Appendix E
Title Report/Deed of Trust

GRAYS HARBOR FACILITY A17.0202.00
100 AIRPORT WAY
HOQUIAM, WA 98550

Inquiry Number: 4904768.7S
APRIL 18, 2017

EDR Environmental Lien and AUL Search

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental Lien Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

GRAYS HARBOR FACILITY A17.0202.00
100 AIRPORT WAY
HOQUIAM, WA 98550

RESEARCH SOURCE

Source 1: GRAYS HARBOR COUNTY RECORDER OF DEEDS

Source 2: WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

Source 3: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PROPERTY INFORMATION

Deed 1

Type of Deed:	STATUTORY WARRANTY DEED
Title is vested in:	THE PORT OF GRAYS HARBOR
Title received from:	RAYONIER INC
Date Executed:	10/28/1999
Date Recorded:	10/29/1999
Book:	NA
Page:	NA
Volume:	NA
Instrument#:	1999-10290007
Docket:	NA
Land Record Comments:	NA
Miscellaneous Comments:	NA

Legal Description: HOQ TDLDS TAX R3 (OUT OF TRS 10-11)

Current Owner: PORT OF GRAYS HARBOR

Property Identifiers: 056401000801

Comments: NA

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

If Found:

1st Party:	NA
2nd Party:	NA
Dated:	NA
Recorded:	NA
Book:	NA
Page:	NA
Docket:	NA

Volume: NA
Instrument #: NA
Comments:
Miscellaneous:

OTHER ACTIVITY AND USE LIMITATIONS (AULS)

Other AUL's: Found ☐ Not Found ☒

If Found:

1st Party: NA
2nd Party: NA
Dated: NA
Recorded: NA
Book: NA
Page: NA
Docket: NA
Volume: NA
Instrument #: NA
Comments:
Miscellaneous:

1st Party: NA
2nd Party: NA
Dated:
Recorded: NA
Book: NA
Page: NA
Docket: NA
Volume: NA
Instrument #: NA
Comments:
Miscellaneous:

EDR Environmental Lien and AUL Search

MISCELLANEOUS

Type of Instrument: NONE IDENTIFIED
1st Party:
2nd Party:
Date Recorded:
Instrument #:
Book:
Page:
Comments:

DEED EXHIBIT

145910

AFTER RECORDING RETURN TO:
The Port of Grays Harbor
Attn: Leonard Barnes
111 S. Wooding
P.O. Box 660
Aberdeen, WA 98520-0141

REAL ESTATE EXCISE TAX
$144,299.50 Paid 10-29-99
RONALD A. STRABBING, TREASURER
Grays Harbor County, Montesano, Wash.
By Hafford Deputy

043983

STATUTORY WARRANTY DEED

Document Title: STATUTORY WARRANTY DEED
Reference Number of Related Documents: None
Grantor: Rayonier Inc.
Grantee: The Port of Grays Harbor
Legal Description: PTN OF TRS 10 & 11 HOQ TIDELANDS, PTN OF BLK 17, ALL OF BLKS 18, 19, 24 & 26 CAMPBELL'S ADD; AND LOTS 1-4; C&D TR 14 HOQ TIDELANDS TGW VACS 3-17-10; 10-17-10
Assessor's Tax Parcel Number: 056401000400, 056401000801, 056401100204, 056401000501, 056401100203, 517100331007, 517101021001, 517101012001; and 051201701400, 051201800400, 0512019000, 051202400100, 051202500000, 056401400100, 056401400302, 056401400400

The Grantor, RAYONIER INC., a North Carolina corporation, of P.O. Box 34162, Seattle, Washington 9812401162, for good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, warrant and convey to Grantee, THE PORT OF GRAYS HARBOR, a Washington municipal corporation with offices at 111 S. Wooding, Aberdeen, Washington 98520-0141, the real property situated in the County of Grays Harbor, State of Washington, and more particulary described in Exhibit A attached hereto.

Grantor reserves unto itself, its successors in interest and assigns an easement 40 feet in width for the operation and maintenance of a 54" industrial waterline over and across a portion of Railroad Avenue in Edward Campbell's Addition to the Town of Hoquiam located in Section 12, Tonwship 17 North, Range 10 West of the Willamette Meridian, the centerline of said esement more particularly described as follows:

> Commencing at the Northeast corner of Block 26 in Edward Campbell's Addition to the Town of Hoquiam per plat recorded in Volume 2 of Plats at Page 11 records of Grays Harbor County; thence South 0° 01'29" West along the east line of said Block 26 a distance of 241.65 feet to the true point of beginning of said centerline; thence North 86° 44' 48" West a distance of 404.92 feet; thence South 39° 55' 53" West a distance of 65.36 feet to an intersection with the centerline of Railroad Avenue and the terminus of said easement.

Subject to all easements, restrictions, and encumbrances of public record.

COAST TITLE 14.00 DEED
1999-10290007
Page: 1 of 7
10/29/1999 10:53A
Grays Harbor Co

DATED this 28 day of October, 1999.

RAYONIER INC.

Approved as to Legal Form

By: Dennis C Snyder
Dennis C. Snyder,
Vice President, Corporate Services

STATE OF WASHINGTON)
)ss.
County of Grays Harbor)

I certify that I know or have satisfactory evidence that Dennis C. Snyder is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute this instrument and acknowledged it as the Vice President, Corporate Services of Rayonier Inc. to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Given under my hand and official seal this 28 day of October, 1999.

TANYA LASH
NOTARY PUBLIC
STATE OF WASHINGTON
My Commission Expires Nov. 25, 2001

Tanya Lash TANYA LASH
Notary Public in and for the
State of Washington,
Residing at Montesano.
My appointment expires: 11-25-2001

- pa

COAST TITLE 14.00 DEED

1999-10290007
Page: 2 of 7
10/29/1999 10:53A
Grays Harbor Co

Exhibit A

PARCEL A:

A tract of land situate in Lots 3, 4, 5, 8, 9 and 10, Tract 10, Lots 2 and 3, Tract 11; and vacated Waterway No. 3; as shown on the official plat of Hoquiam Tidelands filed July 21, 1913, described as follows:

Beginning at a point on the North line of Section 10, Township 17 North, Range 10 West of the Willamette Meridian, which is North 89° 03' 02" West a distance of 3,680.54 feet from the Section corner common to Sections 2, 3, 10 and 11, said Township and Range, said Section corner being in the intersection of Adams Street and Emerson Avenue in the City of Hoquiam, said point of beginning being the meander corner between Sections 3 and 10, said Township and Range, which is identified by a stone marked with an "X";
Thence South 68° 48' 06" East a distance of 1,538.23 feet to a point;
Thence South 00° 17' 35" West a distance of 1,260.09 feet to a point;
Thence South 89° 42' 25" East a distance of 923.00 feet to a point on the East line of Lot 8, Tract 10, Hoquiam Tidelands;
Thence South 00° 17' 35" West along the East line of said Lot 8 and the East line of Lot 2, Tract 11, a distance of 1,113.47 feet to a point on the Northerly line of the right-of-way of the Moon Island Road;
Thence South 80° 04' 32" West along the Northerly line of the right-of-way of the Moon Island Road a distance of 1,047.11 feet to a point;
Thence South 87° 44' 45" West along the Northerly line of the right-of-way of the Moon Island Road a distance of 415.11 feet to a point;
Thence North 00° 17' 35" East a distance of 1,139.40 feet to a point;
Thence North 89° 42' 25" West a distance of 1,115.65 feet to a point;
Thence North 00° 17' 35" East a distance of 1,989.50 feet to a point on the produced North line of said Section 10;
Thence South 89° 03' 02" East along the produced North line of said Section 10 a distance of 200.90 feet to the point of beginning; ALL in Section 10, Township 17 North, Range 10 West of the Willamette Meridian;
Situate in the County of Grays Harbor, State of Washington.

PARCEL B:

A portion of Lots 5 and 8, Tract 10, Hoquiam Tidelands, located within the City of Hoquiam, Grays Harbor County, Washington, being more particularly described as follows:

Beginning at the Northeast corner of said Lot 5;
Thence South 0° 17' 35" West along the East line of said Lots 5 and 8 a distance of 907.53 feet to the true point of beginning of this description;
Thence North 89° 42' 25" West a distance of 923.00 feet;
Thence North 0° 17' 35" East a distance of 1,260.09 feet;
Thence South 68° 48' 06" East a distance of 131.67 feet;
Thence South 0° 17' 35" West a distance of 413.11 feet;
Thence along the arc of a curve to the left having a central angle of 90° and a radius of 800 feet a curve distance of 1,256.64 feet to the true point of beginning;
Situate in the County of Grays Harbor, State of Washington.

PARCEL C :

A portion of Lots 5 and 8, Tract 10, Hoquiam Tidelands, located within the City of Hoquiam, Grays Harbor County, Washington, being more particularly described as follows:

Beginning at the meander corner between Sections 3 and 10, Township 17 North, Range 10 West of the Willamette Meridian, which point is identified by a stone marked with an "X";
Thence South 68° 48' 06" East along the meander line a distance of 1,669.90 feet to the true point of beginning;
Thence South 0° 17' 35" West a distance of 413.11 feet;
Thence along the arc of a curve to the left having a central angle of 90° and a radius of 800.00 feet a curve distance of 1,256.64 feet to its intersection with the East line of said Lot 8;
Thence North 0° 17' 35" East along said East line of said Lot 8 and the East line of said Lot 5, a distance of 907.53 feet to its intersection with said Meander line;
Thence North 68° 48' 06" West along said meander line to the true point of beginning;
Situate in the County of Grays Harbor, State of Washington.

PARCEL D :

That portion of Lots 2, 3, 7 and 8, Tract 11, Hoquiam Tidelands, Grays Harbor County, Washington, lying Southerly of Moon Island Road and being more particularly described as follows:

Beginning at the meander corner between Sections 3 and 10, Township 17 North, Range 10 West of the Willamette Meridian, which point is identified with a stone marked with an "X";
Thence South a distance of 3,267.39 feet to its intersection with the Southerly line of said Moon Island Road;
Thence North 87° 27' 10" East along said Southerly line of said Moon Island Road a distance of 676.76 feet to a point on said Southerly line of Moon Island Road, which point is the true point of beginning;
Thence South 0° 38' 55" West to the Inner Harbor Line;
Thence South 89° 08' 30" East along said Inner Harbor Line a distance of 942.71 feet;
Thence North to its intersection with said Southerly line of said Moon Island Road;
Thence Southwesterly along said Southerly line of Moon Island Road to the true point of beginning of the above described parcel;

EXCEPT any portion thereof which may have been previously conveyed to Grays Harbor Humane Society, a non-profit corporation, recorded on December 4, 1962, under Auditor's File No. 103079;
Situate in the County of Grays Harbor, State of Washington.

PARCEL E:

A portion of Government Lot 2, Section 3, Township 17 North, Range 10 West of the Willamette Meridian, and a portion of Lot 1, Tract 10, Hoquiam Tidelands; all located within the City of Hoquiam, Grays Harbor County, Washington, and being more particularly described as follows:

Beginning at the meander corner between Sections 3 and 10 said Township and Range which point is identified with a stone marked with an "X", and which point is the Southeastern Corner of said Lot 1, Tract 10;
Thence North 89° 03' 02" West along the South line of said Lot 1, Tract 10 a distance of 200.90 feet;
Thence North 0° 17' 35" East a distance of 162 feet, more or less, to the South line of the Burlington Northern Railroad right of way;
Thence Southeasterly along said right of way line a distance of 709 feet, more or less, to its intersection with the South line of said Government Lot 2;
Thence along said South line of Government Lot 2 North 89° 03' 02" West a distance of 504.74 feet to the point of beginning;
Situate in the County of Grays Harbor, State of Washington.

PARCEL F:

A tract of land situated in the City of Hoquiam, Grays Harbor County, State of Washington, more particularly described as follows:

Beginning at a point on the North line Section 10, Township 17 North, Range 10 West of the Willamette Meridian, which is North 89° 03' 02" West a distance of 3,680.54 feet from the section corner to Sections 2, 3, 10 and 11, of said Township and Range; said section corner being in the intersection of Adams Street and Emerson Avenue in the City of Hoquiam, said point of beginning being the meander corner between Sections 3 and 10, said Township and Range, which is identified by a stone marked with an "X";
Thence South 68° 48' 06" East a distance of 1,538.23 feet to a point;
Thence North 00° 17' 35" East a distance of 254.63 feet to a point on the Southwesterly line of the right-of-way of the Burlington Northern Railroad (Moclips Branch), as conveyed by the Treasurer's Deed from Chehalis County (now Grays Harbor County) to Northern Pacific Railroad Company dated May 23, 1902, recorded June 10, 1902 in Volume 64, page 314, records of Chehalis County (now Grays Harbor County);
Thence North 72° 29' 00" West along said Southwesterly line of the right-of-way a distance of 976.02 feet to a point on the line between said Sections 3 and 10;
Thence North 89° 03' 02" West along said line between Sections 3 and 10 a distance of 504.74 feet to the point of beginning;
Situate in the County of Grays Harbor, State of Washington.

PARCEL G:

A portion of Government Lot 1, Section 10, Township 17 North, Range 10 West of the Willamette Meridian, located within the City of Hoquiam, Grays Harbor County, State of Washington, being more particularly described as follows:

Beginning at a point on the North line of said Section 10, said Township and Range, which point lies North 89° 03' 02" West a distance of 3,680.54 feet from the section corner common to Sections 2, 3, 10 and 11, said Township and Range, said point being the meander corner between Sections 3 and 10, said Township and Range, which point is identified by a stone marked with an "X";
Thence South 68° 48' 06" East a distance of 1,538.23 feet to the true point of beginning;
Thence South 68° 48' 06" East a distance of 131.67 feet;
Thence North 00° 17' 35" East a distance of 263.48 feet to a point on the Southwesterly line of the right of way of the Burlington Northern Railroad (Moclips Branch) as conveyed by Treasurer's Deed from Chehalis County (now Grays Harbor County) to Northern Pacific Railway Company dated May 23, 1902, recorded in the records of Chehalis County (now Grays Harbor County) in Volume 64, page 314, on June 10, 1902;
Thence North 72° 29' 00" West along said Southwesterly line of the right of way a distance of 128.78 feet;
Thence South 00° 17' 35" West a distance of 254.63 feet to the true point of beginning;
Situate in the County of Grays Harbor, State of Washington.

PARCEL H:

Lots 14 through 22, inclusive, Block 17;
Lots 4 through 10, inclusive, Block 18;
Lots 1 through 12, inclusive, Block 19;
Lots 1 through 12, inclusive, Block 24;
Lots 1 through 10, inclusive, Block 25;
Lots 1 through 9, inclusive, Block 26;

ALL in Edward Campbell's Addition to the Town, now City, of Hoquiam, as per plat recorded in Volume 2 of Plats, page 11, records of Grays Harbor County;

TOGETHER WITH all of the vacated alley in said Blocks 17, 19 and 24 which would attach thereto by operation of law;

TOGETHER WITH the vacated North 10 feet of Aberdeen Avenue abutting said Block 19 which would attach thereto by operation of law;

TOGETHER WITH all of vacated Aberdeen Avenue abutting said Blocks 17 and 18;
All of vacated Pacific Avenue abutting said Blocks 18, 19, 24 and 25;
All of vacated Bay Avenue (formerly Railroad Avenue) abutting said Blocks 24 and 26;
And that portion of vacated Railroad Avenue (formerly Bay Avenue) abutting said Block 26;
All of vacated 21st Street lying South of the Easterly produced North line of Lot 4, Block 18 of said Edward Campbell's Addition, all of which would attach thereto by operation of law;

ALSO:

ALL of Lots 1, 2, 4, vacated Lots C and D, and that portion of Lot 3 lying South of the North line of Lot 14, Block 17, Edward Campbell's Addition to the Town, now City, of Hoquiam extended West to the Hoquiam River and North of the South line of vacated Aberdeen Avenue extended West to the Hoquiam River;
ALL in Tract 14 of Hoquiam Tide and Shorelands, according to the official plat thereof on file in the Office of the Commissioner of Public Lands at Olympia, Washington;

TOGETHER WITH that portion of vacated Railroad Avenue (formerly Bay Avenue) abutting said Lots 1, 2 and vacated Lot C which would attach thereto by operation of law;

ALSO

That portion of Government Lot 2, if any, in Section 12, Township 17 North, Range 12 West of the Willamette Meridian, lying between Tract 14 of Hoquiam Tide and Shorelands and the Plat of Edward Campbell's Addition to the Town, now City, of Hoquiam and South of the North line of Lot 14, Block 17, said Edward Campbell's Addition extended West;

ALL Situate in the County of Grays Harbor, State of Washington.

GRAYS HARBOR FACILITY A17.0202.00
100 AIRPORT WAY
HOQUIAM, WA 98550

Inquiry Number: 4904768.7S
APRIL 18, 2017

EDR Environmental Lien and AUL Search

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Shelton, CT 06484
Toll Free: 800.352.0050
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- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

GRAYS HARBOR FACILITY A17.0202.00
100 AIRPORT WAY
HOQUIAM, WA 98550

RESEARCH SOURCE

Source 1: GRAYS HARBOR COUNTY RECORDER OF DEEDS

Source 2: WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

Source 3: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PROPERTY INFORMATION

Deed 1

Type of Deed:	QUIT CLAIM DEED
Title is vested in:	ADAM STREET HOQUIAM LLC
Title received from:	ENTERPRISES INTERNATIONAL INC
Date Executed:	11/14/2013
Date Recorded:	11/15/2013
Book:	NA
Page:	NA
Volume:	NA
Instrument#:	2013-11150088
Docket:	NA
Land Record Comments:	NA
Miscellaneous Comments:	NA

Legal Description:	HOQ TDLDS LOT 6 & LOT 7 LS S 176' OF E 176' TR 10
Current Owner:	ADAM STREET HOQUIAM LLC
Property Identifiers:	056401000600
Comments:	NA

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

If Found:

1st Party:	NA
2nd Party:	NA
Dated:	NA
Recorded:	NA
Book:	NA
Page:	NA
Docket:	NA

Volume: NA
Instrument #: NA
Comments:
Miscellaneous:

OTHER ACTIVITY AND USE LIMITATIONS (AULS)

Other AUL's: Found ☐ Not Found ☒

If Found:

1st Party: NA
2nd Party: NA
Dated: NA
Recorded: NA
Book: NA
Page: NA
Docket: NA
Volume: NA
Instrument #: NA
Comments:
Miscellaneous:

1st Party: NA
2nd Party: NA
Dated:
Recorded: NA
Book: NA
Page: NA
Docket: NA
Volume: NA
Instrument #: NA
Comments:
Miscellaneous:

EDR Environmental Lien and AUL Search

MISCELLANEOUS

Type of Instrument: NONE IDENTIFIED
1st Party:
2nd Party:
Date Recorded:
Instrument #:
Book:
Page:
Comments:

DEED EXHIBIT

After Recording Return To:

Enterprises International, Inc.
P.O. Box 293
Hoquiam, WA 98550

Attention Sherri Vessey, Administrative Assistant

210734

REAL ESTATE EXCISE TAX
EXEMPT TRANSACTION
RONALD A. STRACHAN, TREASURER
Grays Harbor County, Montesano, WA
By [signature] Date 11/15/13

QUIT CLAIM DEED

Grantor: Enterprises International, Inc.

Grantee: Adam Street Hoquiam, LLC

Abbreviated Legals: HOQ TDLDS LOT 6 & LOT 7 LS S 176' OF E 176' TR 10

Assessor's Tax Parcel Numbers: 056401000600

THE GRANTOR, Enterprises International, Inc., for no consideration- mere change in identity or form, conveys and quit claims to Adams Street Hoquiam, LLC the following described real estate, situated in the County of Grays Harbor, State of Washington, together with all after acquired title of the Grantor therein:

Situated in Sec. 10, Twp 17N, R 10 W.W.M., Lots Six (6) and Seven (7), Tract 10 Hoquiam Tidelands; EXCEPT that portion Lot 7 more particularly as follows:

> Beginning at the an intersection of the Westerly right of way line at Adams Street and the South Line of said Lot 7, Tract 10 of Hoquiam Tidelands Additions; thence North 89 degrees 42' 25" West along said South line a distance of 176.00 feet; thence North 0 degrees 17' 35" East along a line parallel to Adams Street right of way a distance of 176.00 feet;
> Thence South 89 degrees 42' 25" East along a line parallel to said South Line of Lot 7, Tract 10, a distance of 176.00 feet to a point on the Westerly right of way Adams Street; and,

2013-11150088 11/15/2013 04:05 PM QCD
Page 1 of 2 R 73.00 Grays Harbor Co, WA
ENTERPRISES INTERNATIONAL

Thence, South 0 degrees 17' 35" West along said Westerly right of way a distance of 176.00 feet to the point of the beginning.

Dated: November 14, 2013

Enterprises International, Inc.

By _____

STATE OF WASHINGTON)
:ss.
GRAYS HARBOR COUNTY)

On this 14th day of November 2013, before me, the undersigned, a Notary Public and for the State of Washington, duly commissioned and sworn, personally appeared David E Larrib, the President of Enterprises International Inc, the corporation that executed the foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned and on oath stated that he is authorized to execute the said instrument on behalf of said corporation.

Witnessed my hand and official seal hereto affixed the day and year first above written.

Sherri L Vessey

NOTARY PUBLIC in and
for the State of Washington
residing at Montesano
My Commission Expires:
June 1 2017

SHERRI L. VESSEY
NOTARY PUBLIC
STATE OF WASHINGTON
My Commission Expires June 1, 2017

GRAYS HARBOR FACILITY A17.0202.00
100 AIRPORT WAY
HOQUIAM, WA 98550

Inquiry Number: 4904768.7S
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- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

GRAYS HARBOR FACILITY A17.0202.00
100 AIRPORT WAY
HOQUIAM, WA 98550

RESEARCH SOURCE

Source 1: GRAYS HARBOR COUNTY RECORDER OF DEEDS

Source 2: WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

Source 3: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PROPERTY INFORMATION

Deed 1

Type of Deed:	QUIT CLAIM DEED
Title is vested in:	EMERSON STREET HOQUIAM LLC
Title received from:	ENTERPRISES INTERNATIONAL INC
Date Executed:	11/14/2013
Date Recorded:	11/15/2013
Book:	NA
Page:	NA
Volume:	NA
Instrument#:	2013-11150089
Docket:	NA
Land Record Comments:	NA
Miscellaneous Comments:	NA

Legal Description:	HOQ AC LOT 1 LS RY RW LS PT OF TAX 2 LS TAX 3 & 4; LOT 2 S OF RY RW LS TAX 1
Current Owner:	EMERSON STREET HOQUIAM LLC
Property Identifiers:	517101011001
Comments:	NA

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

If Found:

1st Party:	NA
2nd Party:	NA
Dated:	NA
Recorded:	NA
Book:	NA
Page:	NA
Docket:	NA

Volume: NA
Instrument #: NA
Comments:
Miscellaneous:

OTHER ACTIVITY AND USE LIMITATIONS (AULS)

Other AUL's: Found ☐ Not Found ☒

If Found:

1st Party: NA
2nd Party: NA
Dated: NA
Recorded: NA
Book: NA
Page: NA
Docket: NA
Volume: NA
Instrument #: NA
Comments:
Miscellaneous:

1st Party: NA
2nd Party: NA
Dated:
Recorded: NA
Book: NA
Page: NA
Docket: NA
Volume: NA
Instrument #: NA
Comments:
Miscellaneous:

EDR Environmental Lien and AUL Search

MISCELLANEOUS

Type of Instrument: NONE IDENTIFIED
1st Party:
2nd Party:
Date Recorded:
Instrument #:
Book:
Page:
Comments:

DEED EXHIBIT

After Recording Return To:

Enterprises International, Inc.
P.O. Box 293
Hoquiam, WA 98550

Attention Sherri Vessey, Administrative Assistant

210735
REAL ESTATE EXCISE TAX
EXEMPT TRANSACTION
RONALD A. STRALOW, TREASURER
Grays Harbor County, Montesano, WA
By [signature] Date 11/15/13

QUIT CLAIM DEED

Grantor: Enterprises International, Inc.

Grantee: Emerson Street Hoquiam, LLC

Abbreviated Legal: HOQ AC LOT 1 LS RY LS PT OF TAX 2, LS TAX 3&4; LOT 2 S OF RY RW LS TAX 1

HOQ AC LOT 2 S OF EMERSON AVE & W OF SPENCER ST & N OF FIRMAN AVE EXT W LS N 135' OF E135'

Assessor's Tax Parcel Number 517101011001, 517101011003

THE GRANTOR, Enterprises International, Inc., for no consideration- mere change in identity or form, conveys and quit claims to Emerson Street Hoquiam, LLC the following described real estate, situated in the County of Grays Harbor, State of Washington, together with all after acquired title of the Grantor therein:

Tax Parcel 517101011003:

That portion of Government Lot 2, Section 10 Township 17 North, Range 10 West of the Willamette Meridian, lying Southerly of the Southerly line of Emerson Avenue and Westerly of the Westerly margin of Spencer Street and Northerly of the Northerly margin Firman Street extended Westerly; EXCEPT the north 135 feet of East 135 feet thereof.

and

Tax Parcel 517171711001:

2013-11150089 11/15/2013 04:05 PM QCD
Page 1 of 3 R 74.00 Grays Harbor Co, WA
ENTERPRISES INTERNATIONAL

Government Lot One (1), Less Northern Pacific Railway right of way, and Less part of Tax Two (2) Sec 10, Township 17, N Range 10 W of Willamette Meridian, and Less Tax Three (3) Sec 10, Township 17, N Range 10 W of Willamette Meridian, and Less Tax Four (4) Sec 10, Township 17, N Range 10 W of Willamette Meridian.

Tax Two (2) being more particularly described as follows:
That part of Government Lots One (1) and Two (2) bounded on the north by the southerly line of Block 11, Grays Harbor Company's First Addition to Hoquiam extended West, and on the South by Northern Pacific Railway's right of way and on the East by the West Line of Spencer Street, Less Firman Avenue, situated in Grays Harbor County, State of Washington.

Tax Three (3) being more particularly described as follows:
A part of Government Lot one (1) lying South of the Northern Pacific Railway right of way, Section Ten (10) Township Seventeen, (17) North Range Ten (10) West of the Willamette Meridian, more particularly described as follows: Beginning at the point of the North line of Section Ten (10), Township Seventeen, (17) North, Range Ten (10) West of the Willamette Meridian, which is North 89 Degrees 03' 02" West a distance of 3, 680.54 feet from the section corner common to Sections 2, 3, 10, 11 of said Township and Range; said section corner being in the intersection of Adams Street and Emerson Avenue in the City of Hoquiam, said point of beginning being the Meander Corner between Section 3 and 10 said township and range, which is identified by a stone marked with an "X", TRUE POINT OF BEGINNING; thence South 68 degrees 48' 06" East a distance of 1,538.23 feet to a point; thence North 00 degrees 17' 35" East a distance of 254.63 feet to a point on the Southwesterly line of the right of way of the Burlington Northern Railroad (Moclips Branch) as conveyed by the Treasurers' Deed from Chehalis County to Northern Pacific Railway Company dated May 23, 1902, recorded June 10, 1902, in Volume 64 page 314, records of Chehalis County; thence North 72 degrees 29" 00" West along said Southwesterly line of the right of way a distance of 976.02 feet to a point on the line between said Sections 3 and 10; thence North 89 degrees 03' 02" West along said line between Sections 3 and 10 a distance of 504.74 feet to the point of beginning.

Tax Four being more particularly described as follows:

Beginning at a point of the North line of Section Ten (10), Township Seventeen, (17) North, Range Ten (10) West of the Willamette Meridian, which point lies North 89 Degrees 03' 02" West a distance of 3, 680.54 feet from the section corner common to Sections 2, 3, 10, 11said Township and Range; said section corner being in the intersection of Adams Street and Emerson Avenue in the City

of Hoquiam, said point being the Meander Corner between Section 3 and 10 said township and range, which is identified by a stone marked with an "X"; thence South 68 degrees 48' 06" East a distance of 1,538.23 feet to the TRUE POINT OF BEGINNING; thence South 68 degrees 48' 06" East a distance of 131.67 feet; thence North 00 degrees 17' 35" East a distance of 263.48 feet to a point on the Southwesterly line of the Burlington Northern Railroad (Moclips Branch) Right of Way as conveyed by the Treasurers' Deed from Chehalis County to Northern Pacific Railway Company dated May 23, 1902, recorded June 10, 1902, in Volume 64 page 314, records of Chehalis County; thence North 72 degrees 20' 00"West along said Southwesterly line of the right of way a distance of 128.78 feet; thence South 00 degrees 17' 35" West a distance of 254.63 feet to the TRUE POINT OF BEGINNING; the above described area containing 0.73 acre more or less.

These lands being situate in the County of Grays Harbor, State of Washington

Dated: November 14, 2013

Enterprises International, Inc.

By D. E. Lamb

STATE OF WASHINGTON)
:ss.
GRAYS HARBOR COUNTY)

On this 14th day of November 2013, before me, the undersigned, a Notary Public and for the State of Washington, duly commissioned and sworn, personally appeared David E. Lamb, the President of Enterprises International, Inc. the corporation that executed the foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned and on oath stated that he is authorized to execute the said instrument on behalf of said corporation.

Witness my hand and official seal hereto affixed the day and year first above written.

SHERRI L. VESSEY
NOTARY PUBLIC
STATE OF WASHINGTON
My Commission Expires June 1, 2017

Sherri L. Vessey

NOTARY PUBLIC in and
for the State of Washington
residing in Montesano
My Commission Expires
June 1 2017

Appendix F
Historical Topographic Maps

Grays Harbor Facility A17.0202.00

100 Airport Way

Hoquiam, WA 98550

Inquiry Number: 4904768.4

April 12, 2017

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

04/12/17

Site Name:

Grays Harbor Facility A17.0202
100 Airport Way
Hoquiam, WA 98550
EDR Inquiry # 4904768.4

Client Name:

BergerAbam
210 E 13th Street, Suite 300
Vancouver, WA 98660-3231
Contact: April Ryckman

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by BergerAbam were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# A17.0202.00

Project: Grays Harbor Facility

Coordinates:

Latitude:	46.97521 46° 58' 31" North
Longitude:	-123.909456 -123° 54' 34" West
UTM Zone:	Zone 10 North
UTM X Meters:	430826.31
UTM Y Meters:	5202810.66
Elevation:	25.00' above sea level

Maps Provided:

2014
1994
1983
1973
1957
1942

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2014 Source Sheets

Hoquiam
2014
7.5-minute, 24000

1994 Source Sheets

Hoquiam
1994
7.5-minute, 24000
Aerial Photo Revised 1990

1983 Source Sheets

Hoquiam
1983
7.5-minute, 24000
Aerial Photo Revised 1980

1973 Source Sheets

Hoquiam
1973
7.5-minute, 24000
Aerial Photo Revised 1973

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1957 Source Sheets

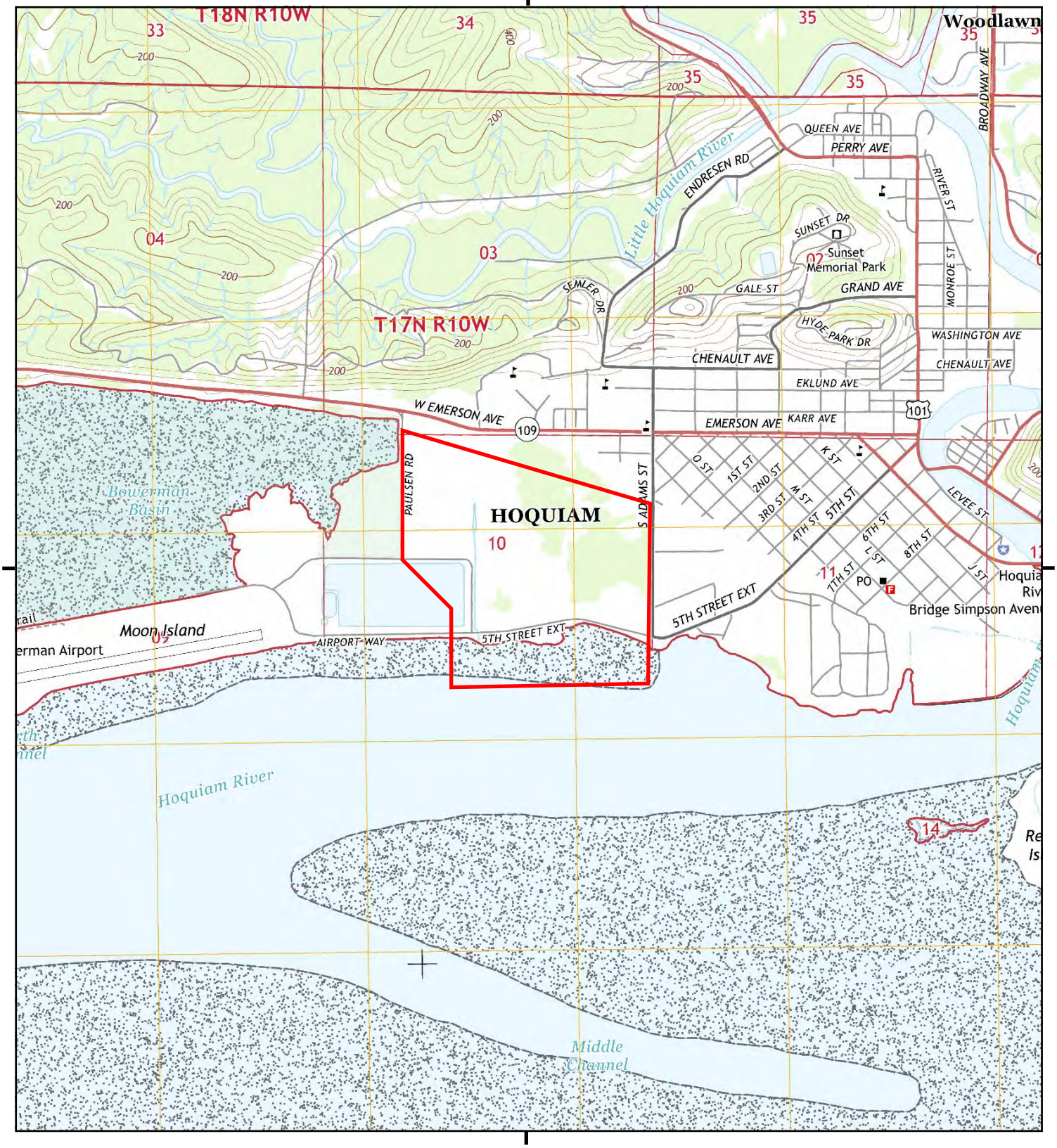
Hoquiam
1957
7.5-minute, 24000
Aerial Photo Revised 1950

1942 Source Sheets

ABERDEEN
1942
15-minute, 50000

Historical Topo Map

2014



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

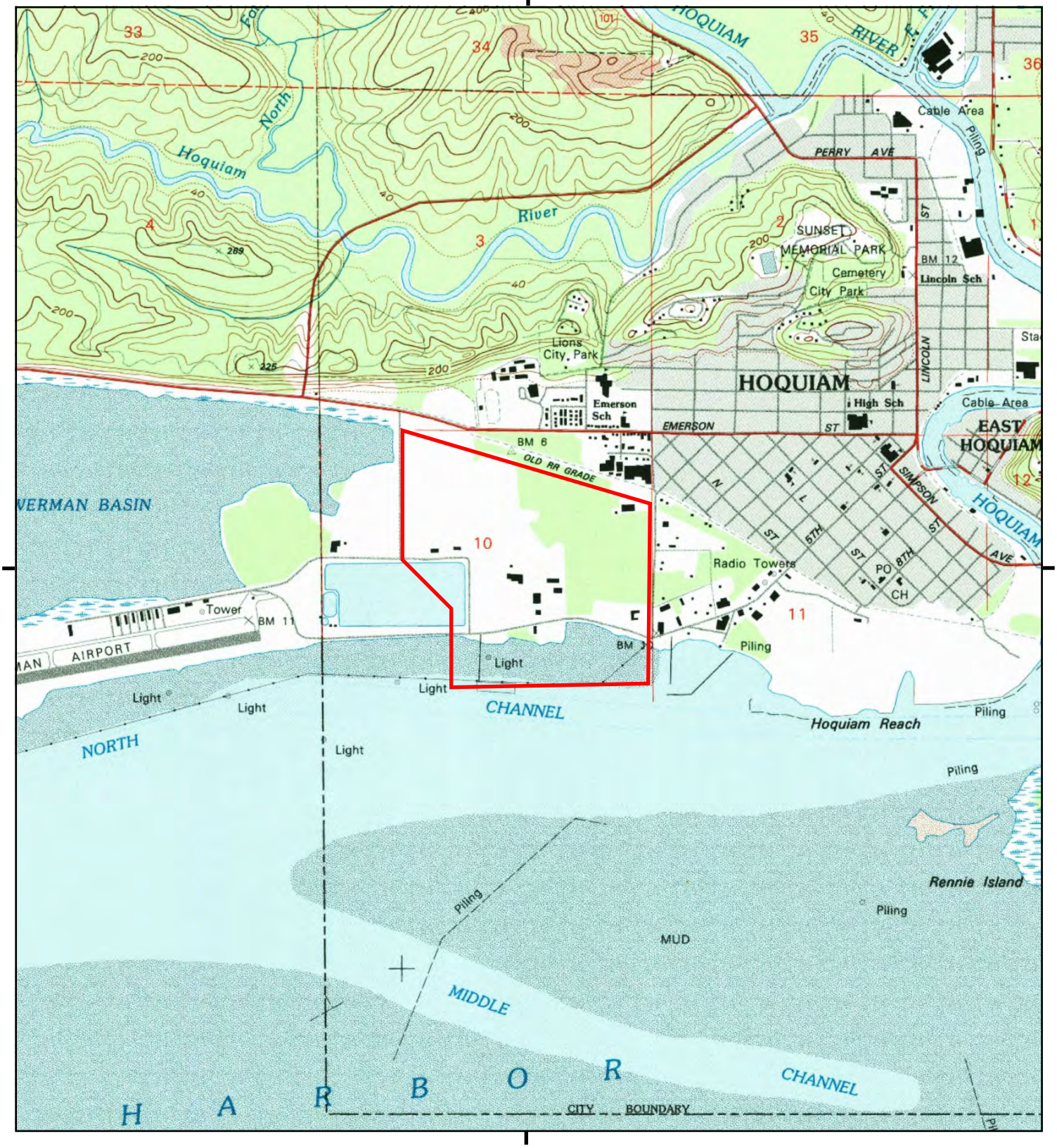
TP, Hoquiam, 2014, 7.5-minute

SITE NAME: Grays Harbor Facility A17.0202.00
ADDRESS: 100 Airport Way
Hoquiam, WA 98550
CLIENT: BergerAbam

N

Historical Topo Map

1994



This report includes information from the following map sheet(s).

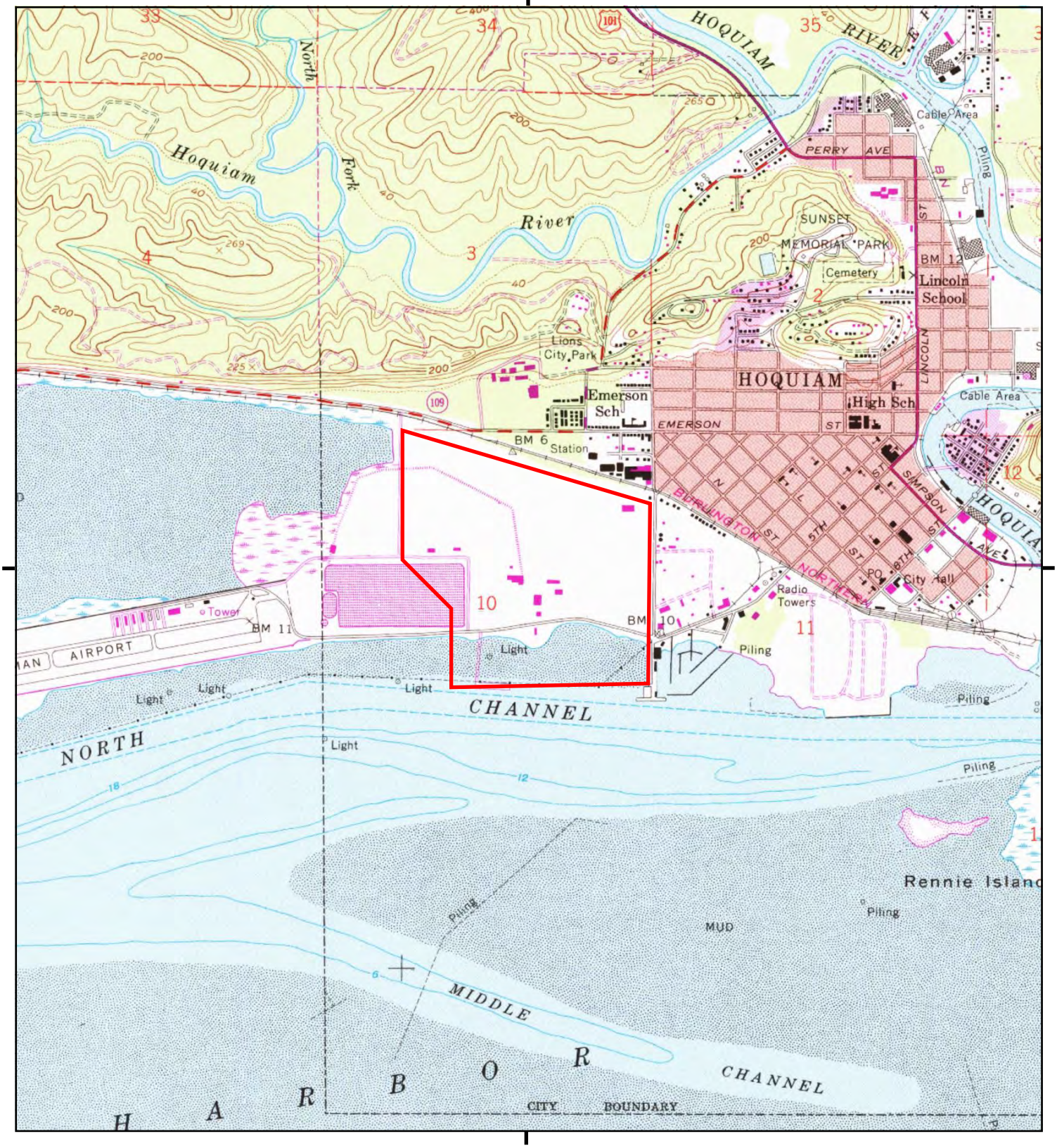
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Hoquiam, 1994, 7.5-minute

SITE NAME: Grays Harbor Facility A17.0202.00
ADDRESS: 100 Airport Way
Hoquiam, WA 98550
CLIENT: BergerAbam

N



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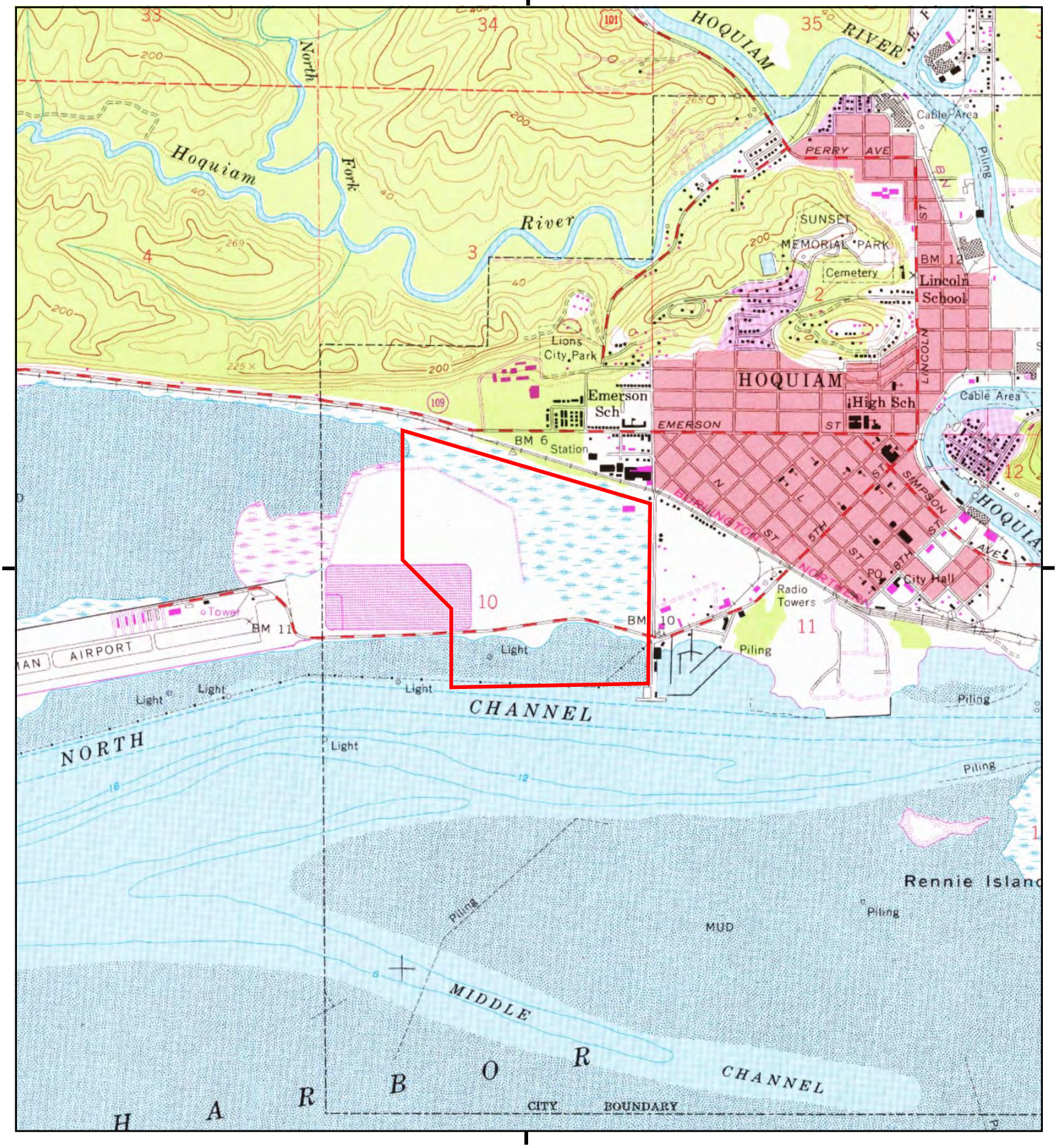
W E
SW S SE

TP, Hoquiam, 1983, 7.5-minute

SITE NAME: Grays Harbor Facility A17.0202.00
ADDRESS: 100 Airport Way
Hoquiam, WA 98550
CLIENT: BergerAbam

N



This report includes information from the following map sheet(s).

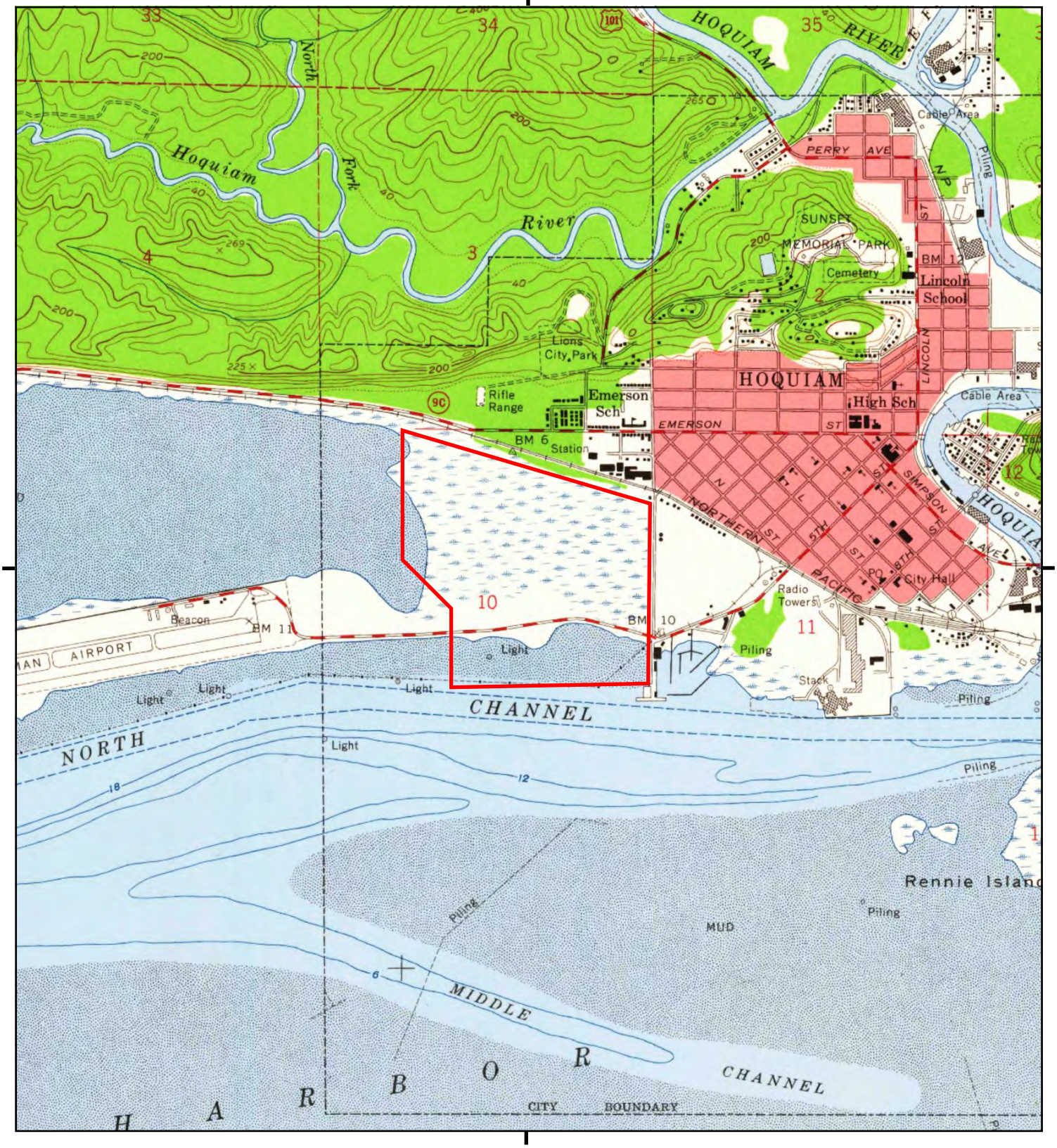
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Hoquiam, 1973, 7.5-minute

SITE NAME: Grays Harbor Facility A17.0202.00
ADDRESS: 100 Airport Way
Hoquiam, WA 98550
CLIENT: BergerAbam

N



This report includes information from the following map sheet(s).

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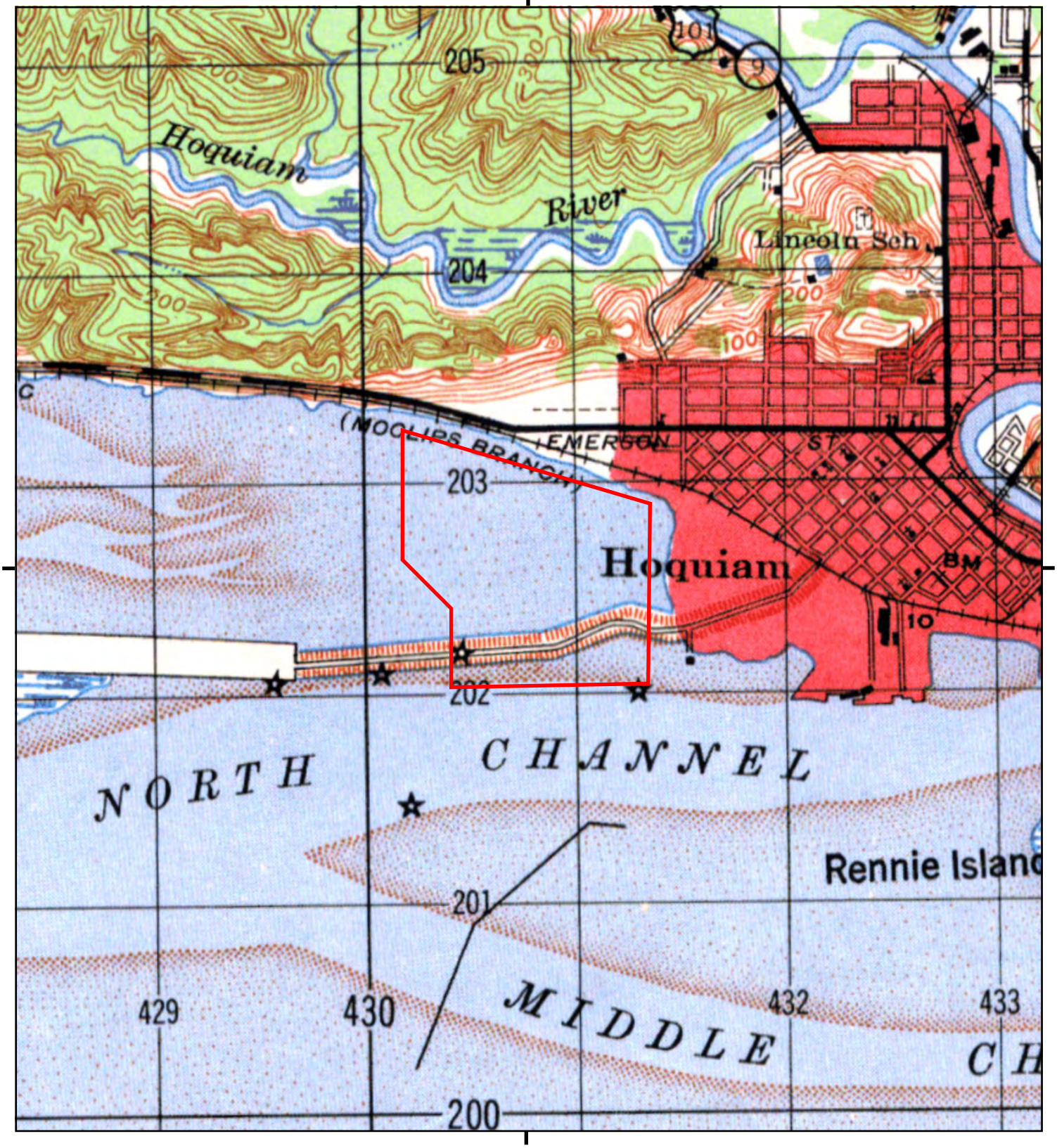
NW N NE
W E
SW S SE

TP, Hoquiam, 1957, 7.5-minute

SITE NAME: Grays Harbor Facility A17.0202.00
ADDRESS: 100 Airport Way
Hoquiam, WA 98550
CLIENT: BergerAbam

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, ABERDEEN, 1942, 15-minute

SITE NAME: Grays Harbor Facility A17.0202.00
ADDRESS: 100 Airport Way
Hoquiam, WA 98550
CLIENT: BergerAbam

N

Appendix G
City Directory

Grays Harbor Facility A17.0202.00
100 Airport Way
Hoquiam, WA 98550

Inquiry Number: 4904768.5
April 12, 2017

The EDR-City Directory Image Report

Environmental Data Resources Inc
6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2013	☑	☐	Cole Information Services
2008	☐	☐	Cole Information Services
2003	☐	☐	Cole Information Services
1999	☑	☐	Cole Information Services
1995	☑	☐	Cole Information Services
1992	☐	☐	Cole Information Services
1988	☑	☑	Polk's City Directory
1984	☑	☐	Polk's City Directory
1979	☐	☐	Polk's City Directory
1974	☐	☐	Polk's City Directory
1969	☐	☐	Polk's City Directory
1966	☐	☐	Polk's City Directory
1963	☐	☐	Polk's City Directory
1956	☐	☐	Polk's City Directory

RECORD SOURCES

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FINDINGS

TARGET PROPERTY STREET

100 Airport Way
Hoquiam, WA 98550

Year	*CD Image*	*Source*	
AIRPORT WAY			
2013	pg A1	Cole Information Services	
2008	-	Cole Information Services	Target and Adjoining not listed in Source
2003	-	Cole Information Services	Target and Adjoining not listed in Source
1999	pg A2	Cole Information Services	
1995	pg A3	Cole Information Services	
1992	-	Cole Information Services	Target and Adjoining not listed in Source
1988	pg A4	Polk's City Directory	
1984	pg A6	Polk's City Directory	
1979	-	Polk's City Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1969	-	Polk's City Directory	Street not listed in Source
1966	-	Polk's City Directory	Street not listed in Source
1963	-	Polk's City Directory	Street not listed in Source
1956	-	Polk's City Directory	Street not listed in Source

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
PAULSON RD			
2013	-	Cole Information Services	Target and Adjoining not listed in Source
2008	-	Cole Information Services	Target and Adjoining not listed in Source
2003	-	Cole Information Services	Target and Adjoining not listed in Source
1999	-	Cole Information Services	Target and Adjoining not listed in Source
1995	-	Cole Information Services	Target and Adjoining not listed in Source
1992	-	Cole Information Services	Target and Adjoining not listed in Source
1988	pg. A5	Polk's City Directory	
1984	-	Polk's City Directory	Target and Adjoining not listed in Source
1979	-	Polk's City Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1969	-	Polk's City Directory	Street not listed in Source
1966	-	Polk's City Directory	Street not listed in Source
1963	-	Polk's City Directory	Street not listed in Source
1956	-	Polk's City Directory	Street not listed in Source

City Directory Images

Target Street	Cross Street	Source
✓	-	Cole Information Services

AIRPORT WAY 2013

100	DAHLSTROM LUMBER CO
1000	US GOVTFISH & WILDLIFE GRAYS HARBOR
1380	PORT OF GRAYS HARBOR AIRPORT AT BOWE
1450	FLYING FAT BOY

Target Street	Cross Street	Source
✓	-	Cole Information Services

AIRPORT WAY 1999

100 DAHLSTROM LUMBER COMPANY

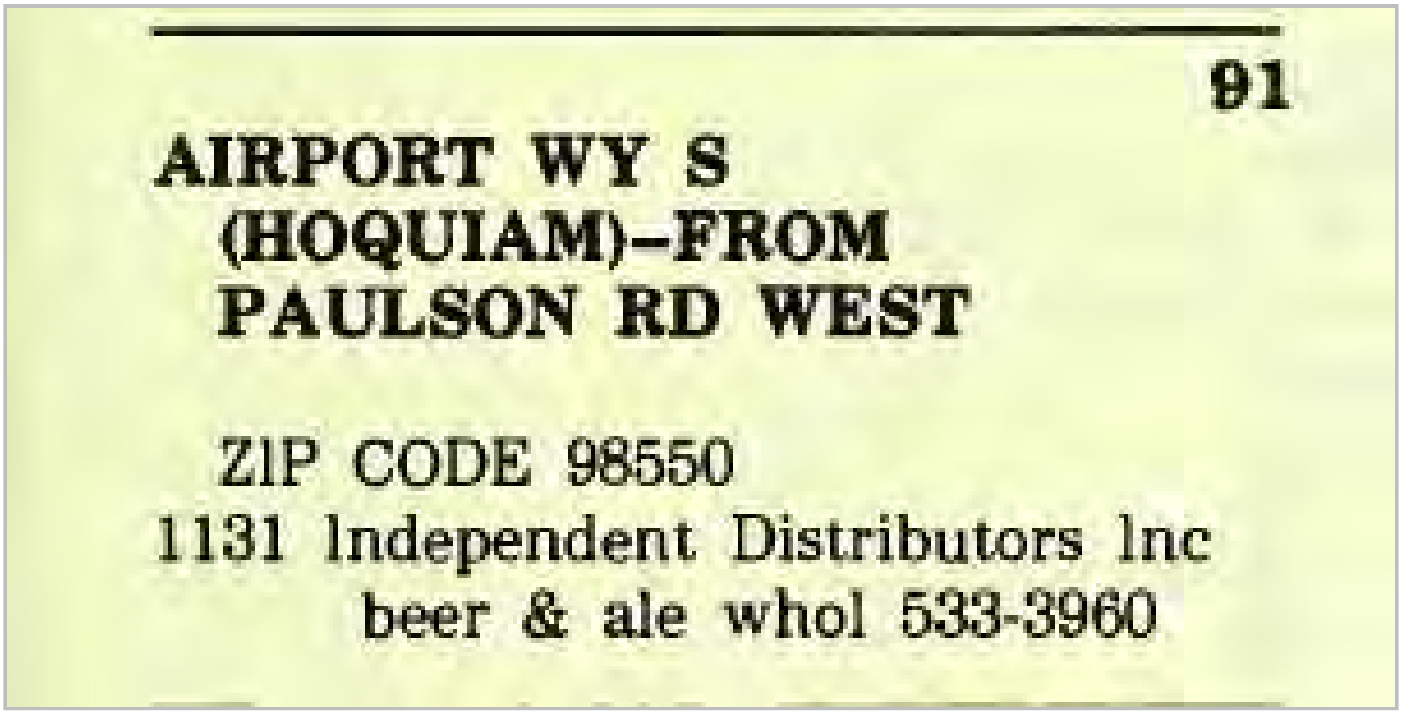
Target Street	Cross Street	Source
✓	-	Cole Information Services

AIRPORT WAY 1995

616 GRAYS HARBOR SORTING YARD

Target Street	Cross Street	Source
✓	-	Polk's City Directory

AIRPORT WAY 1988



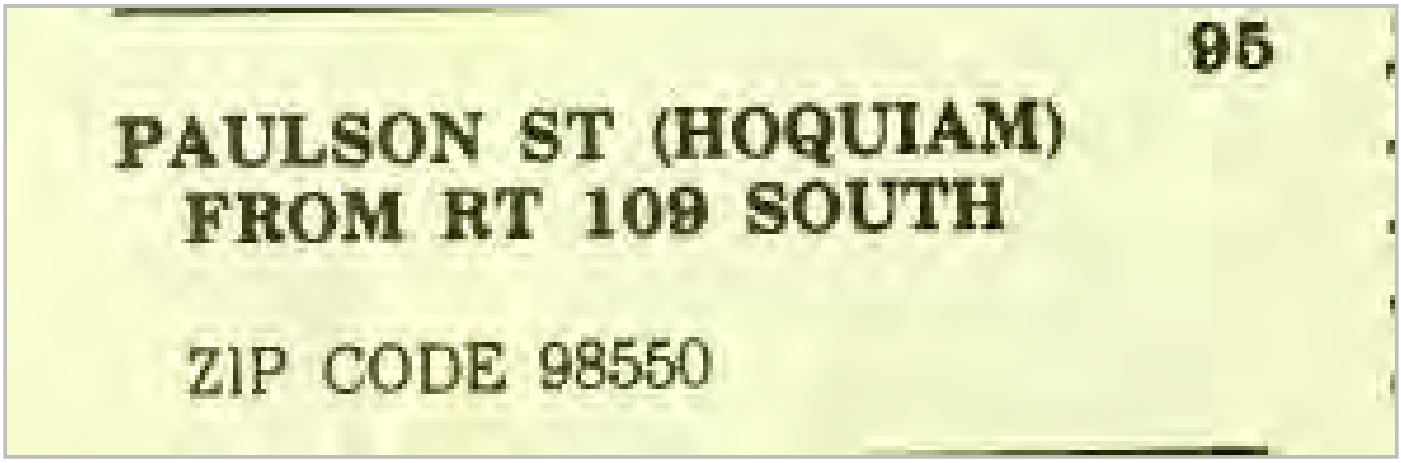
91

AIRPORT WY S
(HOQUIAM)–FROM
PAULSON RD WEST

ZIP CODE 98550
1131 Independent Distributors Inc
beer & ale whol 533-3960

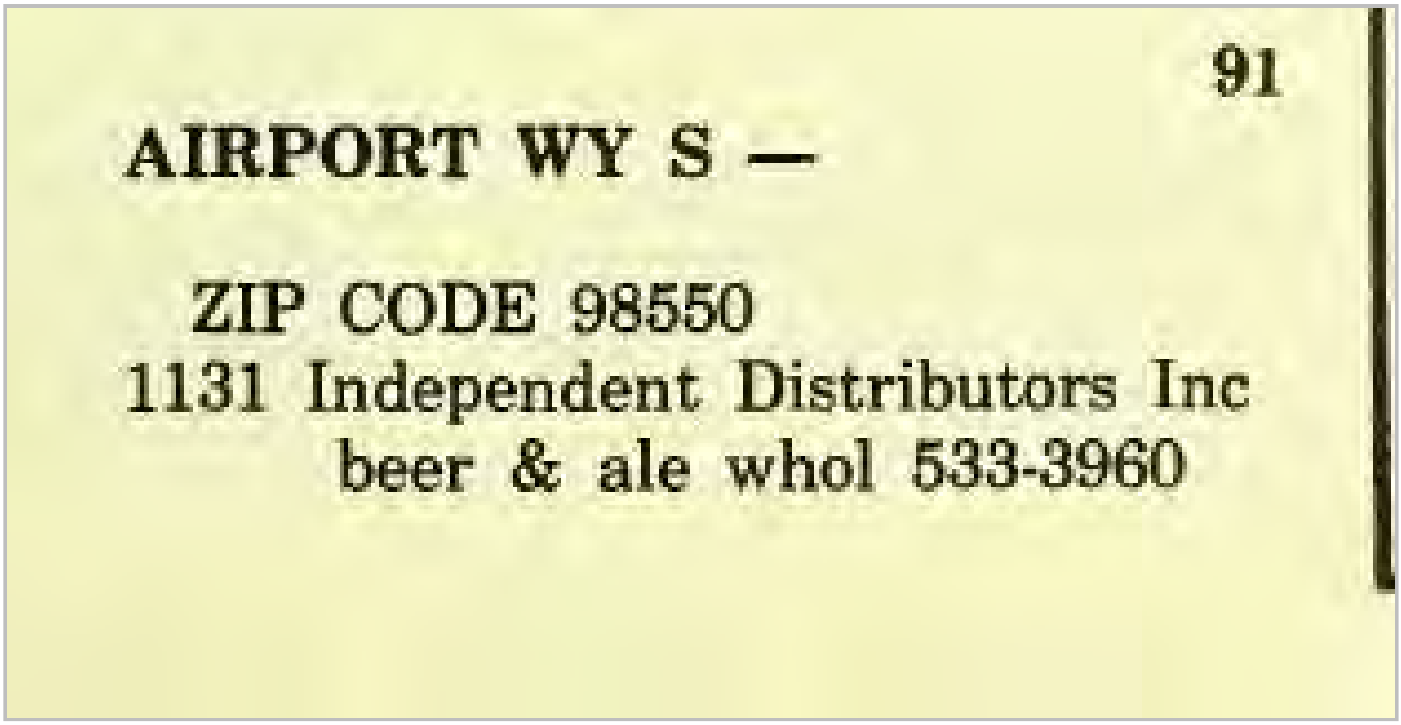
Target Street	Cross Street	Source
-	✓	Polk's City Directory

PAULSON RD 1988



Target Street	Cross Street	Source
✓	-	Polk's City Directory

AIRPORT WAY 1984



91

AIRPORT WY S —

ZIP CODE 98550
1131 Independent Distributors Inc
beer & ale whol 533-3960

Appendix H
City of Hoquiam Permits

Department of Public Services
Phone: 360-249-4222
Fax: 360-249-3203

100 West Broadway; Suite 31
Montesano, Washington 98563
www.co.grays-harbor.wa.us

GRAYS HARBOR COUNTY

STATE OF WASHINGTON

SOLID WASTE DISPOSAL PERMIT

Issued in accordance with the provisions of WAC 173-350-410 and County Ordinance 2004-1

Date of Issuance: 01 January 2017 Expiration Date: 31 December 2017

Permit 14IN-2017
Inert Landfill

FACILITY
400 Blk-South Adams Street
Parcel # 056401000600

OWNER
Enterprises International, Inc.
PO Box 293
Hoquiam, WA 98550

OPERATOR
City of Hoquiam
Chris McMullen
609 8th Street
Hoquiam, WA 98550
360-532-5700 ext. 236

THIS PERMIT IS THE PROPERTY OF THE GRAYS HARBOR COUNTY ENVIRONMENTAL HEALTH DIVISION AND MAY BE SUSPENDED OR REVOKED, AFTER AN OPPORTUNITY FOR A HEARING, UPON VIOLATION BY THE HOLDER ON ANY OF THE RULES AND REGULATIONS APPLICABLE HERETO. THIS PERMIT IS NOT TRANSFERABLE AND MUST BE RENEWED ANNUALLY.

JEFF NELSON - DIRECTOR OF ENVIRONMENTAL HEALTH

1-13-2017
(DATE)

GRAYS HARBOR COUNTY ENVIRONMENTAL HEALTH
SPECIFIC PERMIT CONDITIONS
HOQUIAM INERT LANDFILL
14IN-2017

1) Expires December 31, 2017. Issued by Grays Harbor County Environmental Health.

2) A Compliance Schedule has been included with these Permit Conditions which addresses date requirements of these Permit Conditions. Failure to meet the completion dates of the Compliance Schedule may result in penalties, fees and/or other requirements. Any changes to the completion date must be approved in writing (email) by Environmental Health.

3) Permit holder will follow the approved Plan of Operation, last updated on June 16, 2016. Additional updates may be required by GHC Environmental Health and should be completed for any substantial change in operation.
   i) The plan of operation should be reviewed annually with revisions made as needed. If any revisions are made, an up to date version shall be submitted to Environmental Health within 30 days of revision.

4) Site access is to be restricted.

5) Activities at this site shall be in compliance with WAC 173-350-410.

6) Only inert waste, meeting criteria of WAC 173-350-990, may be accepted. Concrete should be limited to cured pieces of structurally significant size. Smaller pieces of concrete and dust increases the chances of surfaces water contamination, likely by pH.

7) An annual report will be submitted to the Environmental Health Department by April 1st of each year for the previous year's activities. It must include the following information:
   a) Name and address of the facility.
   b) Calendar year covered by the report.
   c) Annual quantity, in tons or volumes, in cubic yards, and estimated in-place density in pounds per cubic yard or recycled material handled and by type of material available.
   d) A copy of the annual report should also be submitted to the Department of Ecology.

8) The footprint, or square footage covered by inert waste, may not expand until it is shown to Grays Harbor County Environmental Health, in writing, that the site and activities meet the standards set forth in WAC 173-350-040. More specifically, it must not have a negative impact on wetlands or surface water.
   a) This perimeter has been marked by steel fence posts. These marking posted shall be maintained and replaced if needed.

GRAYS HARBOR COUNTY ENVIRONMENTAL HEALTH

SOLID WASTE GENERAL PERMIT CONDITIONS

1. TERMS PERTAINING TO SOLID WASTE USED IN THIS PERMIT SHALL BE AS DEFINED IN WAC 173-350-100.

2. ALL CONDITIONS OF THIS PERMIT SHALL BE BINDING UPON, AND PERMITTEE SHALL BE RESPONSIBLE FOR ALL ACTS AND OMISSIONS OF ALL CONTRACTORS AND AGENTS OF THE PERMITTEE FOR THE TERM OF THE PERMIT AND POST-CLOSURE PERIOD OF THE SITE.

3. ALL OWNERS AND OPERATORS SHALL MEET THE PERFORMANCE STANDARDS OF WAC 173-350-040.

4. THE DISPOSAL SITE OPERATION SHALL BE IN COMPLIANCE WITH WAC 173-350, SPECIFIC CONDITIONS OF THIS PERMIT AND THE LOCAL SOLID WASTE PLAN. IN ANY CONFLICT BETWEEN LOCAL AND STATE REGULATIONS, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

5. ANY DULY AUTHORIZED OFFICER, EMPLOYEE, OR REPRESENTATIVE OF THE HEALTH OFFICER OF GRAYS HARBOR COUNTY OR HIS DESIGNEE HAVING JURISDICTION MAY ENTER AND INSPECT ANY PROPERTY, PREMISES, OR PLACE AT ANY REASONABLE TIME FOR THE PURPOSE OF DETERMINING COMPLIANCE WITH ORDINANCE 2004-1 AND OTHER APPLICABLE RULES AND REGULATIONS.

6. THE DIRECT DISCHARGE OF LEACHATE OR LEACHATE CONTAMINATED STORM WATER TO GROUND WATER AND/OR SURFACE WATER IS STRICTLY PROHIBITED.

7. THIS PERMIT IS SUBJECT TO SUSPENSION OR REVOCATION IF THE GRAYS HARBOR COUNTY PUBLIC SERVICES FINDS:
   A. THAT IT WAS PROCURED BY MISREPRESENTATION OF ANY MATERIAL FACTOR BY LACK OF FULL DISCLOSURE IN THE APPLICATION FOR A PERMIT.
   B. THAT THERE HAS BEEN A VIOLATION OF ANY OF THE CONDITIONS CONTAINED HEREIN.
   C. THAT THERE HAS BEEN A SIGNIFICANT CHANGE IN QUANTITY OR CHARACTER OF SOLID WASTE OR METHOD OF DISPOSAL.

8. THIS PERMIT OR COPY THEREOF SHALL BE DISPLAYED WHERE IT CAN BE READILY REFERRED TO BY OPERATING PERSONNEL.

9. THIS PERMIT MAY BE AMENDED BY THE GRAYS HARBOR COUNTY PUBLIC SERVICES. AMENDMENTS SHALL BE MADE IN WRITING AND BECOME SPECIFIC CONDITIONS OF THE PERMIT.

10. THE PERMITTEE IS AUTHORIZED TO CONTINUE ALL ACTIVITIES ALLOWED UNDER THE CURRENT PERMIT IF GRAYS HARBOR COUNTY PUBLIC SERVICES HAS NOT RENDERED A DECISION ON RENEWAL BY THE CURRENT PERMIT'S EXPIRATION DATE UNTIL A NEW PERMIT IS ISSUED.

11. IN THE EVENT A STATE OF EMERGENCY IS DECLARED OR AN IMMINENT RISK TO PUBLIC HEALTH EXISTS, GRAYS HARBOR COUNTY PUBLIC SERVICES MAY TEMPORARILY SUSPEND OR WAIVE PERMIT PROVISION OR OPERATIONAL CONDITIONS, OR IMPOSE ADDITIONAL PERMIT PROVISION OR OPERATIONAL CONDITIONS FOR SUCH PERIOD DEEMED NECESSARY IN THE SOLE DISCRETION OF THE LOCAL HEALTH OFFICER OR HIS/HER DESIGNEE.

Grays Harbor County Environmental Health

SOLID WASTE FACILITY COMPLIANCE SCHEDULE

HOQUIAM INERT LANDFILL

2017

Required Completion Date	Obligation	Date(s) Completed
January 31, 2017	Pay Solid Waste Permit fee	
January 31, 2017	Sign, Date and Return Solid Waste Permit Renewal Application to GHC Environmental Health	
April 1, 2017	Submit Annual Report to GHC Environmental Health and ECY Waste 2 Resources	
On-Going	Inspections (4) and Maintenance	

BEFORE THE SHORELINE ADMINISTRATOR FOR THE CITY OF HOQUIAM

Alissa Thurman, Shoreline Administrator

RE: City of Hoquiam
Wastewater Lagoon Fill Project

Case No. : SMA 09-13

Shoreline Substantial Development Permit

FINDINGS OF FACT AND CONCLUSIONS OF LAW OF THE SHORELINE ADMINISTRATOR

INTRODUCTION

EXHIBITS

All exhibits as adopted are listed below and are incorporated herein by reference.

Exhibit 1: Joint Aquatic Resources Permit Application Form (JARPA) Dated December 28, 2009

Exhibit 2: SEPA Checklist dated December 28, 2009

Exhibit 3: Threshold SEPA Determination as published by the City of Hoquiam on December 31, 2009

Exhibit 4: Critical Areas Review – Technical Memorandum dated June 2, 2009

.

FINDINGS OF FACT

Procedural:

1. Application. The applicant filed an application for Shoreline Substantial Development with the City of Hoquiam on December 28, 2009. The City will act as SEPA lead agency for permits required under the Shoreline Management Act and local Shoreline Master Programs.

A SEPA Determination of Nonsignificance was issued by Brian Shay, City Administrator and SEPA Responsible Official on December 31, 2009. The public comment period on the Determination of Nonsignificance ended on January 14, 2010.

Substantive:

2. Location: The proposed project would be located on County Assessors tax Parcel Nos. 056401100100, 056401000301, and 056401000201 within the City of Hoquiam in Section 1 Township 17 North, Range 10 West of the Willamette Meridian adjacent to Grays Harbor.

3. Current Use. The site is currently used as a Municipal Sanitary Sewer Treatment and storage lagoon owned and operated by the City of Hoquiam

4. Proposed use. A portion (approximately 20 acres) of the treatment plant lagoon is being de-commissioned by a prior permitting process. The area will be reclaimed as part of this current permitting process by filling the de-commissioned portion of the lagoon with clean fill material so that the site can be available for future use options yet to be identified.

5. Surrounding Uses. Adjacent property uses include the Port of Grays Harbor Airport (Bowerman Field) to the north and west of the facility, industrial to the east, and Grays Harbor to the south. The project is within the northerly margin Chehalis River and is immediately adjacent and north of the federally authorized navigation channel.

6. Potential Impacts.

- A Spill Prevention, Control and Countermeasures (SPCC) Plan shall be developed and implemented to minimize the risk of water pollution from spills of liquid products. Spill prevention equipment must be installed or otherwise available on the site during all periods of construction and operations on or adjacent to the site. The applicant shall ensure that all personnel involved with construction or site operations receive adequate training in liquid materials handling and safety procedures.
- A Stormwater Management Plan consistent with the terms and conditions of the most current Ecology Stormwater Manual for Western Washington to control stormwater flows during and after construction will be developed and implemented at the beginning of the project.
- An Erosion Control Plan will be developed and implemented prior to construction and will be maintained until such time as any erosion on the site has been abated in accordance with the Best Management Practice guidelines.

7. Waterbody. The Chehalis River at the project location is on the State's 303(d) List of impaired waterbodies as a Category 2 water for pH and temperature. Category 2 waters do not require development of Total Maximum Daily Load (TMDL) limitations at this time.

8. Wetlands. No material would be placed in or removed from wetlands or associated wetland buffers.

9. Structures. No structures will be constructed as a result of this proposal. Earth fill will be placed in the de-commissioned portion of the lagoon.

11. Excavation/Dredging. No Excavating/Dredging will result from this project.

12. Timeline. Construction is proposed to begin sometime in late 2010

13. Shoreline Designation. The subject property is classified as Urban Environment.

14. SEPA Environmental Checklist. A SEPA Environmental Checklist was prepared by the City of Hoquiam on December 28, 2009. The City acted as lead agency for SEPA

review of this application and issued a Threshold Determination of Nonsignificance on December 31, 2009, and the public comment period concluded on January 14, 2010.

15. Floodplain Impacts. None of the proposed work is within the floodplain and no impacts to the floodplain will occur as a result of this project.

16. Critical Areas. A Critical Areas review has been conducted pursuant to HMC 11.06.060 resulting in a Critical Areas Report. The report found that the proposed project will be conducted in a location and manner as not to have any effects on critical areas as defined by HMC 11.06.030.

17. Grays Harbor Estuary Management Plan. The project as proposed is consistent with the planning goals and objectives of the GHEMP. All work proposed will be conducted on the upland in what is classified as "Urban Development" within Area 5 of Management Unit 12.

18. Public Benefit of Proposal. The proposed activities are consistent with the applicable laws and regulations for the project area. Proper management of the wastewater treatment facility is in the public interest. Decommissioning of a portion of the facility for eventual reuse of the site for development purposes will benefit the general public.

CONCLUSIONS OF LAW

Procedural:

1. Authority of Shoreline Administrator. HMC 11.04.180(5)(b) provides that the Shoreline Administrator shall evaluate the application and collect all relevant data and communications from persons and agencies wishing to express views on the application during a thirty (30) day review period. HMC 11.04.180 (5)(c) requires the Shoreline Administrator to issue a final decision in written form at the end of this review period.

Substantive:

2. Applicable HMC Criteria and Application. Chapter 11.04 of the Hoquiam Municipal Code governs the criteria for shoreline substantial development permits. The applicable criteria are included below and are applied via Conclusion of Law:

HMC 11.04.180(1), Permits. HMC 11.04.180(1) requires that permits be obtained for "substantial development" HMC11.04.030(2) defines "substantial development" as development in which the total cost or fair market value exceeds five thousand dollars. The applicant has submitted a complete application for a Shoreline Substantial Development Permit to the City of Hoquiam. Therefore this criterion is satisfied.

HMC 11.04.060, Siting Regulations. HMC 11.04.060(2)(m) designates "public utilities" as a Permitted Shoreline Use. The proposed improvements at the Wastewater Treatment Lagoon would be classified as "public utilities" Therefore, this criterion is satisfied.

HMC 11.04.080, Earth Changing Regulations. HMC 11.04.080(2) specifies that protection from siltation and erosion shall be provided for all earth changing acts. The applicant has stated that all work performed as a result of this project will occur above the MLLW. While some "earth changing" will occur as the result of this project no filling will occur outside the existing dike system or below MLLW. All City permits relating to this project will be conditioned so that they will require applicant compliance with all other applicable state and federal regulations and permit conditions.

HMC 11.04.100, Restoration of shoreline areas – defined. HMC 11.04.110 defines "restoration of shoreline areas" as "returning the area to its natural state, or cleaning up the area to remove litter, debris, abandoned structures, and pilings to present a neat and tidy appearance." The latter definition applies to the proposed project. In order to satisfy the criterion, the applicant shall be required to remove all litter and construction debris from the shoreline area at the completion of project construction and equipment installation.

HMC 11.06.030, Compliance with Critical Areas Protection. HMC 11.06.030 Requires that "all public and private land uses in the City of Hoquiam shall comply with the requirements of this Article as a condition to any project permit application granted under Titles 9, 10, or 11 of the Hoquiam Municipal Code."

HMC 11.06.040, Exempt Activities in Critical Areas. HMC 11.06.040 allows for certain "uses or activities within a critical area or critical area buffer are exempt from the requirements of this Article to the extent that they are not prohibited by other state or federal laws and do not degrade the critical area." Sub-part (d) of the Article defines "Repair and maintenance of existing public roads, bridges and sewer, water, and storm water facilities" as being among the allowed activities.

HMC 11.06.060, Technical Assessments. HMC 11.06.060 requires that each project proposal occurring in an area potentially having critical areas present on or near the project site conduct a critical areas assessment to determine if the proposal will affect any critical area or critical area buffer. "It shall be the responsibility of the applicant to provide the City with appropriate technical assessments and reports prepared by a qualified expert, if necessary, to fulfill the requirements of an application for a project permit review or threshold decision under Titles 9, 10, or 11 of the Hoquiam City Code or any other city, state or federal laws."

Grays Harbor Estuary Management Plan. The Grays Harbor Estuary Management Plan as incorporated into the City of Hoquiam Municipal Code in January of 1986. The goal of the Plan provides that "there are three policy levels in the Grays Harbor Estuary Management Plan. The first level is a single, broad policy called the Estuary Management Goal. The goal sets forth the concept of balance in development and preservation of the estuary (see section entitled Plan Concepts). The goal, which says in part that "The Grays Harbor estuary will be managed for multiple uses ……."
The area occupied by the City of Hoquiam wastewater treatment plant is within Area 5 of Management Unit 12 of the Plan. Area 5 is defined as an area of Urban Development.

3. Applicable WAC Provisions: WAC 173-27-140 and WAC 173-27-150 specifically apply to this project. All provisions identified in this Conclusions of Law are quoted and applied below.

WAC 173-27-140, Review Criteria for All Development, WAC 173-27-150 and Review Criteria for Substantial Development Permits contain criteria that apply to this proposal. They are summarized as follows:

WAC 173-27-140, Review Criteria for All Development:

> *(1) No authorization to undertake use or development on shorelines of the state shall be granted by the local government unless upon review the use or development is determined to be consistent with the policy and provisions of the Shoreline Management Act and the master program.*

WAC 173-27-150, Review Criteria for Substantial Development Permits:

> *(A) A substantial development permit shall be granted only when the development proposed is consistent with:*
> *(a) The policies and procedures of the act;*
> *(b) The provisions of this regulation; and*
> (c) *The applicable master program adopted or approved for the area.*

4. WAC 173-27-140 and WAC 173-27-150 Compliance: The "policies and procedures of the act" referenced above have already been addressed in the procedures used to review the subject shoreline substantial development permit application. These procedures are fully compliant with state and local regulations. Likewise, the proposed project has been deemed to be consistent with the "policy and provisions of the Shoreline Management Act and the master program." Local master program compliance is established in HMC 11.04.010, in which the 'Grays Harbor Estuary Plan" dated January 1986, is adopted as an amendment to the Hoquiam Shoreline Management ordinance.

5. Shoreline Substantial Development Application Complies with All Required Criteria: The proposed development complies with all required criteria for issuance of a Shoreline Substantial Development Permit. The proposed project complies with and is consistent with the policies of the Hoquiam Municipal Code and state shoreline management regulations.

DECISION

Based on the documents and exhibits submitted into the record and the previously made Findings of Fact and Conclusions of Law, The Shoreline Substantial Development Permit requested by the applicant is hereby **APPROVED,** subject to the following conditions:

1. The applicant and its contractor(s) shall develop and follow a Spill Prevention and Countermeasures (SPCC) plan to minimize the risk of water pollution from spills of liquid products. Spill prevention equipment shall be readily available on site during all periods of project construction and site operations.

The applicant shall ensure that all personnel involved with liquid transfer or use receive adequate training in liquid materials handling and safety procedures.

2. Prior to construction the applicant and its contractor must develop approved Stormwater Management and Erosion Control Plans consistent with the requirements of the Ecology 2005 Stormwater Control Manual for Western Washington.

3. The applicant shall obtain and comply with all other applicable permits and authorizations resulting from this proposal including, but not necessarily limited to, compliance requirements of the City of Hoquiam Building Official, the City Fire Chief, City Police Chief, the City water, sewer and street Departments.

4. The applicant and its contractor(s) shall comply with all other applicable federal, state, and local regulations not otherwise specifically identified herein.

5. The applicant shall adhere to all other applicable policies and regulations of the City of Hoquiam Shoreline Management Master Program, Grays Harbor County Estuary Management Plan and City of Hoquiam Municipal Code, including but limited to review and protection of Critical Areas that are not specifically identified herein.

Dated this 8th day of February, 2010

_____

Alissa Thurman,
City of Hoquiam Shoreline Administrator

Appeal and Reconsideration

This is a final decision that may be appealed to the hearings board. A complete file on the documents pertaining to this case is available for review at the City of Hoquiam. The procedures for appeal of this decision are governed by HMC 11.04.220. If you wish to request an appeal, you are encouraged to reference HMC 11.04.220 quickly, since a written appeal to the hearings board is due within thirty (30) calendar days of the issuance of this decision.

City of Hoquiam
Planning and Building Division
609 8th St. Hoquiam, WA 98550-3522
Tel: 360-532-5700 ext. 211, Fax: 360-538-0938
Website: www.cityofhoquiam.com

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write, "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." **IN ADDITION**, complete the **SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D)**.

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

	OFFICE USE ONLY
1. Project Title: **City of Hoquiam Sewer Lagoon Modifications**	
2. Applicant: **City of Hoquiam**	
3. Address and Phone: **City of Hoquiam Public Works** **609 8th Street** **Hoquiam, WA 98550** **(360) 532-5700 x 243** **Contact: Brian Shay, City Administrator**	
4. Date checklist prepared: **December 16, 2009**	
5. Agency requiring checklist: **City of Hoquiam**	

6. Proposed timing or schedule: **Lagoon fill placement will occur starting in 2010 based on availability of the supply of fill material.**	**OFFICE USE ONLY**
7. Plans for future additions, expansion, or further activity. If yes, explain. **The City has decommissioned approximately half of the existing lagoon, with the remaining half servicing ongoing treatment operations. In the long term, the City plans to construct a waste water treatment facility to allow decommissioning and closing of the lagoon altogether. Filling or the decommissioned half of the lagoon is the intent of this proposal. The fill will be contained within the dike system and will be placed in a manner that will not cause adverse impacts in the area.**	
8. List other environmental information you know about related to this proposal: **A Critical Area Report, dated March 27, 2008 was prepared in support of the Critical Area Review of the decommissioning project by the City of Hoquiam. That CAR is adopted by reference for the fill application and is attached hereto.** **Other previous studies conducted by/for the City of the facilities and project area include:** • **2004 Geotechnical Report for the City of Hoquiam Waterline Crossing, Sewer line Crossing and UV Disinfection Improvements Project (CH2M Hill, November 2004)** • **Geotechnical Report, Wastewater Treatment Facility Biosolids Lagoon Project, Hoquiam, Washington, Shannon and Wilson, 2008** • **Biosolids Sampling Plan, HDR/Tenelco, May 2008, Amended October 2008.**	
9. List other pending applications or approvals: **The project will require the following additional approvals:** - **City of Hoquiam Shoreline permit** - **City of Hoquiam Critical Area Review verification** - **Ecology coverage under General NPDES Construction Stormwater Permit** - **City of Hoquiam Grading and Filling Permit**	
10. Give detailed description of proposal including off-site improvements, utility requirements, land and building dimensions, etc. (attach site plan): **Decommissioning of the Biosolids Lagoon was identified as a long term objective through the City's General Sewer plan (2008). In order to meet future waste water treatment needs, and given that the existing treatment plant is reaching the end of its useful life and that the present site is desired for other uses, the City has identified a preferred approach to construct a new wastewater treatment plant at a new location.** **This project is the next step towards achieving long term decommissioning of the entire lagoon. The empty portion of the lagoon, approximately 20 acres, will be filled to ground level in 1 foot lifts and compacted.** **(See attached: Site Plan – Sheet C-1, HDR submittal for "Wastewater Treatment Plant Lagoon Modification and Biosolids Management – April 2009")**	**OFFICE USE ONLY**
1. Location of proposal including section, township, range and parcel number. **056401100100, 056401000301, 056401000201** **The project is located at 1000 Moon Island Road in Township 17N, Range 10W, Section 1, directly east of Bowerman Field. (See attached: Vicinity Map – Cover Sheet, HDR submittal for "Wastewater Treatment Plant Lagoon Modification and Biosolids Management – April 2009")**	

B. ENVIRONMENTAL ELEMENTS

	OFFICE USE ONLY
1. EARTH	
a. General description of the site (circle one): flat, rolling, hilly, steep slopes, mountainous, other. **The Hoquiam lagoon is on a flat, graded area bounded by sloped sides. Port Property to the Northeast of the lagoon is also flat and graded.**	

b. What is the steepest slope on site (approximate percent slope)? **Side slopes on the lagoon boundary are approximately 2:1, or 33%. Port Property to the Northeast of the lagoon is flat and graded.**	**OFFICE USE ONLY**
c. What general types of soils are found on the site (e.g., clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. **The Hoquiam lagoon is located on artificial fill from historical dredge spoils. Subsurface conditions below the lagoon consist of a sequence of very soft to soft organic silt, soft to stiff clay and silt, and medium dense silty sand. In our subsurface explorations, the organic silt was 6 to 17 feet thick, the silt/clay was 6 to 14 feet thick, and the silty sand was encountered to the termination depth of the explorations. The depth of water in the lagoon ranges from 4 to 6 feet.**	
d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. **The lagoon is constructed on historic fill. The area has been identified as one of high susceptibility to liquefaction in the event of a seismic event.**	
e. Describe purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill. **Fill will be imported in order fill the lagoon to ground level. Approximately 325,000 cy of imported material can be placed in the eastern portion of the lagoon. The Source will be determined prior to construction; fill content and placement will be required to meet geotechnical design standards.** **A gravel road way will be laid down from the defined staging area to the bottom of the lagoon. The staging area is not expected to require any grading prior to use.**	
f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. **A minimal amount of erosion could occur as a result of activities related to placing fill in the lagoon. Erosion would be due to moving heavy vehicles around the site, and would mostly be captured within the lagoon dike system.**	
g. About what percent of the site will be covered with impervious surfaces after project construction (e.g., asphalt or buildings)? **Filling of the lagoon will not create additional impervious surfaces. The staging area is already graveled, and additional impervious surfaces will not be created for its use.**	

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Appropriate site management techniques will be taken to reduce erosion potential on site including but not limited to:

- **Using, as necessary, erosion control methods to protect side and backslopes, and minimizing and the discharge of sediment to surface water leaving the construction site as soon as rough grading is complete.**
- **Implementing structural practices such as diversion swales, terraces, straw bales, silt fences, berms, storm drain inlet protection, rocked outlet protection, sediment traps and temporary basins.**
- **Implementing vegetative practices such as temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffers, hydroseeding, anchored erosion control blankets, sodding, vegetated swales or a combination of these methods.**
- **Providing the construction sites with graveled or rocked access entrance and exit drives and parking areas to reduce the tracking of sediment onto public or private roads.**
- **Stockpiled materials would be managed according to the requirements of the Western Washington Stormwater Manual.**

Erosion and other impacts to earth resulting from construction of the berm would be contained within the existing lagoon boundaries.

2. AIR

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Construction of the associated filling of the lagoon may result in dust emissions typical of a construction site using heavy equipment.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None are known to exist.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Measures would be applied as needed to prevent particulate matter from becoming airborne. Measures may include frequent road cleaning, planting vegetative groundcover, application of water or application of chemical dust suppressants.

No burning will be conducted on-site. If disposal by burning is necessary, the construction contractor would make arrangements for an off-site burning area and would conform to all applicable agency regulations.

OFFICE USE ONLY

3. WATER

a. Surface:

1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. **The Grays Harbor estuary is approximately 200-300 feet south of the southern lagoon border.** **Wetlands (as identified by the National Wetlands Inventory) are located north west and west of the project site, at Bowerman Field and at the National Wildlife Refuge property.** **Vegetated areas located along the northwest perimeter of the lagoon (adjacent to Airport Way), and located in the southwest corner of the Port of Grays Harbor Property (also adjacent to Airport Way) exhibit wetland characteristics.** **An 8-10 foot swale is located along the western portion of the Port of Grays Harbor Property, adjacent to Airport Way. This swale is marked as an F-Type stream by DNR but appears to be better characterized as a wetland.**	
2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. **The southeast corner of the Hoquiam lagoon is located within 200 ft of the shoreline of the Grays Harbor estuary. Existing roads that will be used to access and used to place fill in the lagoon are also located within 200 feet of the shoreline.** **No construction will occur in any of the potential wetlands identified adjacent to the lagoon or to Port of Grays Harbor Property.** **No construction will occur in the swale/wetland located east of Airport Way on Port of Grays Harbor Property.**	
3. Estimate amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. **None.**	
4. Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. **No.**	
5. Does the proposal lie within a 100-year flood plain? If so, note location on the site plan. **The Hoquiam Lagoon is not located within a 100-yr floodplain. The staging area is also not located within a 100-yr floodplain.**	
6. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. **Construction related with the filling of the lagoon will not involve discharges of waste materials to surface waters. Future operation of the filled lagoon will continue to be in compliance with the City's NPDES discharge permit for this facility.**	
b. Ground:	
1. Will groundwater be withdrawn, or will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. **No. Filling of the lagoon, will not require ground water withdrawals or discharges.**	**OFFICE USE ONLY**

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (e.g., domestic sewage; industrial, containing the following chemicals _____; agricultural, etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. **No, none is anticipated.**	
c. Water Runoff (including storm water):	
1. Describe the source of runoff, (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. **The Hoquiam WWTP has a stormwater drainage system. Existing surrounding roads (perimeter around lagoon, and adjacent public roads) will be used for construction access. Any other stormwater will drain into the existing lagoon.**	
2. Could waste materials enter ground or surface waters? If so, generally describe. **Spills related to typical construction activities could occur, including leaks from construction machinery or from storage of fuels and other fluids.**	
3. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: **A spill prevention countermeasures and control plan will be implemented for activities associated with the filling of the lagoon, and for use of the staging area.**	

4. PLANTS

a. Check or circle types of vegetation found on the site:

___ deciduous tree: alder, maple, aspen, other _____
___ evergreen tree: fir, cedar, pine, other _____
___ shrubs
_X_ grass (domestic landscaping)
___ pasture
___ crop or grain
___ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other _____
___ water plants: water lily, eel grass, milfoil, other _____
___ other types of vegetation

The Hoquiam lagoon facility is a large artificially ponded area. It is also surrounded with grass areas that are maintained by regular mowing. Some portions of these grass exhibit characteristics of wetlands.

The staging area is located on land covered in quarry spalls and previously used for log storage. Weeds and grasses may be present.

OFFICE USE ONLY

b. What kind and amount of vegetation will be removed or altered?

No vegetation other than grasses will be removed during the fill placement.

Weeds and grasses may be cleared from the staging area prior to its use.

c. List threatened or endangered species known to be on or near the site.

No threatened or endangered plant species are known to occur on or near the site.

d. Proposed landscaping, use of native plants, or measures to preserve or enhance vegetation on the site, if any:

No additional landscaping will be provided for the lagoon as existing vegetation will not be removed.

5. ANIMALS

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver, other _____
fish: bass, salmon, trout, herring, shellfish, other

The Hoquiam WWTP is located approximately 1.5 miles from the Grays Harbor National Wildlife refuge. The WWTP is also located immediately south east of Bowerman Basin. Many types of shore birds and water fowl use the refuge and the Grays Harbor Estuary at different times of the year, and especially during their summer and fall migrations.

b. List any threatened or endangered species known to be on or near the site. **Although a number of federally listed species are known to exist within Grays Harbor County (see http://www.fws.gov/westwafwo/speciesmap/GRAYS%20HARBOR.html), conditions in vicinity of the lagoon only support the presence of the following listed and threatened species:** **Bull trout: known to migrate through the Grays Harbor estuary and into the Chehalis River Green sturgeon: may be present in Grays Harbor, possibly using estuarine habitat as forage areas during the summer. The portion of the Grays Harbor estuary in the vicinity of where the Hoquiam lagoon is located is not considered habitat for spawning green sturgeon. However, green sturgeon may migrate past the Terminal during foraging.** **Marbled Murrelet: recent consultations with the Corps (Casey Ehorn, Corps Project Manager, personal communication, 7/29/08) have indicated that the closest recorded accounts of murrelets are located approximately 12,000 to 20,000 feet west of the lagoon. Critical habitat for this species has not been designated in the vicinity of the lagoon.** **State listed species occurring within the vicinity of the lagoon include: Peregrine falcon, Purple martin, bald eagle (PHS Database, January 8, 2009). Of these species, only the peregrine falcon is associated directly with the area in vicinity of the lagoon – the lagoon is located within peregrine falcon wintering habitat where they use intertidal mudflats with shorebird concentrations.** **The lagoon has also been identified as located in the vicinity of PHS polygons for shorebird concentrations and waterfowl concentrations.**	**OFFICE USE ONLY**
c. Is site part of a migration route? If so, explain. **The Grays Harbor estuary is one of four major staging areas for shorebirds in North America. The lagoon is not viable habitat for these birds, but the adjacent habitat in the tidal flats is of importance to migrating shorebirds.**	
d. Proposed measures to preserve or enhance wildlife, if any: **The lagoon is a previously permitted municipal sewage and wastewater treatment facility and is not intended to serve as a wildlife habitat. Some birds can be observed on the lagoon at some times of the year, but they do not use the lagoon for breeding, nesting or rearing their young. They may use the lagoon for resting or feeding. The construction activities would take place during the late summer and fall, when concentrations of shorebirds and waterfowl are lower.**	
6. ENERGY AND NATURAL RESOURCES	
a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. **No energy at the site is required for lagoon filling activities except for fuel to power construction equipment. No electrical source will be provided by the City for this project.**	
b. Would your project affect the potential use of solar energy on adjacent properties? If so, generally describe. **No.**	

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: **As part of good construction site practices, vehicle idling will be kept to a minimum.**	**OFFICE USE ONLY**
7. ENVIRONMENTAL HEALTH	
a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. **Activities associated with lagoon filling will involve typical products used for construction and fuel for vehicles. A spill prevention countermeasure and control plan will also be implemented for activities associated with filling of the lagoon, and for use of the staging area.**	
1. Describe special emergency services that might be required. **Special emergency services are not anticipated for the construction related to the filling of the lagoon.**	
2. Proposed measures to reduce or control environmental health hazards, if any. **An oil and hazardous substance spill prevention countermeasure and control plan will be implemented for activities associated with placing fill in the lagoon, and for use of the staging area.**	
b. Noise	
1. What types of noise exist in the area which may affect your project (e.g., traffic, equipment operation, other)? **Noise in the area will only have a minimal affect on this proposal. Bowerman Field is adjacent to the treatment plant and aircraft will be periodically taking off and landing there during project construction. To the south and east, Port of Grays Harbor Terminal 3 is an active marine terminal.**	
2. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (e.g., traffic, construction, operation, other)? Indicate what hours noise would come from the site. **Lagoon filling activities will have heavy equipment noise associated with the placement and compaction of the fill.**	
3. Proposed measures to reduce or control noise impacts, if any: **No specific measures are proposed. Certain specialized mufflers that can significantly reduce exhaust noise are available for loaders and other on site equipment that may be employed.**	**OFFICE USE ONLY**
8. LAND AND SHORELINE USE	

a. What is the current use of site and adjacent properties? **This section of the lagoon is currently bermed off and empty. The treatment plant is adjacent to Bowerman field, which is west of the treatment plant. To the north and east of the plant is industrial land owned by the Port of Grays Harbor. The shoreline environment designation is Urban Environment.** **The proposed staging area is located on land that was previously used for log handling.**	
b. Has the site been used for agriculture? If so, describe. **Neither the treatment plant area nor the staging area has been used for agriculture to the best knowledge of the City of Hoquiam.**	
c. Describe any structures on site. **Structures at the plant site include an administrative/operations building and various other process buildings and tanks that house treatment units. In addition, a medium-intensity approach lighting system for Bowerman Field is located in the lagoon.** **Two small buildings are located in vicinity of the staging area.**	
d. Will any structures be demolished? If so, what? **No demolition will take place for activities associated with the filling of the lagoon, or equipment staging.**	
e. What is the current zoning classification of the site? **The lagoon and staging area are located in an area that is zoned industrial.**	
f. What is the current comprehensive plan designation of the site? **Industrial**	
g. If applicable, what is the current shoreline master program designation of the site? **Hoquiam lagoon and staging area: Urban Environment**	
h. Has any part of the site been classified as an "environmentally sensitive" area? **The following critical areas have been designated in the vicinity of the Hoquiam Lagoon and staging area: geologically hazardous area (for high susceptibility to liquefaction), fish and wildlife critical habitat area (Grays Harbor shoreline and areas associated with PHS species).**	
i. Approximately how many people would reside or work in the completed project? **The number of employees at the City of Hoquiam WWTP will not increase as a result of the lagoon filling**.	
j. Approximately how many people would the completed project displace? **None.**	**OFFICE USE ONLY**
k. Proposed measures to avoid or reduce displacement impacts, if any: **None are proposed.**	

l. Proposed measures to ensure proposal is compatible with existing and projected land uses and plans, if any: **The lagoon area remaining will continue to be used for waste water treatment until the lagoon is completely decommissioned in the future. Use of the staging area will be temporary, for the duration of project activities. At the conclusion of project construction, the staging are will revert to existing uses.**	
9. HOUSING	
a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. **This project does not involve or otherwise impact housing.**	
b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **None.**	
c. Proposed measures to reduce or control housing impacts, if any: **Not applicable.**	
10. AESTHETICS	
a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? **The finished fill in the lagoon will be approximately 0.5 feet above surrounding ground elevation to allow for settlement.**	
b. What views in the immediate vicinity would be altered or obstructed? **No views will be permanently altered or obstructed by the proposed action.** **Because the nature of activities at the lagoon will not change, the lagoon is not expected to alter or obstruct views in this area.**	
c. Proposed measures to reduce or control aesthetics impacts, if any: **None are proposed.**	
11. LIGHT AND GLARE	
a. What type of light or glare will the proposal produce? What time of day would it mainly occur? **Construction activities during lagoon filling may produce light from equipment and trucks operating at the site. This will also be primarily a daytime activity. Once filled, light emissions from the lagoon will be similar to existing conditions.**	
b. Could light or glare from the finished project be a safety hazard or interfere with views? **No safety hazard is anticipated.**	**OFFICE USE ONLY**
c. What existing off-site sources of light or glare may affect your proposal? **None.**	
d. Proposed measures to reduce or control light and glare impacts, if any: **None are proposed at this time**	
12. RECREATION	

a. What designated and informal recreational opportunities are in the immediate vicinity?

The Grays Harbor National Wildlife Refuge is located approximately 1.5 miles west of the Hoquiam lagoon. The Grays Harbor airport is also located to the immediate west of the lagoon.

b. Would the proposed project displace any existing recreational uses? If so, describe.

Filling of the lagoon is not expected to displace or adversely effect recreational uses in the area.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No impacts are anticipated therefore no special measures are proposed. Activities at the lagoon site are not expected to adversely affect access to the refuge. The City is will work with the Grays Harbor Audubon Society to ensure minimal impacts to visitors during the main birding season.

13. HISTORIC AND CULTURAL PRESERVATION

a. Are there any places or objects listed on, or proposed for, national, state or local preservation registers known to be on or next to the site? If so, generally describe.

The location of the lagoon consists of a modern fill site. There are no places or objects listed on or proposed for national, state or local registers on or near the subject site.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific or cultural importance known to be on or next to the site.

The location of the lagoon consists of a modern fill site. There are no landmarks or evidence of historic, archeological, scientific or cultural importance.

c. Proposed measures to reduce or control impacts, if any:

Proposed mitigation measures are not anticipated as no impacts to this resource are not expected. If during the course of construction, evidence of deposits of historical or archaeological interests is found, work will be stopped in the area of the discovery. The resources discovered will not be disturbed, until a plan has been approved to address the discovery.

14. TRANSPORTATION

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

There are two access roads to the lagoon and staging area site: from east (and downtown Hoquiam) along 5th street, and from the north along Highway 109 and Paulson Road. Airport Way and Moon Island Road serve the site.

OFFICE USE ONLY

b. Is site currently served by public transit? If not, what is the approximate distance to nearest transit stop?

The treatment plant is not served by public transit at this time.

c. How many parking spaces would the completed project have? How many would the project eliminate?

The treatment plant already has approximately 10 parking spaces and no additional parking will be provided as part of this project.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private). **The proposal will not require the construction of any new access roads or street. Improvements to existing roads are not expected.**	
e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. **The lagoon is in the vicinity of the Bowerman Field airport. Approach lights located in the lagoon will not be affected by the construction activities.** **The project does not expect to use air, rail or water transportation. Fill materials will be trucked to the site**.	
f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur. **Up to 25 trucks per day are anticipated. This truck traffic is expected to peak in July through November during the year of activity.** **Once the lagoon is filled, traffic will return to pre-existing levels.**	
g. Proposed measures to reduce or control transportation impacts, if any: **It is common good practice to select major roads and truck routes, and avoid transportation through neighborhood areas as much as possible. The City will evaluate using both access routes to the lagoon in the event that high recreational traffic on Paulson Road coincides with construction activities.**	
15. PUBLIC SERVICES	
a. Would the project result in an increased need for public services (e.g., fire protection, police protection, health care, schools, other)? If so, generally describe. **No increased need is anticipated.**	
b. Proposed measures to reduce or control direct impacts on public services, if any. **None are proposed at this time.**	
16. UTILITIES	
a. Circle utilities available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other. **The WWTP already has electricity, water, refuse service, telephone, and sanitary sewer service. Additional utilities are not anticipated for the filling of the lagoon.**	**OFFICE USE ONLY**
b. Describe the utilities that are proposed for the project, the utility providing the service and the general construction activities on the site or in the immediate vicinity which might be needed. **No additional utilities are proposed at the WWTP.**	

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:_____

Date Submitted:_____

Appendix I
SLR Subsurface Investigation Report

DRAFT – FOR CLIENT REVIEW

February 27, 2015
Project 101.01057.00001

Mr. Andrew Madderson
Chief Financial Officer
Enterprises International, Inc.
PO Box 293
Hoquiam, Washington 98550

Re: Subsurface Investigation Report
Former Lamb-Grays Harbor Company Facility
Blaine Street and Firman Avenue
Hoquiam, Washington

Dear Andrew,

SLR International Corporation (SLR) has prepared this report for Enterprises International, Inc. (EI) to present the results of subsurface investigation activities that were performed at the former Lamb-Grays Harbor Company (LGH) facility (subject property) in Hoquiam, Washington. The subject property is located southwest of the intersection of Blaine Street and Firman Avenue (see Figure 1). The primary objectives of the investigation were to assess the potential presence of petroleum hydrocarbons, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and metals in soil and groundwater at the areas of concern identified by the Washington State Department of Ecology (Ecology) during a Site Hazard Assessment performed in August 2013.

SITE DESCRIPTION AND BACKGROUND

The subject property is located within an industrial, commercial, and residential area of Hoquiam, and is bounded by Firman Avenue and residential properties to the north, Adams Street and residential and commercial properties to the east, undeveloped property and a lumber mill to the south, and undeveloped land and a lumber mill to the west. A west-northwest to east-southeast trending rail line roughly bisects the subject (see Figures 1 and 2).

The subject property is comprised of several industrially or commercially zoned Grays Harbor County tax parcels encompassing approximately 80 acres. The parcels are currently owned by subsidiaries of EI (Firman Street Hoquiam, LLC; Emerson Street Hoquiam, LLC; or Adams Street Hoquiam, LLC). The facility is developed with several buildings including a former foundry, machine shop, assembly shop, pattern shop, maintenance, repair, and operation (MRO) shop, paint shop, and fabrication shop, and other ancillary outbuildings that comprise over 190,000 square feet of interior space. Oval Strapping, Inc. (a subsidiary of EI) currently leases the former foundry building for the manufacture of plastic strapping to band cardboard boxes, and steel bailing wire. Westland Distillery (a subsidiary of EI) leases the former fabrication shop for the storage of spirits. The other buildings on the subject property are currently vacant.

The exterior ground surface at the subject property is generally covered with asphalt-paved parking areas to the north of the railroad tracks, and areas consisting mostly of vegetation (mainly grass) and gravel to the south of the tracks.

Historically, the subject property was primarily used as a foundry and machine shop since at least 1910 through approximately 2001. LGH formerly designed, manufactured, and sold machinery specifically used in the pulp and paper industry.

PREVIOUS ENVIRONMENTAL ASSESSMENTS

In 2000, Clayton Group Services, Inc. (Clayton) conducted a Phase I Environmental Site Assessment (ESA) of the subject property. The findings of the Phase I ESA identified the following seven recognized environmental conditions (Clayton, 2000):

- Historical research indicated that the subject property has been used as a foundry and a machine shop since at least 1910. Many of the subject property buildings originally had dirt or earthen floors. Subsurface contamination is often associated with this type of industry.
- Three underground storage tanks (USTs) were formerly located at the subject property. Two of the tanks (a 5,000-gallon tank that stored bunker C heating oil and a 2,000-gallon tank that stored leaded gasoline) were removed, and one of the tanks (a 500-gallon tank that stored diesel) was closed in place. The approximate reported locations of the former USTs are shown on Figure 2 of this report. Closure reports or sampling data obtained during the tank closure activities were not obtained, and it is unknown if products formerly stored in the USTs have impacted soil and groundwater in the area of the tanks.
- One partially buried storage tank was located in an aboveground concrete block shed at the subject property. The shed could not be accessed to view the tank or the area around the tank. The tank was reportedly installed during the 1940s and was used to store diesel fuel. The shed and tank was removed by EI in 2014. The former location of the tank is shown on Figure 2 of this report.
- Several floor drains were observed throughout the property. Oily staining was observed within some of the drains, and oily staining was observed on the floor adjacent to some of the drains. The drains reportedly discharge to either the sanitary sewer or a storm water drainage ditch that parallels Adams Street.
- Numerous chemical storage areas were observed at the subject property. Chemicals were most often stored in 55 gallon drums and 5-gallon buckets that were typically placed on wooden pallets or racks, but rarely within secondary containment systems. Chemicals were stored on concrete floors with obvious holes and cracks and on dirt floors.
- Two areas of waste sandblast sand dumped directly on the ground surface were observed. Waste sandblast sand may contain pieces of metals or paints.
- Several pole-mounted and wall-mounted transformers were observed at the property.

During May 2005, Ecology visited the subject property to conduct an initial site investigation. During the visit Ecology staff inspected the Machine Shop, Paint Shop, Welding Shop, and the Sandblast Shop, and collected five samples from the property for laboratory analysis. Three samples of waste sandblast sand were collected at locations of "waste sand dumping areas" located in the southwest portion of the subject property, reportedly at locations to the west of the Sandblast Shop and the Paint shop. The location of the former Paint Sop and the Former Sand Blast Shop are shown on Figure 2. The samples were analyzed for toxicity characteristic leachate procedure (TCLP) metals by EPA Methods 1311/245.1/3010/3010, hydrocarbon identification (HCID) by Ecology Method HCID, and heavy oil-range organics (HO) by Ecology Method NWTPH-Dx. The analytical results showed that the samples did not contain TCLP metals above Ecology's dangerous waste thresholds, or HO at concentrations above Ecology's Model Toxics Control Act (MTCA) Method A soil cleanup level [2,000 milligrams per kilogram (mg/kg)]. Additionally, Ecology collected two samples of "cooling oils" that were observed in large concrete "pits" located under large machines in the Machine Shop. The samples were analyzed for HCID by Ecology Method HCID, and HO by Ecology Method NWTPH-Dx. The results showed that one sample contained primarily pure lube oil, and the other sample contained an HO concentration of 168,200 mg/kg (Ecology, 2005).

In 2013, Ecology completed a Site Hazard Assessment of the subject property. Based on Ecology's assessment, a hazard ranking of 1 was assigned to the property (on a scale of 1 to 5, with 1 representing the highest relative risk)(Ecology, 2013). The hazard ranking is an estimation of the potential threat to human health and/or the environment, relative to all other Washington State sites assessed at the time. Ecology's SHA ranking was reportedly due to concerns regarding potential impacts to soil and groundwater within the vicinity of the former USTs and aboveground storage tank (AST) at the subject property. Assessment activities and samples were not collected at the time of tank closure activities in the 1980s. Additionally, Ecology had concerns with previous reports and photographs of surface staining in a portion of the MRO Shop that has dirt floors. With the exception of a small area in the southern portion of the building, the MRO shop currently has a concrete floors.

SUBSURFACE INVESTIGATION ACTIVITIES

To meet the objectives of the subsurface investigation, a total of 6 soil borings were drilled and sampled at the subject property on January 28, 2015. Prior to drilling, the locations of the underground utilities in the vicinity of the borings were identified by using both the public one-call locating service and Applied Professional Services, Inc. of North Bend, Washington, a private utility locating company. ESN Northwest (ESN) of Olympia, Washington drilled and sampled the borings by using a limited-access, direct-push, hydraulic probe rig, under the direction of an SLR geologist.

The soil borings were located at the former diesel AST (designated SB-1), the former diesel UST (designated SB-2), inside the MRO shop near the reported location of the former cyanide quenching tank (designated SB-3), inside the MRO shop within the dirt floor area with the worst evidence of staining (designated SB-4), at the reported location of the former leaded gasoline UST

(designated SB-5), and at the former location of the former heating oil UST (designated SB-6). The approximate locations of the soil borings are shown on Figures 2 and 3.

Soil borings SB-1 through SB-5 were advanced to depths of approximately 10 feet below ground surface (bgs). Soil boring SB-6 was advanced to a depth of approximately 9.5 feet bgs, where drilling refusal was encountered. Groundwater was observed in soil borings SB-1, SB-4, and SB-5 at depths of approximately 4, 4, and 4.5 feet bgs, respectively. Groundwater was not observed in borings SB-2, SB-3, or SB-6; however, during the investigation activities, contractors retained by EI were performing construction dewatering in the vicinity of boring SB-6.

During the advancement of borings SB-1 through SB-6, soil samples were collected on a continuous basis by using an acetate-lined direct-push drill rod; however, limited soil was recovered during sampling at boring SB-4. The samples were logged in accordance with the Unified Soils Classification System (USCS). SLR screened each sample for the potential presence of petroleum hydrocarbons and VOCs by using visual appearance, odors, and photoionization detector (PID) readings. Based on the field screening results, the soil sample from each boring, collected at a depth above the groundwater table, that exhibited the greatest evidence of contamination was submitted to OnSite Environmental, Inc. (OnSite) in Redmond, Washington, for analysis. If there was no field evidence of contamination in a boring, the sample collected from immediately above the groundwater table was submitted for analysis. The soil borings logs are presented in Appendix A.

The soil samples collected from the borings (SB-1, SB-2, and SB-6) drilled near the former AST and USTs that reportedly contained diesel fuel or heating oil were analyzed for the following:

- Diesel-range organics (DRO) and HO by Ecology Method NWTPH-Dx (after silica gel cleanup)
- Polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270D SIM
- Benzene, toluene, ethylbenze, and xylenes (BTEX) by EPA Method 8260C

The soil sample collected from the boring (SB-4) drilled near the former UST that reportedly contained leaded gasoline was analyzed for the following:

- Gasoline-range organics (GRO) by Ecology Method NWTPH-Gx
- BTEX
- Lead by EPA Method 200.8

The soil samples collected from the borings (SB-3 and SB-4) drilled inside the MRO shop were analyzed for the following:

- GRO
- DRO and HO
- PAHs
- VOCs by EPA Method 8260C
- RCRA 8 Metals (arsenic, barium, cadmium, chromium, lead, selenium, and silver by EPA Method 200.8 and mercury by EPA Method 1631E)

The soil sample from the boring (SB-3) located near the former cyanide quenching tank was also analyzed for total cyanide by EPA Method 9010B.

To allow for assessment of the groundwater conditions, ESN temporarily completed the borings (SB-1, SB-4, and SB-5) in which groundwater was encountered as a groundwater monitoring well. Each well was constructed of 1-inch-diameter Schedule 40 PVC with either a 5 or 10-foot-long screen (0.010-inch wide slots) that intercepted the groundwater table. The temporary well construction details are shown on the soil boring logs in Appendix A. After installation of each well, SLR used a peristaltic pump with new tubing to sample the well. The bottom of the tubing was set at approximately one foot below the water table.

The groundwater sample collected from the well (SB-1) located near the former AST that reportedly contained diesel fuel was analyzed for the following:

- DRO and HO by Ecology Method NWTPH-Dx (after silica gel cleanup)
- PAHs by EPA Method 8270D SIM
- BTEX by EPA Method 8021B

The groundwater sample collected from the well (SB-5) located near the former UST that reportedly contained leaded gasoline was analyzed for the following:

- GRO by Ecology Method NWTPH-Gx
- BTEX
- Dissolved lead by EPA Method 200.8

The groundwater sample collected from the well (SB-4) located inside the MRO shop was analyzed for the following:

- GRO
- DRO and HO
- PAHs
- VOCs by EPA Method 8260C
- Dissolved RCRA 8 Metals (arsenic, barium, cadmium, chromium, lead, selenium, and silver by EPA Method 200.8 and mercury by EPA Method 1631E).

The groundwater samples collected for analysis of dissolved metals were filtered in the field by using an in-line 0.45 micron disposable filter. After collecting each groundwater sample, ESN removed the temporary well and filled the boring with hydrated bentonite chips to within 6 inches of the ground surface. The soil boring that were not temporarily completed as a well were also filled with hydrated bentonite chips to within 6 inches of the ground surface. ESN sealed each boring with either cold-patch asphalt or covered with gravel to match the existing ground surface.

The soil generated by the drilling activities and wastewater generated during the decontamination of the drilling and sampling equipment are temporarily stored inside the MRO shop in properly labeled 30-gallon drums, pending off-site disposal at an Ecology-approved facility.

RESULTS

The subsurface investigation results are summarized below:

- The soil encountered during the drilling activities generally consisted of silt or sandy silt with occasional gravel or gravelly sand. Groundwater was encountered in borings SB-1, SB-4, and SB-5 at depths between approximately 4.0 and 4.5 feet bgs.
- The soil samples from SB-1 (at 1.0 feet bgs), SB-2 (at 1.0 feet bgs), SB-3 (at 1.0 feet bgs), and SB-4 (at 0.5 feet bgs) contained DRO concentrations (32,000, 2,800, 2,300, and 35,000 mg/kg, respectively) that exceeded the MTCA Method A soil cleanup level (2,000 mg/kg).
- The soil samples from SB-1 (at 1.0 feet bgs), and SB-4 (at 0.5 feet bgs) contained HO concentrations (17,000 and 22,000 mg/kg, respectively) that exceeded the MTCA Method A soil cleanup level (2,000 mg/kg).
- The soil samples from SB-1 (at 1.0 feet bgs), SB-4 (at 0.5 feet bgs) and SB-6 (at 6.5 feet bgs) contained total carcinogenic PAH (cPAH) concentrations (0.15, 0.52, and 3.27 mg/kg, respectively) that exceeded the MTCA Method A soil cleanup level (0.1 mg/kg).
- The soil sample from SB-1 (at 1.0 feet bgs) contained a 1-methyl-naphthalene concentration (35 mg/kg), that exceeded the MTCA Method B soil cleanup level (34 mg/kg).
- The soil sample from SB-4 (at 0.5 feet bgs) contained a lead concentration (290 mg/kg) that exceeded the MTCA Method A soil cleanup level (250 mg/kg).
- The groundwater samples from SB-1 and SB-4 contained DRO concentrations [3,200, and 6,000 micrograms per liter (μg/L), respectively] that exceeded the MTCA Method A groundwater cleanup level (500 μg/L).
- The groundwater samples from SB-1 and SB-4 contained HO concentrations (1,700, and 3,600 μg/L, respectively) that exceeded the MTCA Method A groundwater cleanup level (500 μg/L).
- The groundwater samples from SB-4 and SB-5 contained GRO concentrations (930, and 1,700 μg/L, respectively) that exceeded the MTCA Method A groundwater cleanup level (800 μg/L).
- The groundwater sample from SB-1 contained a benzene concentration (6.6 μg/L) that exceeded the MTCA Method A groundwater cleanup level (5 μg/L).

- The groundwater sample from SB-4 contained a total cPAH concentration (0.18 μg/L) that exceeded the MTCA Method A groundwater cleanup level (0.1 μg/L).
- The groundwater samples from SB-1 and SB-4 contained 1-methyl-naphthalene concentrations (14 and 25 μg/L, respectively) that exceeded the MTCA Method B groundwater cleanup level (1.5 μg/L).

The soil and groundwater sample analytical results are summarized in Tables 1 through 8. The soil sample analytical results for petroleum hydrocarbons, total cPAHs, and lead are shown on Figures 4, 5, and 6, respectively. The groundwater analytical results for petroleum hydrocarbons, BTEX, and total cPAHs are shown on Figure 7. A copy of the laboratory report is presented in Appendix B.

CONCLUSIONS

In January 2015, SLR conducted subsurface investigation activities at the subject property to assess the potential presence of petroleum hydrocarbons, VOCs, PAHs, and metals in soil and groundwater at the areas of concern identified by Ecology during a Site Hazard Assessment in 2013. The investigation activities included the drilling and sampling of 6 soil borings, collecting soil samples from each of the borings for laboratory analysis, completing three of the borings (SB-1, SB-4, and SB-5) as temporary groundwater monitoring wells (where groundwater was encountered), and collecting groundwater samples from the temporary wells for laboratory analysis.

The soil sample analytical results showed the following:

- DRO and HO concentrations greater than the MTCA Method A cleanup level are present in the shallow soil near the former diesel AST, the diesel UST, and beneath the dirt floor area in the MRO Shop (see Figure 4).
- Total cPAH concentrations greater than the MTCA Method A cleanup levels are present in the shallow soil near the former diesel AST, near the former heating oil UST, and beneath the dirt floor area in the MRO Shop (see Figure 5).
- A lead concentration greater than the MTCA Method A cleanup level is present in the shallow soil beneath the dirt floor area in the MRO Shop.

Soil sample analytical and field screening results indicate that contamination is present in shallow soil (approximately 0 to 2 feet bgs) at borings SB-1, SB-2, SB-3, and SB-4. The impacted shallow soil is likely the result of historic spills to the ground surface near the former diesel AST, the former diesel UST, and at the dirt floor area in the MRO Shop. Deeper soil contamination may be present at SB-4 but there was no recovery in the samples below 0.8 feet bgs. The cPAH impacted soil at boring SB-6 is likely the result of a historic release from the former Bunker C heating oil UST.

Shallow groundwater was present in three borings (SB-1, SB-4, and SB-5) where larger grained soil (sand and/or gravel) was also observed. Sand and gravel was also present in boring SB-6; however, the lack of groundwater in this boring may have been the result of construction dewatering that was being conducted near SB-6 at the time of drilling. Based on observations during drilling, it appears that shallow perched groundwater is present in the larger grained shallow soils that have a higher permeability, and appears to be laterally discontinuous.

The groundwater sample analytical results showed the following:

- DRO, HO, and total cPAH concentrations greater than the MTCA Method A cleanup levels are present near the former diesel AST and beneath the dirt floor area in the MRO Shop (see Figure 7).
- GRO concentrations greater than the MTCA Method A cleanup level are present near the former leaded gasoline UST (see Figure 7).

SLR appreciates the opportunity to provide our services. If you have any questions or comments about this report, please contact Greg Lish at (425) 402-8800.

Sincerely,
SLR International Corporation

Gregory B. Lish, LG
Associate Geologist

Michael D. Staton, LG
Principal Geologist

Enc: Limitations
Tables 1 through 8
Figures 1 through 7
Appendix A - Soil Boring Logs
Appendix B - Laboratory Analytical Reports

REFERENCES

Clayton Group Services. 2000. Phase I Environmental Site Assessment, The Lamb-Grays Harbor Company & Oval Strapping, Inc., Blaine & Firman Streets, Hoquiam, Washington. December 7.

Washington State Department of Ecology. 2005. Initial Investigation Field Report, Enterprises International, Inc. (formerly Lamb-Grays Harbor), Blaine & Firman Street, Hoquiam, Washington, 98550. July 13.

Washington State Department of Ecology. 2013. Site Hazard Assessment, Worksheet 1, Summary Score Sheet, Lamb-Grays Harbor Co, Blaine & Firman Street, Hoquiam, Ecology Facility ID No. 97672932. August 19.

LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

TABLES

Table 1
Soil Sample Analytical Results - BTEX and Petroleum Hydrocarbons
Former Lamb-Grays Harbor Company Facility
Hoquiam, Washington

Soil Boring Number	Sample ID	Approx. Sample Depth (feet)	Date Collected	BTEX[a]				Petroleum Hydrocarbons		
				Benzene	Toluene	Ethylbenzene	Total Xylenes	Gasoline-Range Organics[b]	Diesel-Range Organics[c]	Heavy Oil-Range Organics[c]
MTCA Method A Cleanup Levels[d]				**0.03**	**6**	**7**	**9**	**100**	**2,000**	**2,000**
SB-1	SB-1-1.0	1.0	1/28/2015	<0.11	<0.56	<0.11	0.64	NA	**32,000**	**17,000[e]**
SB-2	SB-2-1.0	1.0	1/28/2015	<0.11	<0.54	<0.11	<0.33	NA	**2,800**	580
SB-3	SB-3-1.0	1.0	1/28/2015	<0.096	<0.48	<0.096	<0.286	<19	**2,300**	860[e]
SB-4	SB-4-0.5	0.5	1/28/2015	<0.094	<0.47	<0.094	3.9	<7.9	**35,000**	**22,000[e]**
SB-5	SB-5-4.0	4.0	1/28/2015	<0.0011	<0.0056	<0.0011	<0.0033	<7.0	NA	NA
SB-6	SB-6-6.5	6.5	1/28/2015	<0.0013	<0.0066	<0.0013	<0.0039	NA	67	280

Notes:

All values in milligrams per kilogram (mg/kg).

Values in bold represent concentrations above MTCA Method A Cleanup Levels.

TPH = total petroleum hydrocarbons

NA = not analyzed

[a] Analyzed by EPA Method 8260C.

[b] Analyzed by Ecology Method NWTPH-Gx.

[c] Analyzed by Ecology Method NWTPH-Dx, after silica gel cleanup.

[d] Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Table 740-1, Method A Soil Cleanup Levels for Unrestricec Land Uses.

[e] The laboratory report indicated that hydrocarbons in the diesel range impacted the heavy oil range result.

Table 2
Soil Sample Analytical Results - PAHs
Former Lamb-Grays Harbor Company Facility
Hoquiam, Washington

Soil Boring Number	Sample ID	Approx. Sample Depth (feet)	Date Collected	PAHs											cPAHs								
				1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)-perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)-pyrene	Benzo[a]-anthracene	Benzo(b)-fluoranthene	Benzo(j,k)-fluoranthene	Chrysene	Dibenzo(a,h)-anthracene	Indeno(1,2,3-cd)-pyrene	Total cPAHs (U=1/2 MRL)	Total cPAHs (U = 0)
MTCA Method A Cleanup Levels[c]				**34[d]**	**320[d]**	**4,800[d]**	**NV**	**24,000[d]**	**NV**	**3,200[d]**	**3,200[d]**	**5**	**NV**	**2,400[d]**	**0.1**	**1.37[d]**	**1.37[d]**	**1.37[d]**	**137[d]**	**0.137[d]**	**1.37[d]**	**0.1**	**0.1**
SB-1	SB-1-1.0	1.0	1/28/2015	**35**	61	0.32	0.80	0.90	0.087	0.70	0.69	3.9	15	2.5	**0.10**	0.17	0.081	0.082	0.33	<0.054	0.069	**0.146**	**0.144**
SB-2	SB-2-1.0	1.0	1/28/2015	2.2	4.0	0.10	0.073	0.025	<0.011	0.015	0.42	0.51	0.27	0.058	<0.011	<0.021	<0.011	<0.011	0.036	<0.011	<0.011	0.009	0.0004
SB-3	SB-3-1.0	1.0	1/28/2015	0.62	0.97	0.11	0.045	0.018	0.017	0.034	0.28	0.15	0.28	0.046	0.012	0.027	0.023	0.010	0.034	<0.010	0.013	0.020	0.020
SB-4	SB-4-0.5	0.5	1/28/2015	13	26	0.65	0.63	0.71	0.34	0.95	4.8	4.1	8.4	1.4	**0.33**	0.71	0.37	0.31	1.2	**0.18**	0.23	**0.522**	**0.522**
SB-5	SB-5-4.0	4.0	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	SB-6-6.5	6.5	1/28/2015	0.049	0.12	0.080	<0.0094	0.045	2.1	0.96	<0.0094	0.089	0.27	1.3	**2.4**	**1.5**	**2.5**	**1.7**	1.7	**0.97**	**1.9**	**3.274**	**3.274**

Notes:

All values in milligrams per kilogram (mg/kg).

Values in bold represent concentrations above MTCA Method A or B Cleanup Levels.

PAHs = polycyclic aromatic hydrocarbons.

cPAHs = carcinogenic polycyclic aromatic hydrocarbons.

NA = not analyzed.

[b] Analyzed by EPA Method 8720D SIM.

[c] Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Table 740-1, Method A Soil Cleanup Levels for Unrestriced Land Uses.

[d] Method B cleanup level used because Method A level is not established. Standard formula values, direct contact Method B soil cleanup levels as published on Ecology's Cleanup Level and Risk Calculations (CLARC) on-line database (February 2015).

Table 3
Soil Sample Analytical Results - Volatile Organic Compounds
Former Lamb-Grays Harbor Company Facility
Hoquiam, Washington

Soil Boring Number	Sample ID	Approx. Sample Depth (feet)	Date Collected	VOCs[a]									
				1,2,4-Trimethylbenzne	1,3,5-Trimethylbenzene	1,2,3-Trichlorobenzene	1,2,4-Tricholorobenzene	n-Butylbenzene	sec-Butylbenzene	Isopropylbenzene	p-Isopropyltoluene	Napthalene	n-Propylbenzene
MTCA Method A Cleanup Levels[b]				**NV**	**800[c]**	**NV**	**34[c]**	**4,000[c]**	**8,000[c]**	**NV**	**NV**	**5**	**8,000[c]**
SB-1	SB-1-1.0	1.0	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-2	SB-2-1.0	1.0	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3	SB-3-1.0	1.0	1/28/2015	0.59	<0.096	<0.096	<0.096	0.52	0.26	0.16	0.48	1.2	0.20
SB-4	SB-4-0.5	0.5	1/28/2015	11	3.2	0.23	0.99	3.0	1.2	0.64	2.2	<0.094	1.0
SB-5	SB-5-4.0	4.0	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6	SB-6-6.5	6.5	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

All values in milligrams per kilogram (mg/kg).

Values in bold represent concentrations above MTCA Method A or B Cleanup Levels.

VOCs = volatile organic compounds

NA = not analyzed

[a] Analyzed by EPA Method 8260C.

[b] Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Table 740-1, Method A Soil Cleanup Levels for Unrestriced Land Uses.

[c] Method B cleanup level used because Method A level is not established. Standard formula values, direct contact Method B soil cleanup levels as published on Ecology's Cleanup Level and Risk Calculations (CLARC) on-line database (February 2015).

Table 4
Soil Sample Analytical Results - Metals
Former Lamb-Grays Harbor Company Facility
Hoquiam, Washington

Soil Boring Number	Sample ID	Approx. Sample Depth (feet)	Date Collected	Metals[a]								
				Arsenic	Barium	Cadmium	Chromium	Cyanide[e]	Lead	Mercury	Selenium	Silver
MTCA Method A Cleanup Levels[b]				**20**	**16,000[c]**	**2.0**	**2,000[d]**	**48[d]**	**250**	**2.0**	**400[c]**	**400[c]**
SB-1	SB-1-1.0	1.0	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-2	SB-2-1.0	1.0	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3	SB-3-1.0	1.0	1/28/2015	<15	54	<0.75	49	11	160	<0.38	<15	<1.5
SB-4	SB-4-0.5	0.5	1/28/2015	<14	110	<0.70	89	NA	**290**	<0.35	<14	<1.4
SB-5	SB-5-4.0	4.0	1/28/2015	NA	NA	NA	NA	NA	66	NA	NA	NA
SB-6	SB-6-6.5	6.5	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

All values in milligrams per kilogram (mg/kg).

Values in bold represent concentrations above MTCA Method A or B Cleanup Levels.

NA = Not analyzed.

[a] Except for mercury, all metals analyzed by EPA Method 200.8. Mercury analyzed by EPA Method 1621E.

[b] Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Table 740-1, Method A Soil Cleanup Levels for Unrestricted Land Uses.

[c] Method B cleanup level used because Method A level is not established. Standard formula values, direct contact Method B soil cleanup levels as published on Ecology's Cleanup Level and Risk Calculations (CLARC) on-line database (February 2015).

[d] Based on Chromium III.

[e] Analyzed by EPA Method SW846 9012.

Table 5
Groundwater Sample Analytical Results - BTEX and Petroleum Hydrocarbons
Former Lamb-Grays Harbor Company Facility
Hoquiam, Washington

Soil Boring Number	Sample ID	Date Collected	BTEX[a]				Petroleum Hydrocarbons		
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Gasoline-Range Organics[b]	Diesel-Range Organics[c]	Heavy Oil-Range Organics[c]
MTCA Method A Cleanup Levels[d]			5	1,000	700	1,000	800	500	500
SB-1	SB-1-W	1/28/2015	**6.6**	57	16	106	NA	**3,200**[e]	**1,700**[f]
SB-4	SB-4-W	1/28/2015	1.6	19	4.0	30.7	**930**	**6,000**	**3,600**[f]
SB-5	SB-5-W	1/28/2015	4.7	26	10	39.8	**1,700**	NA	NA

Notes:

All values in micrograms per liter (µg/L).

Values in bold represent concentrations above MTCA Method A Cleanup Levels.

TPH = total petroleum hydrocarbons

NA = not analyzed

[a] Analyzed by EPA Method 8021B (SB-1 and SB-5) or 8260C (SB-4)

[b] Analyzed by Ecology Method NWTPH-Gx.

[c] Analyzed by Ecology Method NWTPH-Dx, after silica gel cleanup.

[d] Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Table 720-1, Method A Cleanup Levels for Groundwater.

[e] The laboratory report indicated that hydrocarbons in the gasoline range impacted the diesel range result.

[f] The laboratory report indicated that hydrocarbons in the diesel range impacted the heavy oil range result.

Table 6
Groundwater Sample Analytical Results - PAHs
Former Lamb-Grays Harbor Company Facility
Hoquiam, Washington

Soil Boring Number	Sample ID	Date Collected	PAHs[b]											cPAHs[b]								
			1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)-perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)-pyrene	Benzo[a]-anthracene	Benzo(b)-fluoranthene	Benzo(j,k)-fluoranthene	Chrysene	Dibenzo(a,h)-anthracene	Indeno(1,2,3-cd)-pyrene	Total cPAHs (U=1/2 MRL)	Total cPAHs (U = 0)
MTCA Method A Cleanup Levels[c]			**1.5[d]**	**32[d]**	**960[d]**	**NV**	**4,800[d]**	**NV**	**640[d]**	**640[d]**	**160**	**NV**	**480[d]**	**0.1**	**0.12[d]**	**0.12[d]**	**1.2[d]**	**12[d]**	**0.012[d]**	**0.12[d]**	**0.1**	**0.1**
SB-1	SB-1-W	1/28/2015	**14**	17	1.1	0.23	0.14	0.021	<0.10	1.9	4.7	1.0	0.32	0.025	0.020	0.011	0.012	0.045	**0.014**	0.015	0.033	0.033
SB-4	SB-4-W	1/28/2015	**25**	16	4.8	0.54	<0.51	0.17	<0.51	3.9	2.4	3.6	<0.51	**0.11**	**0.17**	**0.13**	0.070	0.22	**0.12**	**0.15**	**0.176**	**0.176**
SB-5	SB-5-W	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

All values in micrograms per liter (µg/L).

Values in bold represent concentrations above MTCA Method A or B Cleanup Levels.

PAHs = polycyclic aromatic hydrocarbons.

cPAHs = carcinogenic polycyclic aromatic hydrocarbons.

NA = not analyzed

[b] Analyzed by EPA Method 8720D SIM.

[c] Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Table 720-1, Method A Cleanup Levels for Groundwater.

[d] Method B cleanup level used because Method A level is not established. Standard formula values, direct contact Method B soil cleanup levels as published on Ecology's Cleanup Level and Risk Calculations (CLARC) on-line database (February 2015).

Table 7
Groundwater Sample Analytical Results - Volatile Organic Compounds
Former Lamb-Grays Harbor Company Facility
Hoquiam, Washington

Soil Boring Number	Sample ID	Date Collected	VOCs[a]									
			1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	Acetone	Isopropylbenzene	n-Propylbenzene	sec-Butylbenzene	p-Isopropyltoluene	Naphthalene
MTCA Method A Cleanup Levels[b]			**1.5[c]**	**NV**	**80[c]**	**720[c]**	**7,200[c]**	**NV**	**800[c]**	**800[c]**	**NV**	**160**
SB-1	SB-1-1.0	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	SB-4-0.5	1/28/2015	0.42	19.0	2.4	0.22	7.0	1.3	1.7	0.82	0.28	3.7
SB-5	SB-5-4.0	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

All values in micrograms per liter (µg/L).

VOCs = volatile organic compounds

NA = not analyzed

[a] Analyzed by EPA Method 8260C.

[b] Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Table 720-1, Method A Cleanup Levels for Groundwater.

[c] Method B cleanup level used because Method A level is not established. Standard formula values, direct contact Method B soil cleanup levels as published on Ecology's Cleanup Level and Risk Calculations (CLARC) on-line database (February 2015).

Table 8
Groundwater Sample Analytical Results - Metals
Former Lamb-Grays Harbor Company Facility
Hoquiam, Washington

Soil Boring Number	Sample ID	Date Collected	Dissolved Metals[a]							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
MTCA Method A Cleanup Levels[b]			**5**	**3,200[c]**	**5**	**24,000[c]**	**15**	**2.0**	**80[c]**	**80[c]**
SB-1	SB-1-W	1/28/2015	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	SB-4-W	1/28/2015	4.4	<28	<4.4	<11	4.8	<0.50	<5.6	<11
SB-5	SB-5-W	1/28/2015	NA	NA	NA	NA	3.8	NA	NA	NA

Notes:

All values in micrograms per liter (µg/L).

NA = Not analyzed.

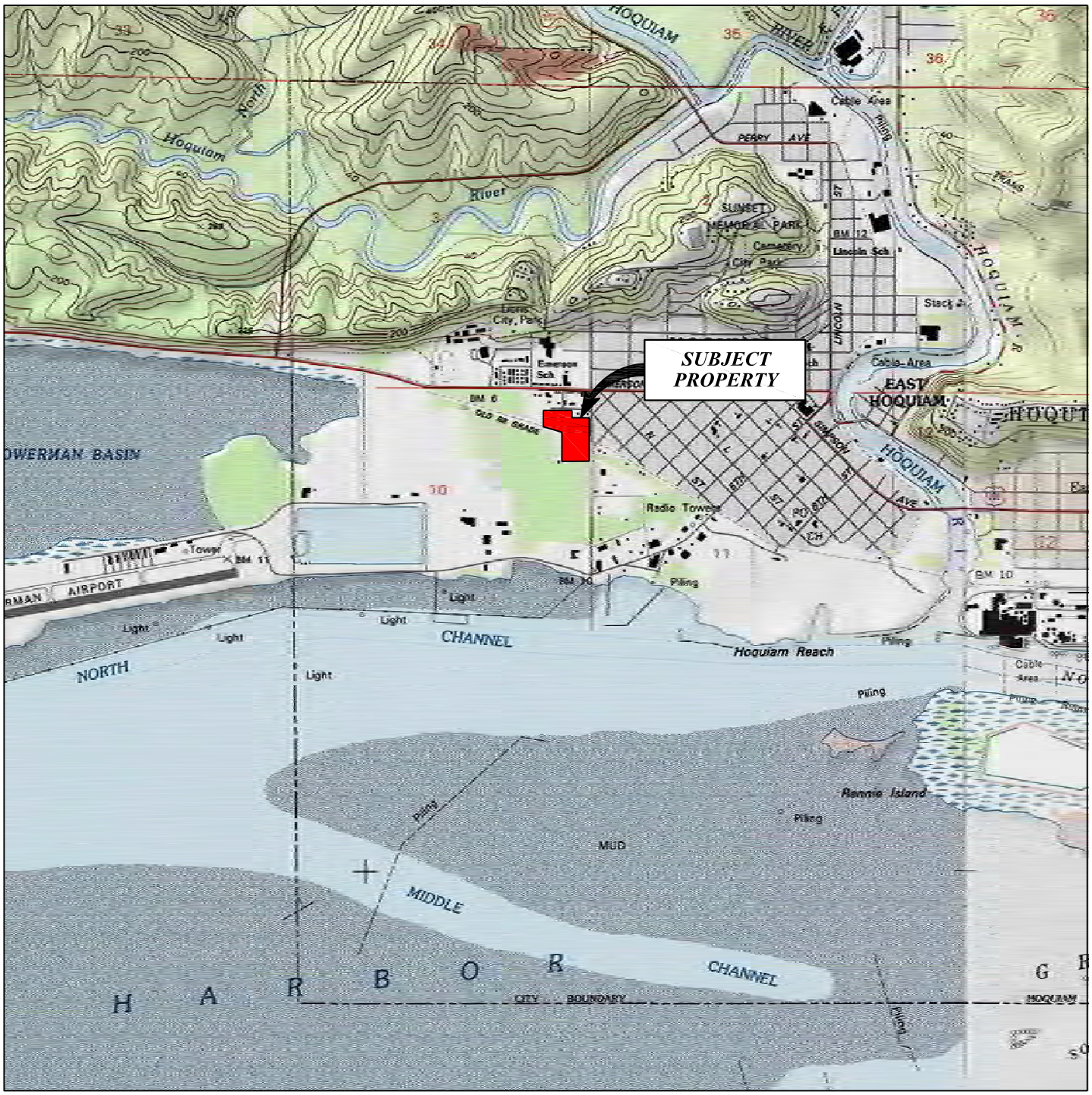
[a] Except for mercury, all metals analyzed by EPA Method 200.8. Mercury analyzed by EPA Method 1621E.

[b] Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Table 720-1, Method A Cleanup Levels for Groundwater.

[c] Method B cleanup level used because Method A level is not established. Standard formula values, direct contact Method B soil cleanup levels as published on Ecology's Cleanup Level and Risk Calculations (CLARC) on-line database (February 2015).

[d] Based on Chromium III.

FIGURES



REFERENCED FROM TOPO! 2002 NATIONAL GEOGRAPHIC, SEATTLE, 7.5x7.5 LEVEL 5.

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0 .5 1 MILE

FORMER LAMB-GRAYS HARBOR COMPANY FACILITY
HOQUIAM, WASHINGTON

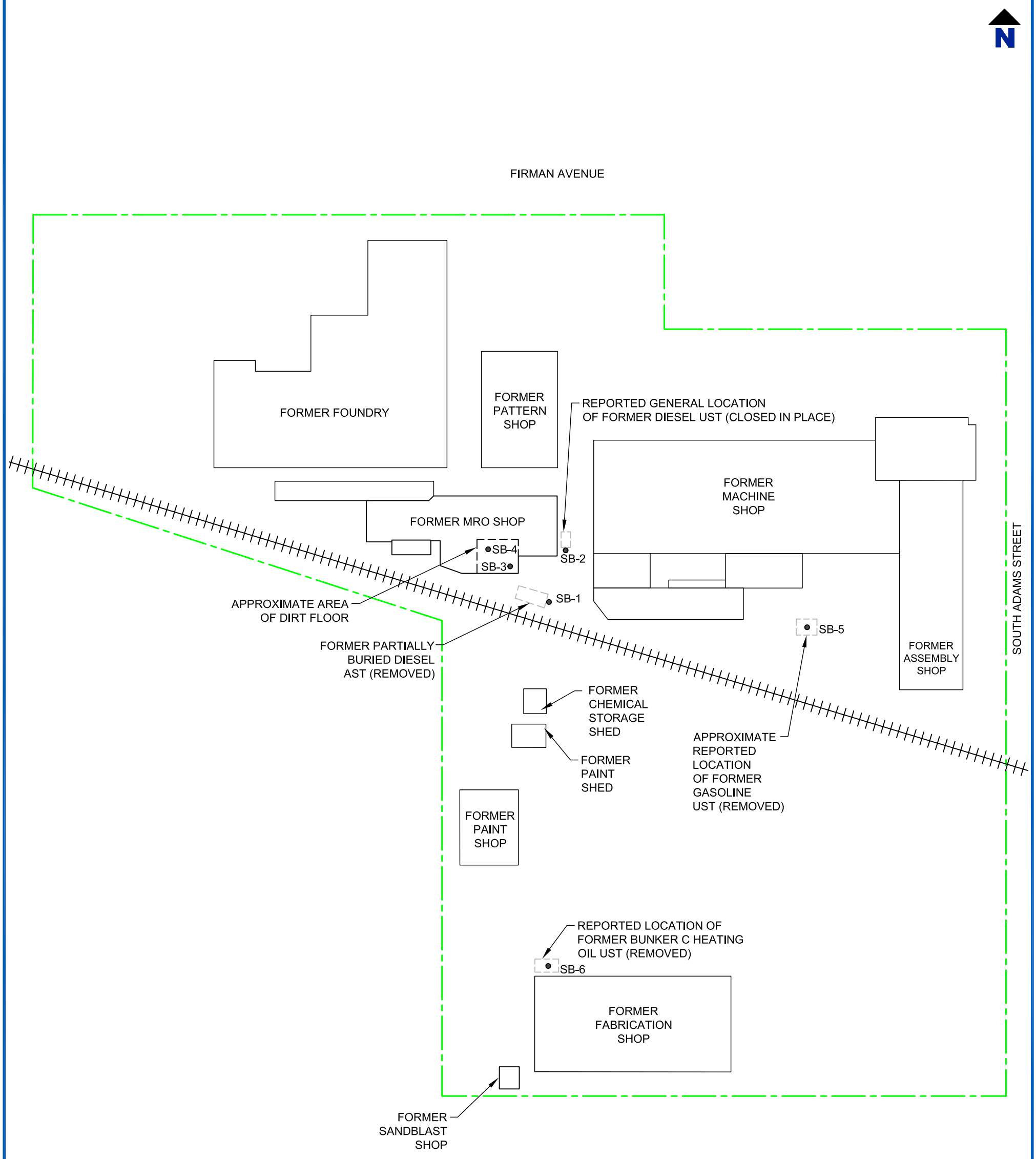
Drawing
LOCATION OF SUBJECT PROPERTY

Date March 4, 2014	Scale AS SHOWN	Fig. No. 1
File Name 01-01	Project No. 101.01057.00001	

SLR

Drawing path: N:\Bothell\1 PROJECTS\Lamb-Grays Harbor Co - 1057\Figures\01-01.dwg by mhardman

Drawing path: N:\Bothell\1 PROJECTS\Lamb-Grays Harbor Co - 1057\Figures\03-02.dwg by mhardman



LEGEND

RAILROAD

SUBJECT PROPERTY BOUNDARY

SB-1 ● APPROXIMATE SOIL BORING LOCATION AND DESIGNATION

0 100 200 300’

NOTE

SLR

FORMER LAMB-GRAYS HARBOR COMPANY FACILITY
HOQUIAM, WASHINGTON

Drawing
APPROXIMATE SOIL BORING LOCATIONS

Date	February 27, 2015	Scale	AS SHOWN
File Name	03-02	Project No.	101.01057.00001

Fig. No. 2

0 20 40

SCALE IN FEET

N

FORMER STORAGE AREA

FORMER MRO SHOP

APPROXIMATE REPORTED LOCATION OF FORMER DIESEL UST (CLOSED IN PLACE)

SB-2

FORMER COMPRESSOR HOUSE

SB-4

SB-3

APPROXIMATE LOCATION OF FORMER CYANIDE QUENCH TANK

APPROXIMATE AREA OF DIRT FLOOR

SB-1

FORMER PARTIALLY BURIED DIESEL AST (REMOVED)

NOTES

LEGEND

BUILDING PERIMETER

SB-1 APPROXIMATE SOIL BORING LOCATION AND DESIGNATION

APPROXIMATE AREAS OF OBSERVED STAINING

FORMER LAMB-GRAYS HARBOR COMPANY FACILITY
HOQUIAM, WASHINGTON

Drawing
APPROXIMATE LOCATIONS OF SOIL BORINGS WITHIN AND NEAR THE MRO SHOP

Date	February 27, 2015	Scale	AS SHOWN
File Name	01-03	Project No.	101.01057.00001

Fig. No. 3

SLR
22118 20th AVE SE
BLDG. G, SUITE 202
BOTHELL, WA 98021
T: 425-402-8800
F: 425-402-8488

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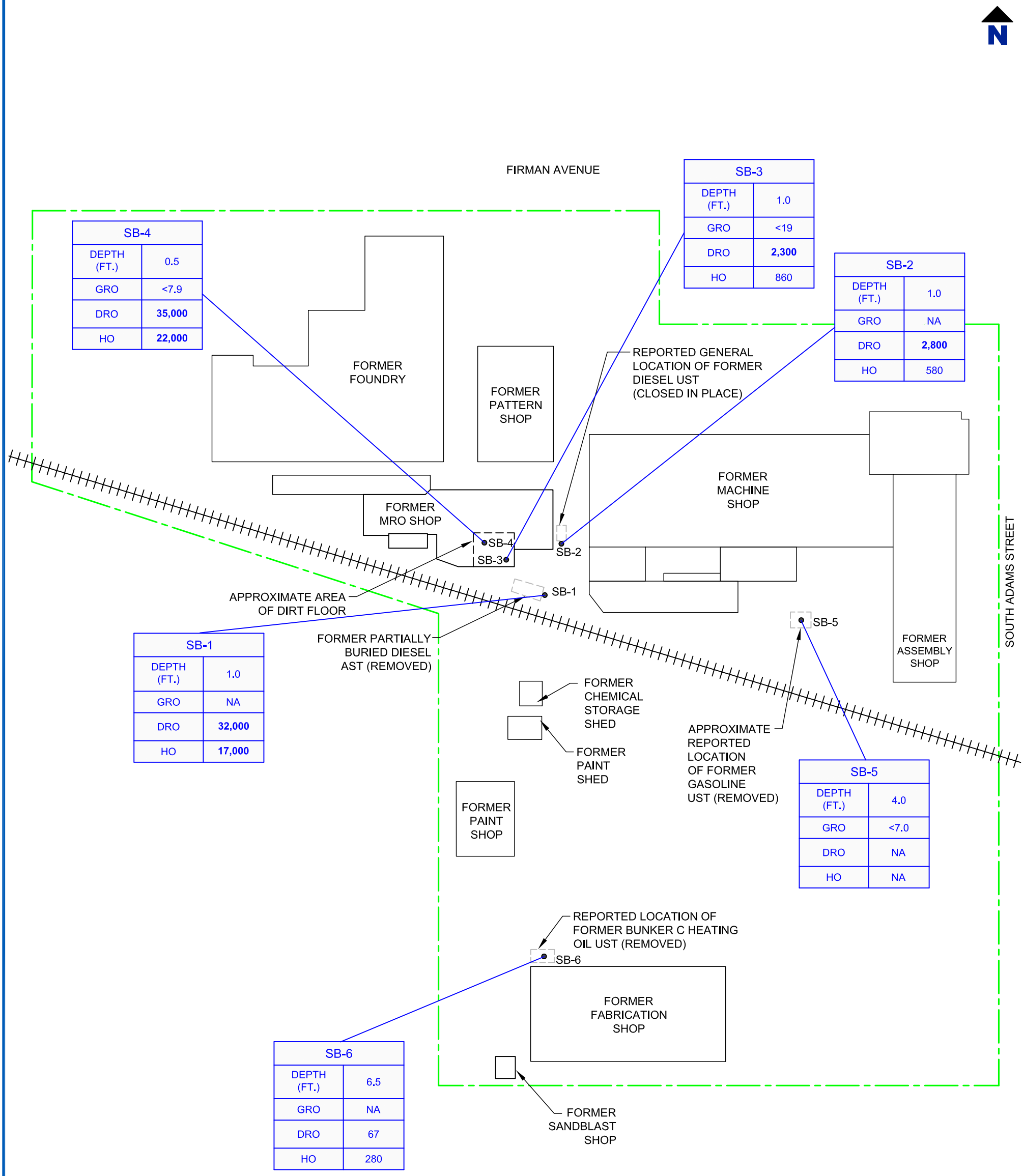


LEGEND

RAILROAD

SUBJECT PROPERTY BOUNDARY

SB-1 ● APPROXIMATE SOIL BORING LOCATION AND DESIGNATION

GRO = GASOLINE-RANGE ORGANICS. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 100 mg/kg ARE PRESENTED IN BOLD.

DRO = DIESEL-RANGE ORGANICS. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 2,000 mg/kg ARE PRESENTED IN BOLD.

HO = HEAVY OIL-RANGE ORGANICS. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 2,000 mg/kg ARE PRESENTED IN BOLD.

NA = NOT ANALYZED

NOTE

1) SAMPLES COLLECTED ON JANUARY 28, 2015.
2) RESULTS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg).

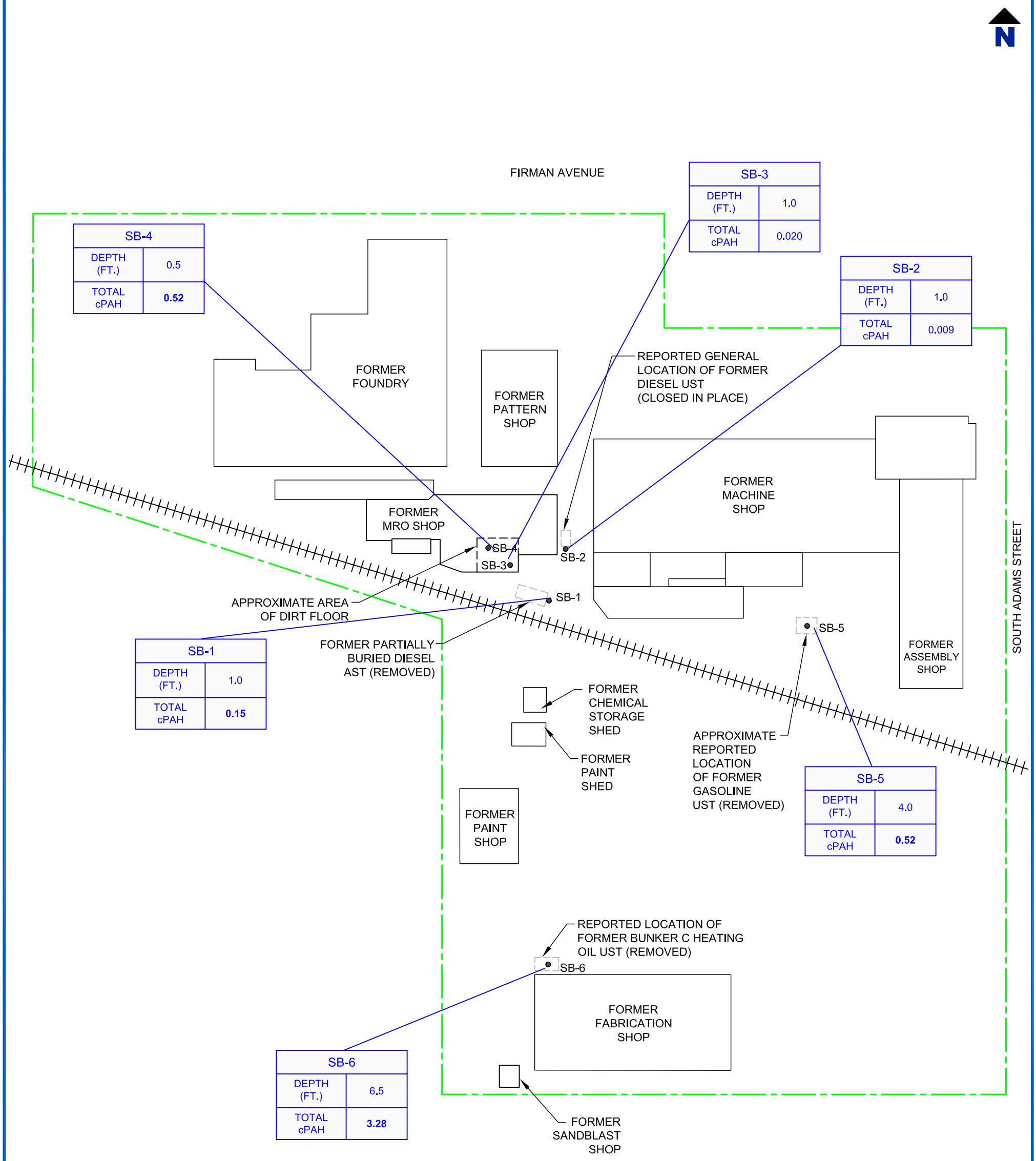
0 100 200 300'

FORMER LAMB-GRAYS HARBOR COMPANY FACILITY
HOQUIAM, WASHINGTON

Drawing: PETROLEUM HYDROCARBON CONCENTRATIONS IN SOIL

Date: February 26, 2015
Scale: AS SHOWN
Fig. No.: 4
File Name: 01-04
Project No.: 101.01057.00001

Drawing path: N:\Bothell\1 PROJECTS\Lamb-Grays Harbor Co - 1057\Figures\01-05.dwg by mhardman



LEGEND

++++++++++		RAILROAD
——— - ———		SUBJECT PROPERTY BOUNDARY
SB-1 ●		APPROXIMATE SOIL BORING LOCATION AND DESIGNATION
TOTAL cPAH	=	CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBONS. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 0.1 mg/kg ARE PRESENTED IN BOLD.
NA	=	NOT ANALYZED

0 100 200 300'

NOTE

1) SAMPLES COLLECTED ON JANUARY 28, 2015.
2) RESULTS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg).

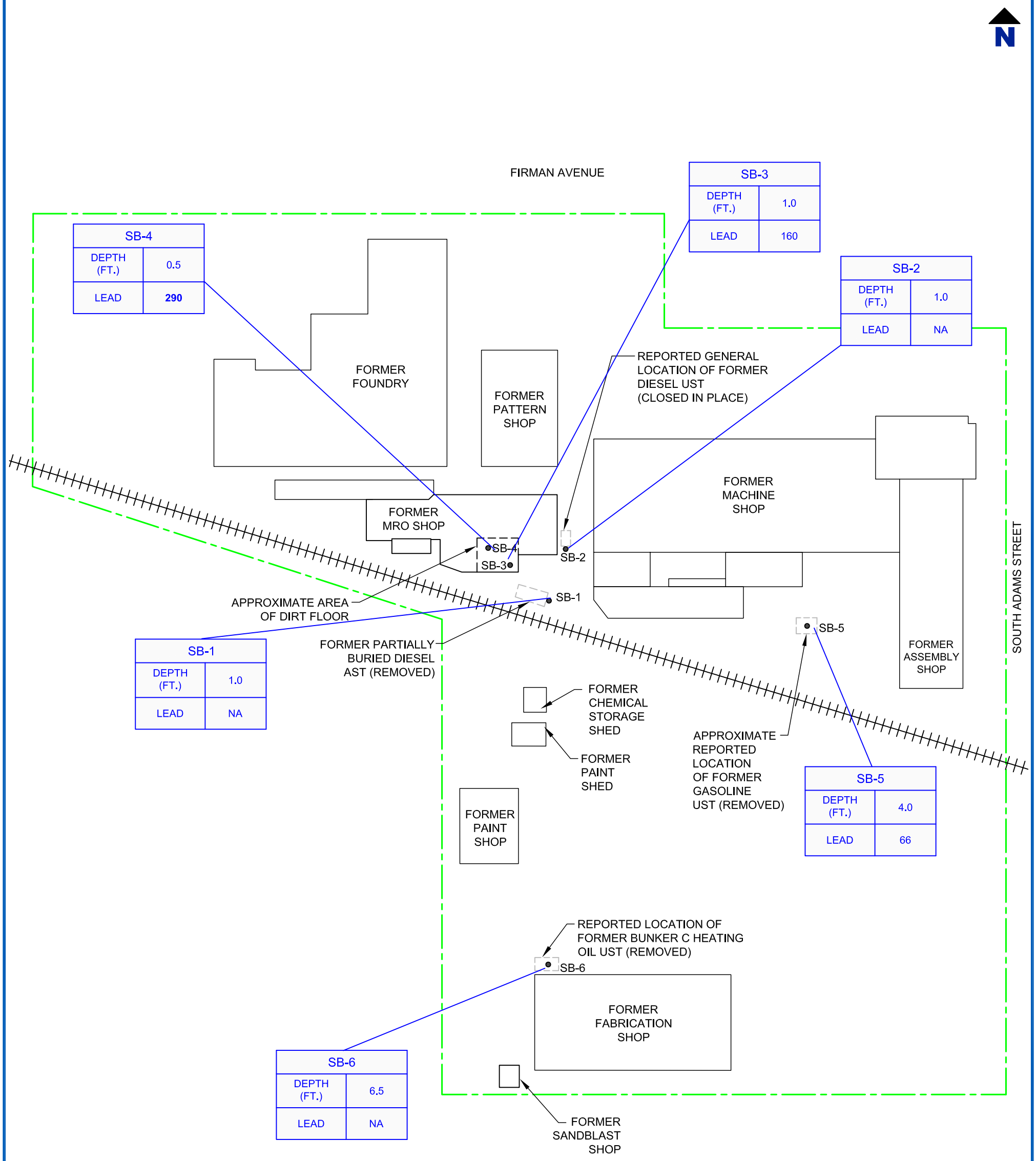
SLR

FORMER LAMB-GRAYS HARBOR COMPANY FACILITY
HOQUIAM, WASHINGTON

Drawing: TOTAL cPAH CONCENTRATIONS IN SOIL

Date February 26, 2015	Scale AS SHOWN	Fig. No. 5
File Name 01-05	Project No. 101.01057.00001	

Drawing path: N:\Bothell\1 PROJECTS\Lamb-Grays Harbor Co - 1057\Figures\01-06.dwg by mhardman



LEGEND

RAILROAD

SUBJECT PROPERTY BOUNDARY

SB-1 ● APPROXIMATE SOIL BORING LOCATION AND DESIGNATION

LEAD = LEAD CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 250 mg/kg ARE PRESENTED IN BOLD.

NA = NOT ANALYZED

0 100 200 300'

NOTE

1) SAMPLES COLLECTED ON JANUARY 28, 2015.
2) RESULTS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg).

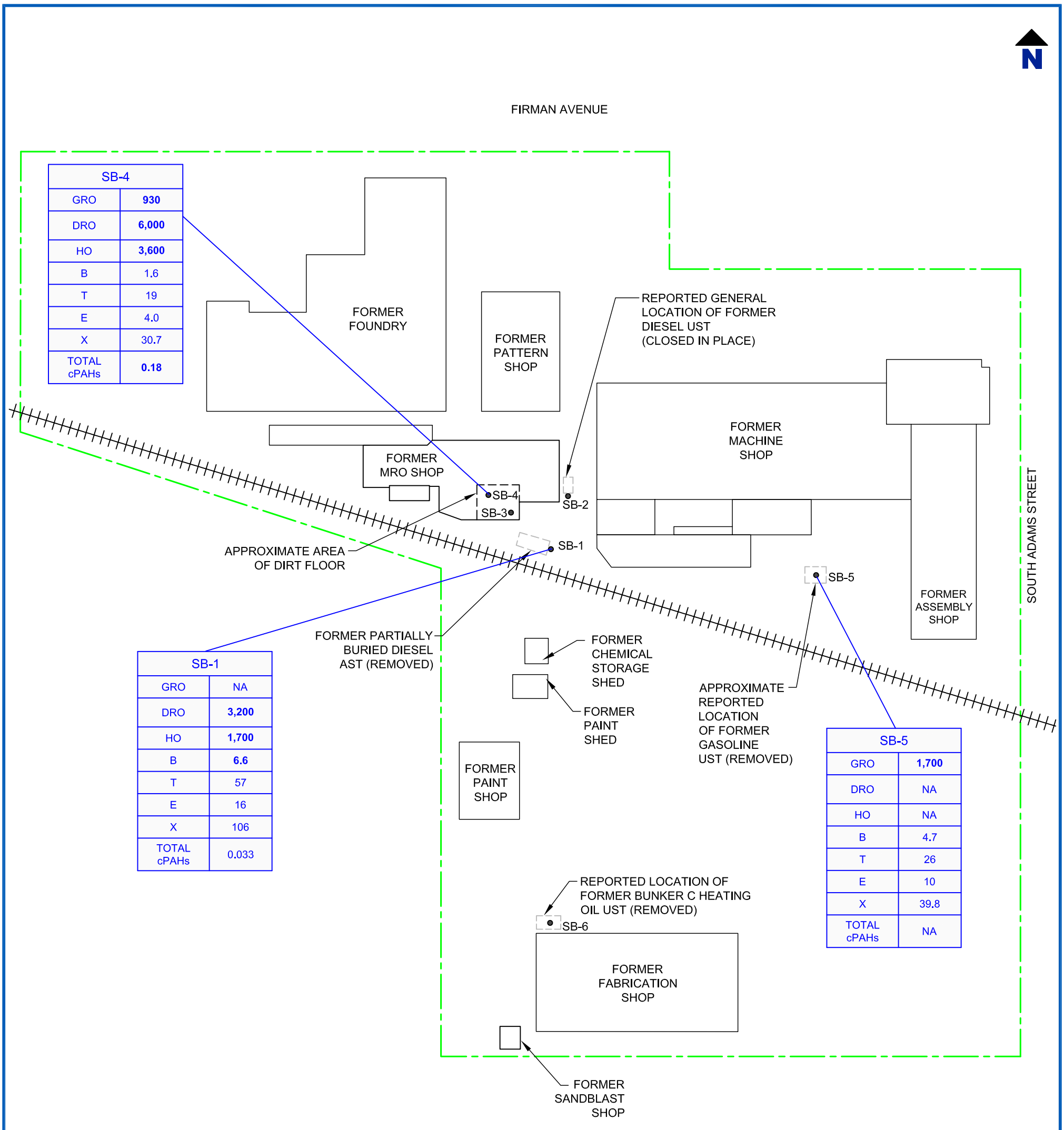
SLR

FORMER LAMB-GRAYS HARBOR COMPANY FACILITY
HOQUIAM, WASHINGTON

Drawing: LEAD CONCENTRATIONS IN SOIL

Date February 26, 2015	Scale AS SHOWN	Fig. No. 6
File Name 01-06	Project No. 101.01057.00001	

Drawing path: N:\Bothell\1 PROJECTS\Lamb-Grays Harbor Co - 1057\Figures\01-07.dwg by mhardman



LEGEND

RAILROAD

SUBJECT PROPERTY BOUNDARY

SB-1 ● APPROXIMATE BORING LOCATIONS

GRO = GASOLINE-RANGE ORGANICS. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 800 (µg/L) ARE PRESENTED IN BOLD.

DRO = DIESEL-RANGE ORGANICS. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 500 (µg/L) ARE PRESENTED IN BOLD.

HO = HEAVY OIL-RANGE ORGANICS. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 500 (µg/L) ARE PRESENTED IN BOLD.

B = BENZENE. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 5 (µg/L) ARE PRESENTED IN BOLD.

T = TOLUENE. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 1,000 (µg/L) ARE PRESENTED IN BOLD.

E = ETHYLBENZENE. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 700 (µg/L) ARE PRESENTED IN BOLD.

X = TOTAL XYLENES. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 1,000 (µg/L) ARE PRESENTED IN BOLD.

TOTAL cPAHs = CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBONS. CONCENTRATIONS ABOVE THE MTCA METHOD A CLEANUP LEVEL OF 0.1 (µg/L) ARE PRESENTED IN BOLD.

NA = NOT ANALYZED

NOTE

1) SAMPLES COLLECTED ON JANUARY 28, 2015.
2) RESULTS REPORTED IN MICROGRAMS PER LITER (µg/L).

0 100 200 300'

SLR

FORMER LAMB-GRAYS HARBOR COMPANY FACILITY
HOQUIAM, WASHINGTON

Drawing: PETROLEUM HYDROCARBON, BTEX, AND TOTAL cPAH CONCENTRATIONS IN GROUNDWATER

Date	February 26, 2015	Scale	AS SHOWN
File Name	01-07	Project No.	101.01057.00001

Fig. No. 7

APPENDIX A

SOIL BORING LOGS

SLR
22118 20th Ave. SE, Suite G-202
Bothell, Washington 98021
Telephone: 425.402.8800
Fax: 425.402.8488

WELL NUMBER SB-1

CLIENT Enterprises International, Inc.
PROJECT NAME Lamb-Grays Harbor
PROJECT NUMBER 101.01057.00001
PROJECT LOCATION Firman Ave. & Blaine St., Hoquiam, Washington
DATE STARTED 1/28/15 **COMPLETED** 1/28/15
GROUND ELEVATION **HOLE SIZE** 1.5"-diameter
DRILLING CONTRACTOR ESN-NW
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING 4.0 ft
LOGGED BY A. Meugniot **CHECKED BY** G. Lish
AFTER DRILLING N/A
NOTES

DEPTH (ft)	INTERVAL	TYPE	SAMPLE NAME	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
0.0					GP		**SANDY GRAVEL**, brown, fine, some fine- to medium-grained sand, few fines, moist, moderate hydrocarbon-like odors.	0.1	
0.5							**SILT**, gray, few fine- to medium-grained sand, moist, black staining, strong hydrocarbon-like odors.	41.8	
			SB-1-1.0*					29.9	
2.5		GP		40	ML		@ 3 feet: few organics in ~1/4"-thick seams.	3.5	1"-diameter 0.010"-slotted PVC well screen.
							▼ @ 4 feet: becomes wet		
5.0									
					ML		**SANDY SILT**, gray, some fine- to medium-grained sand, wet, black staining, strong hydrocarbon-like odors, slight to moderate sheen on water.	7.8	
5.5							**SILT**, gray, few fine- to medium-grained sand, wet, low plasticity, moderate organic odors.	0.9	
7.5		GP		60	ML				Native soil
								0.5	
			SB-1-9.5					0.4	
10.0									
							Boring completed at 10 feet.		

REMARKS

PID = Photoionization detector readings in parts per million (ppm).
GP = Samples collected continuously by using acetate liners within the drill rods.
* = Soil sample submitted for laboratory analysis.

Temporary well:
0.5 to 5.5: 1"-diameter, flush-threaded Sch. 40 PVC 0.010-slotted well screen.

▽ Water level at time of drilling.

SLR SB LOG LAMB-GRAYS HARBOR.GPJ GINT US.GDT 2/27/15

SLR
22118 20th Ave. SE, Suite G-202
Bothell, Washington 98021
Telephone: 425.402.8800
Fax: 425.402.8488

BORING NUMBER SB-2

CLIENT Enterprises International, Inc.
PROJECT NAME Lamb-Grays Harbor
PROJECT NUMBER 101.01057.00001
PROJECT LOCATION Firman Ave. & Blaine St., Hoquiam, Washington
DATE STARTED 1/28/15 **COMPLETED** 1/28/15
GROUND ELEVATION _____ **HOLE SIZE** 1.5"-diameter
DRILLING CONTRACTOR ESN-NW
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING N/A
LOGGED BY A. Meugniot **CHECKED BY** G. Lish
AFTER DRILLING N/A
NOTES

DEPTH (ft)	INTERVAL	TYPE	SAMPLE NAME	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0								
							0.3 **CONCRETE**.	
							SILT, gray, trace fine- to medium-grained sand, moist, moderate hydrocarbon-like odors.	
			SB-2-1.0*					95.4
							@ 2 feet: light hydrocarbon-like odors.	5.0
2.5		GP		90				
								0.7
							@ 3.5 feet: faint hydrocarbon-like odors	
								0.3
5.0								
					ML		@ 5 feet: some organic material for 1 foot.	
			SB-2-6.0					7.2
							@ 7 feet: very faint hydrocarbon-like odors.	
7.5		GP		100				0.3
								0.7
								0.3
								0.3
10.0							10.0	
							Boring completed at 10 feet.	

REMARKS

PID = Photoionization detector readings in parts per million (ppm).
GP = Samples collected continuously by using acetate liners within the drill rods.
* = Soil sample submitted for laboratory analysis.

▽ Water level at time of drilling.

SLR SB LOG LAMB-GRAYS HARBOR.GPJ GINT US.GDT 2/27/15

SLR
22118 20th Ave. SE, Suite G-202
Bothell, Washington 98021
Telephone: 425.402.8800
Fax: 425.402.8488

BORING NUMBER SB-3

CLIENT Enterprises International, Inc.
PROJECT NAME Lamb-Grays Harbor
PROJECT NUMBER 101.01057.00001
PROJECT LOCATION Firman Ave. & Blaine St., Hoquiam, Washington
DATE STARTED 1/28/15 **COMPLETED** 1/28/15
GROUND ELEVATION _____ **HOLE SIZE** 1.5"-diameter
DRILLING CONTRACTOR ESN-NW
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING N/A
LOGGED BY A. Meugniot **CHECKED BY** G. Lish
AFTER DRILLING N/A
NOTES

DEPTH (ft)	INTERVAL	TYPE	SAMPLE NAME	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0					SP		**SAND**, brown, fine- to medium-grained, few to little fine gravel, moist, black staining, light to moderate hydrocarbon-like odors.	0.0
			SB-3-1.0*				**SILT**, dark gray, trace fine-grained sand, moist, low plasticity, moderate hydrocarbon-like odors.	44.6
							@ 1.25 feet: No recovery to 5 feet.	
2.5		GP		20				
5.0					ML		@ 5 feet: no odors or staining.	1.7
								1.3
7.5				95			@ 7.5 feet: trace pieces of metal.	0.6
								0.5
			SB-3-9.5					0.4
10.0							Boring completed at 10 feet.	

REMARKS

PID = Photoionization detector readings in parts per million (ppm).
GP = Samples collected continuously by using acetate liners within the drill rods.
* = Soil sample submitted for laboratory analysis.

▽ Water level at time of drilling.

SLR SB LOG LAMB-GRAYS HARBOR.GPJ GINT US.GDT 2/27/15

SLR
22118 20th Ave. SE, Suite G-202
Bothell, Washington 98021
Telephone: 425.402.8800
Fax: 425.402.8488

WELL NUMBER SB-4

CLIENT Enterprises International, Inc.
PROJECT NAME Lamb-Grays Harbor
PROJECT NUMBER 101.01057.00001
PROJECT LOCATION Firman Ave. & Blaine St., Hoquiam, Washington
DATE STARTED 1/28/15 **COMPLETED** 1/28/15
GROUND ELEVATION _____ **HOLE SIZE** 1.5"-diameter
DRILLING CONTRACTOR ESN-NW
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
▼ **AT TIME OF DRILLING** 4.0 ft
LOGGED BY A. Meugniot **CHECKED BY** G. Lish
AFTER DRILLING N/A
NOTES

DEPTH (ft)	INTERVAL	TYPE	SAMPLE NAME	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
0.0			SB-4-0.5*		ML		**SANDY SILT**, gray, some fine- to medium-grained sand, moist, black staining, strong hydrocarbon-like odors	57.5	
0.8							No recovery.		
2.5		GP		10					
5.0									1"-diameter 0.010"-slotted PVC well screen.
7.5		GP		0					Native soil.
10.0									

Boring completed at 10 feet.

REMARKS

PID = Photoionization detector readings in parts per million (ppm).
GP = Samples collected continuously by using acetate liners within the drill rods.
* = Soil sample submitted for laboratory analysis.

Temporary well:
0.0 to 9.50: 1"-diameter, flush-threaded Sch. 40 PVC 0.010-slotted well screen.

▽ Water level at time of drilling.

SLR SB LOG LAMB-GRAYS HARBOR.GPJ GINT US.GDT 2/27/15

SLR
22118 20th Ave. SE, Suite G-202
Bothell, Washington 98021
Telephone: 425.402.8800
Fax: 425.402.8488

WELL NUMBER SB-5

CLIENT Enterprises International, Inc.
PROJECT NAME Lamb-Grays Harbor
PROJECT NUMBER 101.01057.00001
PROJECT LOCATION Firman Ave. & Blaine St., Hoquiam, Washington
DATE STARTED 1/28/15 **COMPLETED** 1/28/15
GROUND ELEVATION **HOLE SIZE** 1.5"-diameter
DRILLING CONTRACTOR ESN-NW
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING 4.5 ft
LOGGED BY A. Meugniot **CHECKED BY** G. Lish
AFTER DRILLING N/A
NOTES

DEPTH (ft)	INTERVAL	TYPE	SAMPLE NAME	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
0.0							0.3 **TOPSOIL**.		
					GP		0.5 **GRAVEL**, brown, fine to coarse, angular, little fine-grained sand, moist, no odors or staining.		
							GRAVELLY SAND, brown, fine- to coarse-grained, some fine gravel, few fines, moist, no odors or staining.	0.0	
2.5		GP		60					
			SB-5-4.0*					0.0	
5.0							@ 4.5 feet: becomes wet.		1"-diameter 0.010"-slotted PVC well screen.
					SP		@ 5 feet: becomes gray.		
							@ 6 feet: faint hydrocarbon-like odors, slight to moderate black staining.	26.0	
7.5		GP		60					Native soil.
								7.4	
10.0							10.0 Boring completed at 10 feet.		

REMARKS

PID = Photoionization detector readings in parts per million (ppm).
GP = Samples collected continuously by using acetate liners within the drill rods.
* = Soil sample submitted for laboratory analysis.

Temporary well:
0.0 to 9.0: 1"-diameter, flush-threaded Sch. 40 PVC 0.010-slotted well screen.

▽ Water level at time of drilling.

SLR SB LOG LAMB-GRAYS HARBOR.GPJ GINT US.GDT 2/27/15

SLR
22118 20th Ave. SE, Suite G-202
Bothell, Washington 98021
Telephone: 425.402.8800
Fax: 425.402.8488

BORING NUMBER SB-6

CLIENT Enterprises International, Inc.
PROJECT NAME Lamb-Grays Harbor
PROJECT NUMBER 101.01057.00001
PROJECT LOCATION Firman Ave. & Blaine St., Hoquiam, Washington
DATE STARTED 1/28/15 **COMPLETED** 1/28/15
GROUND ELEVATION **HOLE SIZE** 1.5"-diameter
DRILLING CONTRACTOR ESN-NW
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING N/A
LOGGED BY A. Meugniot **CHECKED BY** G. Lish
AFTER DRILLING N/A
NOTES

DEPTH (ft)	INTERVAL	TYPE	SAMPLE NAME	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0								
					GP		0.2 **TOPSOIL**.	
					GP		0.4 **GRAVEL**, brown, fine, moist, no odors or staining.	
					SP		**SAND**, brown, fine- to medium-grained, trace fine gravel, trace wood, moist, no odors or staining.	0.1
							1.5 **SILT**, dark gray, trace to few fine- to medium-grained sand, trace fine gravel, moist, low plasticity, black staning, faint hydrocarbon-like odors.	
2.5		GP		50				0.0
5.0					ML			0.0
			SB-6-6.5*				@ 6.5 feet: faint organic odor.	
							7.0	
7.5		GP	SB-6-7.5	40	GP		7.5 **GRAVEL**, dark gray, fine, moist, trace fine-grained sand, faint organic odor.	
					ML		**SILT**, dark gray, trace to few fine- to medium-grained sand, trace fine gravel, moist, low plasticity, faint organic odors.	
							9.5	
							Refusal at 9.5 feet.	

REMARKS

PID = Photoionization detector readings in parts per million (ppm).
GP = Samples collected continuously by using acetate liners within the drill rods.
* = Soil sample submitted for laboratory analysis.

▽ Water level at time of drilling.

SLR SB LOG LAMB-GRAYS HARBOR.GPJ GINT US.GDT 2/27/15

APPENDIX B

LABORATORY REPORT

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

February 19, 2015

Greg Lish
SLR International Corp
22118 20th Avenue SE, Suite G202
Bothell, WA 98021

Re: Analytical Data for Project 101.01057.00001
Laboratory Reference No. 1501-216

Dear Greg:

Enclosed are the analytical results and associated quality control data for samples submitted on January 29, 2015.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

Case Narrative

Samples were collected on January 28, 2015 and received by the laboratory on January 29, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx (soil) Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Volatiles EPA 8260C (soil) Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Some MTCA Method A cleanup levels are non-achievable for samples SB-1-1.0, SB-2-1.0, SB-3-1.0, and SB-4-0.5 due to the necessary dilutions of the samples.

Dissolved Metals EPA 200.8/7470A Analysis

The dissolved field filter samples were received containing solid material. The samples were digested according to OnSite Environmental standard operating procedure.

PAHs EPA 8270D/SIM (water) Analysis

The samples were extracted 4 days out of holding time.

The method blank had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

Any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

NWTPH-Gx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-3-1.0**					
Laboratory ID:	01-216-05					
Gasoline	**ND**	19	NWTPH-Gx	1-31-15	2-3-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*74*	*68-123*				
Client ID:	**SB-4-0.5**					
Laboratory ID:	01-216-07					
Gasoline	**ND**	7.9	NWTPH-Gx	1-31-15	2-3-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*68-123*				
Client ID:	**SB-5-4.0**					
Laboratory ID:	01-216-08					
Gasoline	**ND**	7.0	NWTPH-Gx	1-31-15	2-3-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*98*	*68-123*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

NWTPH-Gx
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0131S2					
Gasoline	**ND**	5.0	NWTPH-Gx	1-31-15	1-31-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*68-123*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-238-04										
	ORIG	DUP									
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*88*	*87*	*68-123*			

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

NWTPH-Gx/BTEX

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-1-W**					
Laboratory ID:	01-216-11					
Benzene	**6.6**	1.0	EPA 8021B	1-30-15	1-30-15	
Toluene	**57**	1.0	EPA 8021B	1-30-15	1-30-15	
Ethyl Benzene	**16**	1.0	EPA 8021B	1-30-15	1-30-15	
m,p-Xylene	**77**	1.0	EPA 8021B	1-30-15	1-30-15	
o-Xylene	**29**	1.0	EPA 8021B	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*85*	*71-113*				
Client ID:	**SB-4-W**					
Laboratory ID:	01-216-12					
Gasoline	**930**	400	NWTPH-Gx	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*85*	*71-113*				
Client ID:	**SB-5-W**					
Laboratory ID:	01-216-13					
Benzene	**4.7**	1.0	EPA 8021B	1-30-15	1-30-15	
Toluene	**26**	1.0	EPA 8021B	1-30-15	1-30-15	
Ethyl Benzene	**10**	1.0	EPA 8021B	1-30-15	1-30-15	
m,p-Xylene	**31**	1.0	EPA 8021B	1-30-15	1-30-15	
o-Xylene	**8.8**	1.0	EPA 8021B	1-30-15	1-30-15	
Gasoline	**1700**	100	NWTPH-Gx	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*71-113*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

NWTPH-Gx/BTEX
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0130W1					
Benzene	**ND**	1.0	EPA 8021B	1-30-15	1-30-15	
Toluene	**ND**	1.0	EPA 8021B	1-30-15	1-30-15	
Ethyl Benzene	**ND**	1.0	EPA 8021B	1-30-15	1-30-15	
m,p-Xylene	**ND**	1.0	EPA 8021B	1-30-15	1-30-15	
o-Xylene	**ND**	1.0	EPA 8021B	1-30-15	1-30-15	
Gasoline	**ND**	100	NWTPH-Gx	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*89*	*71-113*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-228-01										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*88*	*90*	*71-113*			
SPIKE BLANKS											
Laboratory ID:	SB0130W1										
	SB	SBD	SB	SBD		SB	SBD				
Benzene	**46.8**	**47.2**	50.0	50.0		**94**	**94**	80-118	1	11	
Toluene	**46.1**	**47.0**	50.0	50.0		**92**	**94**	81-119	2	11	
Ethyl Benzene	**46.5**	**47.1**	50.0	50.0		**93**	**94**	80-121	1	12	
m,p-Xylene	**46.6**	**47.3**	50.0	50.0		**93**	**95**	81-121	1	12	
o-Xylene	**46.8**	**47.3**	50.0	50.0		**94**	**95**	81-119	1	12	
Surrogate:											
Fluorobenzene						*87*	*89*	*71-113*			

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-1-1.0**					
Laboratory ID:	01-216-01					
Diesel Fuel #2	**32000**	410	NWTPH-Dx	1-30-15	2-2-15	X1
Lube Oil	**17000**	820	NWTPH-Dx	1-30-15	2-2-15	X1,N1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*---*	*50-150*				S
Client ID:	**SB-2-1.0**					
Laboratory ID:	01-216-03					
Diesel Fuel #1	**2800**	40	NWTPH-Dx	1-30-15	2-2-15	X1
Lube Oil	**580**	80	NWTPH-Dx	1-30-15	2-2-15	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*89*	*50-150*				
Client ID:	**SB-3-1.0**					
Laboratory ID:	01-216-05					
Diesel Fuel #2	**2300**	38	NWTPH-Dx	1-30-15	2-2-15	X1
Lube Oil	**860**	75	NWTPH-Dx	1-30-15	2-2-15	X1,N1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*102*	*50-150*				
Client ID:	**SB-4-0.5**					
Laboratory ID:	01-216-07					
Diesel Fuel #2	**35000**	350	NWTPH-Dx	1-30-15	2-2-15	X1
Lube Oil	**22000**	700	NWTPH-Dx	1-30-15	2-2-15	X1,N1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*---*	*50-150*				S
Client ID:	**SB-6-6.5**					
Laboratory ID:	01-216-09					
Diesel Range Organics	**67**	35	NWTPH-Dx	1-30-15	2-2-15	X1
Lube Oil Range Organics	**280**	70	NWTPH-Dx	1-30-15	2-2-15	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*99*	*50-150*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0130S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	1-30-15	2-2-15	X1
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	1-30-15	2-2-15	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*98*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-183-16										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Lube Oil	**259**	**155**	NA	NA		NA		NA	50	NA	
Surrogate:											
o-Terphenyl						*84*	*63*	*50-150*			

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-1-W**					
Laboratory ID:	01-216-11					
Diesel Range Organics	**3.2**	0.25	NWTPH-Dx	2-2-15	2-2-15	X1,M
Lube Oil	**1.7**	0.40	NWTPH-Dx	2-2-15	2-2-15	X1,N1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*85*	*50-150*				
Client ID:	**SB-4-W**					
Laboratory ID:	01-216-12					
Diesel Fuel #2	**6.0**	0.25	NWTPH-Dx	2-2-15	2-2-15	X1
Lube Oil	**3.6**	0.40	NWTPH-Dx	2-2-15	2-2-15	X1,N1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*83*	*50-150*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0202W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	2-2-15	2-2-15	X1
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	2-2-15	2-2-15	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*81*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-186-01										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	X1
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	X1
Surrogate:											
o-Terphenyl						*75*	*77*	*50-150*			

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

BTEX EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-1-1.0**					
Laboratory ID:	01-216-01					
Benzene	ND	0.11	EPA 8260C	2-2-15	2-2-15	
Toluene	ND	0.56	EPA 8260C	2-2-15	2-2-15	
Ethylbenzene	ND	0.11	EPA 8260C	2-2-15	2-2-15	
m,p-Xylene	0.50	0.23	EPA 8260C	2-2-15	2-2-15	
o-Xylene	0.14	0.11	EPA 8260C	2-2-15	2-2-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*94*	*76-131*				
Toluene-d8	*100*	*82-129*				
4-Bromofluorobenzene	*105*	*79-126*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

BTEX EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-2-1.0**					
Laboratory ID:	01-216-03					
Benzene	ND	0.11	EPA 8260C	1-30-15	1-30-15	
Toluene	ND	0.54	EPA 8260C	1-30-15	1-30-15	
Ethylbenzene	ND	0.11	EPA 8260C	1-30-15	1-30-15	
m,p-Xylene	ND	0.22	EPA 8260C	1-30-15	1-30-15	
o-Xylene	ND	0.11	EPA 8260C	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*118*	*76-131*				
Toluene-d8	*109*	*82-129*				
4-Bromofluorobenzene	*103*	*79-126*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-3-1.0**					
Laboratory ID:	01-216-05					
Dichlorodifluoromethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Chloromethane	ND	0.48	EPA 8260C	1-30-15	1-30-15	
Vinyl Chloride	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Bromomethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Chloroethane	ND	0.48	EPA 8260C	1-30-15	1-30-15	
Trichlorofluoromethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloroethene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Acetone	ND	0.48	EPA 8260C	1-30-15	1-30-15	
Iodomethane	ND	0.48	EPA 8260C	1-30-15	1-30-15	
Carbon Disulfide	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Methylene Chloride	ND	0.48	EPA 8260C	1-30-15	1-30-15	
(trans) 1,2-Dichloroethene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Methyl t-Butyl Ether	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloroethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Vinyl Acetate	ND	0.48	EPA 8260C	1-30-15	1-30-15	
2,2-Dichloropropane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
(cis) 1,2-Dichloroethene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
2-Butanone	ND	0.48	EPA 8260C	1-30-15	1-30-15	
Bromochloromethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Chloroform	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,1,1-Trichloroethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Carbon Tetrachloride	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloropropene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Benzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,2-Dichloroethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Trichloroethene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,2-Dichloropropane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Dibromomethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Bromodichloromethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
2-Chloroethyl Vinyl Ether	ND	0.48	EPA 8260C	1-30-15	1-30-15	
(cis) 1,3-Dichloropropene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Methyl Isobutyl Ketone	ND	0.48	EPA 8260C	1-30-15	1-30-15	
Toluene	ND	0.48	EPA 8260C	1-30-15	1-30-15	
(trans) 1,3-Dichloropropene	ND	0.096	EPA 8260C	1-30-15	1-30-15	

Date of Repor t: February 19, 2015
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Project: 101.01057.00001

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-3-1.0**					
Laboratory ID:	01-216-05					
1,1,2-Trichloroethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Tetrachloroethene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,3-Dichloropropane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
2-Hexanone	ND	0.48	EPA 8260C	1-30-15	1-30-15	
Dibromochloromethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,2-Dibromoethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Chlorobenzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,1,1,2-Tetrachloroethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Ethylbenzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
m,p-Xylene	ND	0.19	EPA 8260C	1-30-15	1-30-15	
o-Xylene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Styrene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Bromoform	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Isopropylbenzene	0.16	0.096	EPA 8260C	1-30-15	1-30-15	
Bromobenzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,1,2,2-Tetrachloroethane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,2,3-Trichloropropane	ND	0.096	EPA 8260C	1-30-15	1-30-15	
n-Propylbenzene	0.20	0.096	EPA 8260C	1-30-15	1-30-15	
2-Chlorotoluene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
4-Chlorotoluene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,3,5-Trimethylbenzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
tert-Butylbenzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,2,4-Trimethylbenzene	0.59	0.096	EPA 8260C	1-30-15	1-30-15	
sec-Butylbenzene	0.26	0.096	EPA 8260C	1-30-15	1-30-15	
1,3-Dichlorobenzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
p-Isopropyltoluene	0.48	0.096	EPA 8260C	1-30-15	1-30-15	
1,4-Dichlorobenzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
1,2-Dichlorobenzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
n-Butylbenzene	0.52	0.096	EPA 8260C	1-30-15	1-30-15	
1,2-Dibromo-3-chloropropane	ND	0.48	EPA 8260C	1-30-15	1-30-15	
1,2,4-Trichlorobenzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Hexachlorobutadiene	ND	0.48	EPA 8260C	1-30-15	1-30-15	
Naphthalene	1.2	0.096	EPA 8260C	1-30-15	1-30-15	
1,2,3-Trichlorobenzene	ND	0.096	EPA 8260C	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*110*	*76-131*				
Toluene-d8	*106*	*82-129*				
4-Bromofluorobenzene	*99*	*79-126*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-4-0.5**					
Laboratory ID:	01-216-07					
Dichlorodifluoromethane	ND	0.13	EPA 8260C	2-2-15	2-2-15	
Chloromethane	ND	0.60	EPA 8260C	2-2-15	2-2-15	
Vinyl Chloride	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Bromomethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Chloroethane	ND	0.47	EPA 8260C	2-2-15	2-2-15	
Trichlorofluoromethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,1-Dichloroethene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Acetone	ND	0.47	EPA 8260C	2-2-15	2-2-15	
Iodomethane	ND	0.47	EPA 8260C	2-2-15	2-2-15	
Carbon Disulfide	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Methylene Chloride	ND	0.47	EPA 8260C	2-2-15	2-2-15	
(trans) 1,2-Dichloroethene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Methyl t-Butyl Ether	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,1-Dichloroethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Vinyl Acetate	ND	0.47	EPA 8260C	2-2-15	2-2-15	
2,2-Dichloropropane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
(cis) 1,2-Dichloroethene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
2-Butanone	ND	0.47	EPA 8260C	2-2-15	2-2-15	
Bromochloromethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Chloroform	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,1,1-Trichloroethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Carbon Tetrachloride	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,1-Dichloropropene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Benzene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,2-Dichloroethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Trichloroethene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,2-Dichloropropane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Dibromomethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Bromodichloromethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
2-Chloroethyl Vinyl Ether	ND	0.47	EPA 8260C	2-2-15	2-2-15	
(cis) 1,3-Dichloropropene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Methyl Isobutyl Ketone	ND	0.47	EPA 8260C	2-2-15	2-2-15	
Toluene	ND	0.47	EPA 8260C	2-2-15	2-2-15	
(trans) 1,3-Dichloropropene	ND	0.094	EPA 8260C	2-2-15	2-2-15	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-4-0.5**					
Laboratory ID:	01-216-07					
1,1,2-Trichloroethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Tetrachloroethene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,3-Dichloropropane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
2-Hexanone	ND	0.47	EPA 8260C	2-2-15	2-2-15	
Dibromochloromethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,2-Dibromoethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Chlorobenzene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,1,1,2-Tetrachloroethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Ethylbenzene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
m,p-Xylene	2.4	0.19	EPA 8260C	2-2-15	2-2-15	
o-Xylene	1.5	0.094	EPA 8260C	2-2-15	2-2-15	
Styrene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Bromoform	ND	0.094	EPA 8260C	2-2-15	2-2-15	
Isopropylbenzene	0.64	0.094	EPA 8260C	2-2-15	2-2-15	
Bromobenzene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,1,2,2-Tetrachloroethane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,2,3-Trichloropropane	ND	0.094	EPA 8260C	2-2-15	2-2-15	
n-Propylbenzene	1.0	0.094	EPA 8260C	2-2-15	2-2-15	
2-Chlorotoluene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
4-Chlorotoluene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,3,5-Trimethylbenzene	3.2	0.094	EPA 8260C	2-2-15	2-2-15	
tert-Butylbenzene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,2,4-Trimethylbenzene	11	0.094	EPA 8260C	2-2-15	2-2-15	
sec-Butylbenzene	1.2	0.094	EPA 8260C	2-2-15	2-2-15	
1,3-Dichlorobenzene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
p-Isopropyltoluene	2.2	0.094	EPA 8260C	2-2-15	2-2-15	
1,4-Dichlorobenzene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,2-Dichlorobenzene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
n-Butylbenzene	3.0	0.094	EPA 8260C	2-2-15	2-2-15	
1,2-Dibromo-3-chloropropane	ND	0.47	EPA 8260C	2-2-15	2-2-15	
1,2,4-Trichlorobenzene	0.99	0.094	EPA 8260C	2-2-15	2-2-15	
Hexachlorobutadiene	ND	0.47	EPA 8260C	2-2-15	2-2-15	
Naphthalene	ND	0.094	EPA 8260C	2-2-15	2-2-15	
1,2,3-Trichlorobenzene	0.23	0.094	EPA 8260C	2-2-15	2-2-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*97*	*76-131*				
Toluene-d8	*102*	*82-129*				
4-Bromofluorobenzene	*108*	*79-126*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

BTEX EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-5-4.0**					
Laboratory ID:	01-216-08					
Benzene	ND	0.0011	EPA 8260C	1-30-15	1-30-15	
Toluene	ND	0.0056	EPA 8260C	1-30-15	1-30-15	
Ethylbenzene	ND	0.0011	EPA 8260C	1-30-15	1-30-15	
m,p-Xylene	ND	0.0022	EPA 8260C	1-30-15	1-30-15	
o-Xylene	ND	0.0011	EPA 8260C	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*119*	*76-131*				
Toluene-d8	*111*	*82-129*				
4-Bromofluorobenzene	*101*	*79-126*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

BTEX EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-6-6.5**					
Laboratory ID:	01-216-09					
Benzene	ND	0.0013	EPA 8260C	1-30-15	1-30-15	
Toluene	ND	0.0066	EPA 8260C	1-30-15	1-30-15	
Ethylbenzene	ND	0.0013	EPA 8260C	1-30-15	1-30-15	
m,p-Xylene	ND	0.0026	EPA 8260C	1-30-15	1-30-15	
o-Xylene	ND	0.0013	EPA 8260C	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*122*	*76-131*				
Toluene-d8	*116*	*82-129*				
4-Bromofluorobenzene	*103*	*79-126*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

VOLATILES by EPA 8260C
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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0130S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Chloromethane	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
Vinyl Chloride	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Bromomethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Chloroethane	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Acetone	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
Iodomethane	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
Carbon Disulfide	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Methylene Chloride	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Vinyl Acetate	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
2-Butanone	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
Bromochloromethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Chloroform	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Benzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Trichloroethene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Dibromomethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Bromodichloromethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
Toluene	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

VOLATILES by EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0130S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Tetrachloroethene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
2-Hexanone	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
Dibromochloromethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Chlorobenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Ethylbenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
m,p-Xylene	ND	0.0020	EPA 8260C	1-30-15	1-30-15	
o-Xylene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Styrene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Bromoform	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Isopropylbenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Bromobenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
n-Propylbenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
2-Chlorotoluene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
4-Chlorotoluene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
tert-Butylbenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
sec-Butylbenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
n-Butylbenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	1-30-15	1-30-15	
Naphthalene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*127*	*76-131*				
Toluene-d8	*119*	*82-129*				
4-Bromofluorobenzene	*108*	*79-126*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0202S1					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	2-2-15	2-2-15	
Chloromethane	ND	0.0064	EPA 8260C	2-2-15	2-2-15	
Vinyl Chloride	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Bromomethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Chloroethane	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Acetone	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
Iodomethane	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
Carbon Disulfide	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Methylene Chloride	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Vinyl Acetate	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
2-Butanone	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
Bromochloromethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Chloroform	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Benzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Trichloroethene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Dibromomethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Bromodichloromethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
Toluene	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	

Date of Repor t: February 19, 2015
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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0202S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Tetrachloroethene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
2-Hexanone	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
Dibromochloromethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Chlorobenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Ethylbenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
m,p-Xylene	ND	0.0020	EPA 8260C	2-2-15	2-2-15	
o-Xylene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Styrene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Bromoform	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Isopropylbenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Bromobenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
n-Propylbenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
2-Chlorotoluene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
4-Chlorotoluene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
tert-Butylbenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
sec-Butylbenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
n-Butylbenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	2-2-15	2-2-15	
Naphthalene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	2-2-15	2-2-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*76-131*				
Toluene-d8	*104*	*82-129*				
4-Bromofluorobenzene	*113*	*79-126*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0130S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0511**	**0.0513**	0.0500	0.0500	102	103	66-129	0	15	
Benzene	**0.0509**	**0.0540**	0.0500	0.0500	102	108	71-123	6	15	
Trichloroethene	**0.0480**	**0.0500**	0.0500	0.0500	96	100	75-115	4	15	
Toluene	**0.0488**	**0.0515**	0.0500	0.0500	98	103	75-120	5	15	
Chlorobenzene	**0.0421**	**0.0445**	0.0500	0.0500	84	89	75-121	6	15	
Surrogate:										
Dibromofluoromethane					*105*	*111*	*76-131*			
Toluene-d8					*101*	*104*	*82-129*			
4-Bromofluorobenzene					*92*	*95*	*79-126*			

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0202S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0410**	**0.0406**	0.0500	0.0500	82	81	66-129	1	15	
Benzene	**0.0459**	**0.0458**	0.0500	0.0500	92	92	71-123	0	15	
Trichloroethene	**0.0453**	**0.0457**	0.0500	0.0500	91	91	75-115	1	15	
Toluene	**0.0467**	**0.0468**	0.0500	0.0500	93	94	75-120	0	15	
Chlorobenzene	**0.0468**	**0.0463**	0.0500	0.0500	94	93	75-121	1	15	
Surrogate:										
Dibromofluoromethane					*93*	*94*	*76-131*			
Toluene-d8					*97*	*98*	*82-129*			
4-Bromofluorobenzene					*103*	*104*	*79-126*			

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

VOLATILES EPA 8260C
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-4-W**					
Laboratory ID:	01-216-12					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Chloromethane	ND	1.0	EPA 8260C	1-30-15	1-30-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Bromomethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Chloroethane	ND	1.0	EPA 8260C	1-30-15	1-30-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Acetone	7.0	5.0	EPA 8260C	1-30-15	1-30-15	
Iodomethane	ND	1.0	EPA 8260C	1-30-15	1-30-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-30-15	1-30-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-30-15	1-30-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
2-Butanone	ND	5.0	EPA 8260C	1-30-15	1-30-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Chloroform	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Benzene	1.6	0.20	EPA 8260C	1-30-15	1-30-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Trichloroethene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Dibromomethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	1-30-15	1-30-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-30-15	1-30-15	
Toluene	19	1.0	EPA 8260C	1-30-15	1-30-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-30-15	1-30-15	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

VOLATILES EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-4-W**					
Laboratory ID:	01-216-12					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Tetrachloroethene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
2-Hexanone	ND	2.0	EPA 8260C	1-30-15	1-30-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Ethylbenzene	4.0	0.20	EPA 8260C	1-30-15	1-30-15	
m,p-Xylene	22	0.40	EPA 8260C	1-30-15	1-30-15	
o-Xylene	8.7	0.20	EPA 8260C	1-30-15	1-30-15	
Styrene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Bromoform	ND	1.0	EPA 8260C	1-30-15	1-30-15	
Isopropylbenzene	1.3	0.20	EPA 8260C	1-30-15	1-30-15	
Bromobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
n-Propylbenzene	1.7	0.20	EPA 8260C	1-30-15	1-30-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,3,5-Trimethylbenzene	2.4	0.20	EPA 8260C	1-30-15	1-30-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2,4-Trimethylbenzene	19	0.20	EPA 8260C	1-30-15	1-30-15	
sec-Butylbenzene	0.82	0.20	EPA 8260C	1-30-15	1-30-15	
1,3-Dichlorobenzene	0.22	0.20	EPA 8260C	1-30-15	1-30-15	
p-Isopropyltoluene	0.28	0.20	EPA 8260C	1-30-15	1-30-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-30-15	1-30-15	
1,2,4-Trichlorobenzene	0.42	0.20	EPA 8260C	1-30-15	1-30-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Naphthalene	3.7	1.3	EPA 8260C	1-30-15	1-30-15	Y
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*79-122*				
Toluene-d8	*101*	*80-120*				
4-Bromofluorobenzene	*101*	*80-120*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0130W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Chloromethane	ND	1.0	EPA 8260C	1-30-15	1-30-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Bromomethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Chloroethane	ND	1.0	EPA 8260C	1-30-15	1-30-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Acetone	ND	5.0	EPA 8260C	1-30-15	1-30-15	
Iodomethane	ND	1.0	EPA 8260C	1-30-15	1-30-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-30-15	1-30-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-30-15	1-30-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
2-Butanone	ND	5.0	EPA 8260C	1-30-15	1-30-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Chloroform	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Benzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Trichloroethene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Dibromomethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	1-30-15	1-30-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-30-15	1-30-15	
Toluene	ND	1.0	EPA 8260C	1-30-15	1-30-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-30-15	1-30-15	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0130W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Tetrachloroethene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
2-Hexanone	ND	2.0	EPA 8260C	1-30-15	1-30-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Ethylbenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
m,p-Xylene	ND	0.40	EPA 8260C	1-30-15	1-30-15	
o-Xylene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Styrene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Bromoform	ND	1.0	EPA 8260C	1-30-15	1-30-15	
Isopropylbenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Bromobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-30-15	1-30-15	
n-Propylbenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
sec-Butylbenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
p-Isopropyltoluene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-30-15	1-30-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Naphthalene	ND	1.3	EPA 8260C	1-30-15	1-30-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-30-15	1-30-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*79-122*				
Toluene-d8	*102*	*80-120*				
4-Bromofluorobenzene	*102*	*80-120*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0130W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**9.31**	**8.93**	10.0	10.0	93	89	64-138	4	16	
Benzene	**9.50**	**9.32**	10.0	10.0	95	93	76-125	2	14	
Trichloroethene	**9.18**	**8.68**	10.0	10.0	92	87	70-125	6	16	
Toluene	**9.42**	**9.15**	10.0	10.0	94	92	75-125	3	15	
Chlorobenzene	**8.99**	**8.79**	10.0	10.0	90	88	80-140	2	15	
Surrogate:										
Dibromofluoromethane					*103*	*104*	*79-122*			
Toluene-d8					*99*	*99*	*80-120*			
4-Bromofluorobenzene					*96*	*98*	*80-120*			

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

TOTAL METALS
EPA 6010C/7471B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-216-05					
Client ID:	**SB-3-1.0**					
Arsenic	**ND**	15	6010C	2-3-15	2-3-15	
Barium	**54**	3.8	6010C	2-3-15	2-3-15	
Cadmium	**ND**	0.75	6010C	2-3-15	2-3-15	
Chromium	**49**	0.75	6010C	2-3-15	2-3-15	
Lead	**160**	7.5	6010C	2-3-15	2-3-15	
Mercury	**ND**	0.38	7471B	2-4-15	2-4-15	
Selenium	**ND**	15	6010C	2-3-15	2-3-15	
Silver	**ND**	1.5	6010C	2-3-15	2-3-15	
Lab ID:	01-216-07					
Client ID:	**SB-4-0.5**					
Arsenic	**ND**	14	6010C	2-3-15	2-3-15	
Barium	**110**	3.5	6010C	2-3-15	2-3-15	
Cadmium	**ND**	0.70	6010C	2-3-15	2-3-15	
Chromium	**89**	0.70	6010C	2-3-15	2-3-15	
Lead	**290**	7.0	6010C	2-3-15	2-3-15	
Mercury	**ND**	0.35	7471B	2-4-15	2-4-15	
Selenium	**ND**	14	6010C	2-3-15	2-3-15	
Silver	**ND**	1.4	6010C	2-3-15	2-3-15	
Lab ID:	01-216-08					
Client ID:	**SB-5-4.0**					
Lead	**66**	6.7	6010C	2-3-15	2-3-15	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

TOTAL METALS
EPA 6010C/7471B
METHOD BLANK QUALITY CONTROL

Date Extracted: 2-3&4-15
Date Analyzed: 2-3&4-15

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0203SM1&MB0204S1

Analyte	Method	Result	PQL
Arsenic	6010C	**ND**	10
Barium	6010C	**ND**	2.5
Cadmium	6010C	**ND**	0.50
Chromium	6010C	**ND**	0.50
Lead	6010C	**ND**	5.0
Mercury	7471B	**ND**	0.25
Selenium	6010C	**ND**	10
Silver	6010C	**ND**	1.0

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

TOTAL METALS
EPA 6010C/7471B
DUPLICATE QUALITY CONTROL

Date Extracted: 2-3&4-15
Date Analyzed: 2-3&4-15

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 01-203-16

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**ND**	**ND**	NA	10	
Barium	**33.2**	**29.0**	14	2.5	
Cadmium	**ND**	**ND**	NA	0.50	
Chromium	**23.8**	**18.5**	25	0.50	
Lead	**ND**	**ND**	NA	5.0	
Mercury	**ND**	**ND**	NA	0.25	
Selenium	**ND**	**ND**	NA	10	
Silver	**ND**	**ND**	NA	1.0	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

TOTAL METALS
EPA 6010C/7471B
MS/MSD QUALITY CONTROL

Date Extracted: 2-3&4-15
Date Analyzed: 2-3&4-15

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 01-203-16

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**93.1**	93	**94.4**	94	1	
Barium	100	**126**	93	**122**	89	4	
Cadmium	50.0	**46.0**	92	**45.8**	92	0	
Chromium	100	**112**	88	**109**	86	2	
Lead	250	**236**	94	**235**	94	0	
Mercury	0.500	**0.539**	108	**0.524**	105	3	
Selenium	100	**94.9**	95	**94.3**	94	1	
Silver	25.0	**21.9**	88	**21.9**	88	0	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-216-12					
Client ID:	**SB-4-W**					
Arsenic	**4.4**	3.3	200.8		2-2-15	
Barium	**ND**	28	200.8		2-2-15	
Cadmium	**ND**	4.4	200.8		2-2-15	
Chromium	**ND**	11	200.8		2-2-15	
Lead	**4.8**	1.1	200.8		2-2-15	
Mercury	**ND**	0.50	7470A		2-2-15	
Selenium	**ND**	5.6	200.8		2-2-15	
Silver	**ND**	11	200.8		2-2-15	
Lab ID:	01-216-13					
Client ID:	**SB-5-W**					
Lead	**3.8**	1.1	200.8		2-2-15	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

DISSOLVED METALS
EPA 200.8
METHOD BLANK QUALITY CONTROL

Date Analyzed: 2-2-15

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0202WM1

Analyte	Method	Result	PQL
Arsenic	200.8	**ND**	3.3
Barium	200.8	**ND**	28
Cadmium	200.8	**ND**	4.4
Chromium	200.8	**ND**	11
Lead	200.8	**ND**	1.1
Selenium	200.8	**ND**	5.6
Silver	200.8	**ND**	11

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

DISSOLVED MERCURY
EPA 7470A
METHOD BLANK QUALITY CONTROL

Date Analyzed: 2-2-15

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0202D1

Analyte	Method	Result	PQL
Mercury	7470A	**ND**	0.50

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

DISSOLVED METALS
EPA 200.8
DUPLICATE QUALITY CONTROL

Date Analyzed: 2-2-15

Matrix: Water
Units: ug/L (ppb)

Lab ID: 01-237-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**ND**	**ND**	NA	3.3	
Barium	**ND**	**ND**	NA	28	
Cadmium	**ND**	**ND**	NA	4.4	
Chromium	**ND**	**ND**	NA	11	
Lead	**ND**	**ND**	NA	1.1	
Selenium	**ND**	**ND**	NA	5.6	
Silver	**ND**	**ND**	NA	11	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

DISSOLVED MERCURY
EPA 7470A
DUPLICATE QUALITY CONTROL

Date Analyzed: 2-2-15

Matrix: Water
Units: ug/L (ppb)

Lab ID: 02-216-12

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	**ND**	**ND**	NA	0.50	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

DISSOLVED METALS
EPA 200.8
MS/MSD QUALITY CONTROL

Date Analyzed: 2-2-15

Matrix: Water
Units: ug/L (ppb)

Lab ID: 01-237-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	111	**124**	111	**119**	107	4	
Barium	111	**124**	111	**121**	109	2	
Cadmium	111	**125**	112	**123**	111	1	
Chromium	111	**118**	107	**118**	106	0	
Lead	111	**113**	102	**112**	101	2	
Selenium	111	**132**	119	**128**	115	3	
Silver	111	**120**	108	**119**	107	1	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

DISSOLVED MERCURY
EPA 7470A
MS/MSD QUALITY CONTROL

Date Analyzed: 2-2-15

Matrix: Water
Units: ug/L (ppb)

Lab ID: 02-216-12

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	12.5	**11.7**	93	**11.5**	92	1	

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-1-1.0**					
Laboratory ID:	01-216-01					
Naphthalene	**3.9**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
2-Methylnaphthalene	**61**	0.54	EPA 8270D/SIM	2-11-15	2-17-15	
1-Methylnaphthalene	**35**	0.54	EPA 8270D/SIM	2-11-15	2-17-15	
Acenaphthylene	**0.80**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Acenaphthene	**0.32**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Fluorene	**0.69**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Phenanthrene	**15**	0.54	EPA 8270D/SIM	2-11-15	2-17-15	
Anthracene	**0.90**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Fluoranthene	**0.70**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Pyrene	**2.5**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[a]anthracene	**0.17**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Chrysene	**0.33**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[b]fluoranthene	**0.081**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo(j,k)fluoranthene	**0.082**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[a]pyrene	**0.10**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Indeno(1,2,3-c,d)pyrene	**0.069**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Dibenz[a,h]anthracene	**ND**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[g,h,i]perylene	**0.087**	0.054	EPA 8270D/SIM	2-11-15	2-17-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*39*	*32 - 114*				
Pyrene-d10	*33*	*33 - 121*				
Terphenyl-d14	*79*	*31 - 116*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-2-1.0**					
Laboratory ID:	01-216-03					
Naphthalene	**0.51**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
2-Methylnaphthalene	**4.0**	0.11	EPA 8270D/SIM	2-11-15	2-17-15	
1-Methylnaphthalene	**2.2**	0.11	EPA 8270D/SIM	2-11-15	2-17-15	
Acenaphthylene	**0.073**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Acenaphthene	**0.10**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Fluorene	**0.42**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Phenanthrene	**0.27**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Anthracene	**0.025**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Fluoranthene	**0.015**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Pyrene	**0.058**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Benzo[a]anthracene	**0.021**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Chrysene	**0.036**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Benzo[b]fluoranthene	**ND**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Benzo(j,k)fluoranthene	**ND**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Benzo[a]pyrene	**ND**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Dibenz[a,h]anthracene	**ND**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Benzo[g,h,i]perylene	**ND**	0.011	EPA 8270D/SIM	2-11-15	2-13-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*79*	*32 - 114*				
Pyrene-d10	*86*	*33 - 121*				
Terphenyl-d14	*73*	*31 - 116*				

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Project: 101.01057.00001

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-3-1.0**					
Laboratory ID:	01-216-05					
Naphthalene	**0.15**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
2-Methylnaphthalene	**0.97**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
1-Methylnaphthalene	**0.62**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Acenaphthylene	**0.045**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Acenaphthene	**0.11**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Fluorene	**0.28**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Phenanthrene	**0.28**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Anthracene	**0.018**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Fluoranthene	**0.034**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Pyrene	**0.046**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Benzo[a]anthracene	**0.027**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Chrysene	**0.034**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Benzo[b]fluoranthene	**0.023**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Benzo(j,k)fluoranthene	**0.010**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Benzo[a]pyrene	**0.012**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Indeno(1,2,3-c,d)pyrene	**0.013**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Benzo[g,h,i]perylene	**0.017**	0.010	EPA 8270D/SIM	2-11-15	2-13-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*93*	*32 - 114*				
Pyrene-d10	*97*	*33 - 121*				
Terphenyl-d14	*93*	*31 - 116*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-4-0.5**					
Laboratory ID:	01-216-07					
Naphthalene	**4.1**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
2-Methylnaphthalene	**26**	0.47	EPA 8270D/SIM	2-11-15	2-17-15	
1-Methylnaphthalene	**13**	0.47	EPA 8270D/SIM	2-11-15	2-17-15	
Acenaphthylene	**0.63**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Acenaphthene	**0.65**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Fluorene	**4.8**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Phenanthrene	**8.4**	0.47	EPA 8270D/SIM	2-11-15	2-17-15	
Anthracene	**0.71**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Fluoranthene	**0.95**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Pyrene	**1.4**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[a]anthracene	**0.71**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Chrysene	**1.2**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[b]fluoranthene	**0.37**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo(j,k)fluoranthene	**0.31**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[a]pyrene	**0.33**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Indeno(1,2,3-c,d)pyrene	**0.23**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Dibenz[a,h]anthracene	**0.18**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[g,h,i]perylene	**0.34**	0.047	EPA 8270D/SIM	2-11-15	2-17-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*38*	*32 - 114*				
Pyrene-d10	*114*	*33 - 121*				
Terphenyl-d14	*82*	*31 - 116*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-6-6.5**					
Laboratory ID:	01-216-09					
Naphthalene	**0.089**	0.0094	EPA 8270D/SIM	2-11-15	2-13-15	
2-Methylnaphthalene	**0.12**	0.0094	EPA 8270D/SIM	2-11-15	2-13-15	
1-Methylnaphthalene	**0.049**	0.0094	EPA 8270D/SIM	2-11-15	2-13-15	
Acenaphthylene	**ND**	0.0094	EPA 8270D/SIM	2-11-15	2-13-15	
Acenaphthene	**0.080**	0.0094	EPA 8270D/SIM	2-11-15	2-13-15	
Fluorene	**ND**	0.0094	EPA 8270D/SIM	2-11-15	2-13-15	
Phenanthrene	**0.27**	0.0094	EPA 8270D/SIM	2-11-15	2-13-15	
Anthracene	**0.045**	0.0094	EPA 8270D/SIM	2-11-15	2-13-15	
Fluoranthene	**0.96**	0.0094	EPA 8270D/SIM	2-11-15	2-13-15	
Pyrene	**1.3**	0.094	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[a]anthracene	**1.5**	0.094	EPA 8270D/SIM	2-11-15	2-17-15	
Chrysene	**1.7**	0.094	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[b]fluoranthene	**2.5**	0.094	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo(j,k)fluoranthene	**1.7**	0.094	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[a]pyrene	**2.4**	0.094	EPA 8270D/SIM	2-11-15	2-17-15	
Indeno(1,2,3-c,d)pyrene	**1.9**	0.094	EPA 8270D/SIM	2-11-15	2-17-15	
Dibenz[a,h]anthracene	**0.97**	0.094	EPA 8270D/SIM	2-11-15	2-17-15	
Benzo[g,h,i]perylene	**2.1**	0.094	EPA 8270D/SIM	2-11-15	2-17-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*82*	*32 - 114*				
Pyrene-d10	*88*	*33 - 121*				
Terphenyl-d14	*80*	*31 - 116*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

PAHs EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0211S1					
Naphthalene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Acenaphthylene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Acenaphthene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Fluorene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Phenanthrene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Anthracene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Fluoranthene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Pyrene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Chrysene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270D/SIM	2-11-15	2-12-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*87*	*32 - 114*				
Pyrene-d10	*87*	*33 - 121*				
Terphenyl-d14	*80*	*31 - 116*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

PAHs EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0211S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0667**	**0.0665**	0.0833	0.0833	80	80	63 - 113	0	19	
Acenaphthylene	**0.0766**	**0.0799**	0.0833	0.0833	92	96	61 - 125	4	16	
Acenaphthene	**0.0690**	**0.0722**	0.0833	0.0833	83	87	66 - 113	5	16	
Fluorene	**0.0708**	**0.0738**	0.0833	0.0833	85	89	60 - 117	4	16	
Phenanthrene	**0.0641**	**0.0661**	0.0833	0.0833	77	79	63 - 116	3	12	
Anthracene	**0.0728**	**0.0754**	0.0833	0.0833	87	91	66 - 141	4	19	
Fluoranthene	**0.0756**	**0.0794**	0.0833	0.0833	91	95	60 - 125	5	13	
Pyrene	**0.0739**	**0.0773**	0.0833	0.0833	89	93	66 - 126	4	15	
Benzo[a]anthracene	**0.0722**	**0.0745**	0.0833	0.0833	87	89	60 - 128	3	15	
Chrysene	**0.0635**	**0.0677**	0.0833	0.0833	76	81	60 - 117	6	13	
Benzo[b]fluoranthene	**0.0768**	**0.0800**	0.0833	0.0833	92	96	60 - 131	4	16	
Benzo(j,k)fluoranthene	**0.0712**	**0.0730**	0.0833	0.0833	85	88	57 - 126	2	20	
Benzo[a]pyrene	**0.0728**	**0.0763**	0.0833	0.0833	87	92	62 - 136	5	16	
Indeno(1,2,3-c,d)pyrene	**0.0747**	**0.0778**	0.0833	0.0833	90	93	60 - 127	4	19	
Dibenz[a,h]anthracene	**0.0727**	**0.0760**	0.0833	0.0833	87	91	62 - 133	4	22	
Benzo[g,h,i]perylene	**0.0734**	**0.0777**	0.0833	0.0833	88	93	63 - 129	6	22	
Surrogate:										
2-Fluorobiphenyl					*104*	*100*	*32 - 114*			
Pyrene-d10					*100*	*98*	*33 - 121*			
Terphenyl-d14					*91*	*89*	*31 - 116*			

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

PAHs EPA 8270D/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-1-W**					
Laboratory ID:	01-216-11					
Naphthalene	**4.7**	0.10	EPA 8270D/SIM	2-9-15	2-10-15	
2-Methylnaphthalene	**17**	1.0	EPA 8270D/SIM	2-9-15	2-11-15	
1-Methylnaphthalene	**14**	1.0	EPA 8270D/SIM	2-9-15	2-11-15	
Acenaphthylene	**0.23**	0.10	EPA 8270D/SIM	2-9-15	2-10-15	
Acenaphthene	**1.1**	0.10	EPA 8270D/SIM	2-9-15	2-10-15	
Fluorene	**1.9**	0.10	EPA 8270D/SIM	2-9-15	2-10-15	
Phenanthrene	**1.0**	0.10	EPA 8270D/SIM	2-9-15	2-10-15	
Anthracene	**0.14**	0.10	EPA 8270D/SIM	2-9-15	2-10-15	
Fluoranthene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-10-15	
Pyrene	**0.32**	0.10	EPA 8270D/SIM	2-9-15	2-10-15	
Benzo[a]anthracene	**0.020**	0.010	EPA 8270D/SIM	2-9-15	2-10-15	
Chrysene	**0.045**	0.010	EPA 8270D/SIM	2-9-15	2-10-15	
Benzo[b]fluoranthene	**0.011**	0.010	EPA 8270D/SIM	2-9-15	2-10-15	
Benzo(j,k)fluoranthene	**0.012**	0.010	EPA 8270D/SIM	2-9-15	2-10-15	
Benzo[a]pyrene	**0.025**	0.010	EPA 8270D/SIM	2-9-15	2-10-15	
Indeno(1,2,3-c,d)pyrene	**0.015**	0.010	EPA 8270D/SIM	2-9-15	2-10-15	
Dibenz[a,h]anthracene	**0.014**	0.010	EPA 8270D/SIM	2-9-15	2-10-15	
Benzo[g,h,i]perylene	**0.021**	0.010	EPA 8270D/SIM	2-9-15	2-10-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*86*	*39 - 109*				
Pyrene-d10	*114*	*53 - 131*				
Terphenyl-d14	*98*	*44 - 104*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

PAHs EPA 8270D/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SB-4-W**					
Laboratory ID:	01-216-12					
Naphthalene	**2.4**	0.51	EPA 8270D/SIM	2-9-15	2-11-15	
2-Methylnaphthalene	**16**	0.51	EPA 8270D/SIM	2-9-15	2-11-15	
1-Methylnaphthalene	**25**	0.51	EPA 8270D/SIM	2-9-15	2-11-15	
Acenaphthylene	**0.54**	0.51	EPA 8270D/SIM	2-9-15	2-11-15	
Acenaphthene	**4.8**	0.51	EPA 8270D/SIM	2-9-15	2-11-15	
Fluorene	**3.9**	0.51	EPA 8270D/SIM	2-9-15	2-11-15	
Phenanthrene	**3.6**	0.51	EPA 8270D/SIM	2-9-15	2-11-15	
Anthracene	**ND**	0.51	EPA 8270D/SIM	2-9-15	2-11-15	
Fluoranthene	**ND**	0.51	EPA 8270D/SIM	2-9-15	2-11-15	
Pyrene	**ND**	0.51	EPA 8270D/SIM	2-9-15	2-11-15	
Benzo[a]anthracene	**0.17**	0.051	EPA 8270D/SIM	2-9-15	2-11-15	
Chrysene	**0.22**	0.051	EPA 8270D/SIM	2-9-15	2-11-15	
Benzo[b]fluoranthene	**0.13**	0.051	EPA 8270D/SIM	2-9-15	2-11-15	
Benzo(j,k)fluoranthene	**0.070**	0.051	EPA 8270D/SIM	2-9-15	2-11-15	
Benzo[a]pyrene	**0.11**	0.051	EPA 8270D/SIM	2-9-15	2-11-15	
Indeno(1,2,3-c,d)pyrene	**0.15**	0.051	EPA 8270D/SIM	2-9-15	2-11-15	
Dibenz[a,h]anthracene	**0.12**	0.051	EPA 8270D/SIM	2-9-15	2-11-15	
Benzo[g,h,i]perylene	**0.17**	0.051	EPA 8270D/SIM	2-9-15	2-11-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*94*	*39 - 109*				
Pyrene-d10	*88*	*53 - 131*				
Terphenyl-d14	*92*	*44 - 104*				

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

PAHs EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0209W1					
Naphthalene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-11-15	
2-Methylnaphthalene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-11-15	
1-Methylnaphthalene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-11-15	
Acenaphthylene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-11-15	
Acenaphthene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-11-15	
Fluorene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-11-15	
Phenanthrene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-11-15	
Anthracene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-11-15	
Fluoranthene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-11-15	
Pyrene	**ND**	0.10	EPA 8270D/SIM	2-9-15	2-11-15	
Benzo[a]anthracene	**ND**	0.010	EPA 8270D/SIM	2-9-15	2-11-15	
Chrysene	**ND**	0.010	EPA 8270D/SIM	2-9-15	2-11-15	
Benzo[b]fluoranthene	**ND**	0.010	EPA 8270D/SIM	2-9-15	2-11-15	
Benzo(j,k)fluoranthene	**ND**	0.010	EPA 8270D/SIM	2-9-15	2-11-15	
Benzo[a]pyrene	**ND**	0.010	EPA 8270D/SIM	2-9-15	2-11-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.010	EPA 8270D/SIM	2-9-15	2-11-15	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270D/SIM	2-9-15	2-11-15	
Benzo[g,h,i]perylene	**ND**	0.010	EPA 8270D/SIM	2-9-15	2-11-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*93*	*39 - 109*				
Pyrene-d10	*107*	*53 - 131*				
Terphenyl-d14	*118*	*44 - 104*				Q

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

PAHs EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0209W1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.273**	**0.342**	0.500	0.500	55	68	41 - 105	22	46	
Acenaphthylene	**0.391**	**0.470**	0.500	0.500	78	94	48 - 109	18	43	
Acenaphthene	**0.339**	**0.415**	0.500	0.500	68	83	52 - 105	20	40	
Fluorene	**0.377**	**0.449**	0.500	0.500	75	90	60 - 108	17	41	
Phenanthrene	**0.384**	**0.460**	0.500	0.500	77	92	61 - 110	18	36	
Anthracene	**0.371**	**0.440**	0.500	0.500	74	88	57 - 130	17	37	
Fluoranthene	**0.452**	**0.516**	0.500	0.500	90	103	60 - 120	13	35	
Pyrene	**0.441**	**0.516**	0.500	0.500	88	103	66 - 127	16	37	
Benzo[a]anthracene	**0.498**	**0.542**	0.500	0.500	100	108	60 - 135	8	34	
Chrysene	**0.400**	**0.424**	0.500	0.500	80	85	64 - 113	6	34	
Benzo[b]fluoranthene	**0.569**	**0.542**	0.500	0.500	114	108	66 - 126	5	37	
Benzo(j,k)fluoranthene	**0.447**	**0.506**	0.500	0.500	89	101	66 - 123	12	39	
Benzo[a]pyrene	**0.595**	**0.597**	0.500	0.500	119	119	63 - 130	0	37	
Indeno(1,2,3-c,d)pyrene	**0.522**	**0.532**	0.500	0.500	104	106	63 - 130	2	42	
Dibenz[a,h]anthracene	**0.520**	**0.533**	0.500	0.500	104	107	60 - 124	2	44	
Benzo[g,h,i]perylene	**0.505**	**0.514**	0.500	0.500	101	103	60 - 119	2	45	
Surrogate:										
2-Fluorobiphenyl					*72*	*93*	*39 - 109*			
Pyrene-d10					*94*	*106*	*53 - 131*			
Terphenyl-d14					*88*	*117*	*44 - 104*			

Date of Repor t: February 19, 2015
Samples Submitted: January 29, 2015
Laboratory Reference: 1501-216
Project: 101.01057.00001

% MOISTURE

Date Analyzed: 1-30-15

Client ID	Lab ID	% Moisture
SB-1-1.0	01-216-01	39
SB-2-1.0	01-216-03	38
SB-3-1.0	01-216-05	33
SB-4-0.5	01-216-07	29
SB-5-4.0	01-216-08	25
SB-6-6.5	01-216-09	29

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Feb 13 2015
On-Site Environmental
14648 NE 95th ST
Redmond, WA 98052
Attention: David Baumeister

Dear David Baumeister:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
SB-3-1.0	Soil	15-A001288	CN

Your sample was received on Friday, January 30, 2015. At the time of receipt, the sample was logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to conact me.

Sincerely,

Aaron W. Young
Laboratory Manager

Project #: 101.01057.00001
PO Number: 01-216

BACT = Bacteriological
CONV = Conventionals
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

ANALYSIS REPORT

On-Site Environmental
14648 NE 95th ST
Redmond, WA 98052
Attention: David Baumeister
Project #: 101.01057.00001
PO Number: 01-216
All results reported on an as received basis.

Date Received: 01/30/15
Date Reported: 2/13/15

AMTEST Identification Number **15-A001288**
Client Identification **SB-3-1.0**
Sampling Date **01/28/15, 11:50**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Cyanide	11.	ug/g		0.05	SW846 9012	MR	02/09/15

Aaron W. Young
Laboratory Manager

Am Test Inc.
13600 NE 126th PL
Suite C
Kirkland, WA, 98034
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www.amtestlab.com

Professional Analytical Services

QC Summary for sample number: 15-A001288

MATRIX SPIKES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	SMPL+ SPK	SPK AMT	RECOVERY
15-A001288	Total Cyanide	ug/g	11.	26.	15.	100.00 %

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Total Cyanide	ug/g	0.10	0.10	100. %

BLANKS

ANALYTE	UNITS	RESULT
Total Cyanide	ug/g	< 0.05

OnSite Environmental Inc.

14648 NE 95th Street, Redmond, WA 98052 · (425) 883-3881

Laboratory Reference #: 01-216

Subcontract Laboratory: AmTest Laboratories

Turnaround Request:

Project Manager: David Baumeister

Attention: Aaron Young

1 Day 2 Day 3 Day

email: dbaumeister@onsite-env.com

13600 NE 126th Pl Kirkland, WA 98034

Standard

Project Number: 101.0105.00001

Phone Number: (425) 885-1664

Other: _____

Project Name: _____

Date/Time: _____

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	Requested Analysis
1288	SB-3-1.0	1/28/15		S	1	Total Cyanide

Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by:	OSE	1/30/15	1500	
Received by: Andrea Betts	AMTEST	1/30/15	1500	15.8 °C
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: SLR International Corp.
Project Number: 101.01057.00001
Project Name: Lamb-Grays Harbor (LGH)
Project Manager: Greg Lisk
Sampled by: Amanda Mengniot

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Laboratory Number: 01-216

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals (8)	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	BTEX by 8260C	Total Cyanide by 9010B	LEAD by 200.8			% Moisture
1	SB-1-1.0	1/29/15	0950	Soil	4				X				(X)									X					X
2	SB-1-9.5		1000		4																						
3	SB-2-1.0		1115		4				X				(X)									X					X
4	SB-2-6.0		1130		4																						
5	SB-3-1.0		1150		5			X	X	X			(X)					X					X				X
6	SB-3-9.5		1200		5																						
7	SB-4-0.5		1245		8			X	X	X			(X)					X									X
8	SB-5-4.0		1420		8			X														X		X			X
9	SB-6-6.5		1515		4				X				(X)									X					X
10	SB-6-7.5		1530		5																						

	Signature	Company	Date	Time
Relinquished		SLR	1/29/15	1140
Received		SpeeDy	1/29/15	11 79
Relinquished		SpeeDy	1/29/15	1210
Received		QSE	1/29/15	1210
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Hold SB-1-1.0, SB-2-1.0, SB-3-1.0, SB-4-0.5, SB-6-6.5 for PAHs. pending Dx results.
Hold SB-1-9.5, SB-2-6.0, SB-3-9.5, SB-6-7.5.
NWTPH-Dx after silica gel cleanup
(X) Added 2/6/15. DB (STA)

Chromatograms with final report ☐

Chain of Custody

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Laboratory Number: 01-216

Company: SLR International Corp
Project Number: 101.01057.00001
Project Name: Lamb-Grays Harbor (LGH)
Project Manager: Grey Lish
Sampled by: Amanda Mengnist

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	BTEX by 8021B	Dissolved RCRA 8 Metals by 200.8	Dissolved Lead by 200.8			% Moisture
11	SB-1-W	1/28/15	1015	WATER	12				X				X									X					
12	SB-4-W	↓	1300	↓	11			X	X	X			X										X				
13	SB-5-W	↓	1435	↓	9		X															X		X			

	Signature	Company	Date	Time
Relinquished		SLR	1/29/15	1140
Received		SPEEDY	1/29/15	1140
Relinquished		SPEEDY	1/29/15	1210
Received		COE	1/29/15	1210
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Hold SB-~~1~~ and SB-4-W for PAHs pending Dx results.
NWTPH-Dx after silica gel cleanup.
Sample SB-4-W has 6 unpreserved VOAs due to filling issue.

Chromatograms with final report ☐