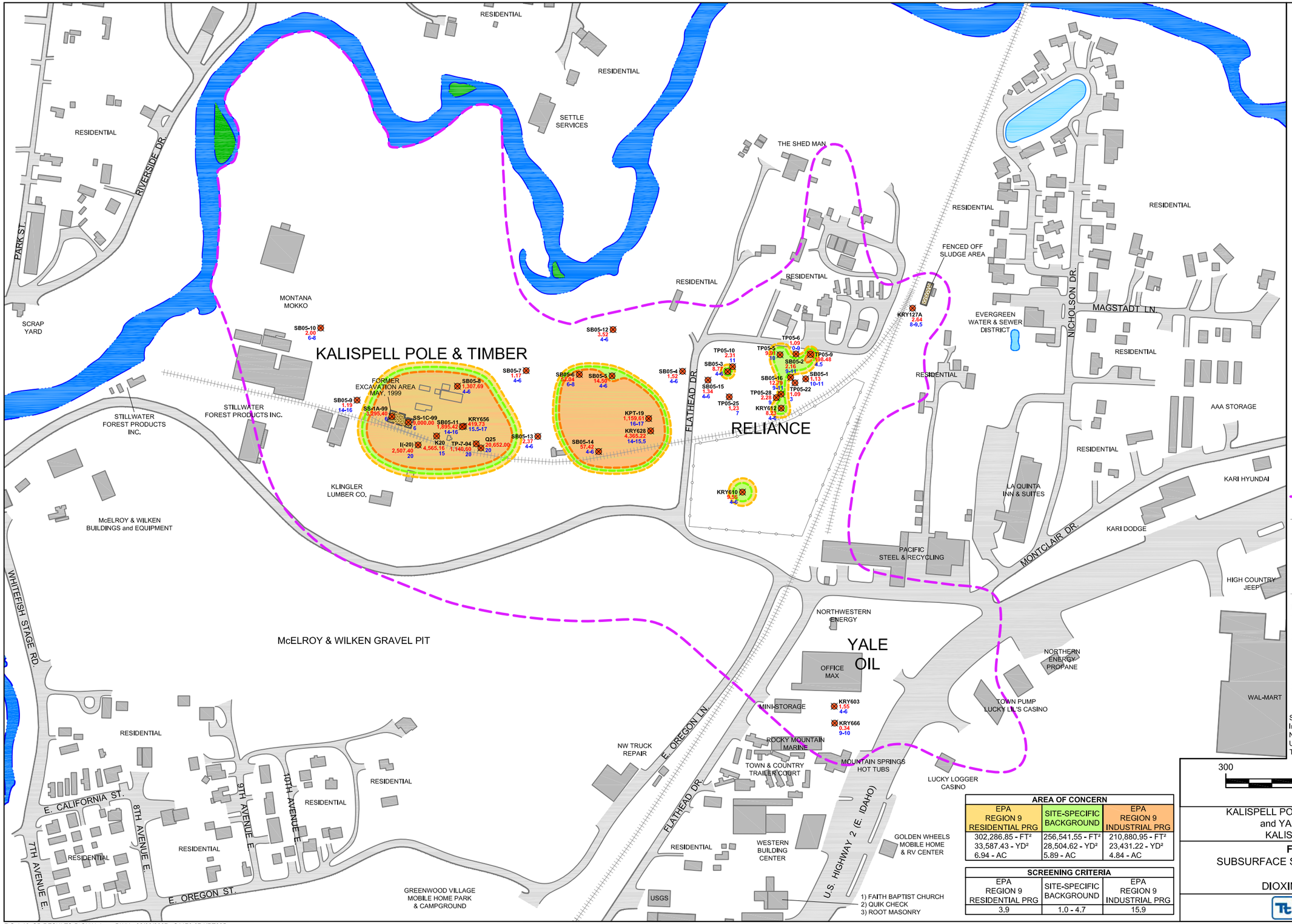
SCREENING CRITERIA			
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 DAF = 10	DEQ SUBSURFACE SOIL RBSL
0.08	0.60	4.0	10.0

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-12D
SUBSURFACE SOIL SAMPLING RESULTS
YALE OIL AREA
BENZO(A)PYRENE

TETRA TECH EM, INC.

FIG 4-12D_SB RESULTS-BAP_YALE.dwg - DWH - 01/22/2007 - S1176-37-KPT005



AREA OF CONCERN		
EPA REGION 9 RESIDENTIAL PRG	SITE-SPECIFIC BACKGROUND	EPA REGION 9 INDUSTRIAL PRG
302,286.85 - FT²	256,541.55 - FT²	210,880.95 - FT²
33,587.43 - YD²	28,504.62 - YD²	23,431.22 - YD²
6.94 - AC	5.89 - AC	4.84 - AC

SCREENING CRITERIA		
EPA REGION 9 RESIDENTIAL PRG	SITE-SPECIFIC BACKGROUND	EPA REGION 9 INDUSTRIAL PRG
3.9	1.0 - 4.7	15.9

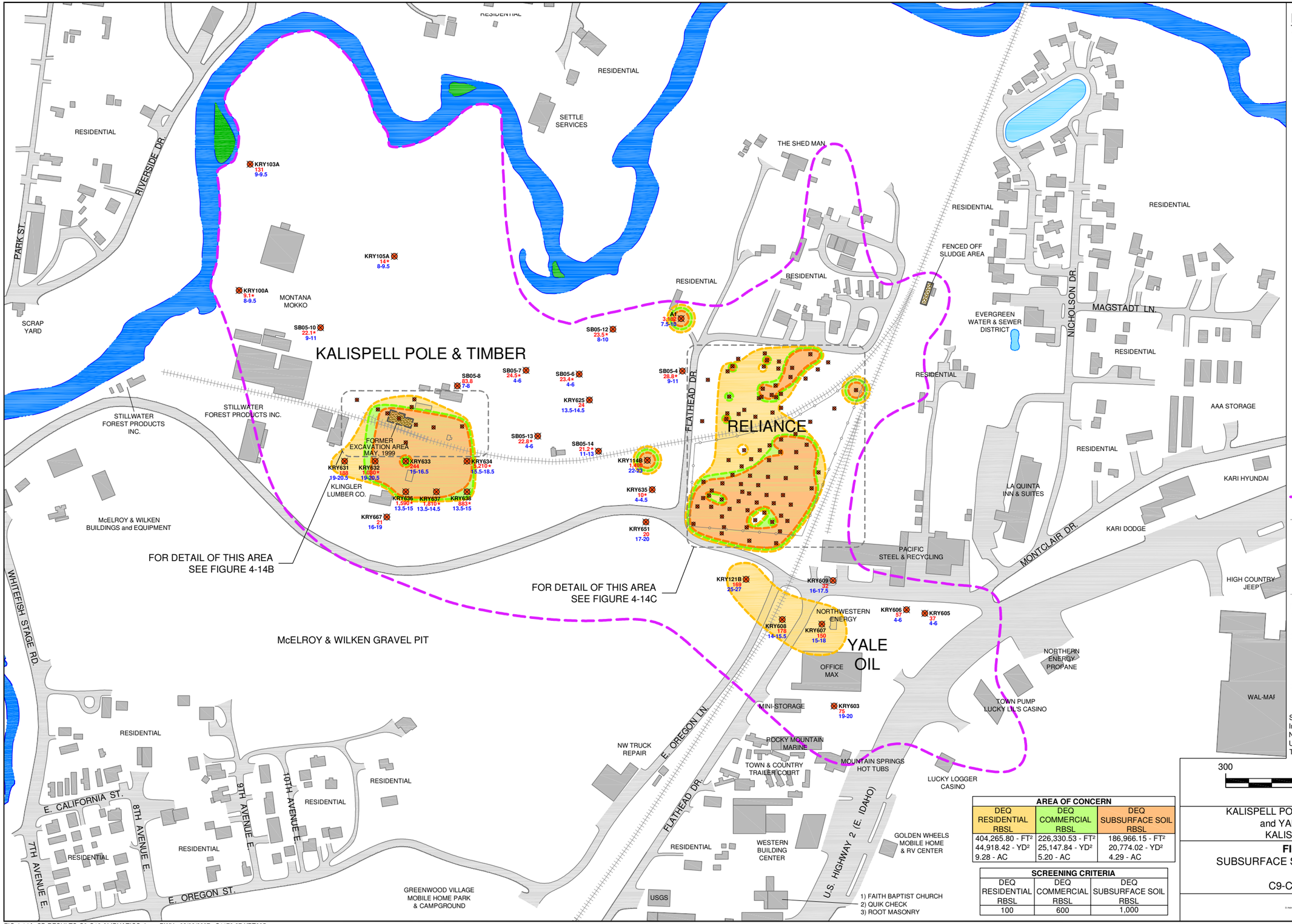
KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-13
SUBSURFACE SOIL SAMPLING RESULTS

DIOXINS AND FURANS

TETRA TECH EM, INC.

FIG 4-13_SB RESULTS-DIOXIN.dwg - DWH - 02/02/2007 - S1176-37-KPT005



NOTES:

1. BASE FIGURE PROVIDED BY TETRA TECH
2. DETAIL CALLOUTS WERE MODIFIED BY TRIHYDRO CORPORATION

N

Legend

- Soil Sampling Location
- 37 - Sampling Result
- 4-6 - Depth in Feet Below Ground Surface
- * - Estimated
- Approximate Extent of Subsurface Soil with Concentrations of C9-C18 Aliphatics Above DEQ Residential RBSL
- Approximate Extent of Subsurface Soil with Concentrations of C9-C18 Aliphatics Above DEQ Commercial RBSL
- Approximate Extent of Subsurface Soil with Concentrations of C9-C18 Aliphatics Above DEQ Subsurface Soil RBSL
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:

1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.
3. Maximum Sample Concentration Shown for Each Location with Corresponding Sample Depth.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

AREA OF CONCERN		
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	DEQ SUBSURFACE SOIL RBSL
404,265.80 - FT²	226,330.53 - FT²	186,966.15 - FT²
44,918.42 - YD²	25,147.84 - YD²	20,774.02 - YD²
9.28 - AC	5.20 - AC	4.29 - AC

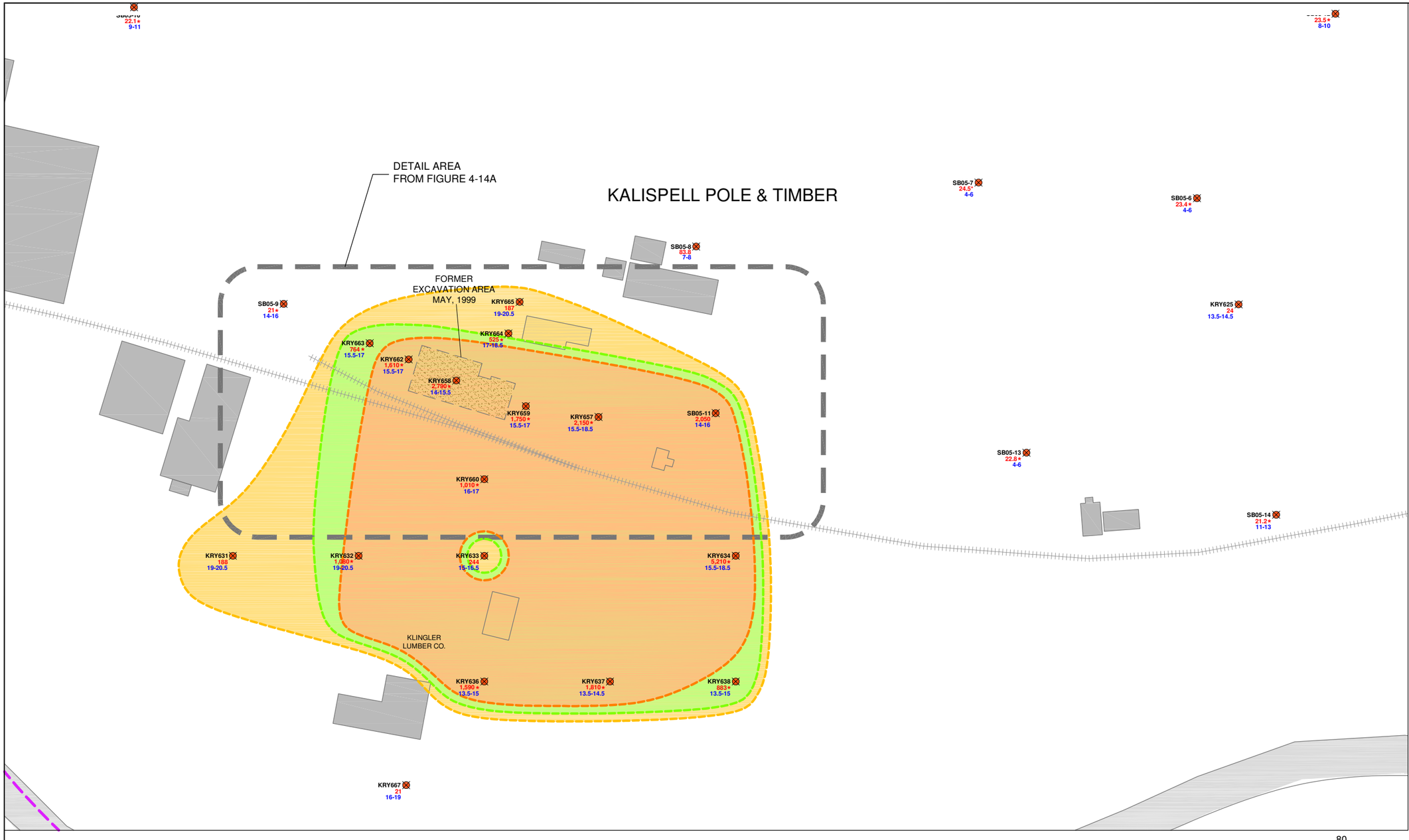
SCREENING CRITERIA		
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	DEQ SUBSURFACE SOIL RBSL
100	600	1,000

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-14A
SUBSURFACE SOIL SAMPLING RESULTS

C9-C18 ALIPHATICS

FIG 4-14A_SB RESULTS-C9-C18 ALIPHATICS.dwg - DWH - 02/02/2007 - S1176-37-KPT005



NOTES:

1. BASE FIGURE PROVIDED BY TETRA TECH
2. DETAIL CALLOUTS WERE MODIFIED BY TRIHYDRO CORPORATION

N

Legend

- Soil Sampling Location
- 24 - Sampling Result
- 13.5-14.5 - Depth in Feet Below Ground Surface
- * - Estimated
- Approximate Extent of Subsurface Soil with Concentrations of C9-C18 Aliphatics Above DEQ Residential RBSL
- Approximate Extent of Subsurface Soil with Concentrations of C9-C18 Aliphatics Above DEQ Commercial RBSL
- Approximate Extent of Subsurface Soil with Concentrations of C9-C18 Aliphatics Above DEQ Subsurface Soil RBSL
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:

1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.
3. Maximum Sample Concentration Shown for Each Location with Corresponding Sample Depth.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

80 80 Feet

SCREENING CRITERIA		
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	DEQ SUBSURFACE SOIL RBSL
100	600	1,000

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-14B
SUBSURFACE SOIL SAMPLING RESULTS
KPT AREA
C9-C18 ALIPHATICS

FIG 4-14B_SB RESULTS-C9-C18 ALIPHATICS_KPT.dwg - DWH - 02/02/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

RESIDENTIAL

RESIDENTIAL

PACIFIC
STEEL & RECYCLING

FLATHEAD DR.

DETAIL AREA
FROM FIGURE 4-14A

A1 3,182 7.5-10
SB05-12 23.5* 8-10
SB05-6 23.4* 4-6
SB05-4 28.8* 9-11
SB05-15 26.6* 6-8
KRY625 24 13.5-14.5
SB05-14 21.2* 11-13
KRY114B 1,400 22-23
KRY635 10 4-4.5
KRY651 20 17-20
TP05-4 427 8
A2-1 25 8-10
A3-1 1,000 8-10
TP05-10 6,390 11
TP05-12 50.6* 9
A3 233 7.5-10
A3-3 403 8-9.5
SB05-3 245* 4-6
TP05-9 1,500 10
A5 3 9-10
TP05-14 4,640 10
KRY672 22* 12-13.5
SB05-2 163,000 9-11
SB05-1 24.9* 10-11
B3-1 629 8-10
B3-2 1,130* 8-10
B3 5,121 8-9
SB05-16 224* 4-6
B3-3 311 8-10
TP05-27 933 9
TP05-28 629 9
TP05-25 671 7
KRY612 39 8-10
X18 3,116 9.5-10
Z16 163 2-4
TP05-30 116 7
TP05-31 382 7
C2-2 301 8-10
C3-2 185 8-10
C3-1 575 8-9.5
C2-1 3,030* 2.5-4
C1-1 20* 9-11
E13 11 9-9.4
F12 301 2-3
G11 26,498 7.5-8
G9 413 8.5-9
G13 12,522 10-10.5
H6 10* 5.5-6
H8 380 2-5.6
H10 806 7-10
H12 3,535 8.5-9
I5 169 2-3.5
I7 238 4-5
I9 1,199 9.5-10
J6 363 6.5-7
J12 3,734 8.5-9
J15 109 7-8
K5 939 0.9-7.9
K7 3,370 8.5-9
K9 1,400 11.5-12.5
K11 1,830 10-11
L2 914 10.5-11
L4 1,745 9
L6 1,150 7.5-8
L8 4,120 14.5-15
L14 2,333 2-6
M3 1,020 6-8
KRY610 965 4-6
M7 40,300 4-5
M9 3,965 17-17.5
M11 6,773 16.5-17
KRY136A 364 23-25
N2 4,380 11.5-12.2
N4 165 12-13
N6 7,203 17
N8 3,502 17
N10 3,230 13.5-14
N12 10,507 15.5-16
O1 1,913 14-16
O3 1,232 14-16
O5 3,600 8-8.5
O7 3,000 2-3
O9 78 2-3
O11 14,075 14-15
P4 3,469 2-4.5
P8 16.5 10-11
P10 127 9-9.5
P12 6,740 16-17
Q1 6,046 18
Q5 4,720 2-7
Q7 1,044 17-17.5
Q11 1,198 16.5-17
TP-3-02 2,250 18-19
TP-1-02 1,580 17-19
TP-2-02 1,680 18-19
KRY121B 169 25-27
KRY609 32 16-17.5

NOTES:

1. BASE FIGURE PROVIDED BY TETRA TECH
2. DETAIL CALLOUTS WERE MODIFIED BY TRIHYDRO CORPORATION

N

Legend

- Soil Sampling Location
- 3,116 - Sampling Result
- 9.5-10 - Depth in Feet Below Ground Surface
- * - Estimated
- Approximate Extent of Subsurface Soil with Concentrations of C9-C18 Aliphatics Above DEQ Residential RBSL
- Approximate Extent of Subsurface Soil with Concentrations of C9-C18 Aliphatics Above DEQ Commercial RBSL
- Approximate Extent of Subsurface Soil with Concentrations of C9-C18 Aliphatics Above DEQ Subsurface Soil RBSL
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:

1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.
3. Maximum Sample Concentration Shown for Each Location with Corresponding Sample Depth.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

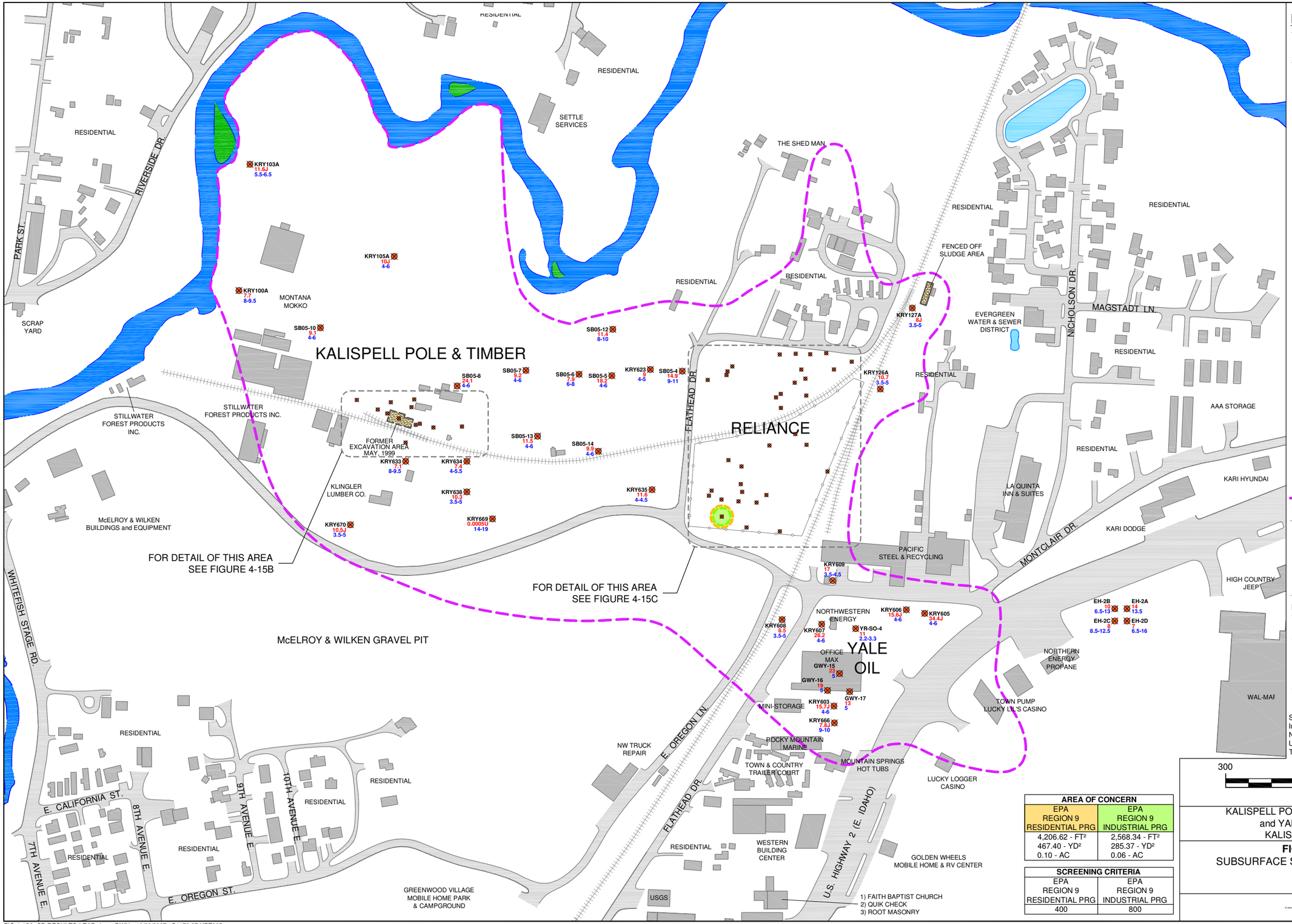
100 0 100 Feet

SCREENING CRITERIA		
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	DEQ SUBSURFACE SOIL RBSL
100	600	1,000

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-14C
SUBSURFACE SOIL SAMPLING RESULTS
RELIANCE AREA
C9-C18 ALIPHATICS

FIG 4-14C_SB RESULTS-C9-C18 ALIPHATICS_RELIANCE.dwg - DWH - 02/02/2007 - S1176-37-KPT005



NOTES:

1. BASE FIGURE PROVIDED B TETRA TECH
2. DETAIL CALLOUTS WERE MODIFIED BY TRIHYDRO CORPORATION

N

Legend

- ⊗ - Soil Sampling Location
- 10 - Sampling Result
- 6.5-13 - Depth in Feet Below Ground Surface
- J - Estimated
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Subsurface Soil with Concentrations of Lead Above EPA Region 9 Residential PRG
- Approximate Extent of Subsurface Soil with Concentrations of Lead Above EPA Region 9 Industrial PRG
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:

1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.
3. Maximum Sample Concentration Shown for Each Location with Corresponding Sample Depth.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (200
USDA FSA NAIP Aerial Photo-Kalispell Area (200
ThermoRetec 2001

300 0 300 Feet

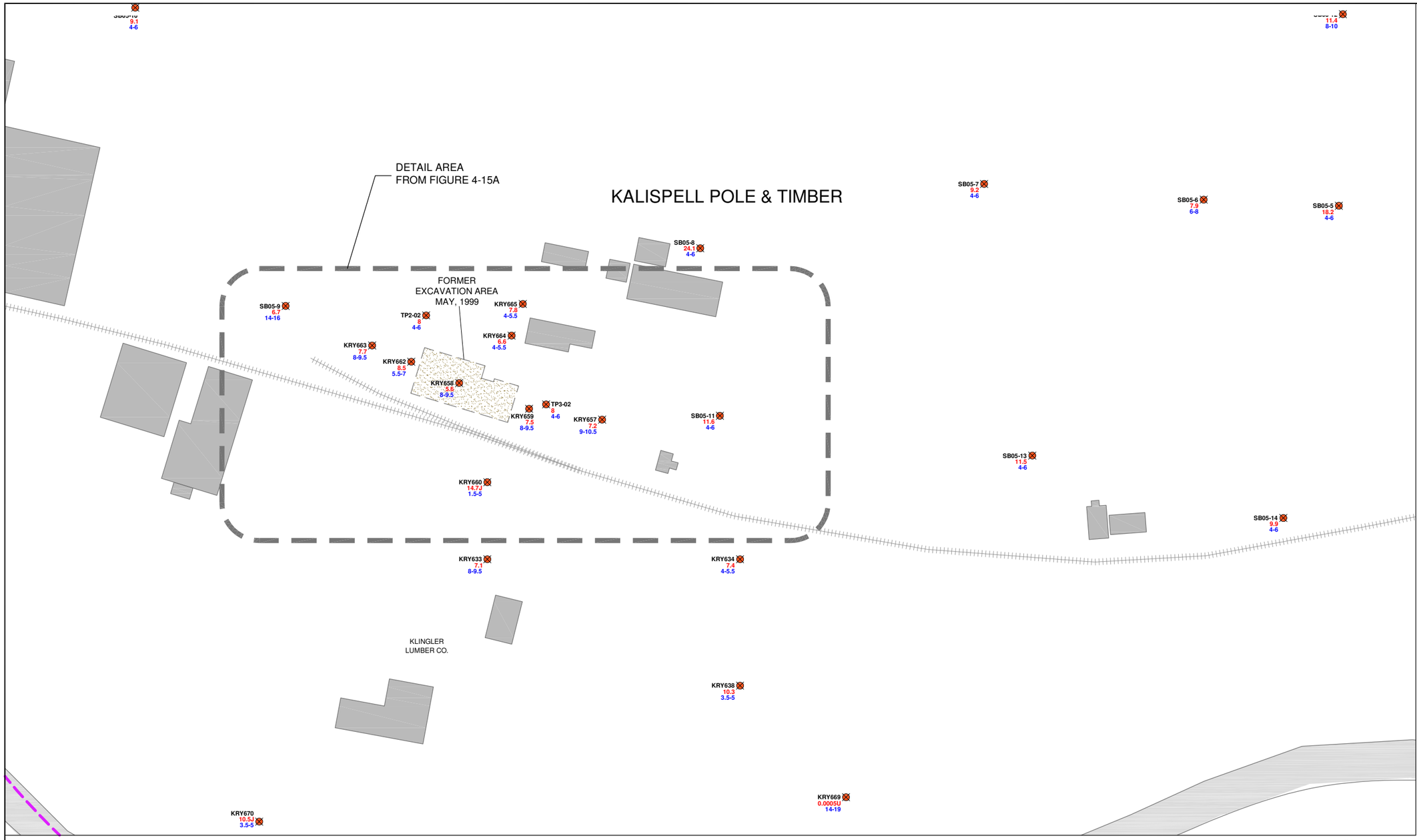
AREA OF CONCERN	
EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
4,206.62 - FT²	2,568.34 - FT²
467.40 - YD²	285.37 - YD²
0.10 - AC	0.06 - AC

SCREENING CRITERIA	
EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
400	800

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-15A
SUBSURFACE SOIL SAMPLING RESULTS

LEAD



NOTES:

1. BASE FIGURE PROVIDED B TETRA TECH
2. DETAIL CALLOUTS WERE MODIFIED BY TRIHYDRO CORPORATION

N

Legend

- Soil Sampling Location
- 9.9 - Sampling Result
- 4-6 - Depth in Feet Below Ground Surface
- J - Estimated
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Subsurface Soil with Concentrations of Lead Above EPA Region 9 Residential PRG
- Approximate Extent of Subsurface Soil with Concentrations of Lead Above EPA Region 9 Industrial PRG
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:

1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.
3. Maximum Sample Concentration Show for Each Location with Corresponding Sample Depth.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (200
USDA FSA NAIP Aerial Photo-Kalispell Area (200
ThermoRetec 2001

80 0 80
Feet

SCREENING CRITERIA	
EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
400	800

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-15B
SUBSURFACE SOIL SAMPLING RESULTS
KPT AREA
LEAD

FIG 4-15B_SB RESULTS-LEAD_KPT.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RESIDENTIAL

RESIDENTIAL

FLATHEAD DR.

RELIANCE

PACIFIC
STEEL & RECYCLING

SB05-12
11.4
8-10

SB05-6
7.9
6-8

SB05-5
18.2
4-6

KRY623
9
4-5

SB05-4
14.8
9-11

SB05-15
19.1
6-8

TP05-10
27
4

SB05-3
65.7
4-6

RR-SO-1
8.95
12.5-15.5

TP05-5
6.8
10

TP05-6
11.6
0-9

TP05-9
61.9
4.5

TP1-02
150
4-6

KRY123A
7.6
20-25

KRY617
7.8
8-13

KRY618
8.9J
4-6

SB05-1
5.7
10-11

TP05-22
9.3
3

SB05-16
15
4-6

TP05-28
7.9
9

KRY616
13.7
4-6

KRY612
16.4
4-6

KRY126A
10.7
3.5-5

F12
5UJ
2-3

G9
16J
8.5-9

G13
11UJ
8-8.5

SB05-14
9.9
4-6

I5
10J
2-3.5

J6
5UJ
6.5-7

KRY137A
0.0005U
10-15

L6
140J
7.5-8

M3
5UJ
5-6

KRY610
75.8
8-10

KRY635
11.6
4-4.5

KRY136A
12.9
11-13

N4
170J
2-3

N6
220J
1.5-3.5

N8
5UJ
3-5

M9
18J
3-6

P4
4,190J
2-4.5

Q7
94J
5-6

Q11
370J
2-3

KRY609
17
3.5-4.5

DETAIL AREA
FROM FIGURE 4-15A

NOTES:

1. BASE FIGURE PROVIDED B TETRA TECH
2. DETAIL CALLOUTS WERE MODIFIED BY TRIHYDRO CORPORATION

N

Legend

- Soil Sampling Location
- 10.7 - Sampling Result
- 3.5-6 - Depth in Feet Below Ground Surface
- J - Estimated
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Subsurface Soil with Concentrations of Lead Above EPA Region 9 Residential PRG
- Approximate Extent of Subsurface Soil with Concentrations of Lead Above EPA Region 9 Industrial PRG
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.
3. Maximum Sample Concentration Shown for Each Location with Corresponding Sample Depth.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (200
USDA FSA NAIP Aerial Photo-Kalispell Area (200
ThermoRetec 2001

100 0 100 Feet

SCREENING CRITERIA	
EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
400	800

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-15C
SUBSURFACE SOIL SAMPLING RESULTS
RELIANCE AREA
LEAD

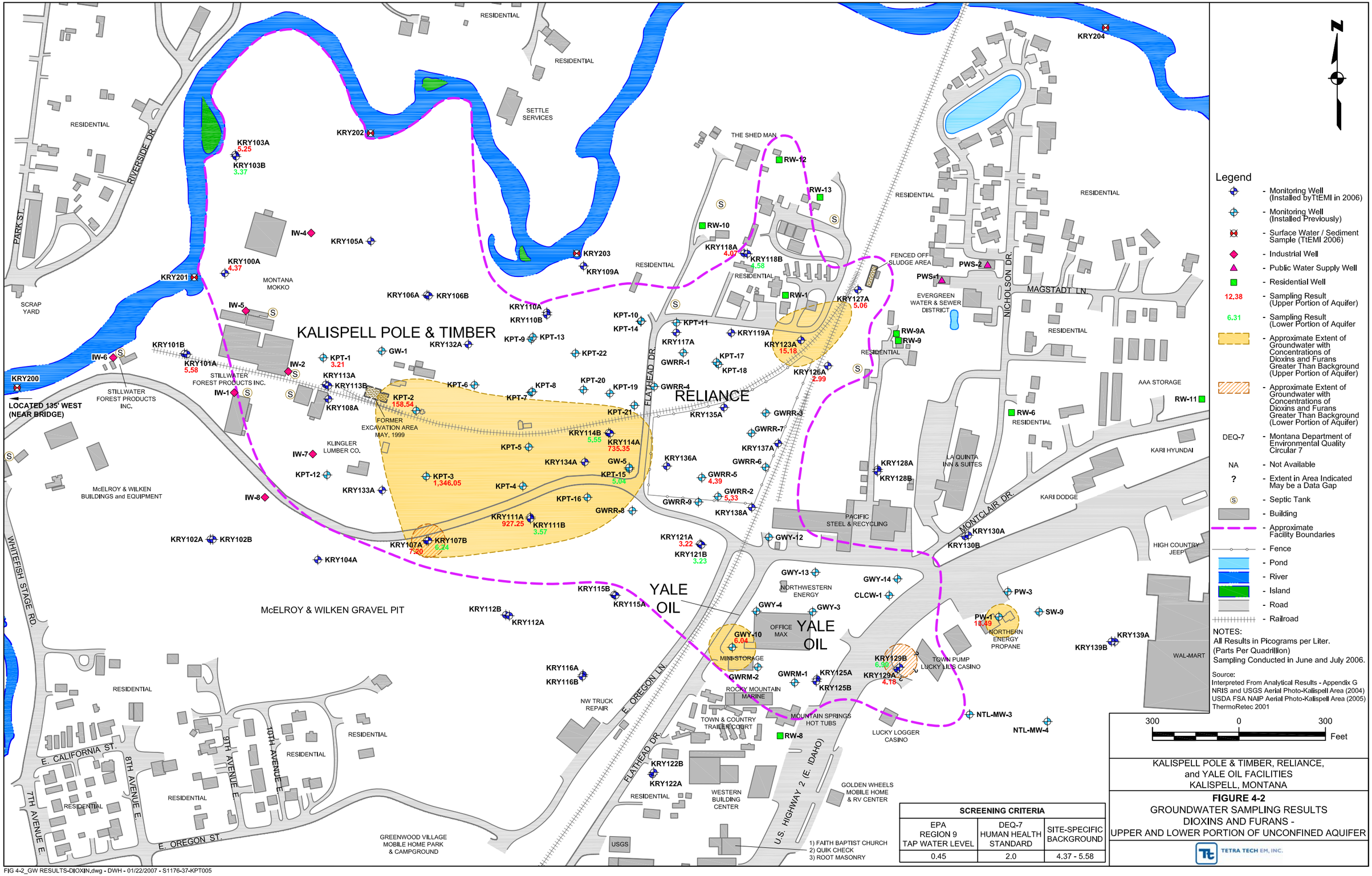


FIG 4-2_GW RESULTS-DIOXIN.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

RESIDENTIAL

SETTLE SERVICES

THE SHED MAN

RIVERSIDE DR.

PARK ST.

SCRAP YARD

MONTANA MOKKO

STILLWATER FOREST PRODUCTS INC.

LOCATED 135' WEST (NEAR BRIDGE)

KLINGLER LUMBER CO.

McELROY & WILKEN BUILDINGS and EQUIPMENT

FORMER EXCAVATION AREA MAY, 1999

FLATHEAD DR.

NICHOLSON DR.

MAGSTADT LN

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

PACIFIC STEEL & RECYCLING

LA QUINTA INN & SUITES

KARI HYUNDAI

KARI DODGE

MONTCLAIR DR.

HIGH COUNTRY JEEP

WAL-MART

AAA STORAGE

NORTHWESTERN ENERGY

OFFICE MAX

MINI-STORAGE

NORTHERN ENERGY PROPANE

TOWN PUMP LUCKY LIL'S CASINO

LUCKY LOGGER CASINO

ROCKY MOUNTAIN MARINE

TOWN & COUNTRY TRAILER COURT

MOUNTAIN SPRINGS HOT TUBS

NW TRUCK REPAIR

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

USGS

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

E. CALIFORNIA ST.

E. OREGON ST.

E. OREGON LN.

7TH AVENUE E.

8TH AVENUE E.

9TH AVENUE E.

10TH AVENUE E.

U.S. HIGHWAY 2 (E. IDAHO)

WHITEFISH STAGE RD.

KRY200 0.5U
KRY201 0.5U
KRY202 0.5U
KRY203 0.5U
KRY204 0.5U
KRY100A 0.5U
KRY101A 0.5U
KRY101B 0.5U
KRY102A 0.5U
KRY102B 0.5U
KRY103A 0.5U
KRY103B 0.5U
KRY104A 0.5U
KRY105A 0.5U
KRY106A 0.5U
KRY106B 0.5U
KRY107A 0.5U
KRY107B 0.5U
KRY108A 0.5U
KRY109A 0.5U
KRY110A 0.5U
KRY110B 0.5U
KRY111A 0.5U
KRY111B 0.5U
KRY112A 0.5U
KRY112B 0.5U
KRY113A 0.5U
KRY113B 0.5U
KRY114A 0.5U
KRY114B 0.5U
KRY115A 0.5U
KRY115B 0.5U
KRY116A 0.5U
KRY116B 0.5U
KRY117A 0.5U
KRY118A 0.5U
KRY118B 0.5U
KRY119A 0.5U
KRY120A 0.5U
KRY121A 0.5U
KRY121B 0.5U
KRY122A 0.5U
KRY122B 0.5U
KRY123A 0.5U
KRY125A 0.5U
KRY125B 0.5U
KRY126A 0.5U
KRY127A 0.5U
KRY128A 0.5U
KRY128B 0.5U
KRY129A 0.5U
KRY129B 0.5U
KRY130A 0.5U
KRY130B 0.5U
KRY132A 0.5U
KRY134A 0.5U
KRY135A 0.5U
KRY136A 0.5U
KRY137A 0.5U
KRY138A 0.5U
KRY139A 0.44J
KRY139B 0.5U
IW-1 0.5U
IW-2 0.5U
IW-4 0.5U
IW-5 0.5U
IW-6 0.5U
IW-7 0.5U
IW-8 0.5U
KPT-1 0.5U
KPT-2 0.5U
KPT-3 0.5U
KPT-4 0.5U
KPT-5 0.5U
KPT-6 0.5U
KPT-7 0.5U
KPT-8 0.5U
KPT-9 0.5U
KPT-10 0.5U
KPT-11
KPT-12 0.5U
KPT-13
KPT-14
KPT-15
KPT-16 0.5U
KPT-17 0.5UJ
KPT-18 1.6
KPT-19 0.5U
KPT-20 0.5U
KPT-21 0.5U
KPT-22 0.5U
GW-1 0.5U
GW-5 0.5U
GWRR-1 0.5U
GWRR-2 0.5U
GWRR-3 0.5U
GWRR-4 0.5U
GWRR-5 0.5U
GWRR-6 0.5U
GWRR-7 0.5UJ
GWRR-8 0.5U
GWRR-9 0.5U
GWRM-1 0.5U
GWRM-2 0.5U
GWY-3 0.5U
GWY-4 0.5U
GWY-10 0.5U
GWY-12 0.5U
GWY-13 0.5U
GWY-14 0.5U
CLCW-1 0.5U
RW-1 0.5U
RW-6 0.5U
RW-8 0.5U
RW-9 0.5U
RW-9A 0.5U
RW-10 0.5U
RW-11 0.5U
RW-12 0.5U
RW-13 0.5U
PW-1 43 J
PW-3 0.5U
SW-9 10
PWS-1
PWS-2
NTL-MW-3
NTL-MW-4 646

Legend

- Monitoring Well (Installed by TtEMI in 2006)
- Monitoring Well (Installed Previously)
- Surface Water / Sediment Sample (TtEMI 2006)
- Industrial Well
- Public Water Supply Well
- Residential Well
- 310U - Sampling Result
- U - Analyte Not Detected at Limit Shown
- J - Estimated
- Approximate Extent of Groundwater with Concentrations of Benzene Above DEQ-7 Standard
- Approximate Extent of Groundwater with Detectable Concentrations of Benzene
- DEQ-7 - Montana Department of Environmental Quality Circular 7
- Septic Tank
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
All Results in Micrograms per Liter.
(Parts Per Billion)
Sampling Conducted in June and July 2006.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

SCREENING CRITERIA		
EPA REGION 9 TAP WATER LEVEL	DEQ-7 HUMAN HEALTH STANDARD	DEQ RISK BASED SCREENING LEVEL
0.35	5.0	5.0

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-3
GROUNDWATER SAMPLING RESULTS
BENZENE -
UPPER PORTION OF UNCONFINED AQUIFER

TETRA TECH EM, INC.

FIG 4-3_GW RESULTS-BENZENE_UPPER.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

RESIDENTIAL

SETTLE SERVICES

THE SHED MAN

RIVERSIDE DR.

PARK ST.

SCRAP YARD

MONTANA MOKKO

STILLWATER FOREST PRODUCTS INC.

LOCATED 135' WEST (NEAR BRIDGE)

FORMER EXCAVATION AREA MAY, 1990

KLINGLER LUMBER CO.

McELROY & WILKEN BUILDINGS and EQUIPMENT

WHITEFISH STAGE RD.

FLATHEAD DR.

E. OREGON LN.

NW TRUCK REPAIR

ROCKY MOUNTAIN MARINE

TOWN & COUNTRY TRAILER COURT

MOUNTAIN SPRINGS HOT TUBS

MINI-STORAGE

OFFICE MAX

NORTHWESTERN ENERGY

PACIFIC STEEL & RECYCLING

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

NICHOLSON DR.

MAGSTADT LN

MONTCLAIR DR.

AAA STORAGE

LA QUINTA INN & SUITES

KARI HYUNDAI

KARI DODGE

HIGH COUNTRY JEEP

WAL-MART

TOWN PUMP LUCKY LIL'S CASINO

LUCKY LOGGER CASINO

NORTHERN ENERGY PROPANE

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

U.S. HIGHWAY 2 (E. IDAHO)

E. CALIFORNIA ST.

E. OREGON ST.

7TH AVENUE E.

8TH AVENUE E.

9TH AVENUE E.

10TH AVENUE E.

USGS

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

KRY200 KRY201 KRY202 KRY203 KRY204

KRY100A 1U
KRY101A 1U
KRY101B
KRY102A 1UJ
KRY102B
KRY103A 1U
KRY103B
KRY104A 1UJ
KRY105A 1U
KRY106A 1U
KRY106B
KRY107A 1U
KRY107B
KRY108A 1U
KRY109A 1U
KRY110A 1U
KRY110B
KRY111A 2.9
KRY111B
KRY112A 1UJ
KRY112B
KRY113A 1U
KRY113B
KRY114A 0.88J
KRY114B
KRY115A 1UJ
KRY115B
KRY116A 1UJ
KRY116B
KRY117A
KRY118A 1U
KRY118B
KRY119A
KRY120A 1U
KRY121A 0.48J
KRY121B
KRY122A 1U
KRY122B
KRY123A 1U
KRY124A 1U
KRY125A 1U
KRY125B
KRY126A 1U
KRY127A 1U
KRY128A 1U
KRY128B
KRY129A 1U
KRY129B
KRY130A 1U
KRY130B
KRY132A
KRY134A
KRY135A
KRY136A
KRY137A
KRY138A
KRY139A 1U
KRY139B

IW-1 1U
IW-2 1U
IW-4 1U
IW-5 1U
IW-6 1U
IW-7 1U
IW-8 1U

KPT-1 1U
KPT-2 17
KPT-3 0.71J
KPT-4 1U
KPT-5 1U
KPT-6 1U
KPT-7 1U
KPT-8 1U
KPT-9 1U
KPT-10 1U
KPT-11
KPT-12 1U
KPT-13
KPT-14
KPT-15
KPT-16 1U
KPT-17 4.6
KPT-18 1U
KPT-19 0.39J
KPT-20 1U
KPT-21 1.8
KPT-22 1U

GW-1 1U
GW-5 1U

GWRR-1 7.7
GWRR-2 13
GWRR-3 1U
GWRR-4 1U
GWRR-5 0.85J
GWRR-6 1U
GWRR-7 32
GWRR-8 1U
GWRR-9 128

GWRM-1 88
GWRM-2 1U

GWY-3 1U
GWY-4 0.23J
GWY-10 1U
GWY-12 1U
GWY-13 1U
GWY-14 1U

RW-1 1U
RW-6 1U
RW-8 1U
RW-9 1U
RW-9A 1U
RW-10 1U
RW-11 1U
RW-12 1U
RW-13 1U

PW-1 1,090
PW-3 13
SW-9 39

PWS-1
PWS-2

NTL-MW-3
NTL-MW-4 16

CLCW-1 1U

Legend

- Monitoring Well (Installed by TtEMI in 2006)
- Monitoring Well (Installed Previously)
- Surface Water / Sediment Sample (TtEMI 2006)
- Industrial Well
- Public Water Supply Well
- Residential Well
- 1U - Sampling Result
- U - Analyte Not Detected at Limit Shown
- J - Estimated
- Approximate Extent of Groundwater with Concentrations of 1,2,4-Trimethylbenzene Above EPA Region 9 Tap Water Level
- Approximate Extent of Groundwater with Detectable Concentrations of 1,2,4-Trimethylbenzene
- DEQ-7 - Montana Department of Environmental Quality Circular 7
- NA - Not Available
- Septic Tank
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
All Results in Micrograms per Liter. (Parts Per Billion)
Sampling Conducted in June and July 2006.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

SCREENING CRITERIA
EPA REGION 9 TAP WATER LEVEL
12

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-4
GROUNDWATER SAMPLING RESULTS
1,2,4-TRIMETHYLBENZENE -
UPPER PORTION OF UNCONFINED AQUIFER

TETRA TECH EM, INC.

FIG 4-4_GW RESULTS-TMB_UPPER,dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

RESIDENTIAL

SETTLE SERVICES

THE SHED MAN

SCRAP YARD

STILLWATER FOREST PRODUCTS INC.

MONTANA MOKKO

KLINGLER LUMBER CO.

McELROY & WILKEN BUILDINGS and EQUIPMENT

FORMER EXCAVATION AREA MAY, 1999

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

AAA STORAGE

LA QUINTA INN & SUITES

KARI HYUNDAI

KARI DODGE

PACIFIC STEEL & RECYCLING

HIGH COUNTRY JEEP

NORTHWESTERN ENERGY

OFFICE MAX

MINI-STORAGE

NORTHERN ENERGY PROPANE

TOWN PUMP LUCKY LIL'S CASINO

WAL-MART

LUCKY LOGGER CASINO

ROCKY MOUNTAIN MARINE

MOUNTAIN SPRINGS HOT TUBS

TOWN & COUNTRY TRAILER COURT

NW TRUCK REPAIR

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

USGS

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

RIVERSIDE DR.
PARK ST.
WHITEFISH STAGE RD
E. CALIFORNIA ST.
E. OREGON ST.
E. OREGON LN.
FLATHEAD DR.
U.S. HIGHWAY 2 (E. IDAHO)
MAGSTADT LN
NICHOLSON DR.
MONTCLAIR DR.
7TH AVENUE E.
8TH AVENUE E.
9TH AVENUE E.
10TH AVENUE E.

KRY200 — LOCATED 135' WEST (NEAR BRIDGE)
KRY201
KRY202
KRY203
KRY204
KRY100A 20U
KRY101A 20U
KRY101B
KRY102A 20U
KRY102B
KRY103A 20U
KRY103B
KRY104A 20U
KRY105A 20U
KRY106A 20U
KRY106B
KRY107A 20U
KRY107B
KRY108A 20U
KRY109A 20U
KRY110A 20U
KRY110B
KRY111A 143
KRY111B
KRY112A 20U
KRY112B
KRY113A 20U
KRY113B
KRY114A 136
KRY114B
KRY115A 20U
KRY115B
KRY116A 20U
KRY116B
KRY117A 63
KRY118A 20U
KRY118B
KRY119A
KRY121A 68
KRY121B
KRY122A 20U
KRY122B
KRY123A 20U
KRY125A 20U
KRY125B
KRY126A 20U
KRY127A 20U
KRY128A 20U
KRY128B
KRY129A 20U
KRY129B
KRY130A 20U
KRY130B
KRY132A
KRY133A
KRY134A
KRY135A
KRY136A
KRY137A
KRY138A
KRY139A 20U
KRY139B

IW-1 20U
IW-2 20U
IW-4 20U
IW-5 20U
IW-6 20U
IW-7 20U
IW-8 20U

KPT-1 20U
KPT-2 278
KPT-3 37
KPT-4 23
KPT-5 20U
KPT-6 20U
KPT-7 20U
KPT-8 20U
KPT-9 20U
KPT-10 20U
KPT-11
KPT-12 20U
KPT-13
KPT-14
KPT-15
KPT-16 20U
KPT-17 219J
KPT-18 74
KPT-19 68
KPT-20 33
KPT-21 138
KPT-22 20U

GW-1 20U
GW-5 20U

GWRR-1 63
GWRR-2 235
GWRR-3 100
GWRR-4 20U
GWRR-5 20U
GWRR-6 20U
GWRR-7 336J
GWRR-8 20U
GWRR-9 776

GWRM-1 547
GWRM-2 38

GWY-3 20U
GWY-4 35
GWY-10 20U
GWY-12 24
GWY-13 23
GWY-14 20U

RW-1 20U
RW-6 20U
RW-9 20U
RW-9A 20U
RW-10 20U
RW-11 20U
RW-12 20U
RW-13 20U

PW-1 5,360J
PW-3 62
PWS-1
PWS-2
SW-9 245

CLCW-1 20U

NTL-MW-3
NTL-MW-4 66

Legend

- Monitoring Well (Installed by TtEMI in 2006)
- Monitoring Well (Installed Previously)
- Surface Water / Sediment Sample (TtEMI 2006)
- Industrial Well
- Public Water Supply Well
- Residential Well
- 20U - Sampling Result
- U - Analyte Not Detected at Limit Shown
- J - Estimated
- Approximate Extent of Groundwater with Concentrations of C9-C10 Aromatics Above DEQ-RBSL
- Approximate Extent of Groundwater with Detectable Concentrations of C9-C10 Aromatics
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- NA - Not Available
- (S) - Septic Tank
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
All Results in Micrograms per Liter. (Parts Per Billion)
Sampling Conducted in June and July 2006.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

SCREENING CRITERIA
DEQ RISK BASED SCREENING LEVEL
50

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-5
GROUNDWATER SAMPLING RESULTS
C9-C10 AROMATICS -
UPPER PORTION OF UNCONFINED AQUIFER

TETRA TECH EM, INC.

FIG 4-5_GW RESULTS-C9-C10 AROMATICS_UPPER.dwg - DWH - 01/22/2007 - S1176-37-KPT005

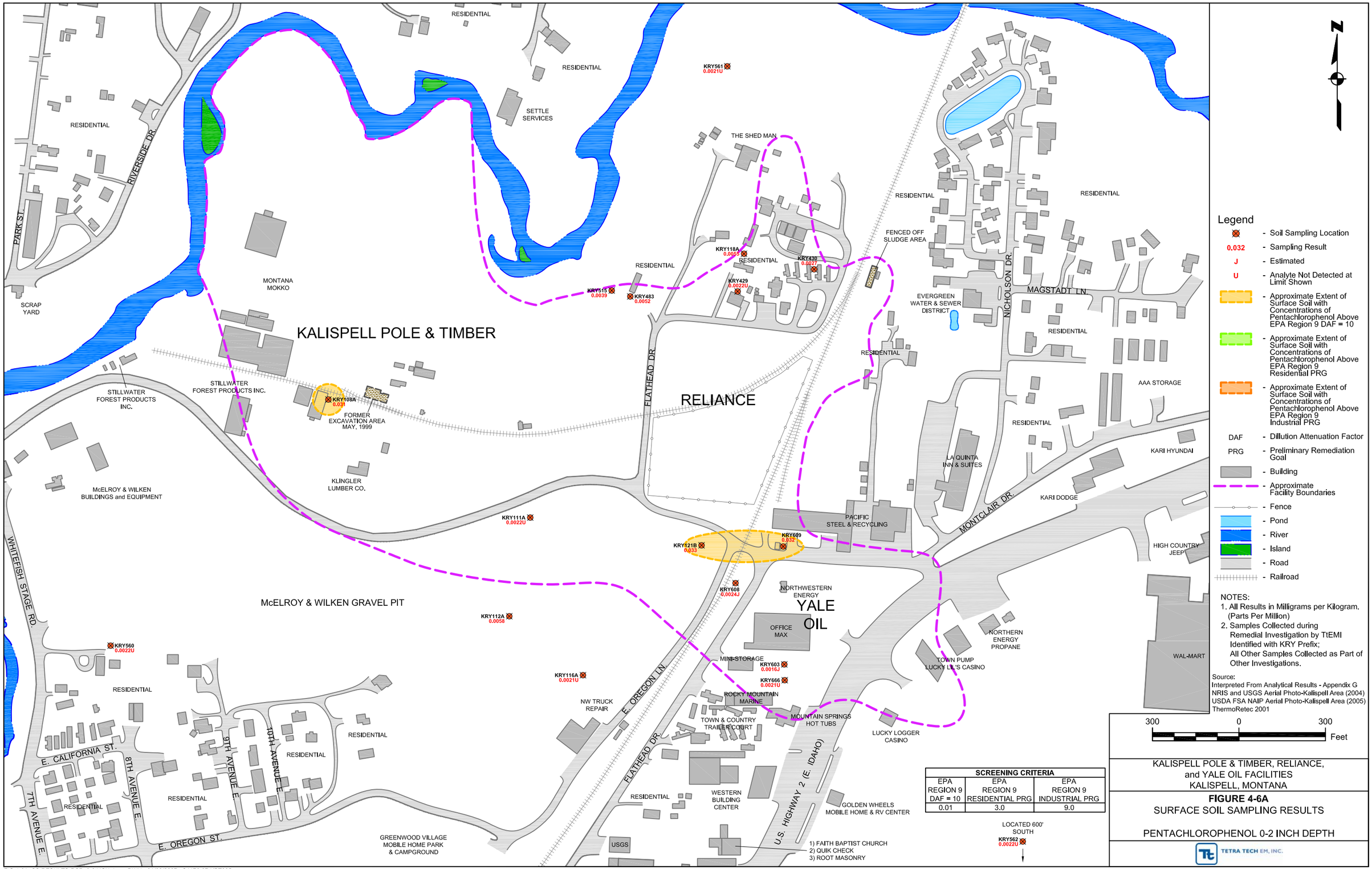


FIG 4-6A_SS RESULTS-PCP_0-2INCH.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

FOR DETAIL OF THIS AREA SEE FIGURE 4-6C

RESIDENTIAL

SETTLE SERVICES

THE SHED MAN

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

MAGSTADT LN

NICHOLSON DR.

AAA STORAGE

KARI HYUNDAI

LA QUINTA INN & SUITES

MONTCLAIR DR.

PACIFIC STEEL & RECYCLING

HIGH COUNTRY JEEP

WAL-MART

NORTHWESTERN ENERGY

OFFICE MAX

MINI-STORAGE

NORTHERN ENERGY PROPANE

TOWN PUMP LUCKY LIL'S CASINO

LUCKY LOGGER CASINO

MOUNTAIN SPRINGS HOT TUBS

ROCKY MOUNTAIN MARINE

TOWN & COUNTRY TRAILER COURT

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

USGS

NW TRUCK REPAIR

E. OREGON LN.

FLATHEAD DR.

U.S. HIGHWAY 2 (E. IDAHO)

RIVERSIDE DR.

PARK ST.

SCRAP YARD

MONTANA MOKKO

STILLWATER FOREST PRODUCTS INC.

FORMER EXCAVATION AREA MAY, 1999

KLINGLER LUMBER CO.

McELROY & WILKEN BUILDINGS and EQUIPMENT

WHITEFISH STAGE RD.

E. CALIFORNIA ST.

E. OREGON ST.

7TH AVENUE E.

8TH AVENUE E.

9TH AVENUE E.

10TH AVENUE E.

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

KRY432 0.027
KRY433 0.082
KRY103A 0.072
KRY437 0.12
KRY436 0.025
KRY438 0.046
KRY439 0.007
KRY440 0.012
KRY105A 0.058
KRY100A 0.012
KRY442 0.0093
SS05-B1 0.00826
KRY443 0.065
KRY444 0.14
KRY445 0.15J
KRY480 0.69
KRY481 0.8U
KRY482 0.011
KRY514 0.11
KRY483 0.0023
SS05-B2 0.00348
KRY478 0.22
KRY479 0.014
KRY454 0.0095
KRY477 0.014
SS05-B3 0.00637
KRY631 0.099
KRY632 6.1J
KRY633 0.076
KRY475 0.26
KRY634 0.95
KRY453 0.025
KRY452 0.015
KRY454 0.16
KRY455 0.015
KRY456 0.093
KRY457 0.29
KRY114B 0.0085
KRY635 3.3U
KRY465 0.011
KRY467 0.048
KRY466 0.012
KRY636 0.56
KRY637 0.19
KRY638 0.096
KRY471 0.081
KRY639 0.053
KRY447 0.021
KRY640 0.15
KRY134A 1
KRY451 0.21
KRY484 0.037
KRY653 0.044
KRY486 0.11
KRY463 0.29
KRY460 0.23
KRY462 0.037
KRY459 0.07
KRY411 0.024
KRY115B 0.0027U
SS5-02 0.002U
SS4-02 0.002U
KRY403 0.0017J
KRY402 0.0025U
KRY409 0.0026
KRY606 0.0022U
KRY605 0.0022U
KRY607 0.0021U
KRY427 0.0032
KRY426 0.0016J
KRY422 0.0056
KRY424 0.009J
KRY428 0.0024U
KRY430 0.0024U
KRY429 0.005J
KRY127A 0.012
KRY423 0.0054
KRY425 0.0028U
KRY420 0.035J
KRY123A 0.0025U
KRY126A 0.01
KRY415 0.027
KRY414 0.29
KRY412 0.028
KRY410 0.011
KRY617 0.0029U
KRY618 0.0018J
KRY616 0.0024U
SS-1-89 2U
SS-16-98 0.49
SS-17-98 0.15
SS-18-98 1
SS-19-98 0.71
SS-20-98 0.7
LT-1 10.8
TP05-12 0.0535U
TP05-17 0.00377
TP1-02 0.002U
SS-5-89 21U
SS-4-89 1.6JB
SS-4-98 1.7
CP-1 5.3U
SS-9-91 52U
SS-1-91 0.80E
SS-5-91 5.1U
SS-7-91 5.1U
SS-2-91 5.1U
SL-1 430
SS-8-91 5.1U
SS-3-91 5.3U
SS-10-91 51U
SS-6-91 840E
SS-6-89 6.6U
S6 3.3U

Legend

- Soil Sampling Location
- 0.01 - Sampling Result
- B - Estimated
- E - Estimated
- J - Estimated
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Surface Soil with Concentrations of Pentachlorophenol Above EPA Region 9 DAF = 10
- Approximate Extent of Surface Soil with Concentrations of Pentachlorophenol Above EPA Region 9 Residential PRG
- Approximate Extent of Surface Soil with Concentrations of Pentachlorophenol Above EPA Region 9 Industrial PRG
- DAF - Dillution Attenuation Factor
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

SCREENING CRITERIA		
EPA REGION 9 DAF = 10	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
0.01	3.0	9.0

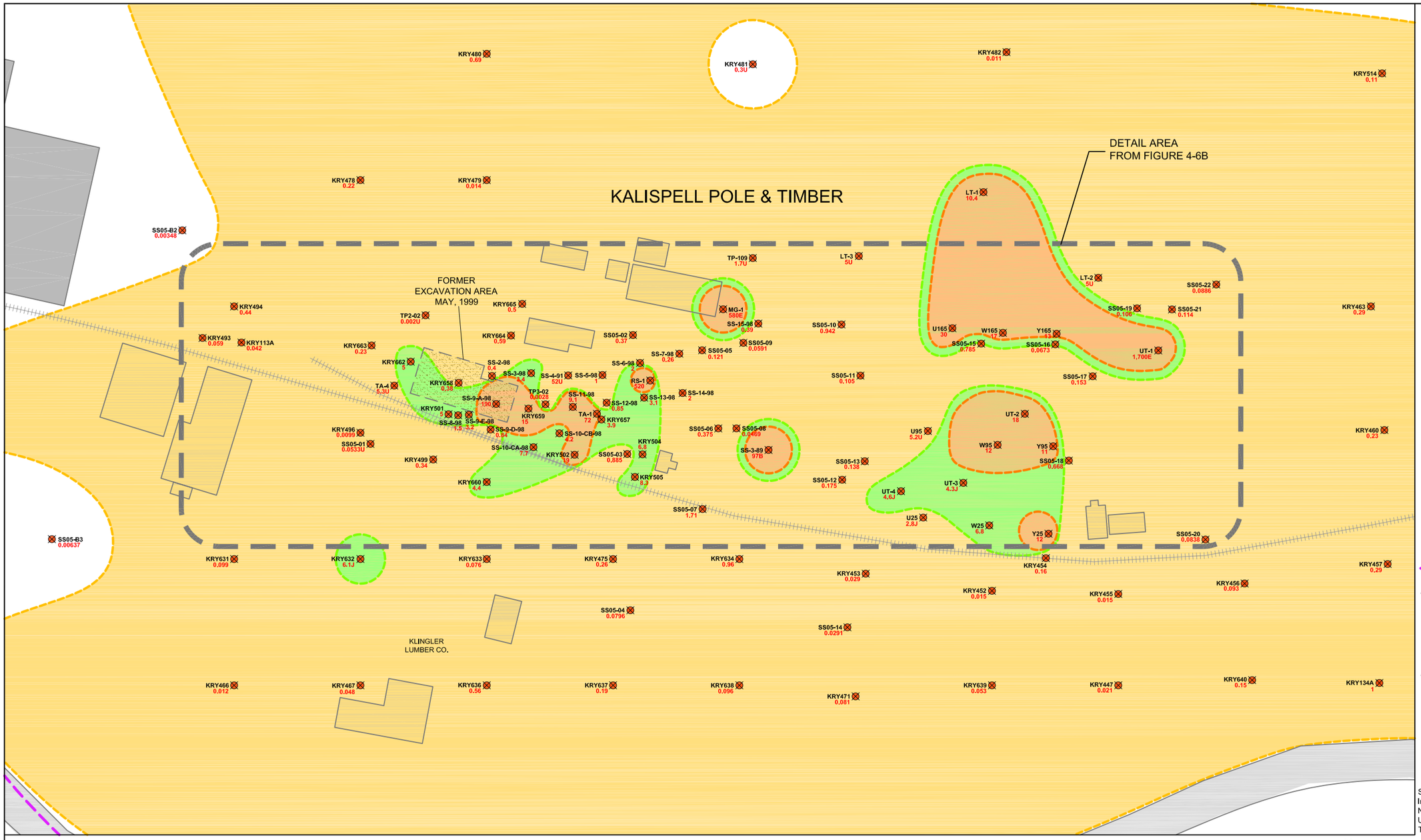
KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-6B
SURFACE SOIL SAMPLING RESULTS

PENTACHLOROPHENOL 0-6 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-6B_SS RESULTS-PCP_0-6INCH.dwg - DWH - 01/22/2007 - S1176-37-KPT005



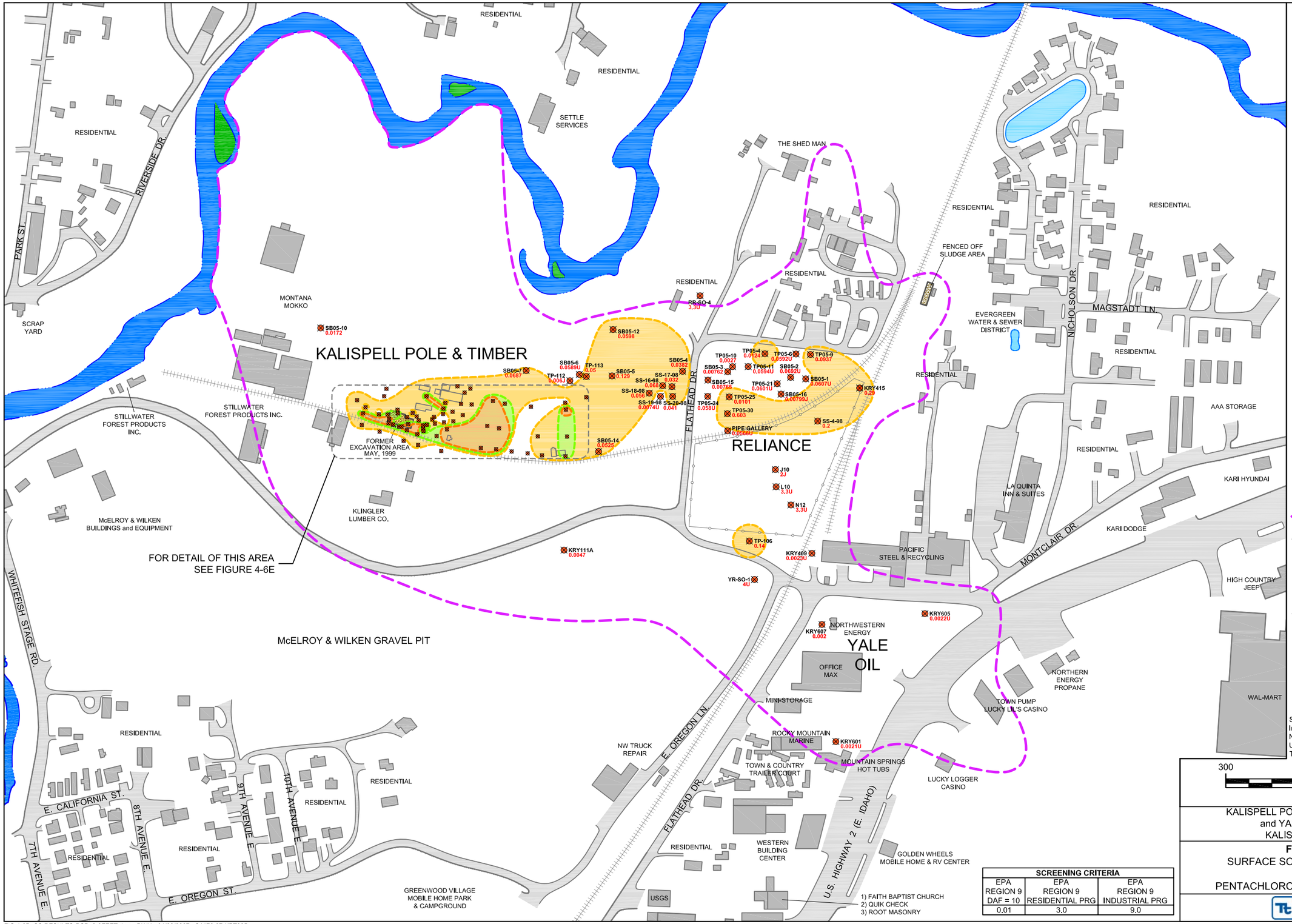
SCREENING CRITERIA		
EPA REGION 9 DAF = 10	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
0.01	3.0	9.0

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-6C
SURFACE SOIL SAMPLING RESULTS
KPT AREA
PENTACHLOROPHENOL 0-6 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-6C_SS RESULTS-PCP_0-6INCH_KPT.dwg - DWH - 01/22/2007 - S1176-37-KPT005



Legend

- Soil Sampling Location
- 0.002 - Sampling Result
- E - Estimated
- J - Estimated
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Surface Soil with Concentrations of Pentachlorophenol Above EPA Region 9 DAF = 10
- Approximate Extent of Surface Soil with Concentrations of Pentachlorophenol Above EPA Region 9 Residential PRG
- Approximate Extent of Surface Soil with Concentrations of Pentachlorophenol Above EPA Region 9 Industrial PRG
- DAF - Dillution Attenuation Factor
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

SCREENING CRITERIA		
EPA REGION 9 DAF = 10	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
0.01	3.0	9.0

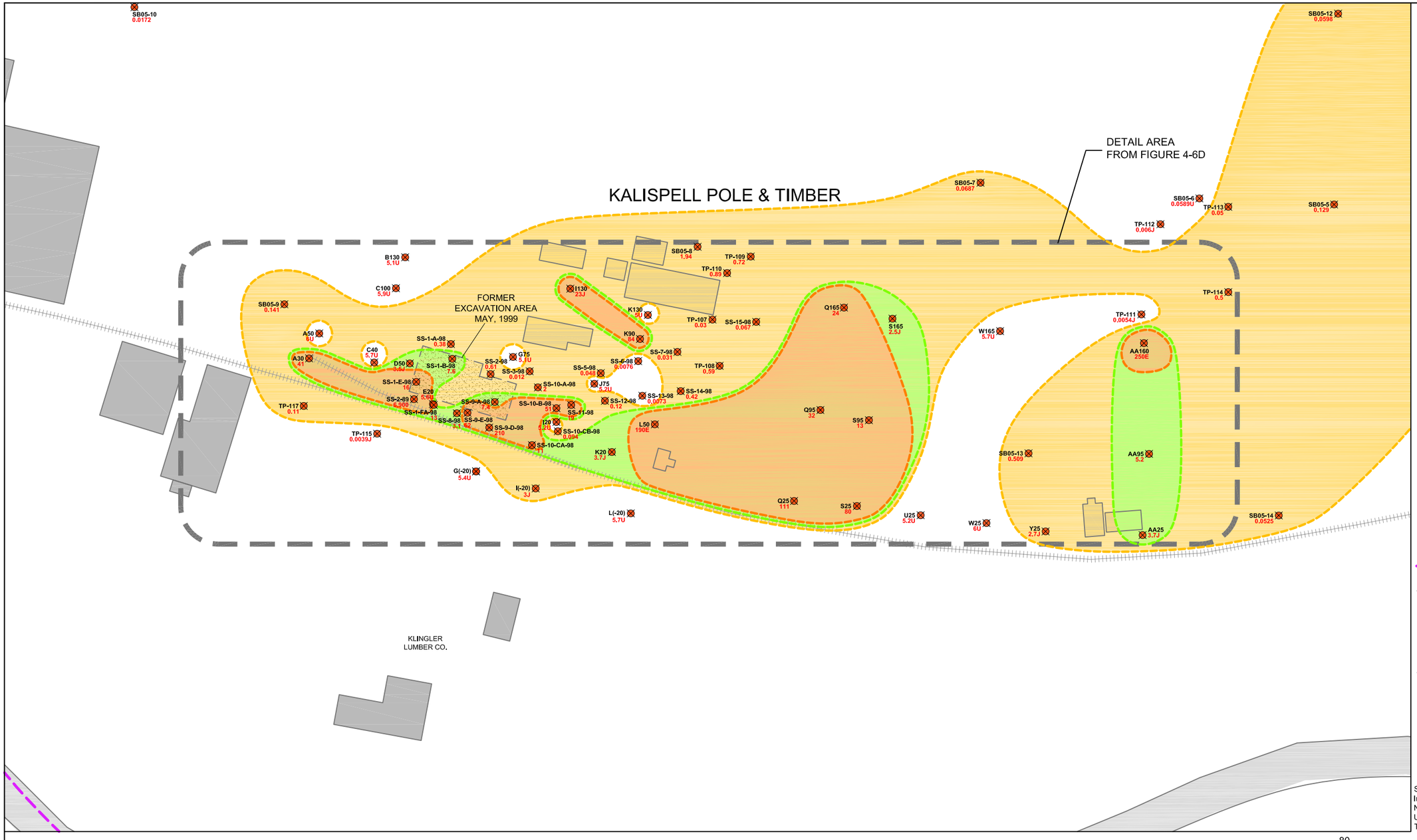
KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-6D
SURFACE SOIL SAMPLING RESULTS

PENTACHLOROPHENOL 0-2 FEET DEPTH

TETRA TECH EM, INC.

FIG 4-6D_SS RESULTS-PCP_0-2FEET.dwg - DWH - 01/22/2007 - S1176-37-KPT005



SCREENING CRITERIA		
EPA REGION 9 DAF = 10	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
0.01	3.0	9.0

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-6E
SURFACE SOIL SAMPLING RESULTS
KPT AREA
PENTACHLOROPHENOL 0-2 FEET DEPTH

TETRA TECH EM, INC.

FIG 4-6E_SS RESULTS-PCP_0-2FEET_KPT.dwg - DWH - 01/22/2007 - S1176-37-KPT005

RESIDENTIAL
RESIDENTIAL
SETTLE SERVICES
RESIDENTIAL
RIVERSIDE DR.
PARK ST.
SCRAP YARD
MONTANA MOKKO
KALISPELL POLE & TIMBER
STILLWATER FOREST PRODUCTS INC.
STILLWATER FOREST PRODUCTS INC.
FORMER EXCAVATION AREA MAY, 1999
KLINGLER LUMBER CO.
McELROY & WILKEN BUILDINGS and EQUIPMENT
McELROY & WILKEN GRAVEL PIT
WHITEFISH STAGE RD.
RESIDENTIAL
E. CALIFORNIA ST.
8TH AVENUE E.
9TH AVENUE E.
10TH AVENUE E.
7TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
RESIDENTIAL
RESIDENTIAL
E. OREGON ST.
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
THE SHED MAN
RESIDENTIAL
RESIDENTIAL
FLATHEAD DR.
RELIANCE
FENCED OFF SLUDGE AREA
RESIDENTIAL
RESIDENTIAL
EVERGREEN WATER & SEWER DISTRICT
NICHOLSON DR.
MAGSTADT LN
RESIDENTIAL
RESIDENTIAL
AAA STORAGE
RESIDENTIAL
LA QUINTA INN & SUITES
KARI HYUNDAI
KARI DODGE
MONTCLAIR DR.
PACIFIC STEEL & RECYCLING
HIGH COUNTRY JEEP
NORTHWESTERN ENERGY
YALE OIL
OFFICE MAX
MINI-STORAGE
NW TRUCK REPAIR
E. OREGON LN.
ROCKY MOUNTAIN MARINE
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
FLATHEAD DR.
RESIDENTIAL
WESTERN BUILDING CENTER
GOLDEN WHEELS MOBILE HOME & RV CENTER
U.S. HIGHWAY 2 (E. IDAHO)
USGS
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY
NORTHERN ENERGY PROPANE
TOWN PUMP LUCKY LIL'S CASINO
LUCKY LOGGER CASINO
WAL-MART

N

Legend

- Approximate Extent of Surface Soil with Concentrations of Pentachlorophenol Above EPA Region 9 DAF = 10
- Approximate Extent of Surface Soil with Concentrations of Pentachlorophenol Above EPA Region 9 Residential PRG
- Approximate Extent of Surface Soil with Concentrations of Pentachlorophenol Above EPA Region 9 Industrial PRG

DAF - Dillution Attenuation Factor
PRG - Preliminary Remediation Goal

- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

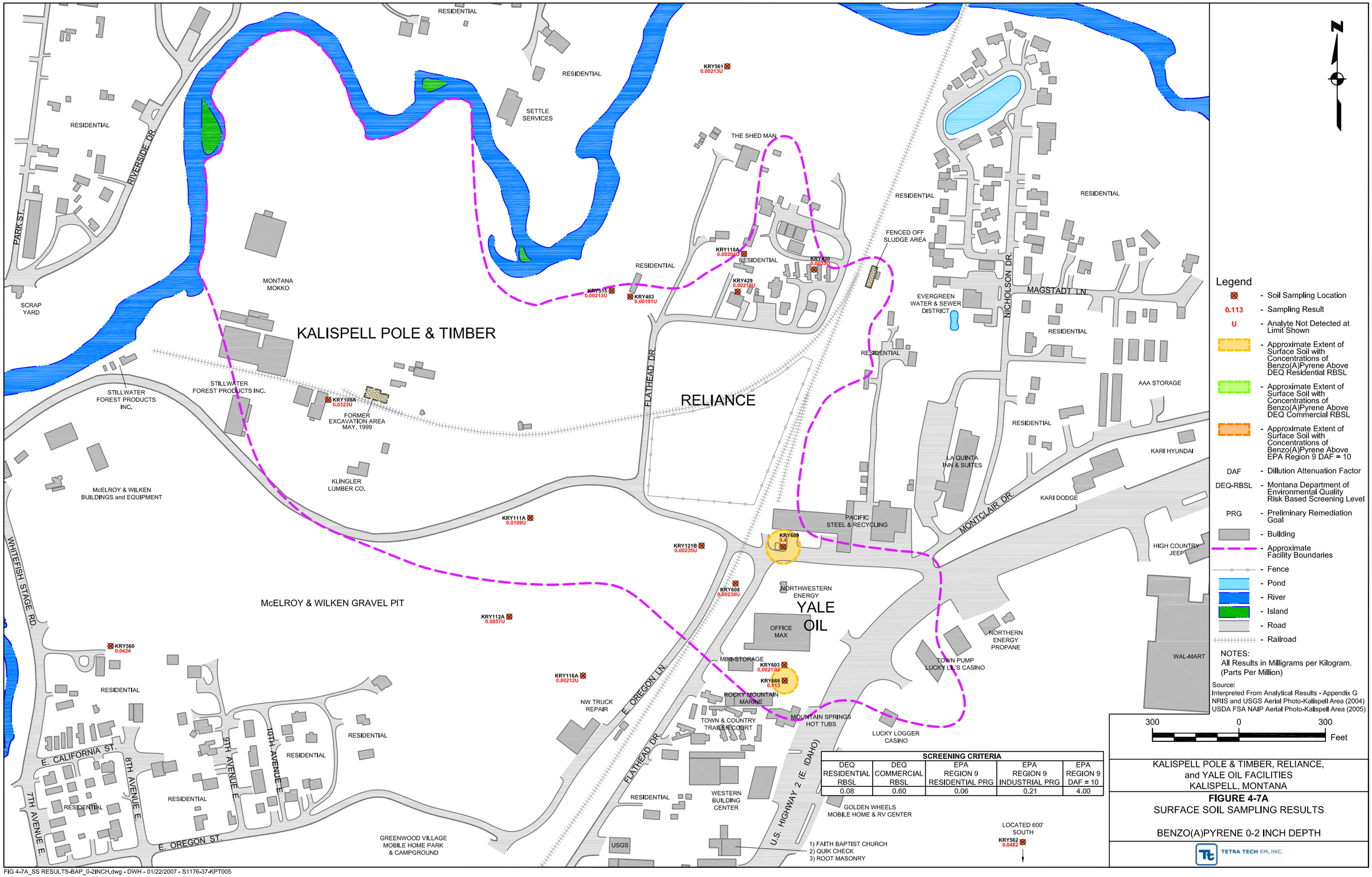
AREA OF CONCERN		
EPA REGION 9 DAF = 10	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG
1,749,288.02 - FT²	109,168.77 - FT²	67,575.02 - FT²
194,365.30 - YD²	12,129.86 - YD²	7,508.34 - YD²
40.16 - AC	2.51 - AC	1.56 - AC

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-6F
SURFACE SOIL SAMPLING RESULTS
PENTACHLOROPHENOL
COMPOSITE OF 0-2 FEET DEPTH

TETRA TECH EM, INC.

FIG 4-6F_SS RESULTS-PCP_COMPOSITE.dwg - DWH - 01/22/2007 - S1176-37-KPT005



SCREENING CRITERIA				
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG	EPA REGION 9 DAF = 10
0.08	0.60	0.06	0.21	4.00

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-7A
SURFACE SOIL SAMPLING RESULTS

BENZO(A)PYRENE 0-2 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-7A_SS RESULTS-BAP_0-2INCH.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

FOR DETAIL OF THIS AREA SEE FIGURE 4-8C

RESIDENTIAL

SETTLE SERVICES

THE SHED MAN

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

MAGSTADT LN

NICHOLSON DR.

RIVERSIDE DR.

PARK ST.

SCRAP YARD

MONTANA MOKKO

STILLWATER FOREST PRODUCTS INC.

FORMER EXCAVATION AREA MAY, 1999

KLINGLER LUMBER CO.

McELROY & WILKEN BUILDINGS and EQUIPMENT

FLATHEAD DR.

AAA STORAGE

LA QUINTA INN & SUITES

KARI HYUNDAI

KARI DODGE

MONTCLAIR DR.

PACIFIC STEEL & RECYCLING

HIGH COUNTRY JEEP

WAL-MART

NORTHWESTERN ENERGY

NORTHERN ENERGY PROPANE

TOWN PUMP LUCKY LIL'S CASINO

OFFICE MAX

MINI-STORAGE

ROCKY MOUNTAIN MARINE

TOWN & COUNTRY TRAILER COURT

MOUNTAIN SPRINGS HOT TUBS

LUCKY LOGGER CASINO

NW TRUCK REPAIR

E. OREGON LN.

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

U.S. HIGHWAY 2 (E. IDAHO)

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

USGS

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

WHITEFISH STAGE RD.

E. CALIFORNIA ST.

E. OREGON ST.

7TH AVENUE E.

8TH AVENUE E.

9TH AVENUE E.

10TH AVENUE E.

KRY432 0.0229U
KRY433 0.0261U
KRY103A 0.0052U
KRY437 0.025U
KRY436 0.0138U
KRY438 0.0145U
KRY439 0.0114U
KRY440 0.014U
KRY105A 0.00328U
KRY442 0.0179U
KRY100A 0.111U
KRY443 0.937
KRY444 0.0158U
KRY445 0.0116U
KRY480 0.0251U
KRY481 0.0233U
KRY482 0.00212U
KRY514 0.00211U
KRY478 0.00342U
KRY479 0.00208U
LT-1 5.1U
KRY464 0.115U
KRY477 0.00404U
KRY463 0.0127U
KRY460 0.00225U
KRY462 0.00237U
KRY459 0.0214U
KRY411 0.0225U
KRY631 0.00215U
KRY632 0.00415U
KRY633 0.00203U
KRY475 0.00203U
KRY634 0.00423U
KRY453 0.0394
KRY454 1.6
KRY452 0.0161
KRY455 0.00203U
KRY456 0.285
KRY457 0.0941
KRY114B 0.00235U
KRY451 0.0211U
KRY467 0.00254U
KRY465 0.0126
KRY466 0.0146
KRY636 0.00941
KRY637 0.00213U
KRY638 0.0198
KRY471 0.0103U
KRY639 0.0342
KRY447 0.0123
KRY640 0.112
KRY134A 0.00217U
KRY635 0.0224U
KRY484 0.00238U
KRY653 0.0136
KRY486 0.00904
KRY115B 0.0114U
SS-02 0.33U
SS4-02 0.33U
KRY403 0.0713
KRY402 0.00245U
WPC 0.0848
KRY607 0.418
KRY606 0.0217U
KRY605 0.0111U
KRY409 0.0431U
SS-6-89 1.3U
SS-3-91 5.3U
SS-10-91 51U
SS-8-91 5.1U
SS-4-89 0.42U
SS-5-91 5.1U
SS-1-91 51U
SS-9-91 52U
SS-7-91 5.1U
SS-2-91 5.1U
SL-1 57U
SS-6-91 5.6U
CP-1 5.3U
KRY410 0.15
KRY414 6.88U
KRY412 0.668
KRY616 0.00241U
KRY415 0.489U
KRY126A 0.0266
KRY617 0.00249U
KRY618 0.0247U
KRY123A 0.00221U
KRY420 1.6U
KRY427 0.00223U
KRY426 0.011U
KRY422 0.122U
KRY424 0.179
KRY428 0.0733
KRY127A 0.0105U
KRY423 0.0226U
KRY425 0.0138U
SS-1-89 0.41U

Legend

- KRY### 0.### - Soil Sampling Location
- 0.418 - Sampling Result
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Surface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Residential RBSL
- Approximate Extent of Surface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Commercial RBSL
- Approximate Extent of Surface Soil with Concentrations of Benzo(A)Pyrene Above EPA Region 9 DAF = 10
- DAF - Dillution Attenuation Factor
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

SCREENING CRITERIA				
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG	EPA REGION 9 DAF = 10
0.08	0.60	0.06	0.21	4.00

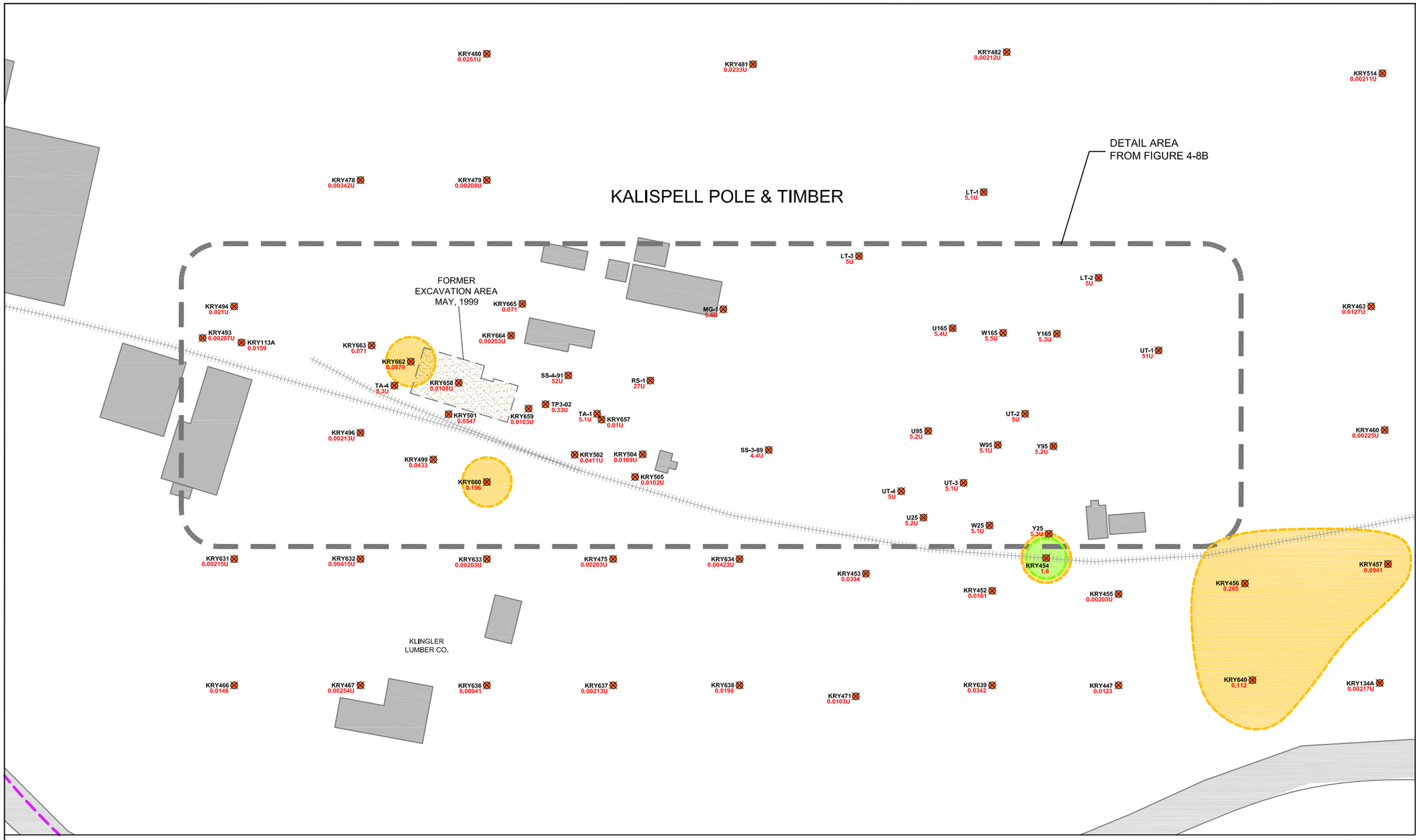
KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-7B
SURFACE SOIL SAMPLING RESULTS

BENZO(A)PYRENE 0-6 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-7B_SS RESULTS-BAP_0-6INCH.dwg - DWH - 01/22/2007 - S1176-37-KPT005



Legend

- Soil Sampling Location
- 0.285 - Sampling Result
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Surface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Residential RBSL
- Approximate Extent of Surface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Commercial RBSL
- Approximate Extent of Surface Soil with Concentrations of Benzo(A)Pyrene Above EPA Region 9 DAF = 10
- DAF - Dillution Attenuation Factor
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

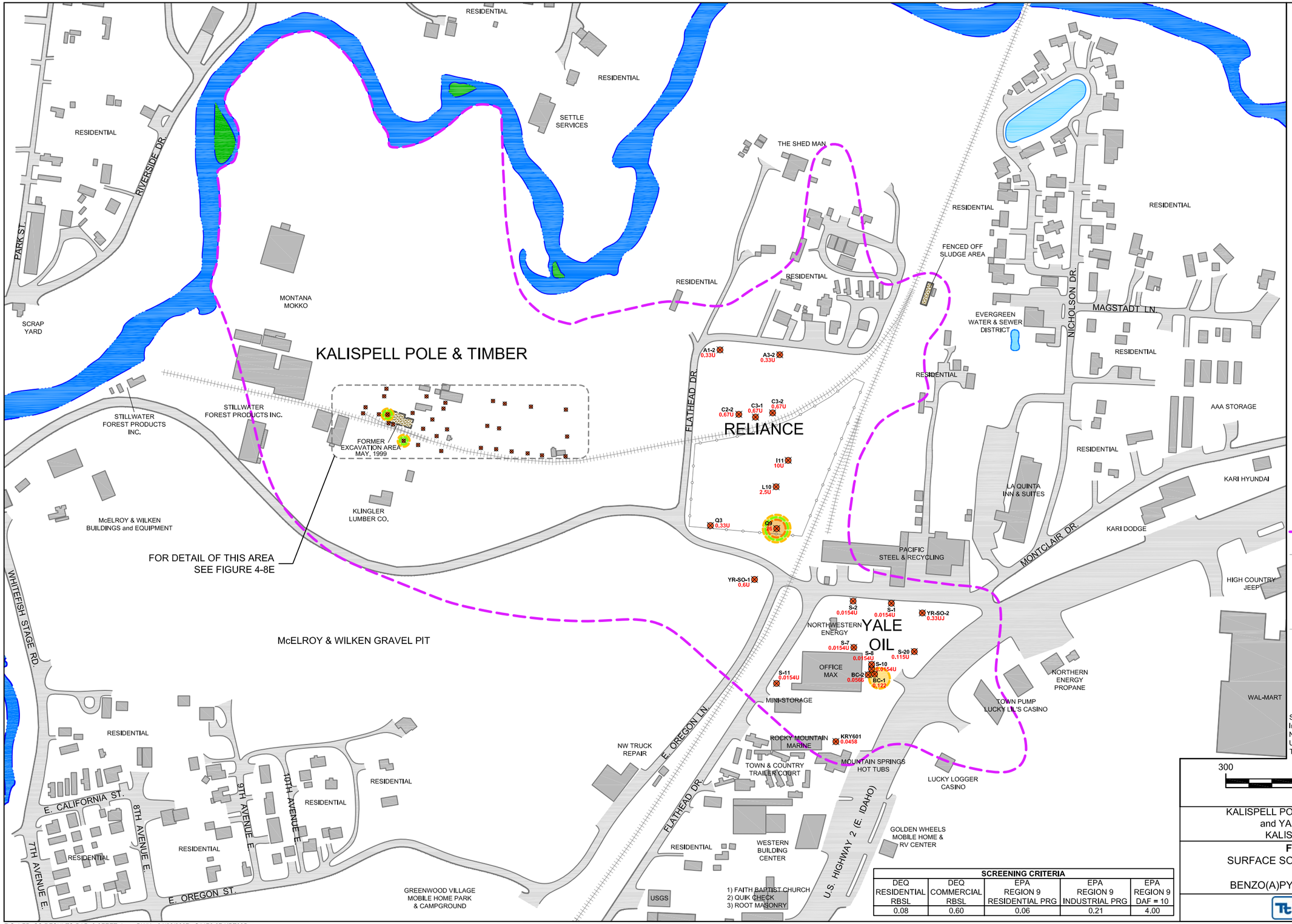
SCREENING CRITERIA				
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG	EPA REGION 9 DAF = 10
0.08	0.60	0.06	0.21	4.00

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-7C
SURFACE SOIL SAMPLING RESULTS
KPT AREA
BENZO(A)PYRENE 0-6 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-7C_SS RESULTS-BAP_0-6INCH_KPT.dwg - DWH - 01/22/2007 - S1176-37-KPT005



SCREENING CRITERIA				
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG	EPA REGION 9 DAF = 10
0.08	0.60	0.06	0.21	4.00

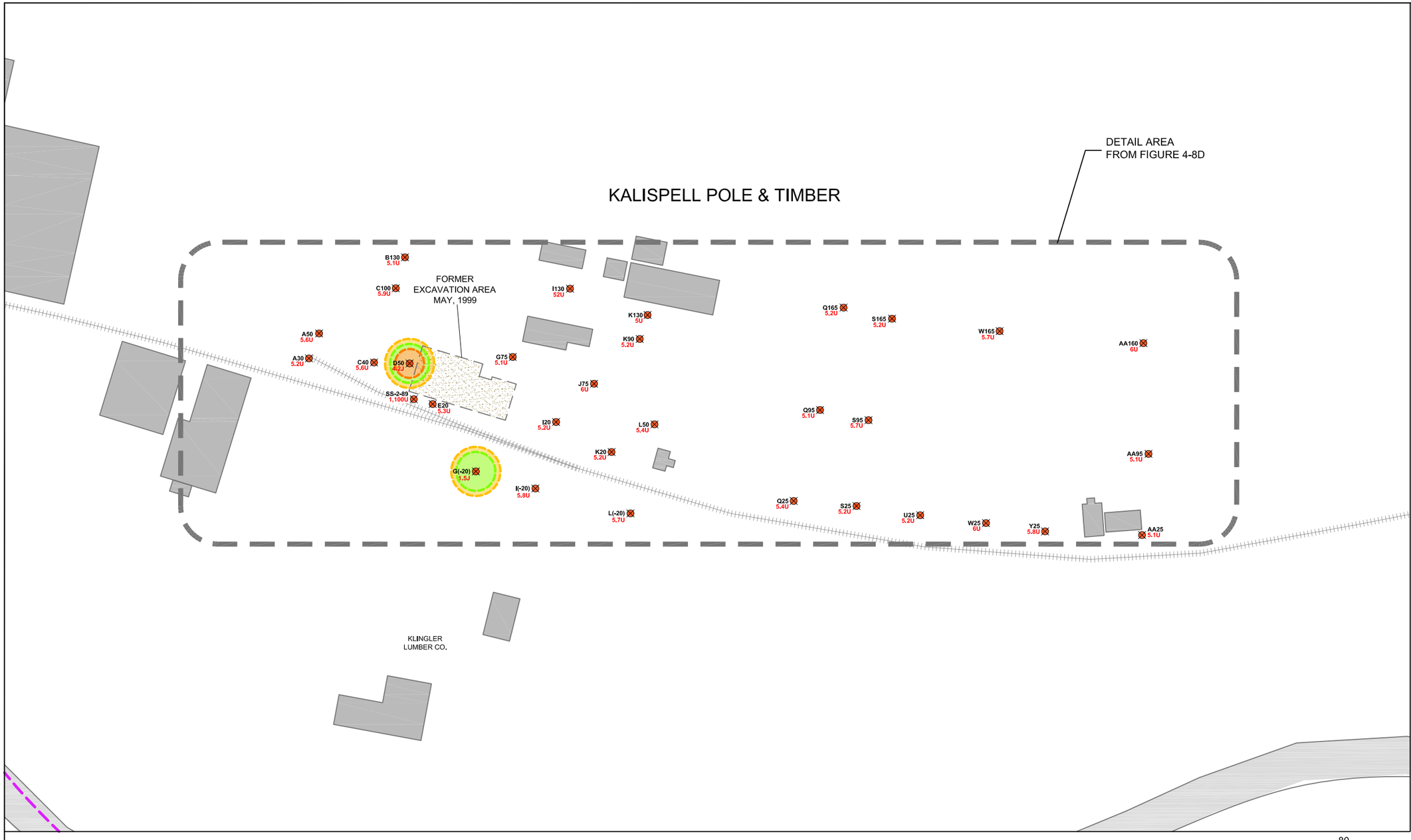
KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-7D
SURFACE SOIL SAMPLING RESULTS

BENZO(A)PYRENE 0-2 FEET DEPTH

TETRA TECH EM, INC.

FIG 4-7D_SS RESULTS-BAP_0-2FEET.dwg - DWH - 01/22/2007 - S1176-37-KPT005



SCREENING CRITERIA				
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 RESIDENTIAL PRG	EPA REGION 9 INDUSTRIAL PRG	EPA REGION 9 DAF = 10
0.08	0.60	0.06	0.21	4.00

KALISPELL POLE & TIMBER, RELIANCE,
and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-7E
SURFACE SOIL SAMPLING RESULTS
KPT AREA
BENZO(A)PYRENE 0-2 FEET DEPTH

TETRA TECH EM, INC.

FIG 4-7E_SS RESULTS-BAP_0-2FEET_KPT.dwg - DWH - 01/22/2007 - S1176-37-KPT005

RESIDENTIAL
RESIDENTIAL
SETTLE SERVICES
RESIDENTIAL
RIVERSIDE DR.
PARK ST.
SCRAP YARD
MONTANA MOKKO
KALISPELL POLE & TIMBER
STILLWATER FOREST PRODUCTS INC.
STILLWATER FOREST PRODUCTS INC.
FORMER EXCAVATION AREA MAY, 1999
KLINGLER LUMBER CO.
McELROY & WILKEN BUILDINGS and EQUIPMENT
McELROY & WILKEN GRAVEL PIT
WHITEFISH STAGE RD.
RESIDENTIAL
E. CALIFORNIA ST.
8TH AVENUE E.
7TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
9TH AVENUE E.
10TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
E. OREGON ST.
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
THE SHED MAN
RESIDENTIAL
RESIDENTIAL
FLATHEAD DR.
RELIANCE
NW TRUCK REPAIR
E. OREGON LN.
ROCKY MOUNTAIN MARINE
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
LUCKY LOGGER CASINO
RESIDENTIAL
WESTERN BUILDING CENTER
GOLDEN WHEELS MOBILE HOME & RV CENTER
U.S. HIGHWAY 2 (E. IDAHO)
USGS
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY
PACIFIC STEEL & RECYCLING
NORTHWESTERN ENERGY
YALE OIL
OFFICE MAX
MINI-STORAGE
FENCED OFF SLUDGE AREA
RESIDENTIAL
RESIDENTIAL
EVERGREEN WATER & SEWER DISTRICT
NICHOLSON DR.
MAGSTADT LN.
RESIDENTIAL
RESIDENTIAL
AAA STORAGE
RESIDENTIAL
LA QUINTA INN & SUITES
KARI HYUNDAI
MONTCLAIR DR.
KARI DODGE
HIGH COUNTRY JEEP
NORTHERN ENERGY PROPANE
TOWN PUMP LUCKY LIL'S CASINO
WAL-MART

N

Legend

- Approximate Extent of Surface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Residential RBSL
- Approximate Extent of Surface Soil with Concentrations of Benzo(A)Pyrene Above DEQ Commercial RBSL
- Approximate Extent of Surface Soil with Concentrations of Benzo(A)Pyrene Above EPA Region 9 DAF = 10
- Dillution Attenuation Factor

DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level

- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)

300 0 300 Feet

AREA OF CONCERN		
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL	EPA REGION 9 DAF = 10
84,303.14 - FT²	15,083.91 - FT²	2,884.73 - FT²
9,367.02 - YD²	1,676.00 - YD²	320.53 - YD²
1.94 - AC	0.35 - AC	0.07 - AC

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-7F
SURFACE SOIL SAMPLING RESULTS
BENZO(A)PYRENE
COMPOSITE OF 0-2 FEET DEPTHS

TETRA TECH EM, INC.

FIG 4-7F_SS RESULTS-BAP_COMPOSITE,dwg - DWH - 01/22/2007 - S1176-37-KPT005

KRY553 2.55 LOCATED 227' NORTH
KRY554 2.09
KRY555 1.31
KRY561 1.26
KRY556 4.19
KRY552 1.70
KRY551 5.72
KRY557 0.38
KRY430 4.30
KRY429 0.48
KRY483 9.08
KRY558 6.31
KRY111A 1.77
KRY560 1.01
KRY549 0.60
KRY550 7.99
KRY559 3.42
KRY562 4.74

RESIDENTIAL
RIVERSIDE DR.
PARK ST.
SCRAP YARD
MONTANA MOKKO
SETTLE SERVICES
THE SHED MAN
FENCED OFF SLUDGE AREA
EVERGREEN WATER & SEWER DISTRICT
NICHOLSON DR.
MAGSTADT LN.
KALISPELL POLE & TIMBER
STILLWATER FOREST PRODUCTS INC.
FORMER EXCAVATION AREA MAY, 1999
FLATHEAD DR.
RELIANCE
AAA STORAGE
KARI HYUNDAI
LA QUINTA INN & SUITES
MONTCLAIR DR.
KARI DODGE
PACIFIC STEEL & RECYCLING
HIGH COUNTRY JEEP
WAL-MART
McELROY & WILKEN BUILDINGS and EQUIPMENT
KLINGLER LUMBER CO.
WHITEFISH STAGE RD.
McELROY & WILKEN GRAVEL PIT
NORTHWESTERN ENERGY
YALE OIL
OFFICE MAX
MINI-STORAGE
NORTHERN ENERGY PROPANE
TOWN PUMP LUCKY LIL'S CASINO
NW TRUCK REPAIR
E. OREGON LN.
ROCKY MOUNTAIN MARINE
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
LUCKY LOGGER CASINO
E. CALIFORNIA ST.
8TH AVENUE E.
9TH AVENUE E.
10TH AVENUE E.
7TH AVENUE E.
E. OREGON ST.
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
WESTERN BUILDING CENTER
GOLDEN WHEELS MOBILE HOME & RV CENTER
U.S. HIGHWAY 2 (E. IDAHO)
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY
USGS

N

Legend

- Soil Sampling Location
- 3.59 - Sampling Result
- Approximate Extent of Surface Soil with Concentrations of Dioxins and Furans Above EPA Region 9 Residential PRG
- Approximate Extent of Surface Soil with Concentrations of Dioxins and Furans Above Site Specific Background
- Approximate Extent of Surface Soil with Concentrations of Dioxins and Furans Above EPA Region 9 Industrial PRG
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. All Results in Nanograms per Kilogram. (Parts Per Trillion)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)

300 0 300 Feet

SCREENING CRITERIA		
EPA REGION 9 RESIDENTIAL PRG	SITE-SPECIFIC BACKGROUND	EPA REGION 9 INDUSTRIAL PRG
3.9	1.0 - 4.7	15.9

LOCATED 600' SOUTH

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-8A
SURFACE SOIL SAMPLING RESULTS

DIOXINS AND FURANS 0-2 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-8A_SS RESULTS-DIOXIN_0-2INCH.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

FORMER EXCAVATION AREA MAY, 1999

FOR DETAIL OF THIS AREA SEE FIGURE 4-7C

KRY103A 116.42
KRY440 12.52
KRY105A 27.71
SS05-B1 106.05
KRY482 22.46
SS05-B2 16.28
SS05-B3 21.73
SS05-04 580.84
SS05-14 32.02
KRY111A 15.20
SS5-02 2.07
KRY483 1.32
KRY628 2.66
KRY429 5.21
KRY430 0.35
KRY422 4.81
TP1-02 1.23
KRY415 15.73
RRS-3 19.88
RRS-1 664.85
RRS-2 83.45
KRY409 6.18
SS4-02 1.26
YR-SO-2A 134.80
KRY605 50.43
KRY607 113.98
YR-SO-4 51.50

RESIDENTIAL
SETTLE SERVICES
THE SHED MAN
SCRAP YARD
PARK ST.
RIVERSIDE DR.
MONTANA MOKKO
STILLWATER FOREST PRODUCTS INC.
KLINGLER LUMBER CO.
McELROY & WILKEN BUILDINGS and EQUIPMENT
WHITEFISH STAGE RD.
FLATHEAD DR.
E. OREGON LN.
E. CALIFORNIA ST.
E. OREGON ST.
7TH AVENUE E.
8TH AVENUE E.
9TH AVENUE E.
10TH AVENUE E.
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
USGS
FENCED OFF SLUDGE AREA
EVERGREEN WATER & SEWER DISTRICT
NICHOLSON DR.
MAGSTADT LN.
AAA STORAGE
LA QUINTA INN & SUITES
KARI HYUNDAI
KARI DODGE
MONTCLAIR DR.
PACIFIC STEEL & RECYCLING
HIGH COUNTRY JEEP
WAL-MART
NORTHWESTERN ENERGY
OFFICE MAX
MINI-STORAGE
NORTHERN ENERGY PROPANE
TOWN PUMP LUCKY LIL'S CASINO
LUCKY LOGGER CASINO
ROCKY MOUNTAIN MARINE
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
NW TRUCK REPAIR
WESTERN BUILDING CENTER
GOLDEN WHEELS MOBILE HOME & RV CENTER
U.S. HIGHWAY 2 (E. IDAHO)
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

N

Legend

- Soil Sampling Location
- 67,67 - Sampling Result
- Approximate Extent of Surface Soil with Concentrations of Dioxins and Furans Above EPA Region 9 Residential PRG
- Approximate Extent of Surface Soil with Concentrations of Dioxins and Furans Above Site Specific Background
- Approximate Extent of Surface Soil with Concentrations of Dioxins and Furans Above EPA Region 9 Industrial PRG
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. All Results in Nanograms per Kilogram. (Parts Per Trillion)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300
Feet

SCREENING CRITERIA		
EPA REGION 9 RESIDENTIAL PRG	SITE-SPECIFIC BACKGROUND	EPA REGION 9 INDUSTRIAL PRG
3.9	1.0 - 4.7	15.9

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-8B
SURFACE SOIL SAMPLING RESULTS

DIOXINS AND FURANS 0-6 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-8B_SS RESULTS-DIOXIN_0-6INCH.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

DETAIL AREA
FROM FIGURE 4-7B

FORMER
EXCAVATION AREA
MAY, 1999

KLINGLER
LUMBER CO.

KRY482 22.46
SS05-B2 16.28
SS05-B3 21.73
TP2-02 1.88
KRY662 2,370.46
KRY658 141.99
TP3-02 1.99
SS05-01 1.24
KRY499 274.21
SS05-02 787.59
SS05-05 1,051.64
SS05-09 253.60
RS-1A 1,865.70
RS-1 21,979.90
SS05-10 1,927.84
SS05-11 418.04
SS05-06 1,428.11
SS05-08 94.45
SS05-03 1,041.94
KRY505 2,036.90
SS05-07 840.11
SS05-13 473.59
SS05-12 1,033.06
W165 1,361.62
SS05-15 905.24
SS05-16 219.66
SS05-17 747.93
SS05-18 975.20
SS05-19 454.57
SS05-21 405.76
SS05-22 301.09
SS05-20 274.32
SS05-04 580.84
SS05-14 32.02

Legend

- Soil Sampling Location
- 285.79 - Sampling Result
- Approximate Extent of Surface Soil with Concentrations of Dioxins and Furans Above EPA Region 9 Residential PRG
- Approximate Extent of Surface Soil with Concentrations of Dioxins and Furans Above Site Specific Background
- Approximate Extent of Surface Soil with Concentrations of Dioxins and Furans Above EPA Region 9 Industrial PRG
- PRG - Preliminary Remediation Goal
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. All Results in Nanograms per Kilogram. (Parts Per Trillion)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

80 0 80 Feet

SCREENING CRITERIA		
EPA REGION 9 RESIDENTIAL PRG	SITE-SPECIFIC BACKGROUND	EPA REGION 9 INDUSTRIAL PRG
3.9	1.0 - 4.7	15.9

KALISPELL POLE & TIMBER, RELIANCE,
and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-8C
SURFACE SOIL SAMPLING RESULTS
KPT AREA
DIOXINS AND FURANS 0-6 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-8C_SS RESULTS-DIOXIN_0-6INCH_KPT.dwg - DWH - 01/22/2007 - S1176-37-KPT005

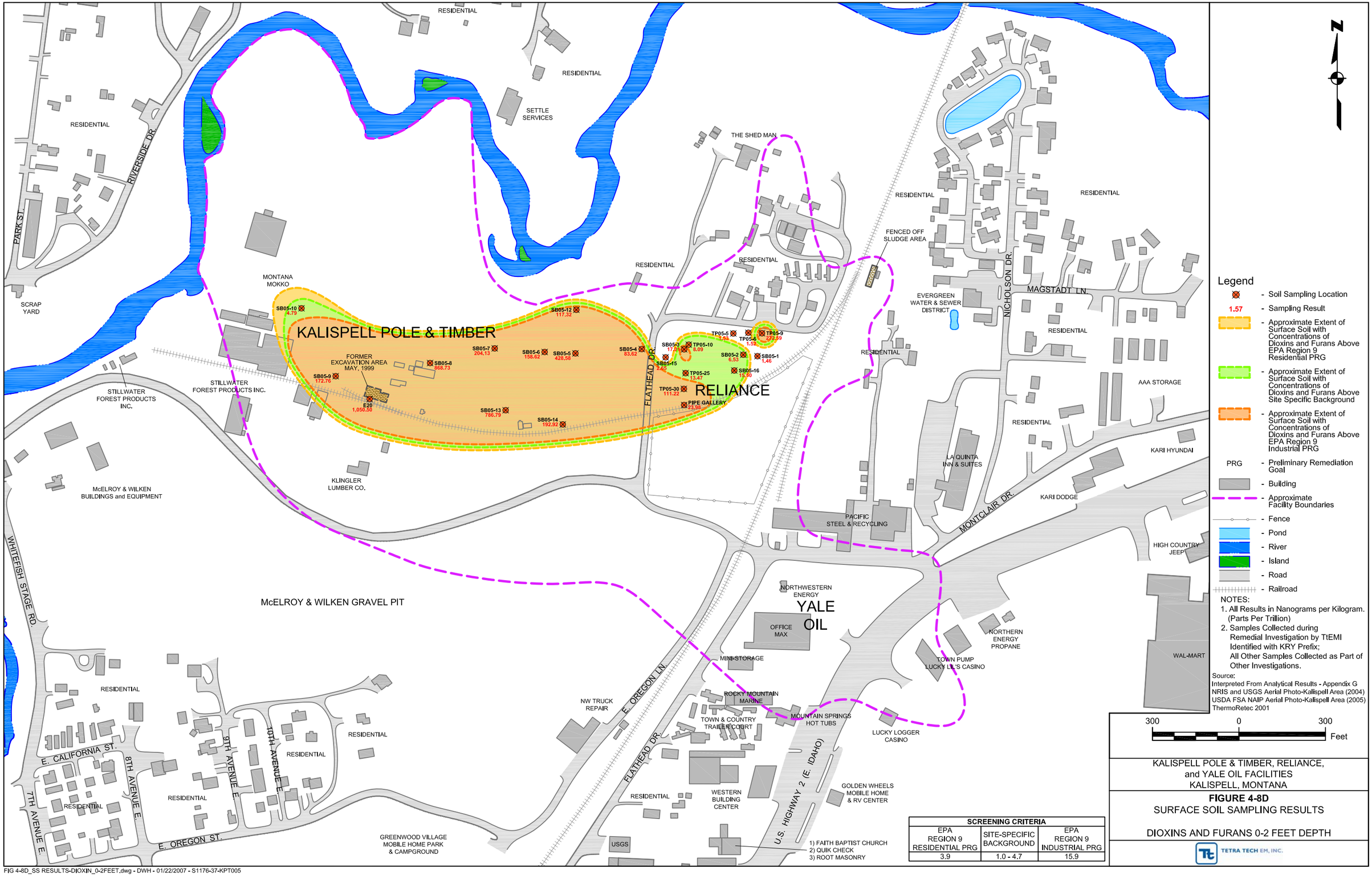
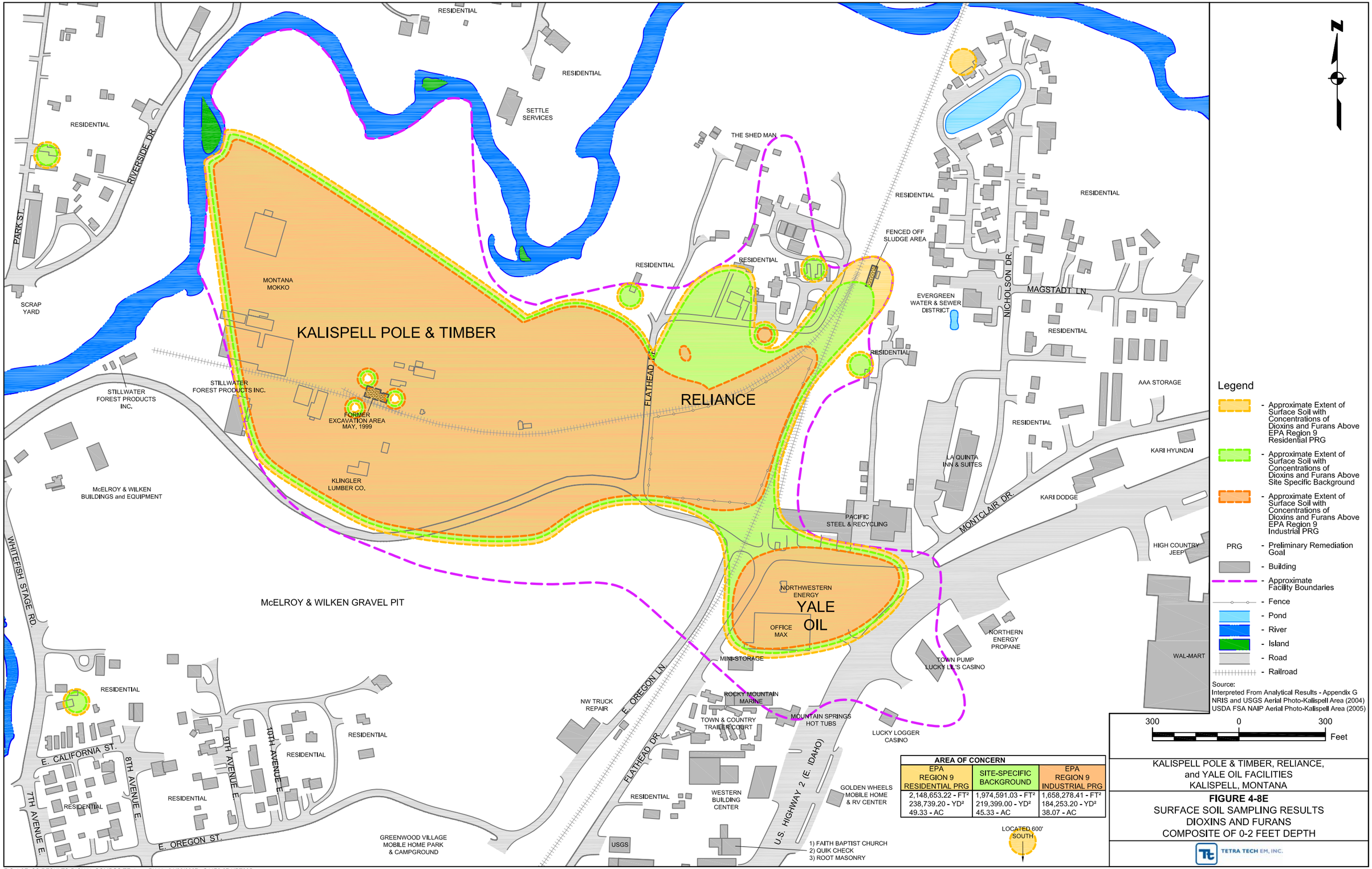


FIG 4-8D_SS RESULTS-DIOXIN_0-2FEET.dwg - DWH - 01/22/2007 - S1176-37-KPT005



AREA OF CONCERN		
EPA REGION 9 RESIDENTIAL PRG	SITE-SPECIFIC BACKGROUND	EPA REGION 9 INDUSTRIAL PRG
2,148,653.22 - FT²	1,974,591.03 - FT²	1,658,278.41 - FT²
238,739.20 - YD²	219,399.00 - YD²	184,253.20 - YD²
49.33 - AC	45.33 - AC	38.07 - AC

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-8E
SURFACE SOIL SAMPLING RESULTS
DIOXINS AND FURANS
COMPOSITE OF 0-2 FEET DEPTH

TETRA TECH EM, INC.

FIG 4-8E_SS RESULTS-DIOXIN_COMPOSITE.dwg - DWH - 01/22/2007 - S1176-37-KPT005

RESIDENTIAL
RESIDENTIAL
SETTLE SERVICES
RESIDENTIAL
RIVERSIDE DR.
PARK ST.
SCRAP YARD
MONTANA MOKKO
KALISPELL POLE & TIMBER
STILLWATER FOREST PRODUCTS INC.
STILLWATER FOREST PRODUCTS INC.
KRY108A 148
FORMER EXCAVATION AREA MAY, 1999
McELROY & WILKEN BUILDINGS and EQUIPMENT
KLINGLER LUMBER CO.
KRY111A 40
McELROY & WILKEN GRAVEL PIT
KRY112A 47
WHITEFISH STAGE RD.
RESIDENTIAL
E. CALIFORNIA ST.
8TH AVENUE E.
7TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
9TH AVENUE E.
10TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
E. OREGON ST.
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
THE SHED MAN
RESIDENTIAL
RESIDENTIAL
FLATHEAD DR.
RELIANCE
NW TRUCK REPAIR
E. OREGON LN.
NORTHWESTERN ENERGY
YALE OIL
OFFICE MAX
MINI-STORAGE
KRY603 19
KRY666 147
ROCKY MOUNTAIN MARINE
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
RESIDENTIAL
WESTERN BUILDING CENTER
USGS
U.S. HIGHWAY 2 (E. IDAHO)
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY
GOLDEN WHEELS MOBILE HOME & RV CENTER
KRY609 154
PACIFIC STEEL & RECYCLING
FENCED OFF SLUDGE AREA
RESIDENTIAL
RESIDENTIAL
EVERGREEN WATER & SEWER DISTRICT
NICHOLSON DR.
MAGSTADT LN.
RESIDENTIAL
RESIDENTIAL
AAA STORAGE
RESIDENTIAL
KARI HYUNDAI
LA QUINTA INN & SUITES
KARI DODGE
MONTCLAIR DR.
HIGH COUNTRY JEEP
NORTHERN ENERGY PROPANE
TOWN PUMP LUCKY LIL'S CASINO
WAL-MART
LUCKY LOGGER CASINO

N

Legend

- Soil Sampling Location
- 11 - Sampling Result
- Approximate Extent of Surface Soil with Concentrations of C11-C22 Aromatics Above DEQ Residential RBSL
- Approximate Extent of Surface Soil with Concentrations of C11-C22 Aromatics Above DEQ Commercial RBSL
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
All Results in Milligrams per Kilogram. (Parts Per Million)

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)

300 0 300 Feet

SCREENING CRITERIA	
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL
70	300

LOCATED 600' SOUTH
KRY562 11

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-9A
SURFACE SOIL SAMPLING RESULTS

C11-C22 AROMATICS 0-2 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-9A_SS RESULTS-C11-C22 AROMATICS_0-2INCH.dwg - DWH - 01/22/2007 - S1176-37-KPT005

KALISPELL POLE & TIMBER

RELIANCE

YALE OIL

McELROY & WILKEN GRAVEL PIT

RESIDENTIAL

RIVERSIDE DR.

PARK ST.

SCRAP YARD

MONTANA MOKKO

SETTLE SERVICES

THE SHED MAN

FENCED OFF SLUDGE AREA

EVERGREEN WATER & SEWER DISTRICT

NICHOLSON DR.

MAGSTADT LN

AAA STORAGE

KARI HYUNDAI

KARI DODGE

LA QUINTA INN & SUITES

MONTCLAIR DR.

HIGH COUNTRY JEEP

WAL-MART

NORTHERN ENERGY PROPANE

TOWN PUMP LUCKY LIL'S CASINO

LUCKY LOGGER CASINO

PACIFIC STEEL & RECYCLING

NORTHWESTERN ENERGY

OFFICE MAX

MINI-STORAGE

ROCKY MOUNTAIN MARINE

MOUNTAIN SPRINGS HOT TUBS

TOWN & COUNTRY TRAILER COURT

NW TRUCK REPAIR

WESTERN BUILDING CENTER

GOLDEN WHEELS MOBILE HOME & RV CENTER

1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY

FLATHEAD DR.

E. OREGON LN.

U.S. HIGHWAY 2 (E. IDAHO)

STILLWATER FOREST PRODUCTS INC.

FORMER EXCAVATION AREA MAY, 1999

KLINGLER LUMBER CO.

McELROY & WILKEN BUILDINGS and EQUIPMENT

FOR DETAIL OF THIS AREA SEE FIGURE 4-10C

WHITEFISH STAGE RD.

E. CALIFORNIA ST.

E. OREGON ST.

7TH AVENUE E.

8TH AVENUE E.

9TH AVENUE E.

10TH AVENUE E.

GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND

USGS

KRY432 41
KRY433 57
KRY103A 31
KRY437 98
KRY436 33
KRY438 35
KRY439 33
KRY440 123
KRY105A 51
KRY442 637
KRY100A 78
KRY444 39
KRY480 42
KRY481 58
KRY514 19
KRY478 57
KRY454 67J
KRY477 8.8J
KRY463 25
KRY460 11
KRY411 31
KRY631 64
KRY632 17
KRY633 115
KRY475 7.8
KRY634 94
KRY453 11U
KRY454 101
KRY455 10U
KRY456 20
KRY457 20
KRY459 10J
KRY467 178
KRY451 18
KRY465 10U
KRY466 13
KRY636 31
KRY637 14
KRY638 17
KRY471 305
KRY639 7.9
KRY447 11
KRY640 20
KRY134A 29
KRY635 32
KRY484 78
KRY653 11
KRY486 13
KRY123A 26
KRY420 14,100
KRY618 20
KRY415 8,540
KRY126A 9.4J
KRY412 38
KRY414 8,020
KRY410 14
KRY422 463
KRY127A 25U
KRY423 62
KRY409 79J
SS4-02 51
KRY605 27J
KRY607 59
KRY115B 11U
SS5-02 20U

Legend

- Soil Sampling Location
- 27J - Sampling Result
- J - Estimated
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Surface Soil with Concentrations of C11-C22 Aromatics Above DEQ Residential RBSL
- Approximate Extent of Surface Soil with Concentrations of C11-C22 Aromatics Above DEQ Commercial RBSL
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:
1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

SCREENING CRITERIA	
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL
70	300

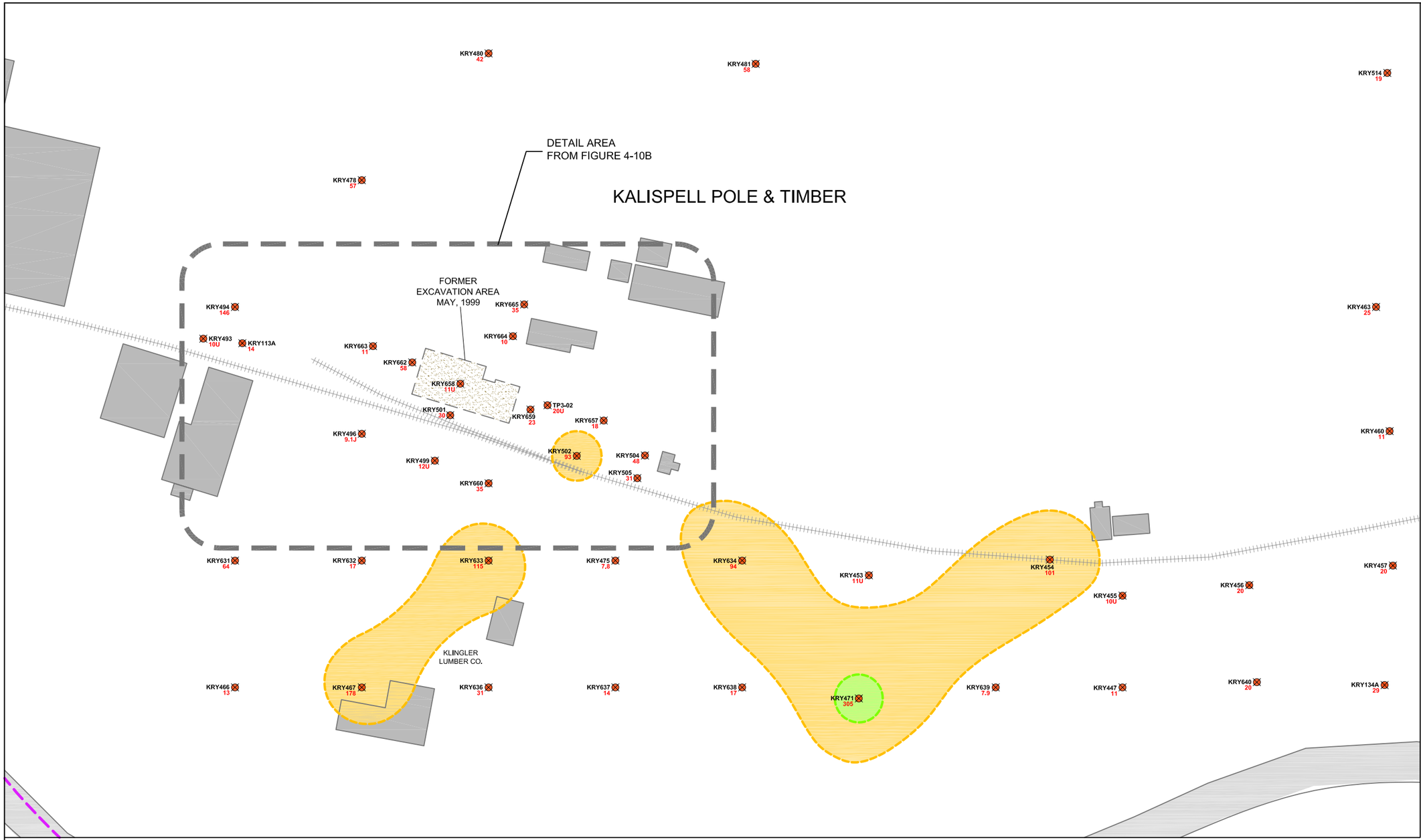
KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-9B
SURFACE SOIL SAMPLING RESULTS

C11-C22 AROMATICS 0-6 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-9B_SS RESULTS-C11-C22 AROMATICS_0-6INCH.dwg - DWH - 01/22/2007 - S1176-37-KPT005



Legend

- Soil Sampling Location
- 20 - Sampling Result
- J - Estimated
- U - Analyte Not Detected at Limit Shown
- Approximate Extent of Surface Soil with Concentrations of C11-C22 Aromatics Above DEQ Residential RBSL
- Approximate Extent of Surface Soil with Concentrations of C11-C22 Aromatics Above DEQ Commercial RBSL
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTES:

1. All Results in Milligrams per Kilogram. (Parts Per Million)
2. Samples Collected during Remedial Investigation by TtEMI Identified with KRY Prefix; All Other Samples Collected as Part of Other Investigations.

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

80 0 80 Feet

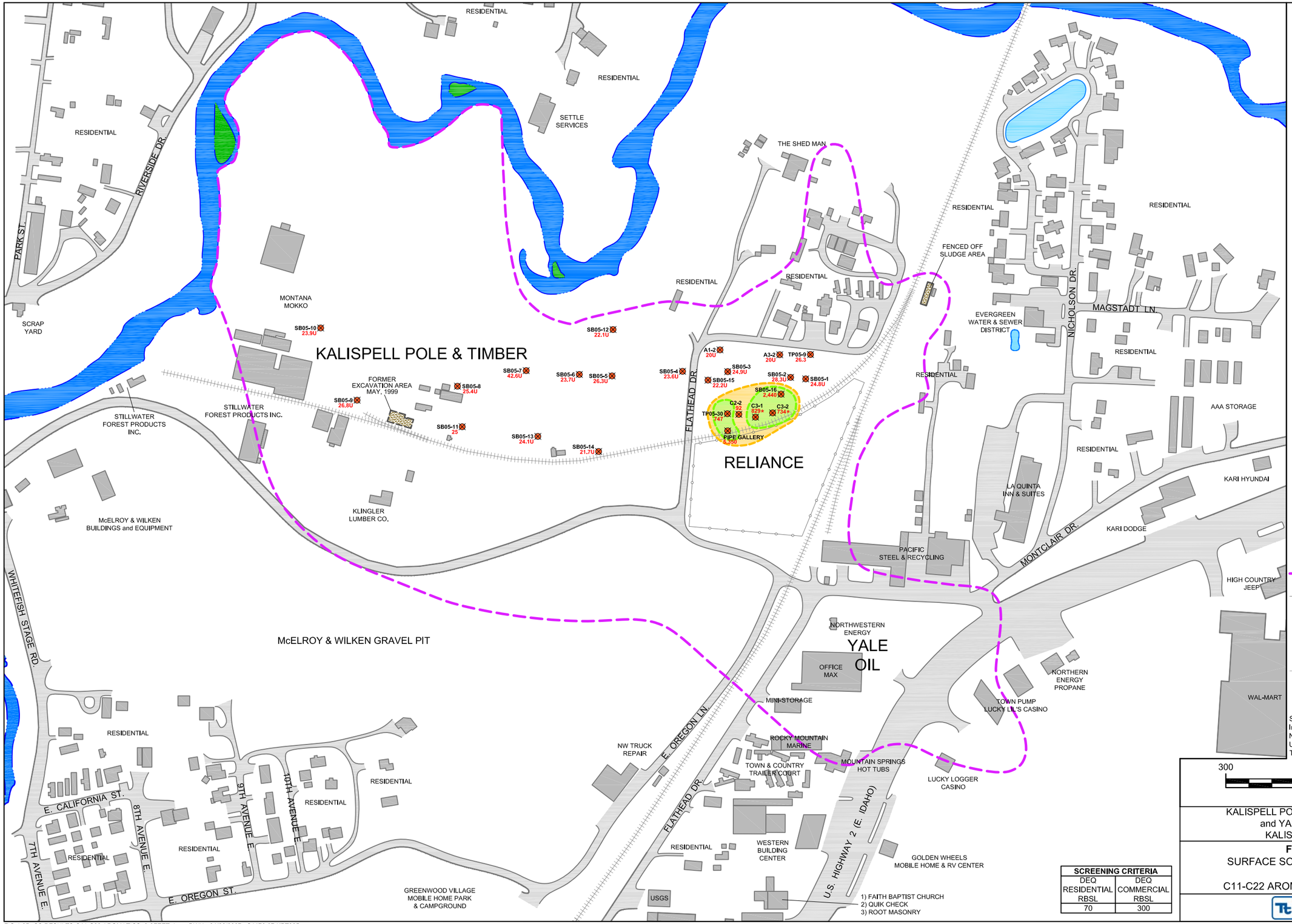
SCREENING CRITERIA	
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL
70	300

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-9C
SURFACE SOIL SAMPLING RESULTS
KPT AREA
C11-C22 AROMATICS 0-6 INCH DEPTH

TETRA TECH EM, INC.

FIG 4-9C_SS RESULTS-C11-C22 AROMATICS_0-6INCH_KPT.dwg - DWH - 01/22/2007 - S1176-37-KPT005



SCREENING CRITERIA	
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL
70	300

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-9D
SURFACE SOIL SAMPLING RESULTS

C11-C22 AROMATICS 0-2 FEET DEPTH

TETRA TECH EM, INC.

FIG 4-9D_SS RESULTS-C11-C22 AROMATICS_0-2FEET.dwg - DWH - 01/22/2007 - S1176-37-KPT005

RESIDENTIAL
RESIDENTIAL
SETTLE SERVICES
RESIDENTIAL
RIVERSIDE DR.
PARK ST.
SCRAP YARD
MONTANA MOKKO
KALISPELL POLE & TIMBER
STILLWATER FOREST PRODUCTS INC.
STILLWATER FOREST PRODUCTS INC.
FORMER EXCAVATION AREA MAY, 1999
KLINGLER LUMBER CO.
McELROY & WILKEN BUILDINGS and EQUIPMENT
McELROY & WILKEN GRAVEL PIT
WHITEFISH STAGE RD.
RESIDENTIAL
E. CALIFORNIA ST.
8TH AVENUE E.
7TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
9TH AVENUE E.
10TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
E. OREGON ST.
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
THE SHED MAN
RESIDENTIAL
RESIDENTIAL
RESIDENTIAL
FLATHEAD DR.
RELIANCE
NW TRUCK REPAIR
E. OREGON LN.
NORTHWESTERN ENERGY
YALE OIL
OFFICE MAX
MINI-STORAGE
ROCKY MOUNTAIN MARINE
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
LUCKY LOGGER CASINO
RESIDENTIAL
WESTERN BUILDING CENTER
GOLDEN WHEELS MOBILE HOME & RV CENTER
U.S. HIGHWAY 2 (E. IDAHO)
USGS
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY
PACIFIC STEEL & RECYCLING
FENCED OFF SLUDGE AREA
RESIDENTIAL
RESIDENTIAL
EVERGREEN WATER & SEWER DISTRICT
NICHOLSON DR.
MAGSTADT LN.
RESIDENTIAL
RESIDENTIAL
AAA STORAGE
RESIDENTIAL
LA QUINTA INN & SUITES
KARI HYUNDAI
KARI DODGE
MONTCLAIR DR.
HIGH COUNTRY JEEP
NORTHERN ENERGY PROPANE
TOWN PUMP LUCKY LIL'S CASINO
WAL-MART

N

Legend

- Approximate Extent of Surface Soil with Concentrations of C11-C22 Aromatics Above DEQ Residential RBSL
- Approximate Extent of Surface Soil with Concentrations of C11-C22 Aromatics Above DEQ Commercial RBSL
- DEQ-RBSL - Montana Department of Environmental Quality Risk Based Screening Level
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)

300 0 300 Feet

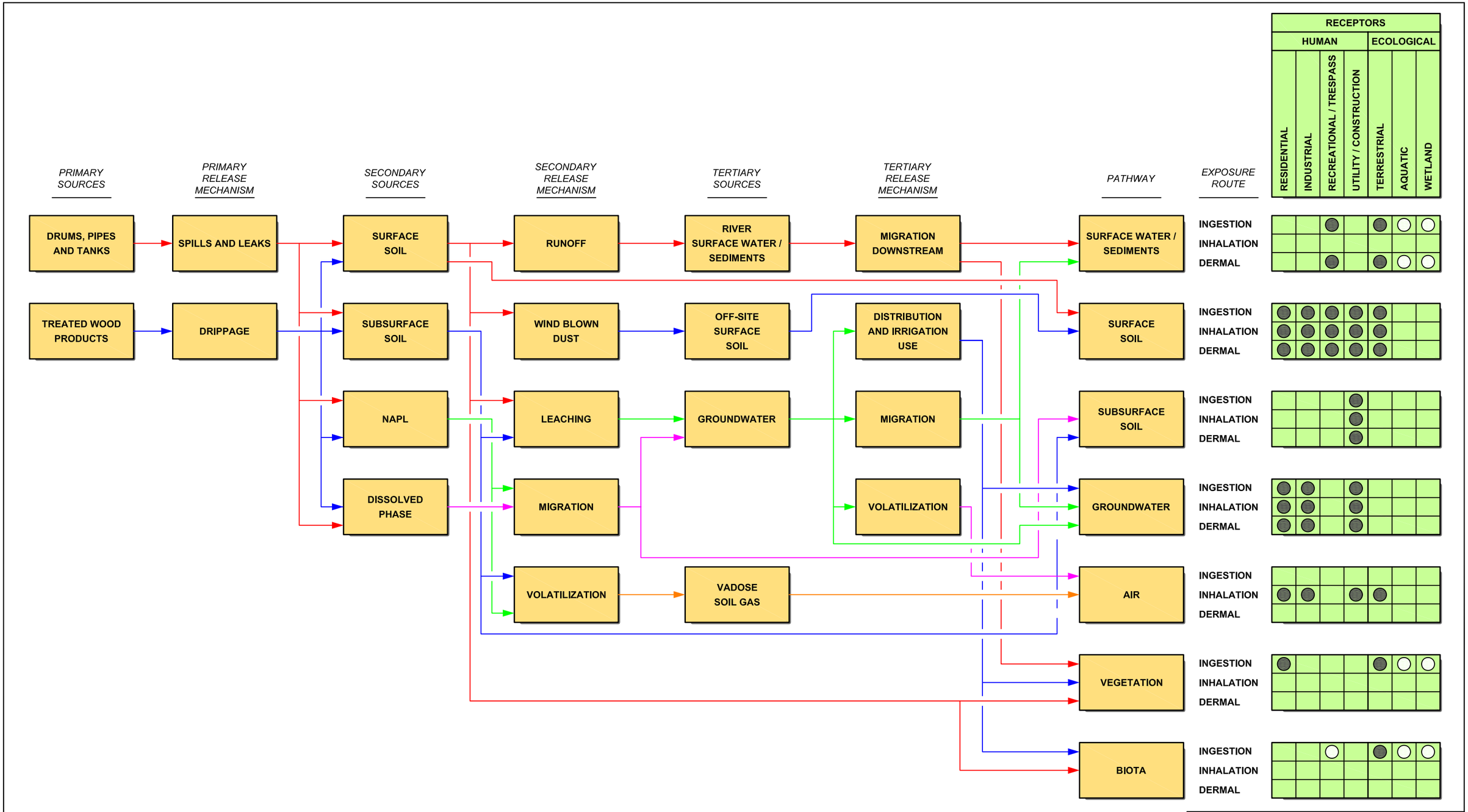
AREA OF CONCERN	
DEQ RESIDENTIAL RBSL	DEQ COMMERCIAL RBSL
255,908.18 - FT²	79,224.97 - FT²
28,434.24 - YD²	8,802.77 - YD²
5.87 - AC	1.82 - AC

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 4-9E
SURFACE SOIL SAMPLING RESULTS
C11-C22 AROMATICS
COMPOSITE OF 0-2 FEET DEPTH

TETRA TECH EM, INC.

FIG 4-9E_SS RESULTS-C11-C22 AROMATICS_COMPOSITE.dwg - DWH - 01/22/2007 - S1176-37-KPT005



NOTES:

○ Pathway has been evaluated and found to be incomplete.

● Pathways that may be assessed in the risk analysis.
A more in-depth conceptual site model will be evaluated as part of the risk analysis.

NAPL Non Aqueous Phase Liquid

KALISPELL POLE & TIMBER, RELIANCE,
and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 5-1
PRELIMINARY
CONCEPTUAL SITE MODEL

TETRA TECH EM, INC.

FIG 5-1_SITE CONC MODEL.dwg - DWH - 12/07/2006 - S1176-37-KPT005

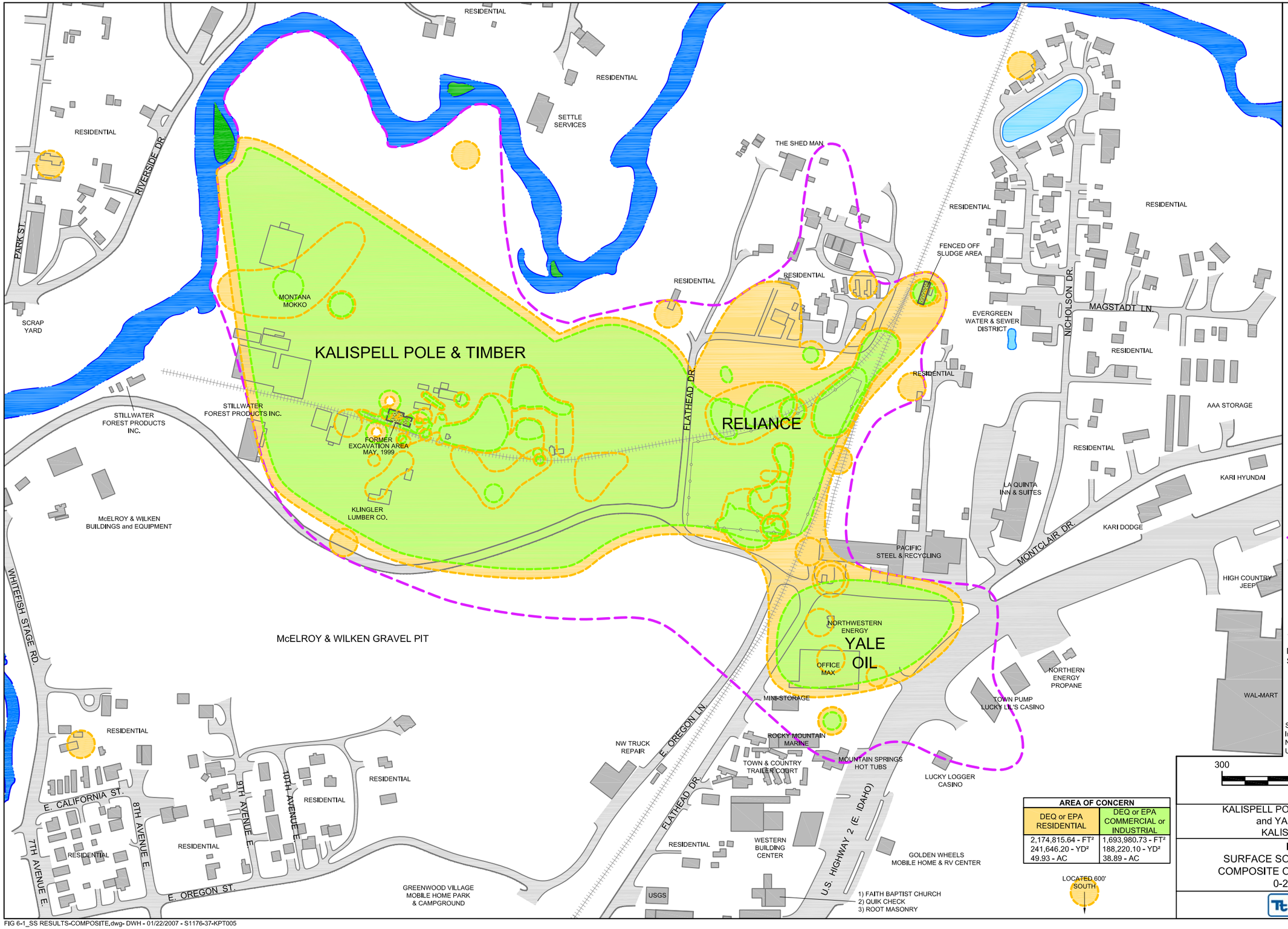


FIG 6-1_SS RESULTS-COMPOSITE.dwg- DWH - 01/22/2007 - S1176-37-KPT005

RESIDENTIAL
RESIDENTIAL
SETTLE SERVICES
RESIDENTIAL
RIVERSIDE DR.
PARK ST.
SCRAP YARD
MONTANA MOKKO
KALISPELL POLE & TIMBER
STILLWATER FOREST PRODUCTS INC.
STILLWATER FOREST PRODUCTS INC.
FORMER EXCAVATION AREA MAY, 1999
KLINGLER LUMBER CO.
McELROY & WILKEN BUILDINGS and EQUIPMENT
WHITEFISH STAGE RD.
McELROY & WILKEN GRAVEL PIT
RESIDENTIAL
E. CALIFORNIA ST.
8TH AVENUE E.
7TH AVENUE E.
9TH AVENUE E.
10TH AVENUE E.
RESIDENTIAL
RESIDENTIAL
RESIDENTIAL
E. OREGON ST.
GREENWOOD VILLAGE MOBILE HOME PARK & CAMPGROUND
THE SHED MAN
RESIDENTIAL
RESIDENTIAL
FLATHEAD DR.
RELIANCE
NW TRUCK REPAIR
E. OREGON LN.
NORTHWESTERN ENERGY
YALE OIL
OFFICE MAX
MINI-STORAGE
ROCKY MOUNTAIN MARINE
TOWN & COUNTRY TRAILER COURT
MOUNTAIN SPRINGS HOT TUBS
LUCKY LOGGER CASINO
RESIDENTIAL
WESTERN BUILDING CENTER
USGS
U.S. HIGHWAY 2 (E. IDAHO)
GOLDEN WHEELS MOBILE HOME & RV CENTER
1) FAITH BAPTIST CHURCH
2) QUIK CHECK
3) ROOT MASONRY
PACIFIC STEEL & RECYCLING
FENCED OFF SLUDGE AREA
RESIDENTIAL
RESIDENTIAL
EVERGREEN WATER & SEWER DISTRICT
NICHOLSON DR.
MAGSTADT LN.
RESIDENTIAL
RESIDENTIAL
AAA STORAGE
RESIDENTIAL
KARI HYUNDAI
LA QUINTA INN & SUITES
MONTCLAIR DR.
KARI DODGE
HIGH COUNTRY JEEP
NORTHERN ENERGY PROPANE
TOWN PUMP LUCKY LIL'S CASINO
WAL-MART

N

Legend

- Approximate Extent of Subsurface Soil with Concentrations of Selected Analytes Above DEQ or EPA Residential Limits
- Approximate Extent of Subsurface Soil with Concentrations of Selected Analytes Above DEQ or EPA Commercial or Industrial Limits
- Building
- Approximate Facility Boundaries
- Fence
- Pond
- River
- Island
- Road
- Railroad

NOTE:
Selected Analytes Include:
Benzo(A)Pyrene
C9-C18 Aliphatics
Dioxins and Furans
Lead
Pentachlorophenol

Source:
Interpreted From Analytical Results - Appendix G
NRIS and USGS Aerial Photo-Kalispell Area (2004)
USDA FSA NAIP Aerial Photo-Kalispell Area (2005)
ThermoRetec 2001

300 0 300 Feet

AREA OF CONCERN	
DEQ or EPA RESIDENTIAL	DEQ or EPA COMMERCIAL or INDUSTRIAL
611,194.97 - FT²	389,100.25 - FT²
67,910.55 - YD²	43,233.36 - YD²
14.03 - AC	8.93 - AC

KALISPELL POLE & TIMBER, RELIANCE, and YALE OIL FACILITIES
KALISPELL, MONTANA

FIGURE 6-2
SUBSURFACE SOIL SAMPLING RESULTS
COMPOSITE OF SELECTED ANALYTES
SUBSURFACE SOIL DEPTHS

TETRA TECH EM, INC.

FIG 6-2_SB RESULTS-COMPOSITE.dwg - DWH - 02/05/2007 - S1176-37-KPT005