ECF-100BC5-15-0119
Revision 0

Determination of Representative Lineal Dimensions for 100BC Operable Unit Waste Site Decision Units for Use in Soil Screening Level and Preliminary Remedial Goal Comparisons to Exposure Point Concentrations

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788

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INTERA, Inc.

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ENVIRONMENTAL CALCULATION COVER PAGE

Section 1: Completed by the Responsible Manager

Project: 100-B/C Remedial Investigation/Feasibility Study

Date: 10/10/2015

Calculation Title & Description: Determination of Representative Lineal Dimensions for 100BC Operable Unit Waste Site Decision Units for Use in Soil Screening Level and Preliminary Remedial Goal Comparisons to Exposure Point Concentrations

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Section 4: Document Review & Approval

	Name /Position	Signature	Date
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Senior Reviewer:	WE Nichols Modeling Lead (CHPRC)	[signature]	4 NOV 2015
Responsible Manager:	AH Aly Risk & Model Integration Mgr	[signature] ACTING FOR AH ALY	4 NOV 2015

Section 5: Applicable if calculation is a risk assessment or uses an environmental model

PRIOR TO INITIATING MODELING:

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Environmental Calculation File

Determination of Representative Lineal Dimensions for 100BC Operable Unit Waste Site Decision Units for Use in Soil Screening Level and Preliminary Remedial Goal Comparisons to Exposure Point Concentrations

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Terms

ArcGIS®	Commercial desktop Geographic Information System software
EACR	Equivalent Area Circle Radius
ECF	Environmental Calculation File
EPC	Exposure Point Concentration
Esri®	Environmental Systems Research Institute
Decision Unit	A geographic representation of the location and extent of soil or waste material, about which a decision will be made.
GIS	Geographical Information System
HISI	Hanford Information System Inventory
IFV	Intersecting Flow Vectors
Planimetric	Horizontal position of geographic features, independent of elevation or relief
PRG	Preliminary Remediation Goal
RLD	Representative Lineal Dimension
SSL	Soil Screening Level
Vector	A directed line segment commonly with the initial point represented by a tail and the terminal point represented by a tip.
Waste Site	Any location within the boundary of the Hanford Site that may require action to mitigate a potential environmental impact.

1 Purpose

The purpose of this environmental calculation file (ECF) is to determine representative lineal dimensions in the generalized direction of groundwater flow for individual waste site decision unit polygon representations in the 100-BC source Operable Units (OUs).

Lineal representative decision unit dimensions are needed to scale soil screening levels (SSLs) and preliminary remediation goals (PRGs) calculated on a per-meter basis in the direction of groundwater flow (*Determination of Representative Lineal Dimensions for 100BC Operable Unit Waste Site Decision Units for Use in Soil Screening Level and Preliminary Remedial Goal Comparisons to Exposure Point Concentrations ECF-100BC5-15-01119, Rev. 0*). The dimensionally-scaled SSL and PRG values will be compared to exposure point concentrations (EPCs) in a separate calculation to determine those waste site where residual soil contamination would have the potential to cause groundwater protection levels to be exceeded in the future.

2 Background

Decision unit related boundaries span a wide range of planimetric shapes. Pipeline-related decision units may be long, linear and orientated in certain directions whereas surface debris or contamination may be composed of small scattered multiple-part polygons.

Two alternatives are examined for each decision unit within the 100-BC-1 and 100-BC-2 operable units. The first alternative uses the polygon area attribute to calculate a Representative Lineal Dimension (RLD) radius from a hypothetical circle with an equivalent area. The second alternative calculates an average RLD from a sample of parallel flow vectors generated 1 meter apart for each decision unit geometry.

3 Methodology

1. Alternative 1 – Equivalent Area Circle Radius (EACR)
    a. **EXPORT DATA**† for 100-BC-1 and 100-BC-2 operable unit decision units into a new layer from the current published DecisionUnits_100BC shapefile.
    b. **ADD FIELD** SqMeters and **CALCULATE GEOMETRY** to add planimetric area represented in square meters.
    c. **ADD FIELD** RadiusCirc and calculate with the python expression; math.sqrt (!SqMeters! / math.pi). Field RadiusCirc is the representative lineal dimension.

2. Alternative 2 – Intersecting Flow Vectors (IFV)
    a. **EXPORT DATA** for 100-BC-1 and 100-BC-2 operable unit decision units into a new layer from the current DecisionUnits_100BC shapefile
    b. **CREATE FISHNET** of flow vectors orientated in the direction of groundwater flow.
    c. **INTERSECT** fishnet with decision unit layer.

d. **DISSOLVE** on DECISION_U field. Do not create multi-part features. Dissolve is needed to prevent segmentation complications associated with overlapping decision unit polygons.

e. **ADD FIELD** Length item and **CALCULATE GEOMETRY** in meters.

f. **SUMMARIZE** DECISION_U field to generate statistics including average length, standard deviation, count, minimum length, maximum length, etc. Average length is the representative lineal dimension.

† ArcGIS functions indicated in bold type

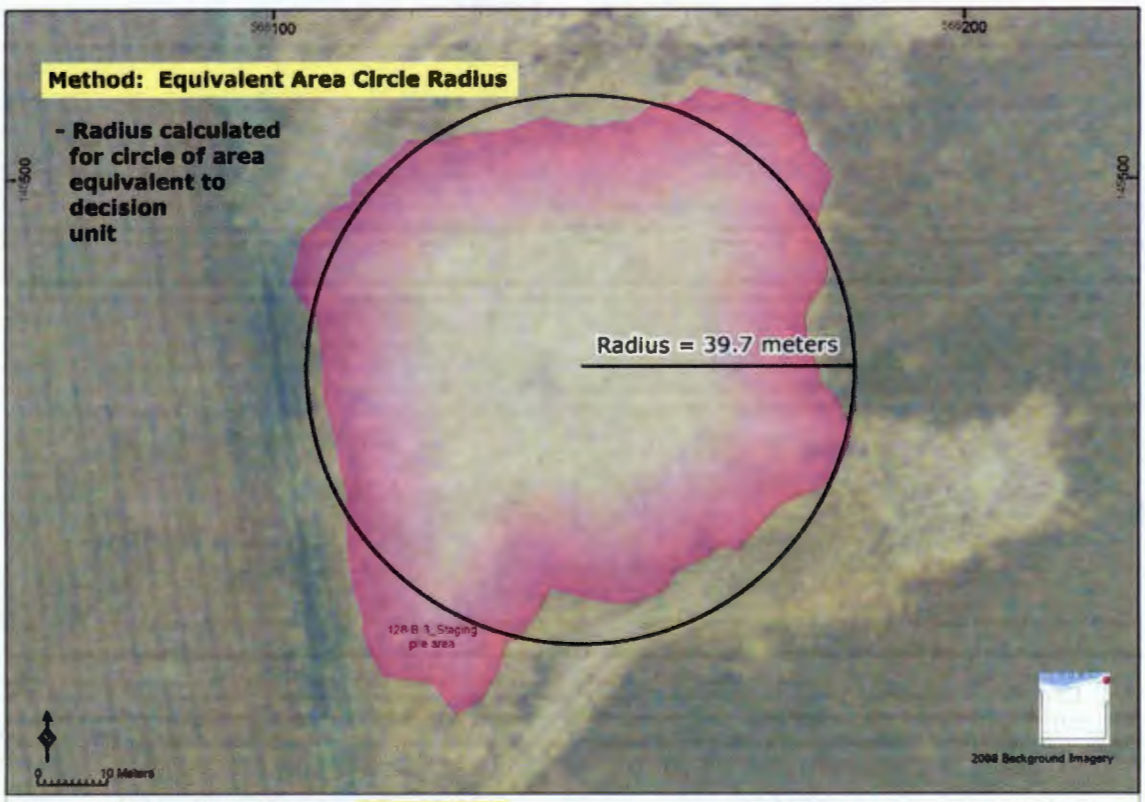


Figure 1. Method Alternative 1 – Equivalent Area Circle Radius

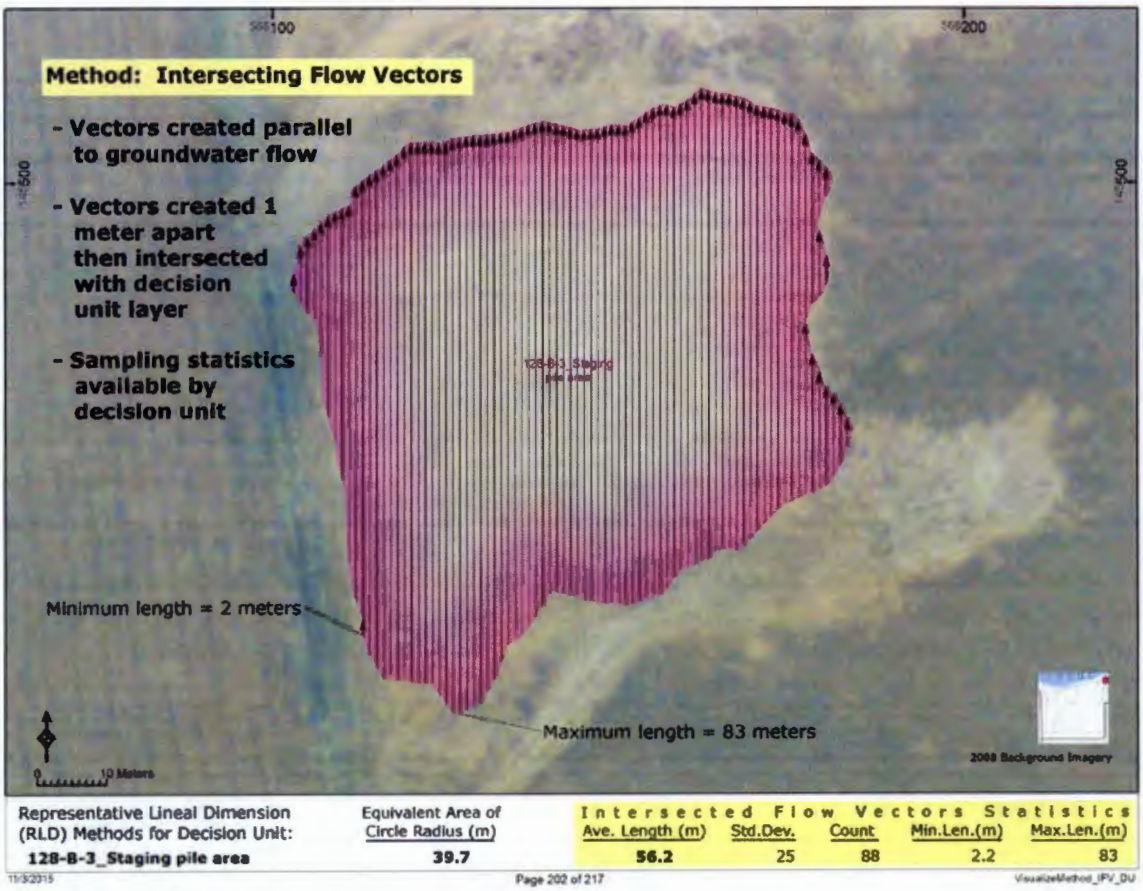


Figure 2. Method Alternative 2 – Intersecting Flow Vectors

4 Assumptions and Inputs

Both alternatives assume the current decision unit layer correctly depicts the spatial and tabular information for the area of interest.

The listed methodology for Alternative 2 – Intersecting Flow Vectors is sensitive to the direction of groundwater flow and assumes that it is constant throughout the area of interest.

5 Software Applications

5.1 Approved Software

5.1.1 Description

- Maps and calculations associated with this ECF were created using ArcGIS 10.2.2 ArcView software by Esri. ArcGIS® and ArcMap™ are the intellectual property of Esri and are used herein under license. For more information about Esri® software, please visit www.esri.com.
- ArcGIS 10.2.2 Basic (ArcView) Single Use Software was used.
- ArcGIS 10.2 is registered on the HISI with Identification Number 3402 and is approved for use.
- All operations were performed on a Lenovo T440s x64-based PC laptop with 8GB RAM running Windows 8.1 Pro, identified with property tag INTERA-00707.

5.1.2 Software Installation and Checkout

Esri license authorization information was provided to INTERA corporate Esri contact and management upon request for review on 5/6/2015.

5.1.3 Statement of Valid Software Application

- GIS is a computerized system for common tasks involving the creation, management, query, analysis, and display of spatial data. It is a valid and appropriate set of software tools to solve problems analytically and support this ECF process. Geoprocessing tools were used together to provide an alternative solution to a complex problem and if needed, can be developed into a geoprocessing model to enhance the repeatability and to establish a uniform practice.
- ArcGIS 10.2.2 was used within the technical and functional limitations. Temporary geoprocessing datasets were well below the 2GB limitation.

6 Calculation

Table 1. Calculation Summary Value Comparison

DECISION UNIT	Method 1 EACR RLD(m)	Method 2 IFV RLD (m)	Method 1 % Difference from Method 2
100-B-1_Shallow_1	53.6	58.6	-9%
100-B-1_Shallow_2	44.3	80.3	-45%
100-B-1_Shallow_Focused	41.0	37.8	9%
100-B-11_Shallow_Focused	1.1	2.0	-44%
100-B-14-1_Deep	50.5	18.4	174%
100-B-14-1_Deep_Focused	1.1	2.0	-44%

100-B-14-1_Overburden_2	549.4	664.1	-17%
100-B-14-1_Overburden_4	62.1	97.6	-36%
100-B-14-1_Overburden_5	78.9	102.9	-23%
100-B-14-1_Overburden_6	54.0	111.6	-52%
100-B-14-1_Overburden_7	59.8	215.9	-72%
100-B-14-1_Overburden_8	26.5	56.4	-53%
100-B-14-1_Overburden_9	90.4	57.9	56%
100-B-14-1_Shallow	104.1	44.6	133%
100-B-14-2_Overburden_Focused	41.0	33.9	21%
100-B-14-2_Shallow_1	21.0	59.2	-64%
100-B-14-2_Shallow_2	25.7	12.2	111%
100-B-14-2_Shallow_3	17.0	19.3	-12%
100-B-14-2_Shallow_Focused	1.1	2.0	-44%
100-B-14-3_Deep_Focused	1.1	2.0	-44%
100-B-14-5_Shallow_Focused	0.4	0.01	6916%
100-B-14-6_Shallow_Focused	6.5	10.9	-41%
100-B-14-7_Shallow_Focused	1.9	5.7	-67%
100-B-16_Shallow_Focused	17.2	11.2	53%
100-B-18_Shallow_Focused	10.6	19.7	-46%
100-B-19_Shallow_1	34.6	63.7	-46%
100-B-19_Shallow_2	11.9	16.4	-28%
100-B-19_Shallow_4	25.8	36.0	-28%
100-B-19_Shallow_5	11.7	25.2	-54%
100-B-19_Shallow_Focused	373.7	219.0	71%
100-B-19_Staging pile area	9.7	14.1	-31%
100-B-19_Staging pile area_Focused	5.8	8.8	-34%
100-B-20_Shallow_Focused	2.9	3.2	-11%
100-B-21-2_Overburden_Focused	26.1	12.1	115%
100-B-21-2_Shallow	10.3	33.0	-69%
100-B-21-3_Overburden_Focused	12.8	7.5	71%
100-B-21-3_Shallow	14.3	9.2	56%
100-B-21-3_Staging pile area_Focused	6.2	9.4	-34%
100-B-21-4_Overburden_Focused	48.1	48.4	-1%
100-B-21-4_Shallow	31.0	29.5	5%
100-B-21-4_Staging pile area	17.1	21.8	-22%
100-B-22-2_Shallow_Focused	120.8	126.3	-4%
100-B-22-2_Staging pile area_Focused	4.0	6.6	-38%
100-B-23_Shallow_Focused	949.7	1237.8	-23%
100-B-25_Overburden_Focused	37.6	58.6	-36%
100-B-25_Shallow	32.9	48.0	-31%
100-B-25_Staging pile area	36.5	29.9	22%
100-B-26_Shallow_Focused	15.3	31.7	-52%
100-B-27_Deep	36.8	47.1	-22%

100-B-27_Overburden_Focused	61.7	73.8	-16%
100-B-27_Staging pile area	51.4	34.6	48%
100-B-28_Overburden_Focused	29.5	14.8	99%
100-B-28_Shallow_1	26.1	24.9	5%
100-B-28_Shallow_3	32.7	19.3	69%
100-B-28_Shallow_5	14.7	22.0	-33%
100-B-28_Shallow_Focused	98.2	150.6	-35%
100-B-28_Staging pile area_2	16.2	70.2	-77%
100-B-28_Staging pile area_4	7.9	4.3	83%
100-B-31_Shallow	46.8	15.1	209%
100-B-32_Shallow_Focused	1.1	2.0	-44%
100-B-33_Shallow_Focused	3.2	4.2	-22%
100-B-33_Staging pile area_Focused	2.8	4.4	-37%
100-B-35-1_Deep_Focused	17.0	22.2	-23%
100-B-35-1_Shallow	90.9	122.0	-25%
100-B-35-1_Staging Pile Area	48.9	101.5	-52%
100-B-35-2_Shallow_Focused	6.8	15.9	-57%
100-B-5_Deep	20.2	27.6	-27%
100-B-5_Shallow	31.8	52.2	-39%
100-B-8-1_Deep	55.9	28.9	94%
100-B-8-1_Overburden	118.0	43.2	173%
100-B-8-1_Shallow	110.6	48.6	128%
100-B-8-2_Deep	76.4	19.2	298%
100-B-8-2_Overburden	150.3	65.3	130%
100-B-8-2_Shallow_1	126.5	30.9	310%
100-B-8-2_Shallow_3	64.5	49.7	30%
100-C-3_Shallow	5.5	8.6	-36%
100-C-7-1_Overburden_Focused_1	82.4	117.8	-30%
100-C-7-1_Overburden_Focused_23	27.0	52.1	-48%
100-C-7-1_Overburden_Focused_24	17.0	26.2	-35%
100-C-7-1_Overburden_Focused_30	34.3	55.8	-39%
100-C-7-1_Overburden_West	89.2	146.9	-39%
100-C-7-1_Shallow_1	89.9	55.4	62%
100-C-7-1_Shallow_2	48.4	51.6	-6%
100-C-7-1_Shallow_3	76.4	103.5	-26%
100-C-7-1_Staging Pile Area_1	79.6	50.7	57%
100-C-7-1_Staging Pile Area_2	78.6	70.6	11%
100-C-7-1_Staging Pile Area_2_Focused	20.0	28.7	-30%
100-C-7-1_Staging Pile Area_3	90.9	99.1	-8%
100-C-7-1_Staging Pile Area_4	67.8	46.5	46%
100-C-7_Overburden_Focused_15	82.2	159.5	-48%
100-C-7_Overburden_Focused_18	55.4	54.9	1%
100-C-7_Overburden_Focused_2	90.9	69.3	31%

100-C-7_Overburden_Focused_27	20.7	20.9	-1%
100-C-7_Overburden_Focused_31	101.3	163.6	-38%
100-C-7_Overburden_Focused_45	14.9	18.7	-21%
100-C-7_Overburden_Focused_47	16.2	31.8	-49%
100-C-7_Shallow_1	85.4	35.7	139%
100-C-7_Shallow_2	44.5	35.9	24%
100-C-7_Staging Pile Area	93.4	45.2	107%
100-C-9-1_Deep_Focused	1.1	2.0	-43%
100-C-9-1_Overburden_Focused	122.0	44.6	174%
100-C-9-1_Shallow_2	53.5	26.1	105%
100-C-9-1_Shallow_Focused	232.5	348.7	-33%
100-C-9-2_Overburden_Focused	17.8	16.6	7%
100-C-9-2_Shallow	26.2	11.7	124%
100-C-9-2_Shallow_Focused	16.7	14.8	13%
100-C-9-3_Deep_Focused	1.1	2.0	-44%
100-C-9_1_Shallow_1	74.9	112.0	-33%
116-B-1_Deep	24.4	20.0	21%
116-B-1_Shallow	26.2	10.8	142%
116-B-10_Shallow	7.0	8.4	-17%
116-B-11_Deep	68.1	85.7	-21%
116-B-11_Shallow	26.3	6.8	286%
116-B-12_Deep	5.4	15.2	-64%
116-B-12_Shallow	11.7	15.9	-26%
116-B-13_Shallow	15.9	24.6	-35%
116-B-14_Deep	6.5	3.6	81%
116-B-14_Shallow	9.4	3.4	178%
116-B-15_Shallow_Focused	14.9	17.9	-17%
116-B-2_Deep	12.1	14.9	-19%
116-B-2_Shallow	13.1	7.7	71%
116-B-3_Deep	3.0	2.2	38%
116-B-3_Shallow	5.2	6.5	-20%
116-B-4_Deep	22.9	38.9	-41%
116-B-4_Shallow	16.4	10.0	65%
116-B-5_Deep_Focused	8.0	18.5	-57%
116-B-5_Overburden_Focused	6.1	4.8	26%
116-B-5_Shallow_Focused	8.8	37.6	-77%
116-B-6A_Deep	8.0	11.0	-28%
116-B-6A_Shallow	11.3	7.9	43%
116-B-6B_Shallow	5.0	8.6	-42%
116-B-7, 132-B-6, 132-C-2_Deep	8.3	12.7	-34%
116-B-7, 132-B-6, 132-C-2_Shallow	21.3	20.9	2%
116-B-9_Shallow	4.0	7.1	-43%
116-C-1_Deep	59.5	57.5	3%

116-C-1_Overburden	68.1	23.0	196%
116-C-1_Shallow	38.2	12.3	211%
116-C-2A_Deep	17.0	14.2	20%
116-C-2A_Overburden	17.3	23.6	-26%
116-C-2A_Shallow	23.1	9.8	136%
116-C-3_Overburden_Focused	46.8	33.4	40%
116-C-3_Shallow	4.3	5.0	-14%
116-C-3_Shallow_Focused	4.2	4.6	-9%
116-C-3_Staging pile area_Focused	18.8	35.8	-48%
116-C-5_Deep	90.4	93.1	-3%
116-C-5_Overburden	58.1	20.2	188%
116-C-5_Shallow	40.3	10.4	287%
116-C-6_Shallow_Focused	2.3	2.4	-4%
118-B-1_Overburden_1	4.9	2.6	88%
118-B-1_Overburden_8	85.7	101.9	-16%
118-B-1_Overburden_9	74.2	32.7	127%
118-B-1_Shallow_1	34.7	37.4	-7%
118-B-1_Shallow_2	21.9	6.1	258%
118-B-1_Shallow_3	38.4	9.8	293%
118-B-1_Shallow_4	21.5	17.2	25%
118-B-1_Shallow_5	18.6	33.1	-44%
118-B-1_Shallow_6	54.3	8.6	534%
118-B-1_Shallow_7	54.1	55.0	-2%
118-B-1_Shallow_Focused	165.5	250.9	-34%
118-B-1_Staging pile area	94.2	103.6	-9%
118-B-1_Staging pile area_Focused	10.2	2.9	253%
118-B-10_Shallow	5.7	8.6	-33%
118-B-10_Shallow_Focused	2.6	2.1	24%
118-B-10_Staging pile area	7.9	8.3	-4%
118-B-3_Overburden_2	46.1	40.2	15%
118-B-3_Overburden_4	38.3	76.8	-50%
118-B-3_Shallow	38.1	27.8	37%
118-B-3_Shallow_Focused	35.6	63.2	-44%
118-B-3_Staging pile area	47.9	47.5	1%
118-B-4_Shallow	13.0	24.2	-46%
118-B-4_Staging pile area	21.2	23.5	-10%
118-B-5_Shallow	14.9	22.5	-34%
118-B-5_Shallow_Focused	4.4	2.3	93%
118-B-5_Staging pile area	30.8	27.1	14%
118-B-6_Deep	4.2	6.2	-32%
118-B-6_Overburden	21.8	23.6	-8%
118-B-6_Shallow	16.2	17.0	-4%
118-B-6_Staging pile area	12.4	21.8	-43%

118-B-7_Shallow_Focused	0.6	0.2	182%
118-B-9_Shallow_Focused	4.4	4.2	5%
118-C-1_Overburden	53.4	49.7	7%
118-C-1_Shallow_1	31.0	29.6	5%
118-C-1_Shallow_2	27.3	17.1	60%
118-C-1_Shallow_3	49.1	41.6	18%
118-C-1_Shallow_4	49.1	32.4	51%
118-C-1_Shallow_Focused	82.5	84.2	-2%
118-C-1_Staging Pile Area	86.0	64.5	33%
118-C-2_Shallow	6.6	9.8	-32%
118-C-2_Staging pile area	5.5	8.0	-31%
118-C-3-2_Deep_Focused	4.9	4.3	16%
118-C-3-3_Shallow_Focused	36.7	60.3	-39%
118-C-4_Shallow	6.2	5.2	21%
120-B-1_Shallow_Focused	6.4	10.6	-39%
126-B-3_Shallow	62.6	87.4	-28%
126-B-3_Staging pile area_2	82.2	84.6	-3%
126-B-3_Staging pile area_3	40.2	67.8	-41%
126-B-3_Staging pile area_Focused	1.1	2.0	-44%
128-B-2_Shallow	64.3	95.0	-32%
128-B-3_Shallow_1	28.3	15.4	83%
128-B-3_Shallow_2	46.7	45.7	2%
128-B-3_Shallow_3	58.8	39.8	48%
128-B-3_Staging pile area	39.7	56.2	-29%
128-B-3_Staging pile area_Focused	3.8	4.3	-11%
128-C-1_Shallow	32.5	45.4	-28%
128-C-1_Shallow_Focused	30.7	37.0	-17%
1607-B1_Shallow_Focused	7.9	6.3	25%
1607-B10_Shallow	7.5	14.6	-48%
1607-B11_Shallow	6.6	10.2	-36%
1607-B2-1_Overburden_Focused	21.3	10.6	100%
1607-B2-1_Shallow	42.8	35.7	20%
1607-B2-2_Overburden_Focused	67.7	129.6	-48%
1607-B2-2_Shallow	77.2	240.1	-68%
1607-B7_Shallow	10.8	12.3	-12%
1607-B8_Shallow	9.0	14.3	-37%
1607-B9_Shallow	23.5	28.0	-16%
600-232_Shallow	170.4	147.8	15%
600-233_Shallow_Focused	4.6	2.1	113%

7 Results/Conclusions

Both calculation methods are easy to perform. In situations where there is prominent groundwater direction and gradient, the IFV method may be useful, as it is a measurement sensitive to both decision unit geometry and orientation and carries an estimate of variation. In situations where multiple measurement methods are desired, the method could be stored in a separate database field, in addition to the measurement.

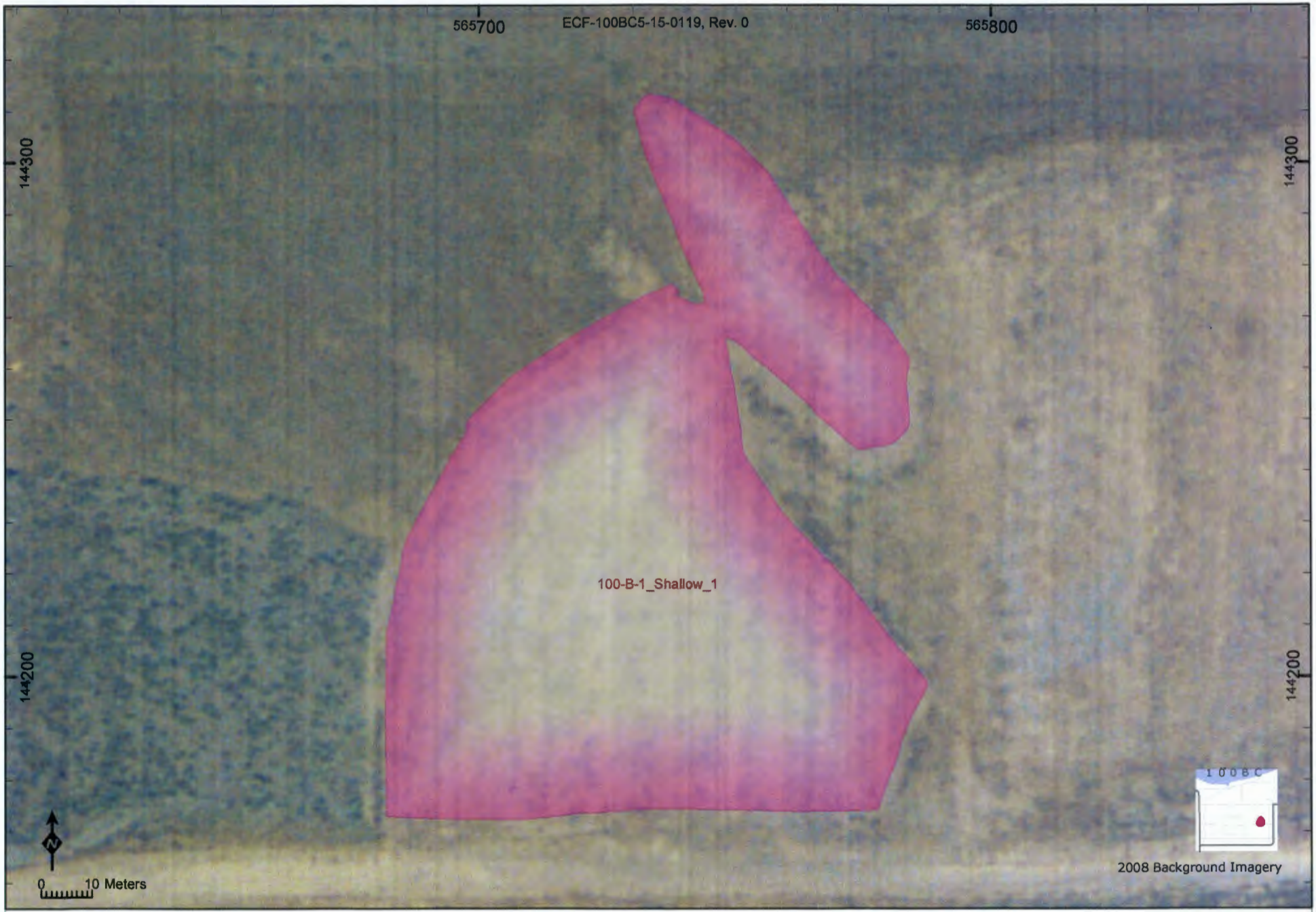
8 References

Esri 2014. *ArcGIS™ for Desktop.* Environmental Systems Research Institute, Redlands, California.

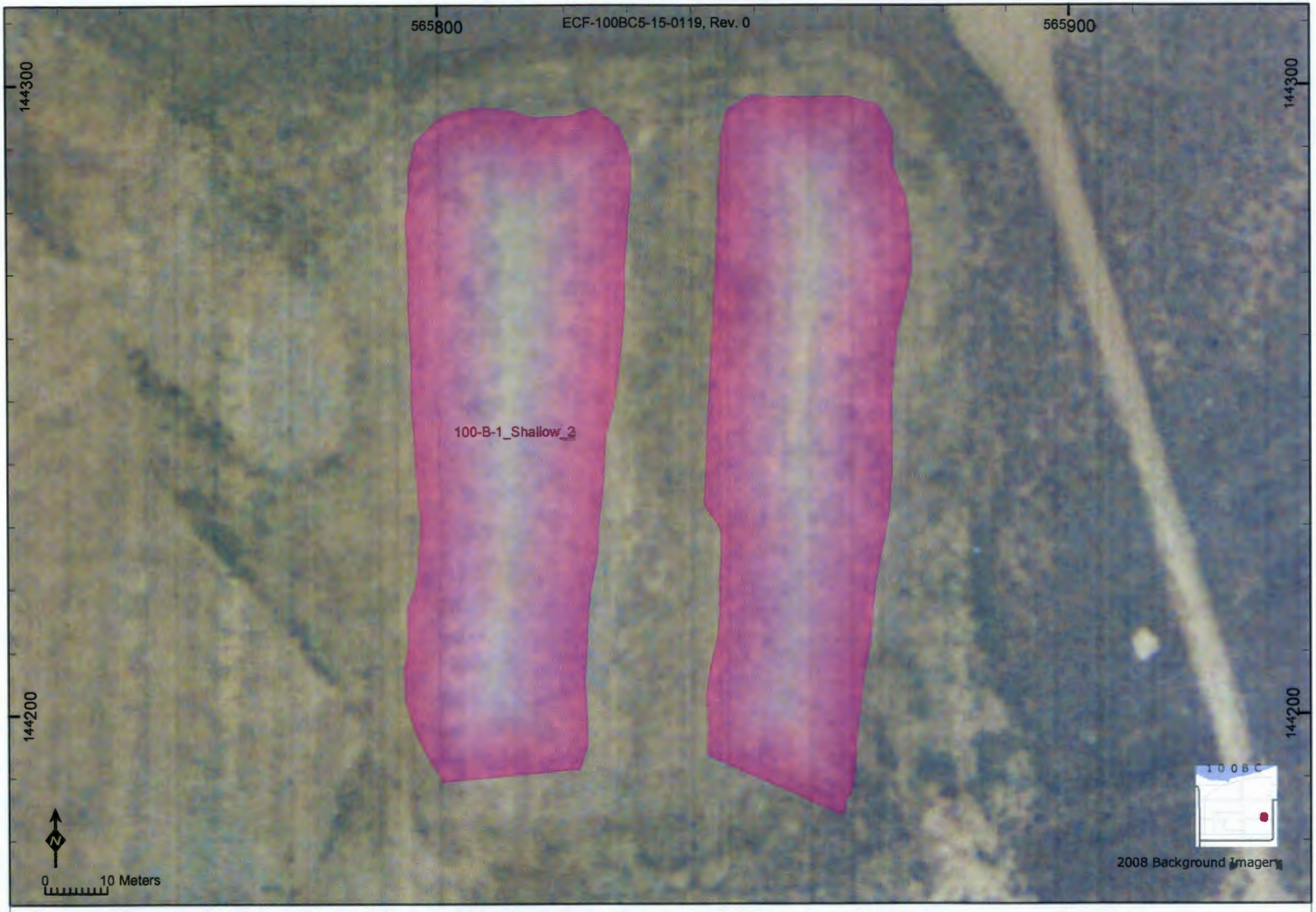
EPA530-D-02-002, 2002. *RCRA Waste Sampling Draft Technical Guidance,* United States Environmental Protection Agency, Office of Solid Waste.

Appendix A

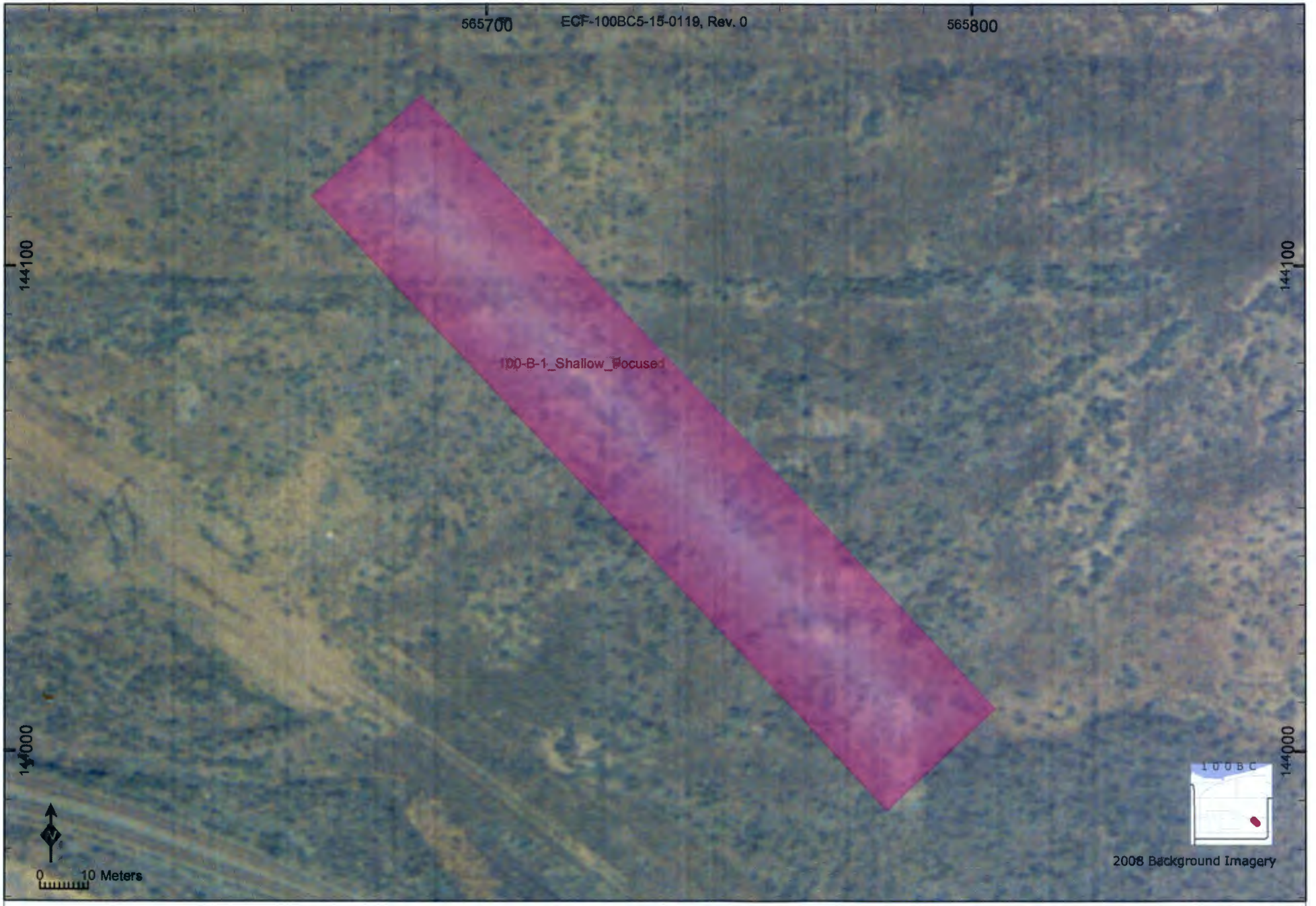
Decision Units Map Series



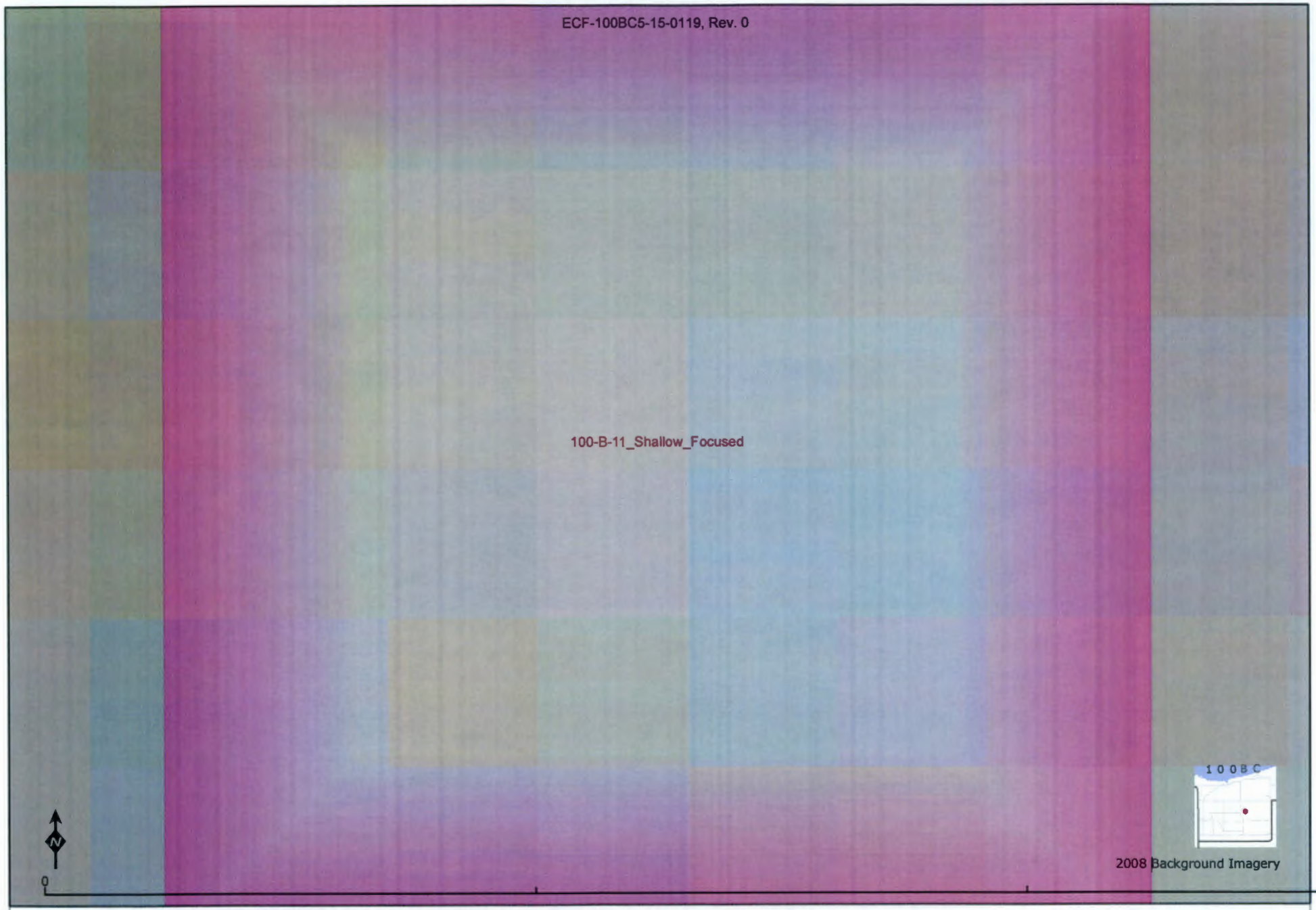
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-1_Shallow_1	**53.6**	**58.6**	31	154	4.1	134



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-1_Shallow_2	**44.3**	13	**80.3**	38	77	0.1	114



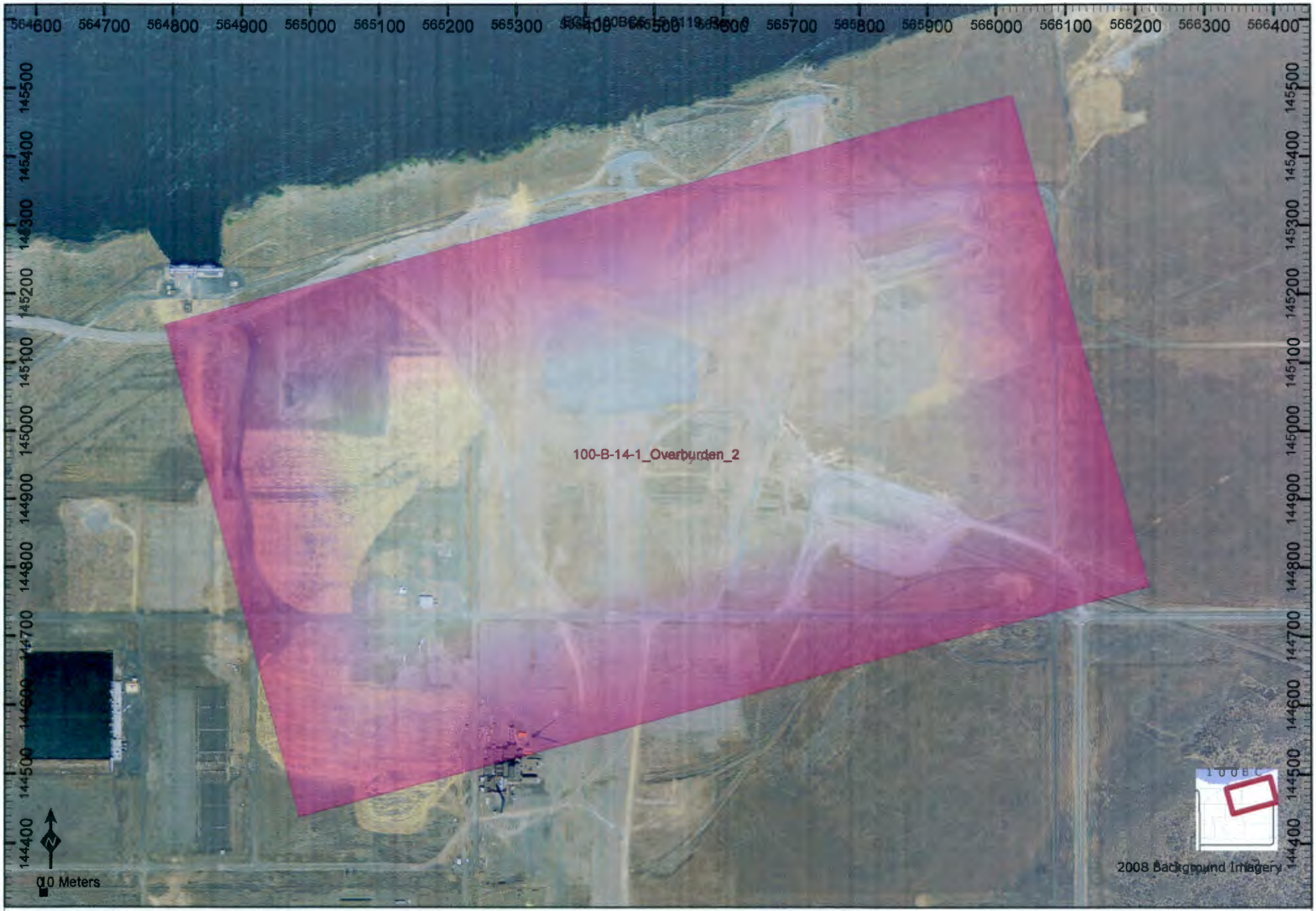
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-1_Shallow_Focused	**41**	**37.8**	13	140	0.7	45



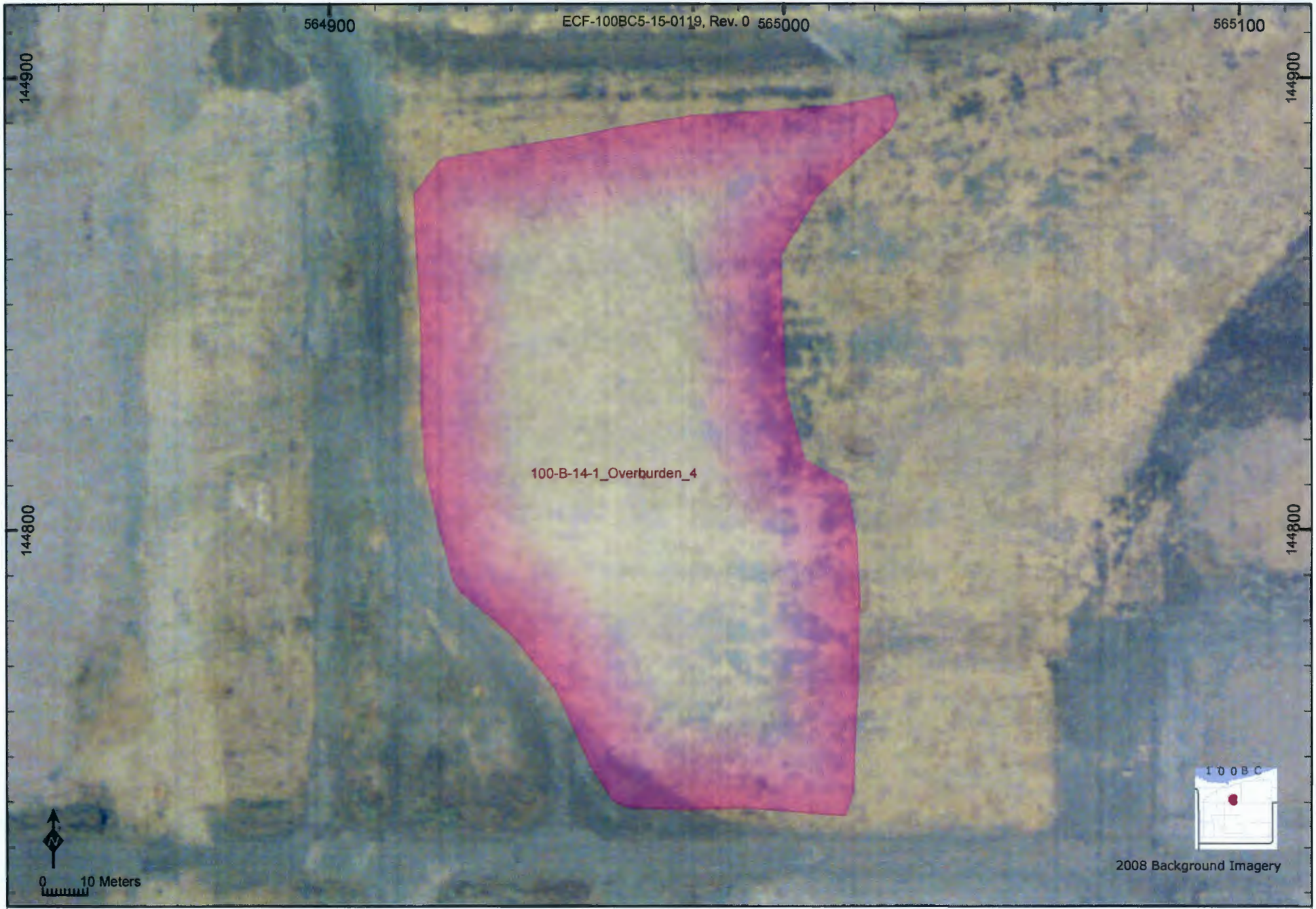
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-11_Shallow_Focused	**1.1**	15	**2**	0	2	2	2

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-1_Deep	**50.5**	16	**18.4**	36	435	0.6	232

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-1_Deep_Focused	**1.1**	17	**2**	0	2	2	2



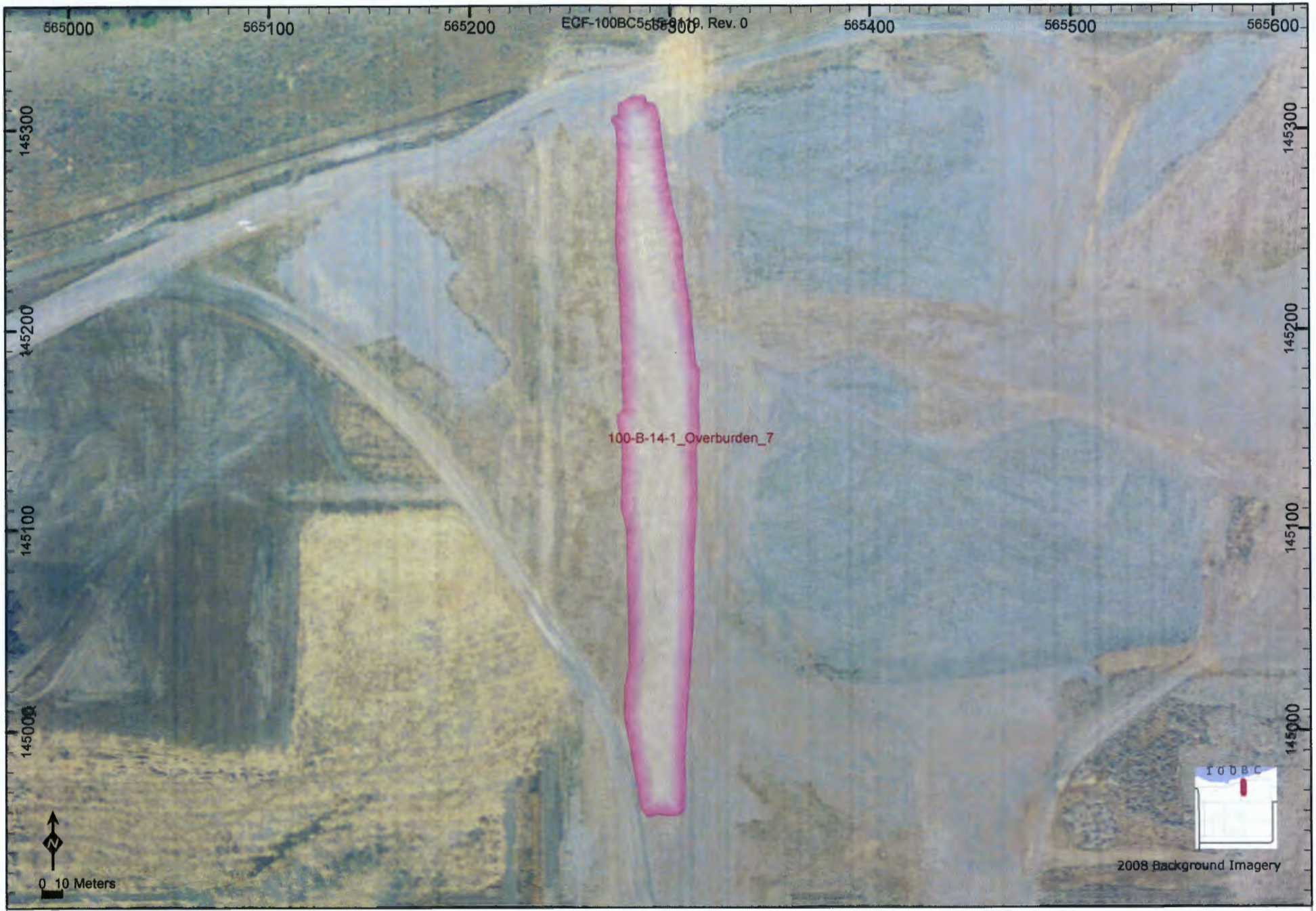
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-1_Overburden_2	**549.4**	18	**664.1**	207	1428	1.4	769



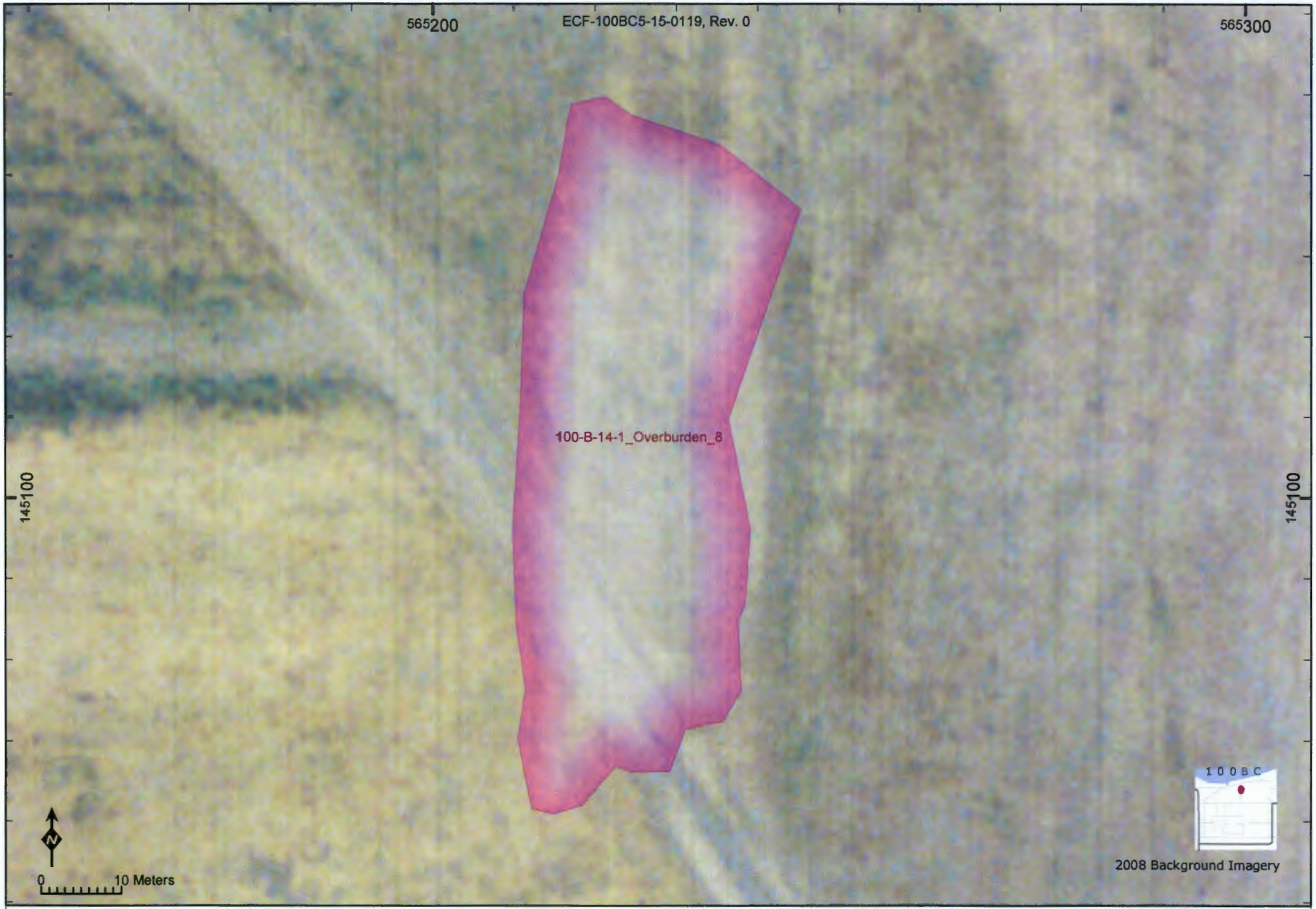
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-1_Overburden_4	**62.1**	19	**97.6**	52	124	1.1	155

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-1_Overburden_5	**78.9**	20	**102.9**	59	190	2.5	200

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-1_Overburden_6	**54**	21	**111.6**	56	82	2.3	168



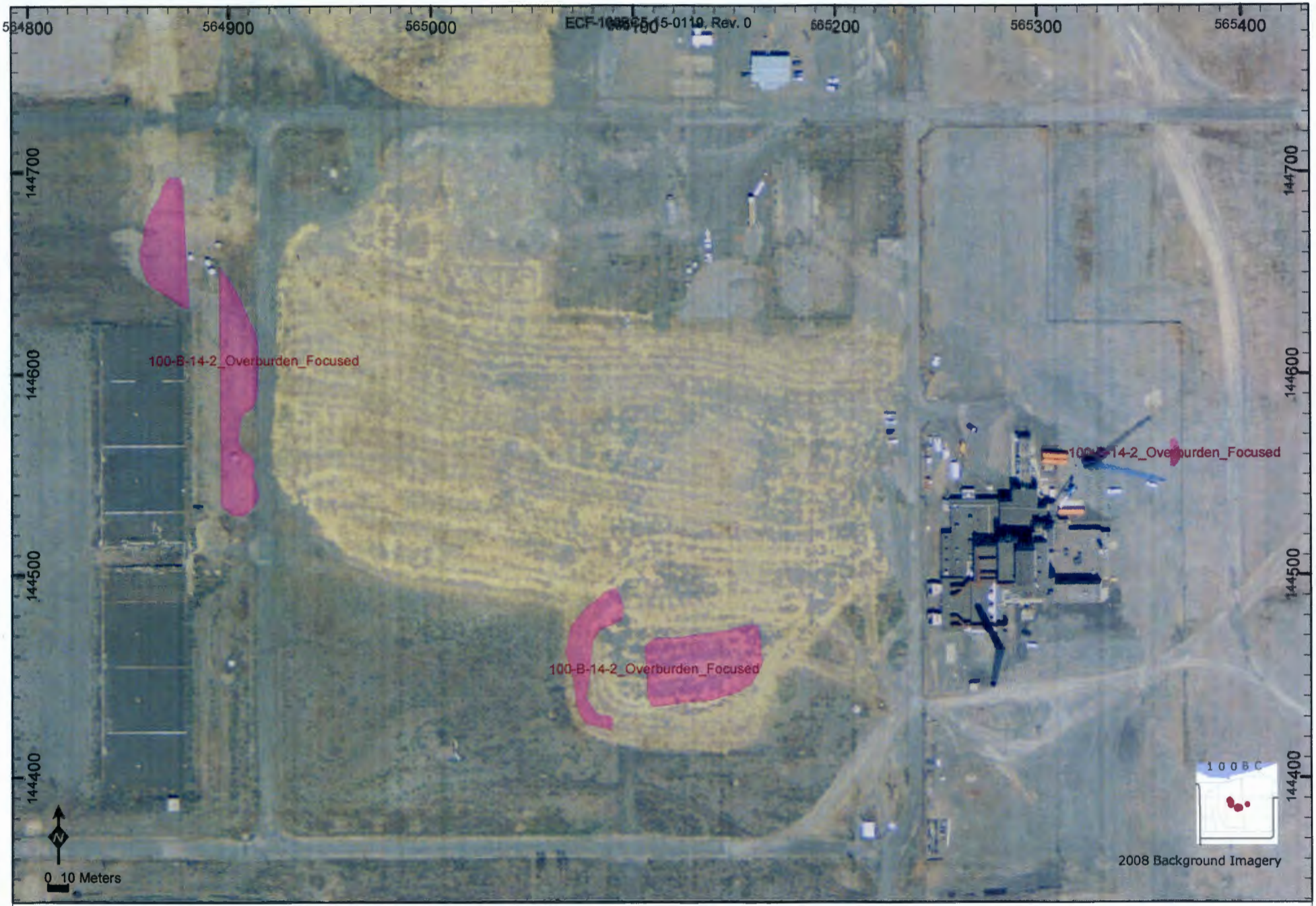
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-1_Overburden_7	**59.8**	22	**215.9**	138	52	1.9	359



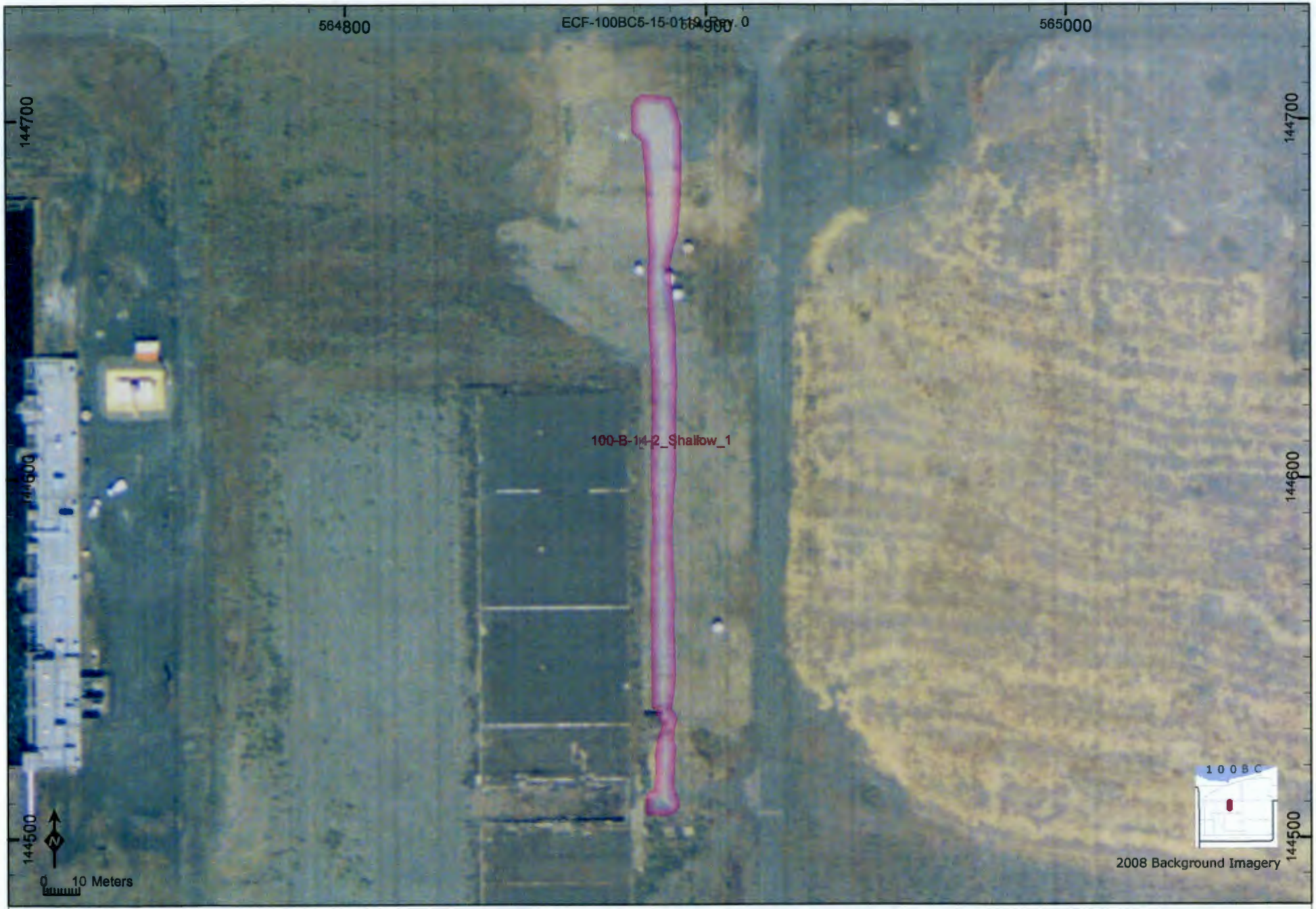
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-1_Overburden_8	**26.5**	23	**56.4**	31	39	0.7	87

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-1_Overburden_9	**90.4**	24	**57.9**	34	443	0.2	156

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-1_Shallow	**104.1**	25	**44.6**	66	764	0.1	305



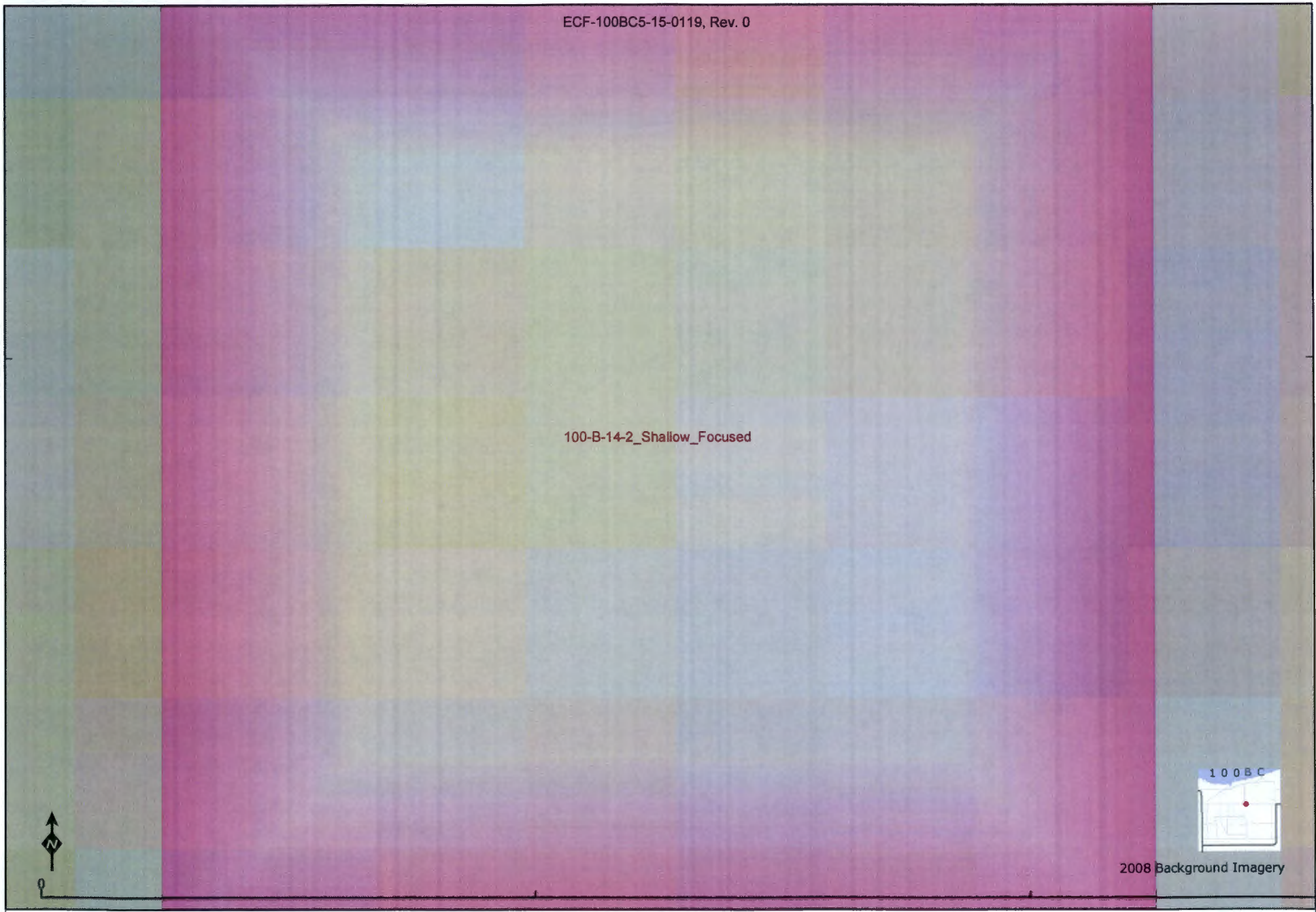
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-2_Overburden_Focused	**41**	26	**33.9**	25	156	0.7	117



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-2_Shallow_1	**21**	27	**59.2**	69	23	3.6	200

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-2_Shallow_2	**25.7**	28	**12.2**	19	169	2	123

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-2_Shallow_3	**17**	29	**19.3**	32	47	0.1	99

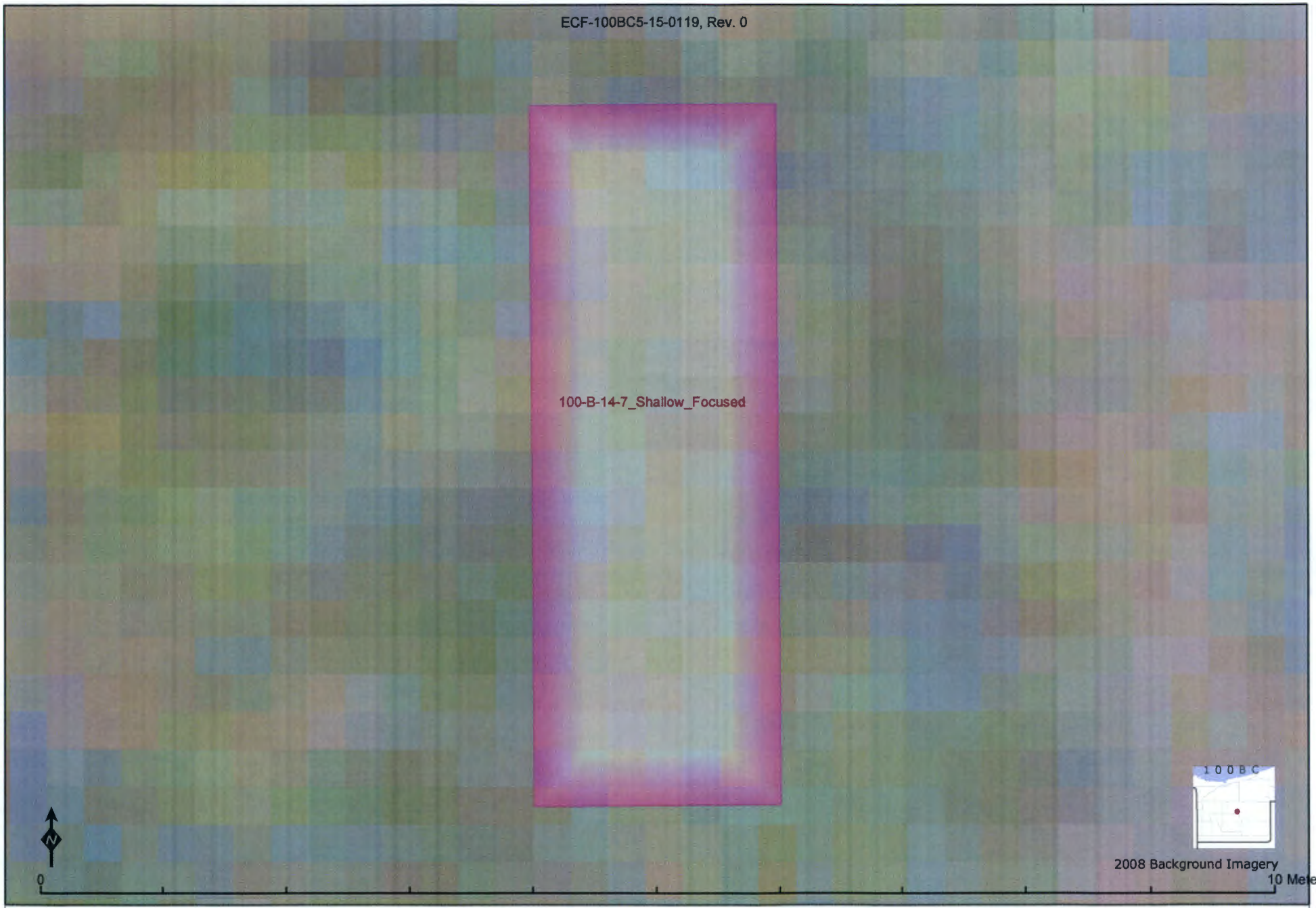


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-2_Shallow_Focused	**1.1**	30	**2**	0	2	2	2

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-3_Deep_Focused	**1.1**	31	**2**	0	2	2	2

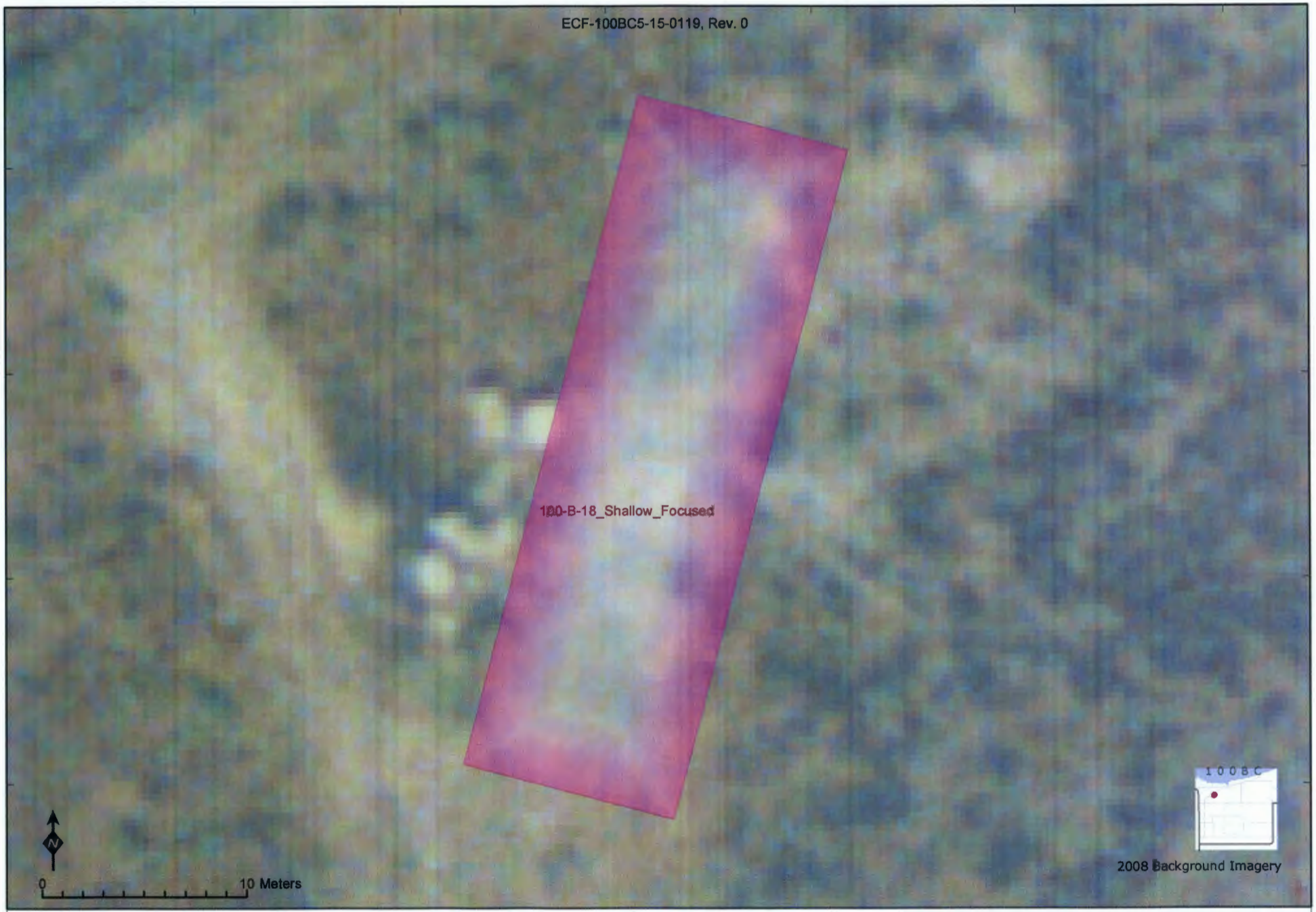
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-5_Shallow_Focused	**0.4**	32	**0**	0	98	0	0

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-6_Shallow_Focused	**6.5**	33	**10.9**	4	12	1.1	13

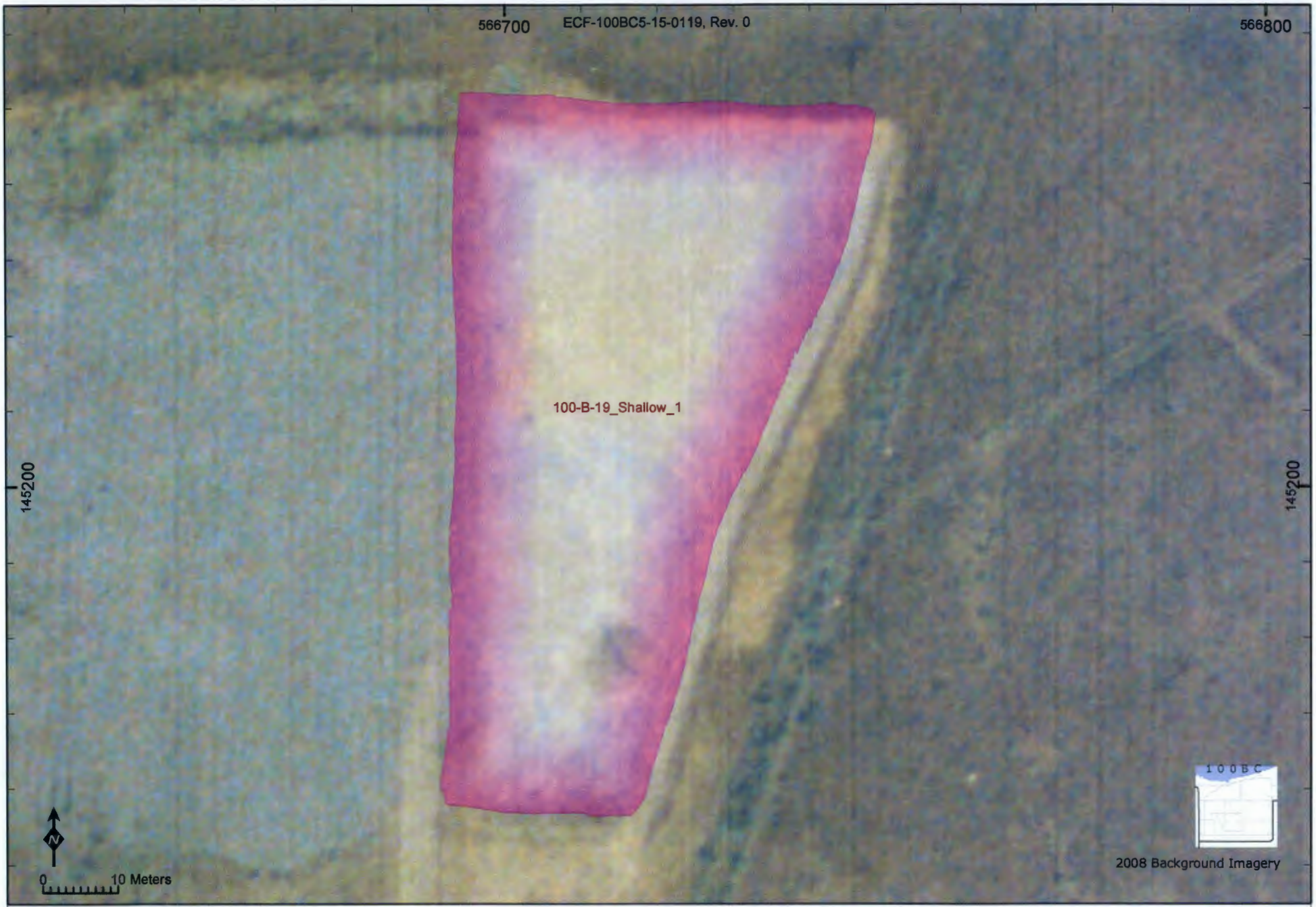


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-14-7_Shallow_Focused	**1.9**	34	**5.7**	0	2	5.7	6

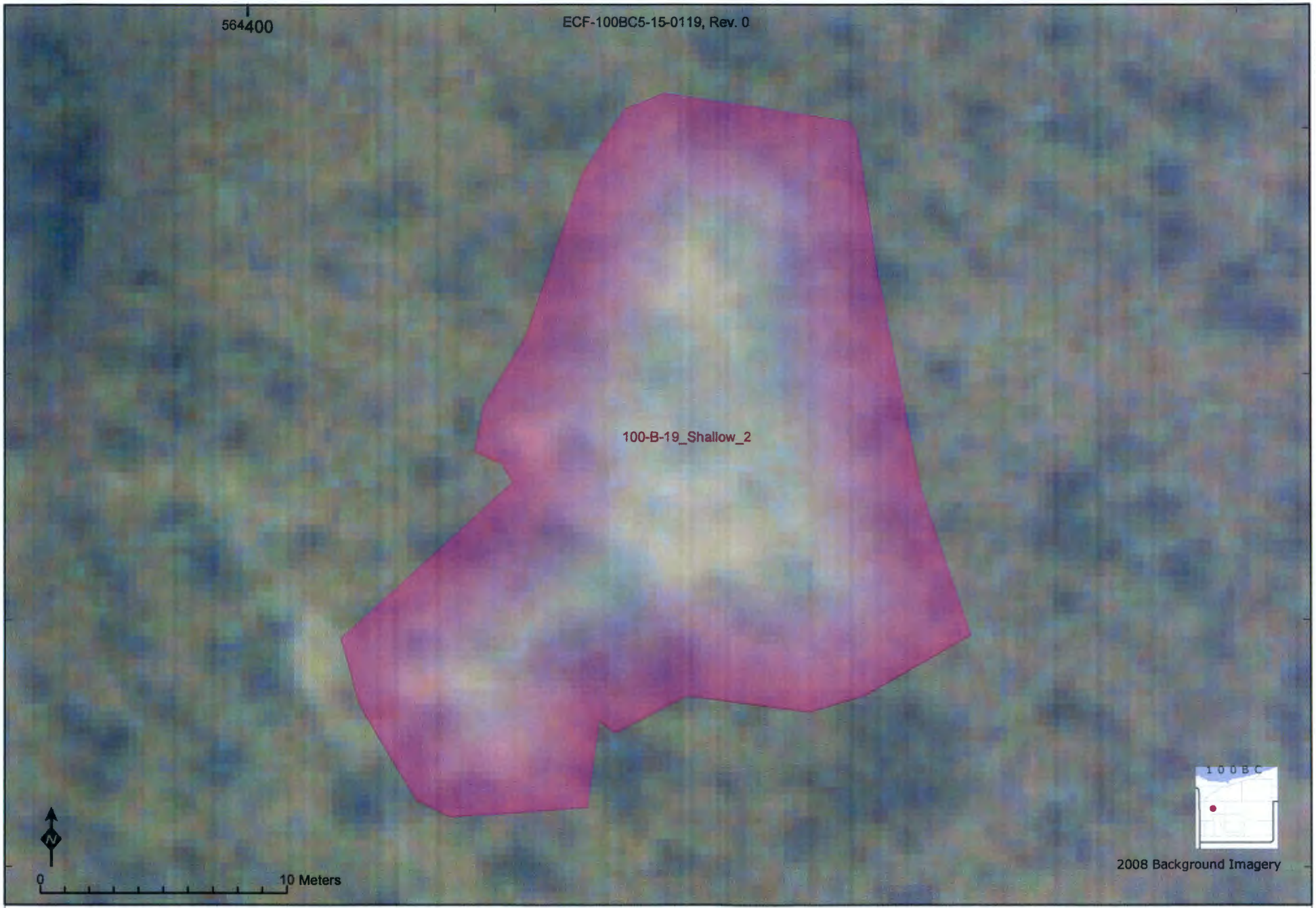
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-16_Shallow_Focused	**17.2**	35	**11.2**	4	83	0.3	17



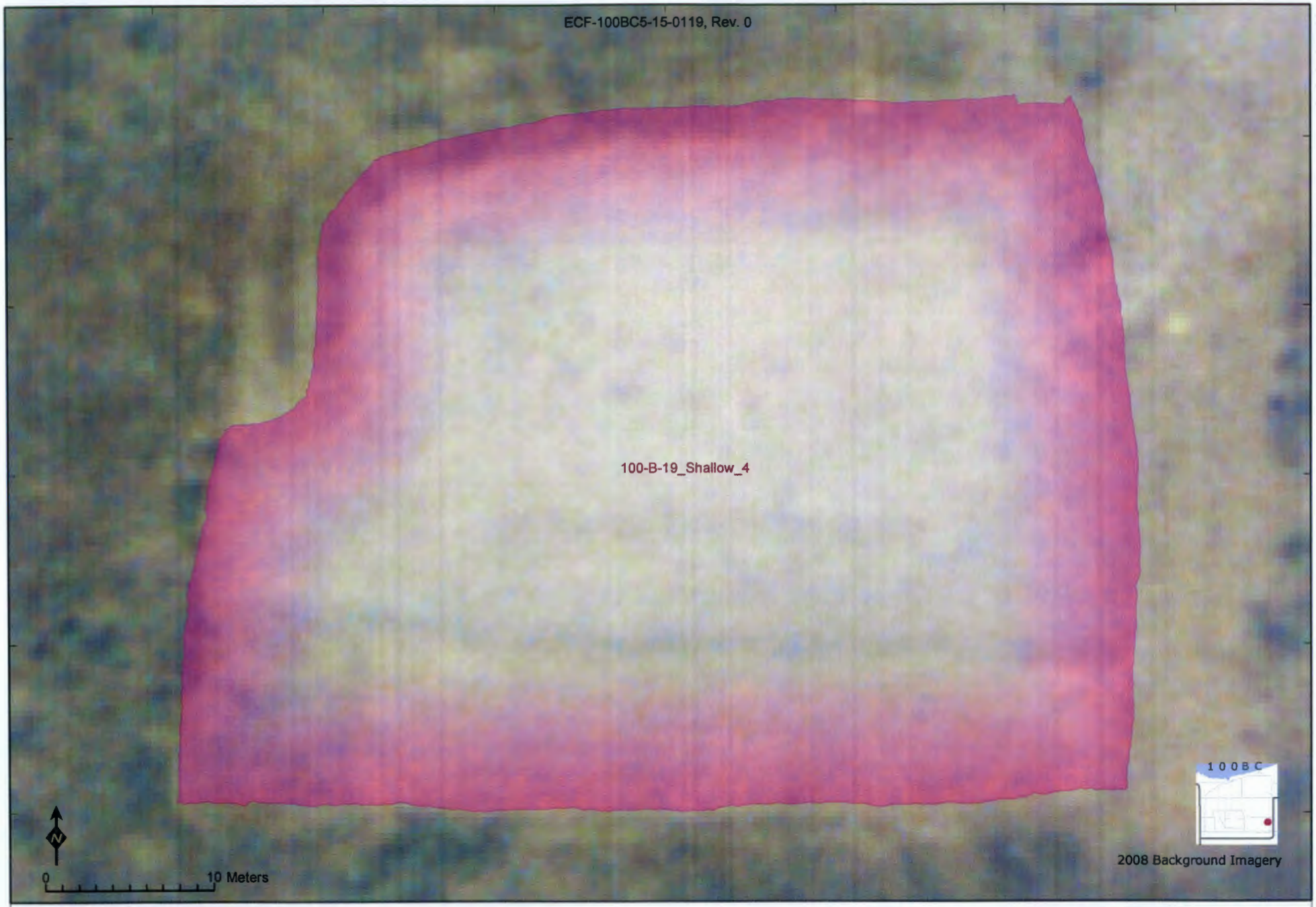
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-18_Shallow_Focused	**10.6**	36	**19.7**	11	18	3.1	35



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-19_Shallow_1	**34.6**	37	**63.7**	33	59	0	95



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-19_Shallow_2	**11.9**	38	**16.4**	9	27	0.9	25



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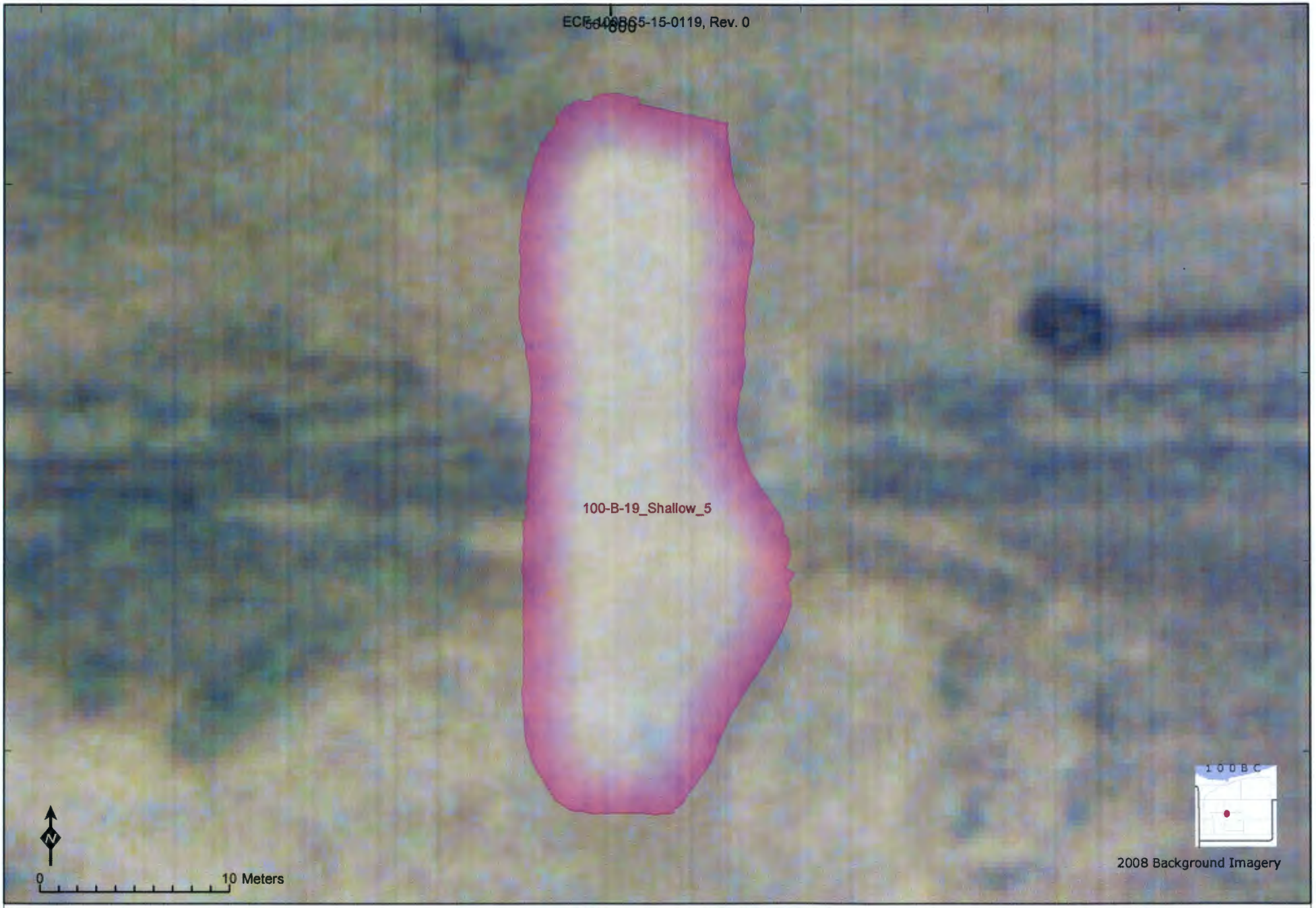
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-19_Shallow_4	**25.8**	39	**36**	10	58	0.5	42



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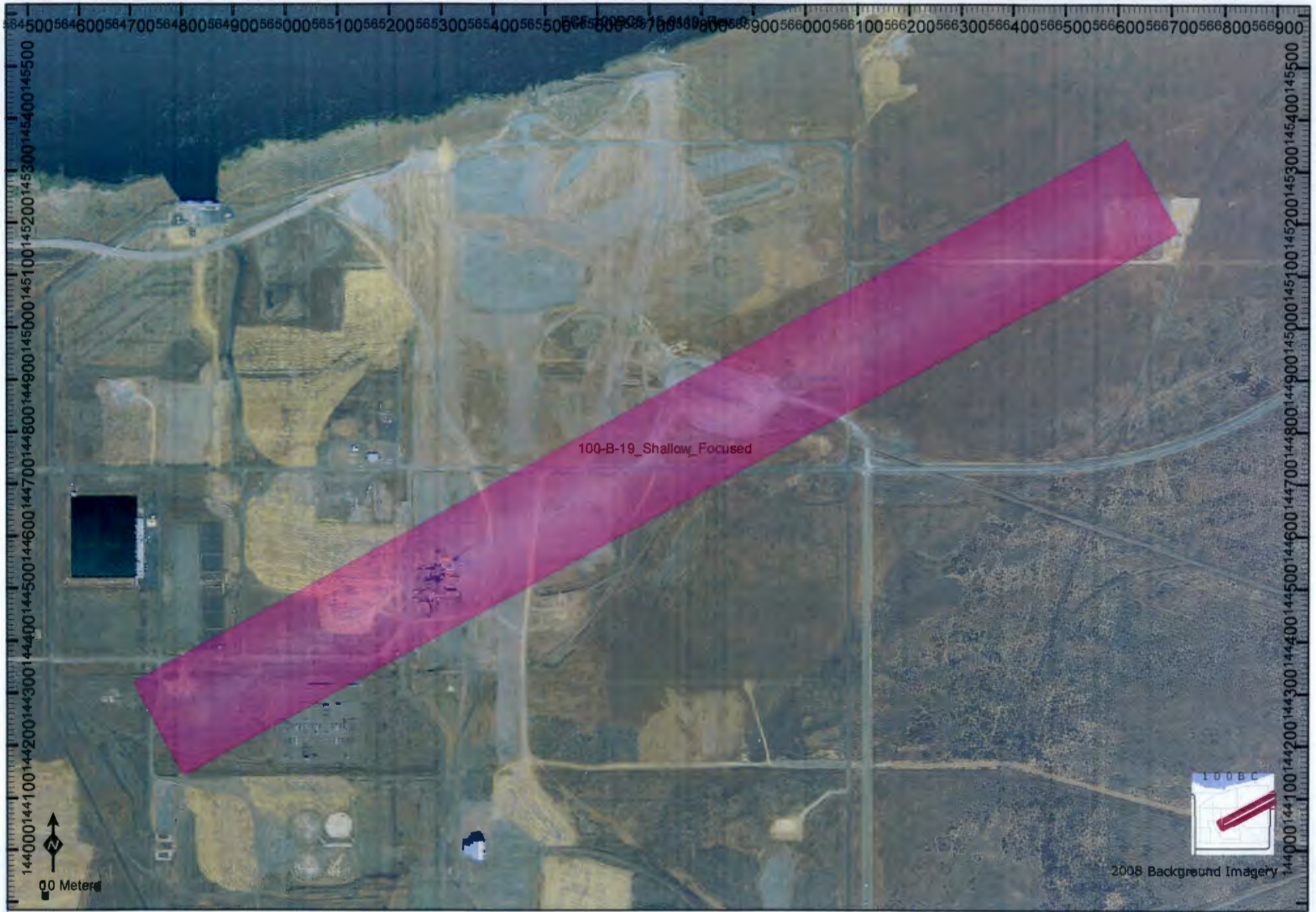
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-19_Shallow_5	**11.7**	40	**25.2**	15	17	0.5	38



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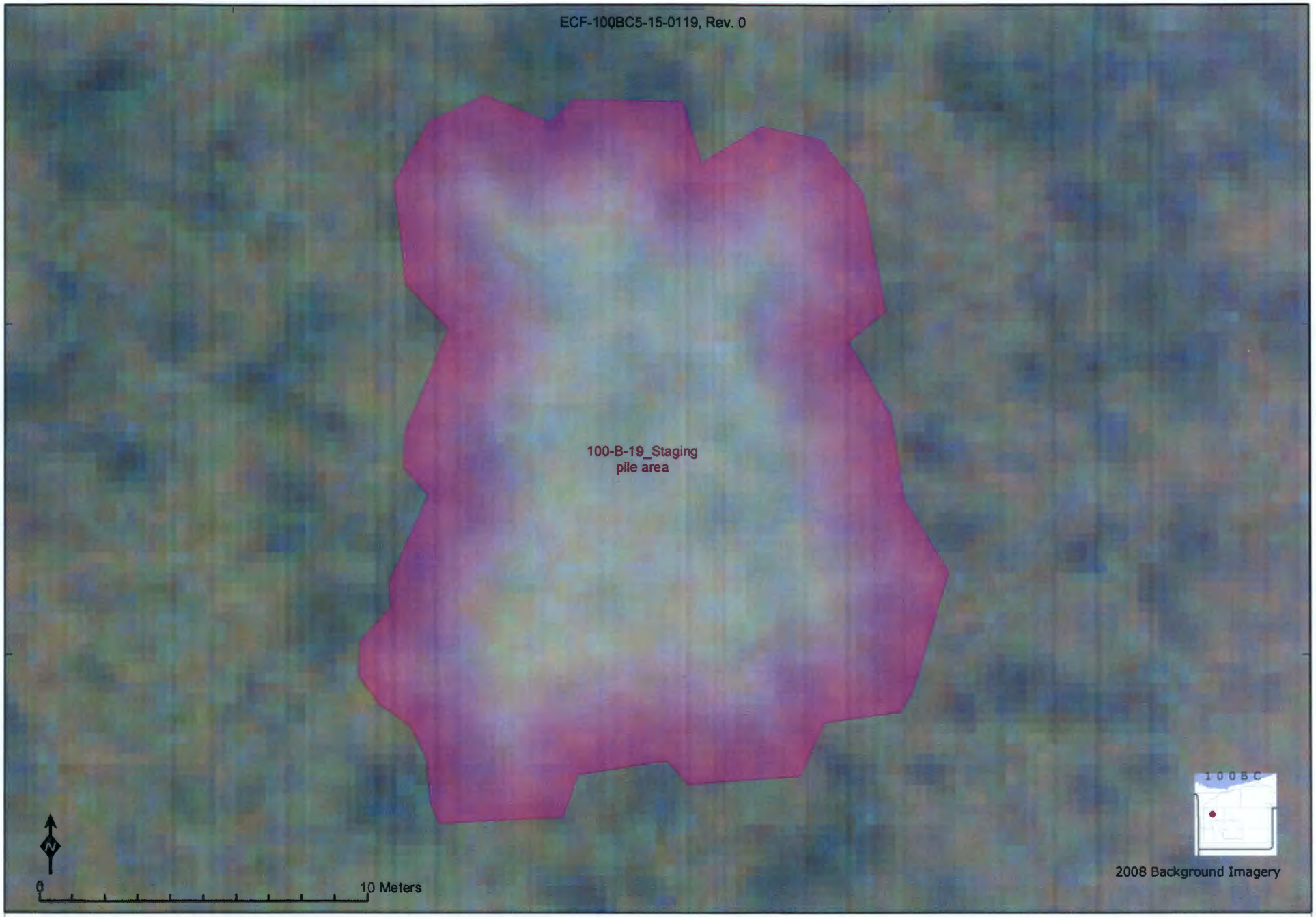
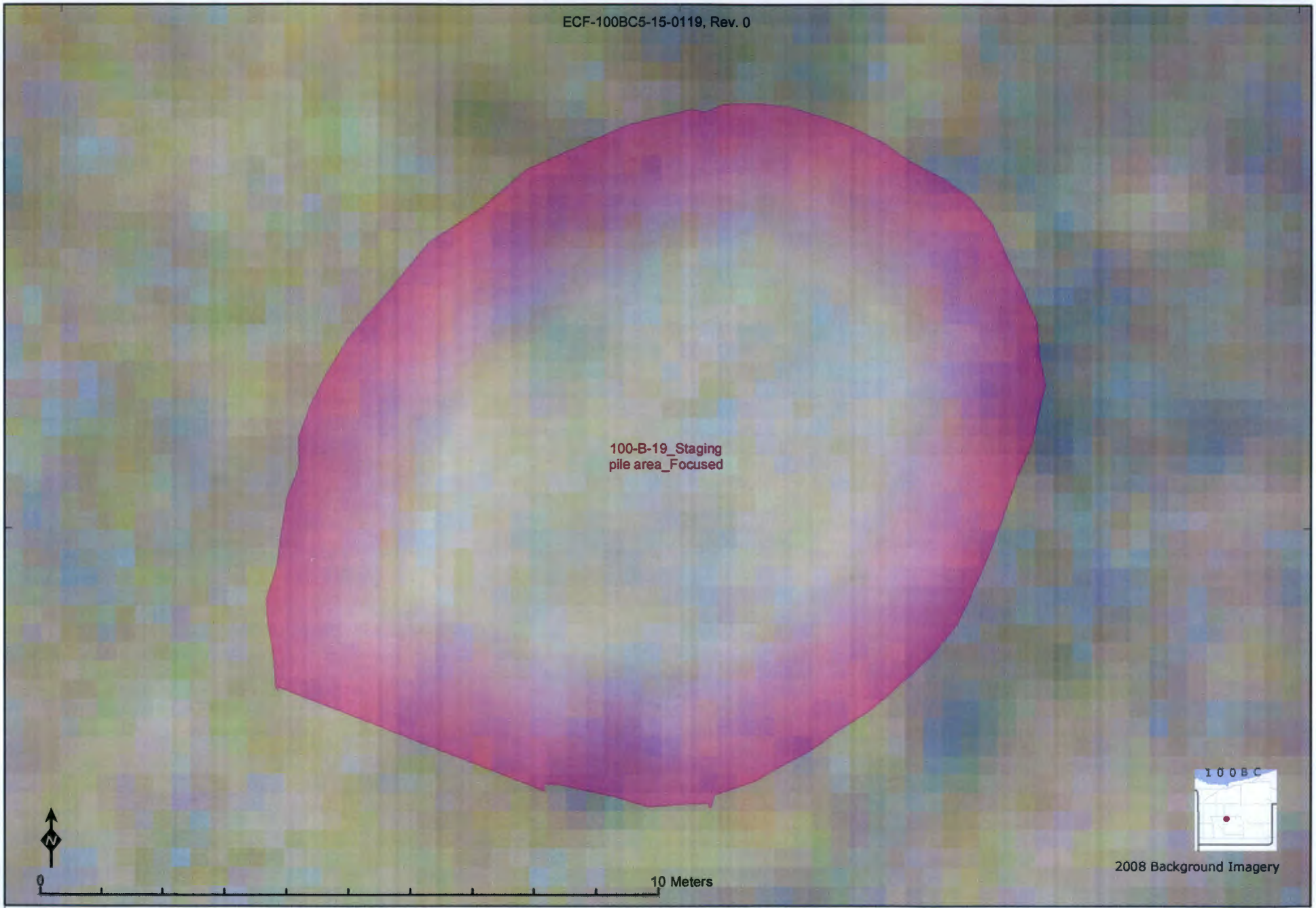
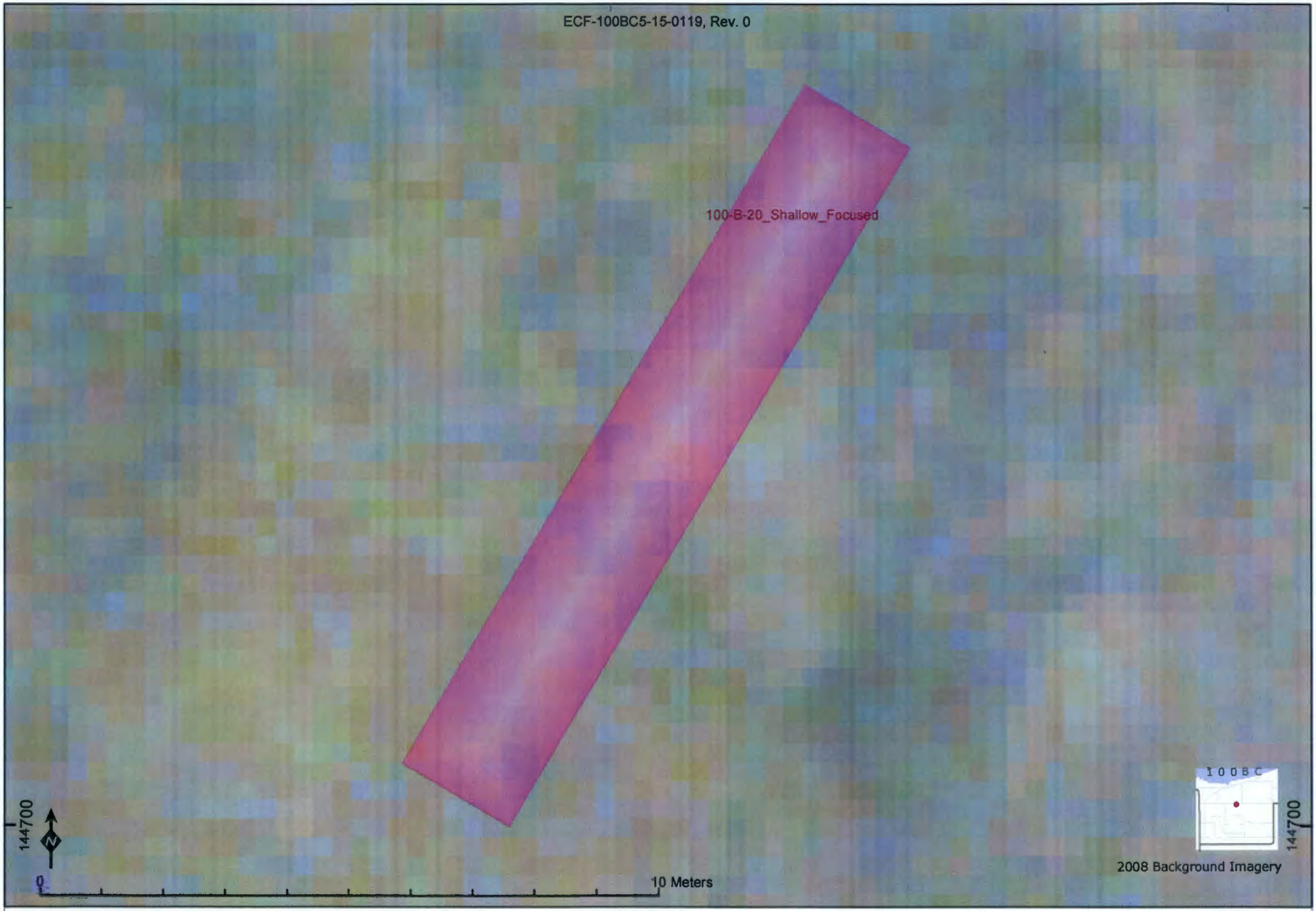
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-19_Shallow_Focused	**373.7**	41	**219**	40	2004	1.1	230



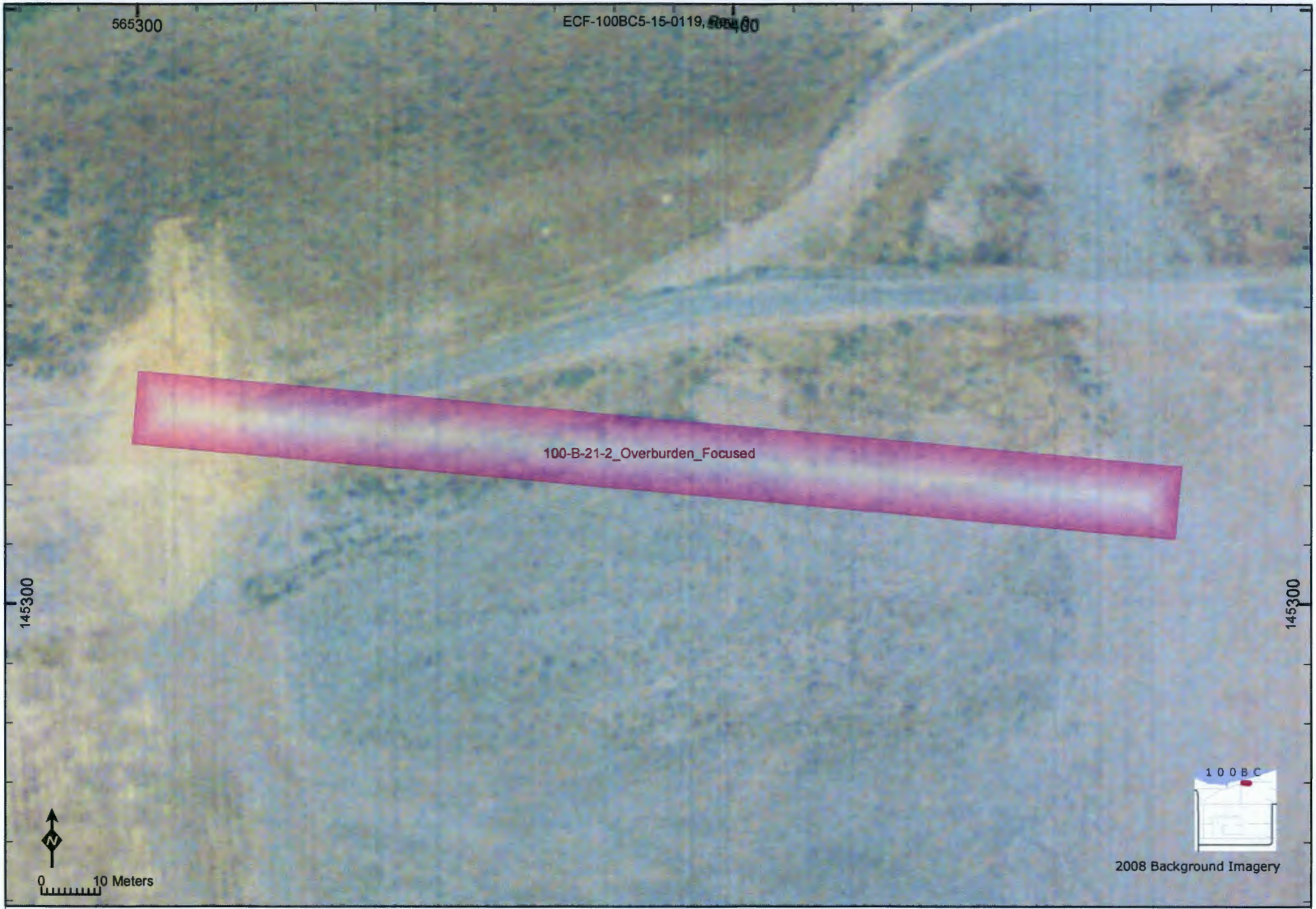
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-B-19_Staging pile area	**9.7**	42 **14.1**	8	21	1	22	



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-19_Staging pile area_Focused	**5.8**	43	**8.8**	2	12	4.7	11

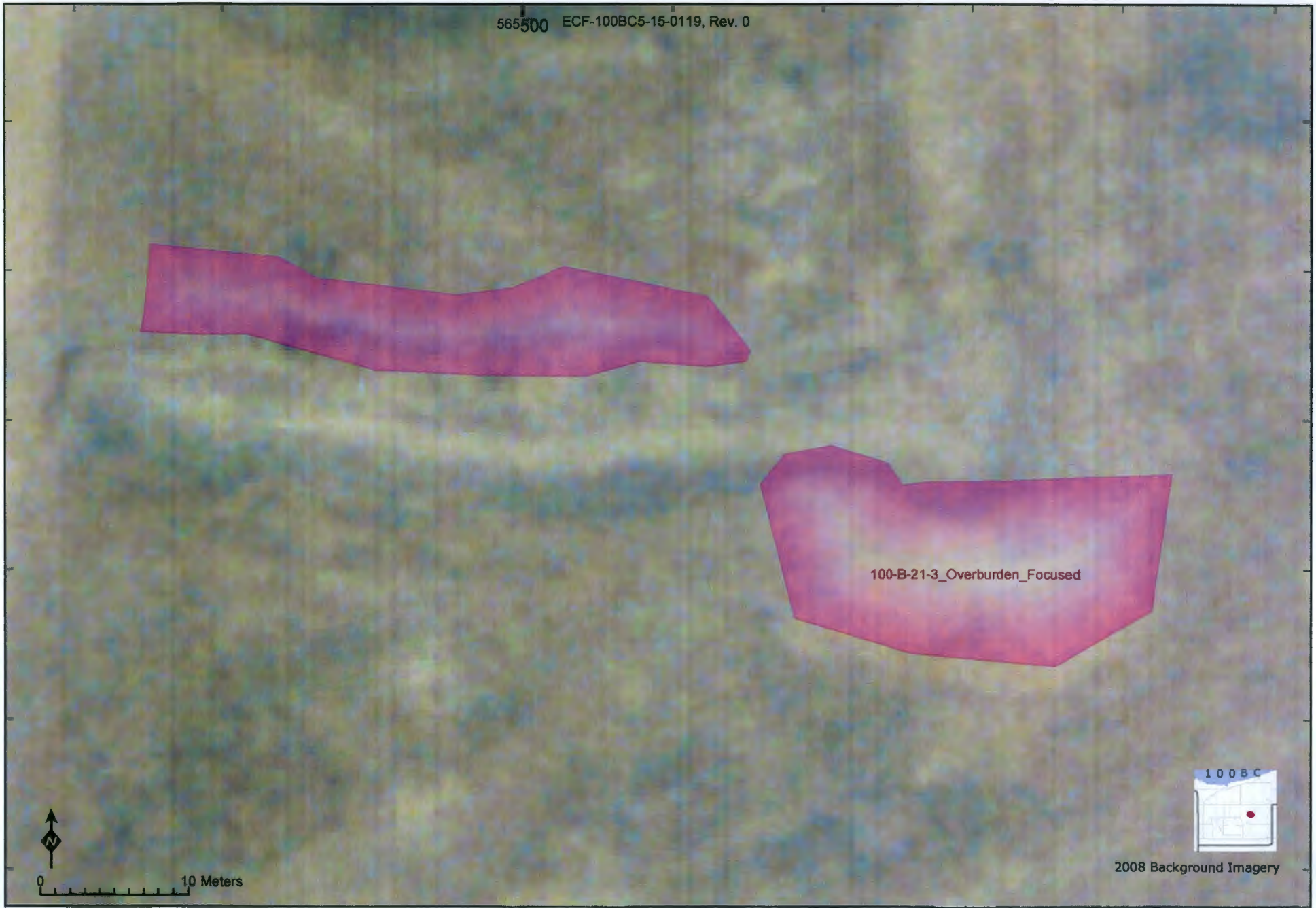


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-20_Shallow_Focused	**2.9**	44	**3.2**	1	8	0.8	4

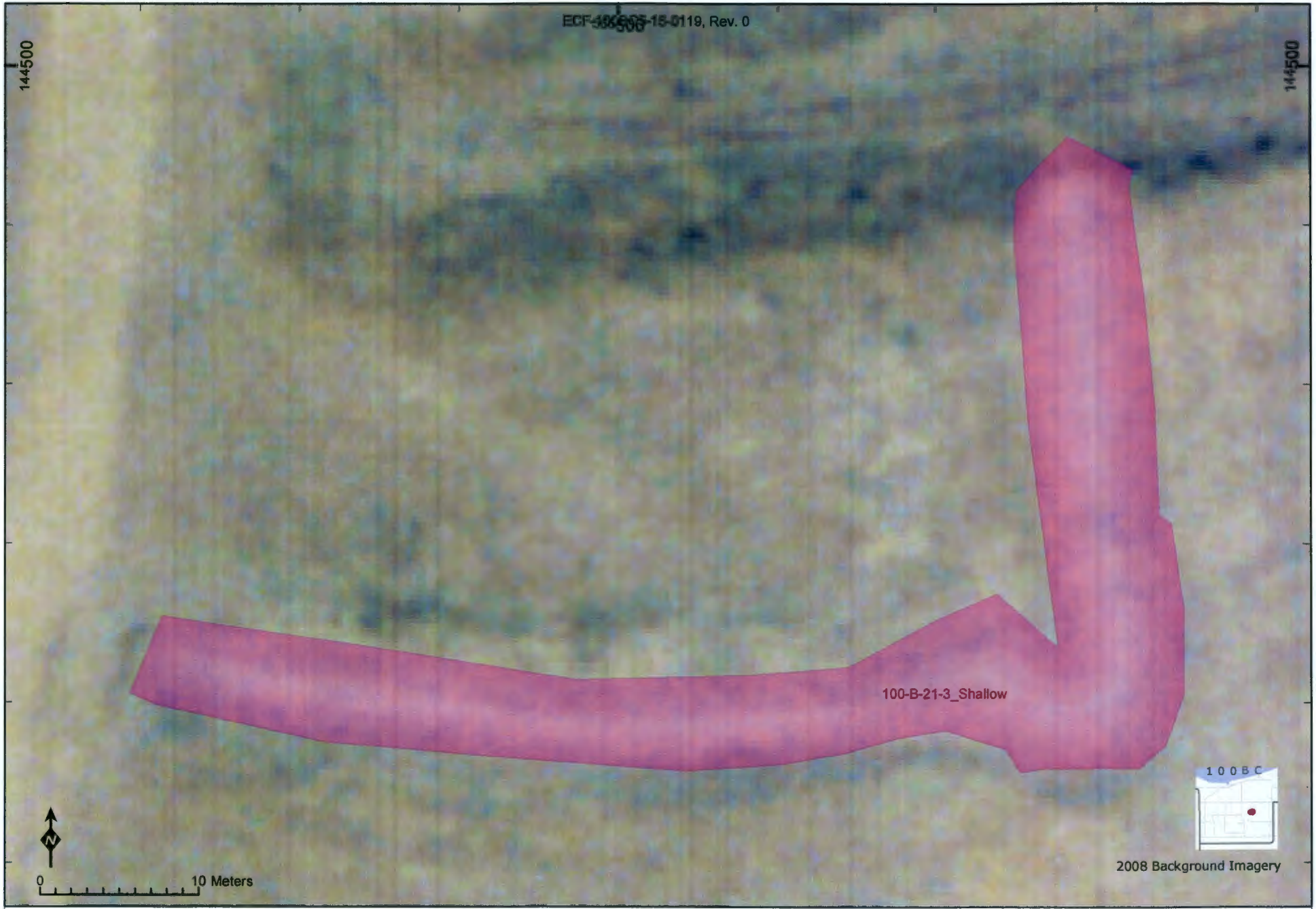


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-21-2_Overburden_Focused	**26.1**	45	**12.1**	1	176	1.2	12

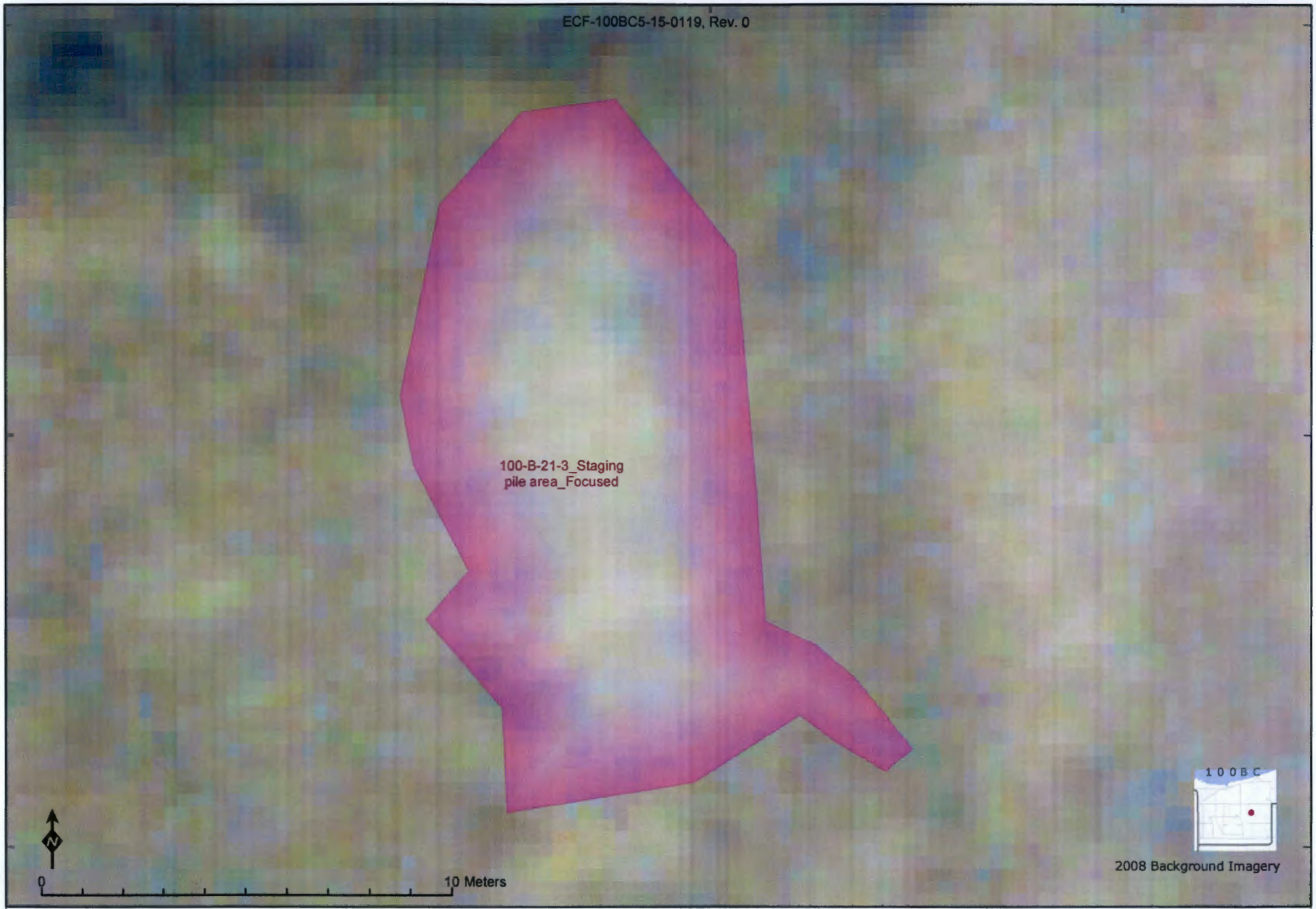
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-21-2_Shallow	**10.3**	46	**33**	20	10	4.9	48



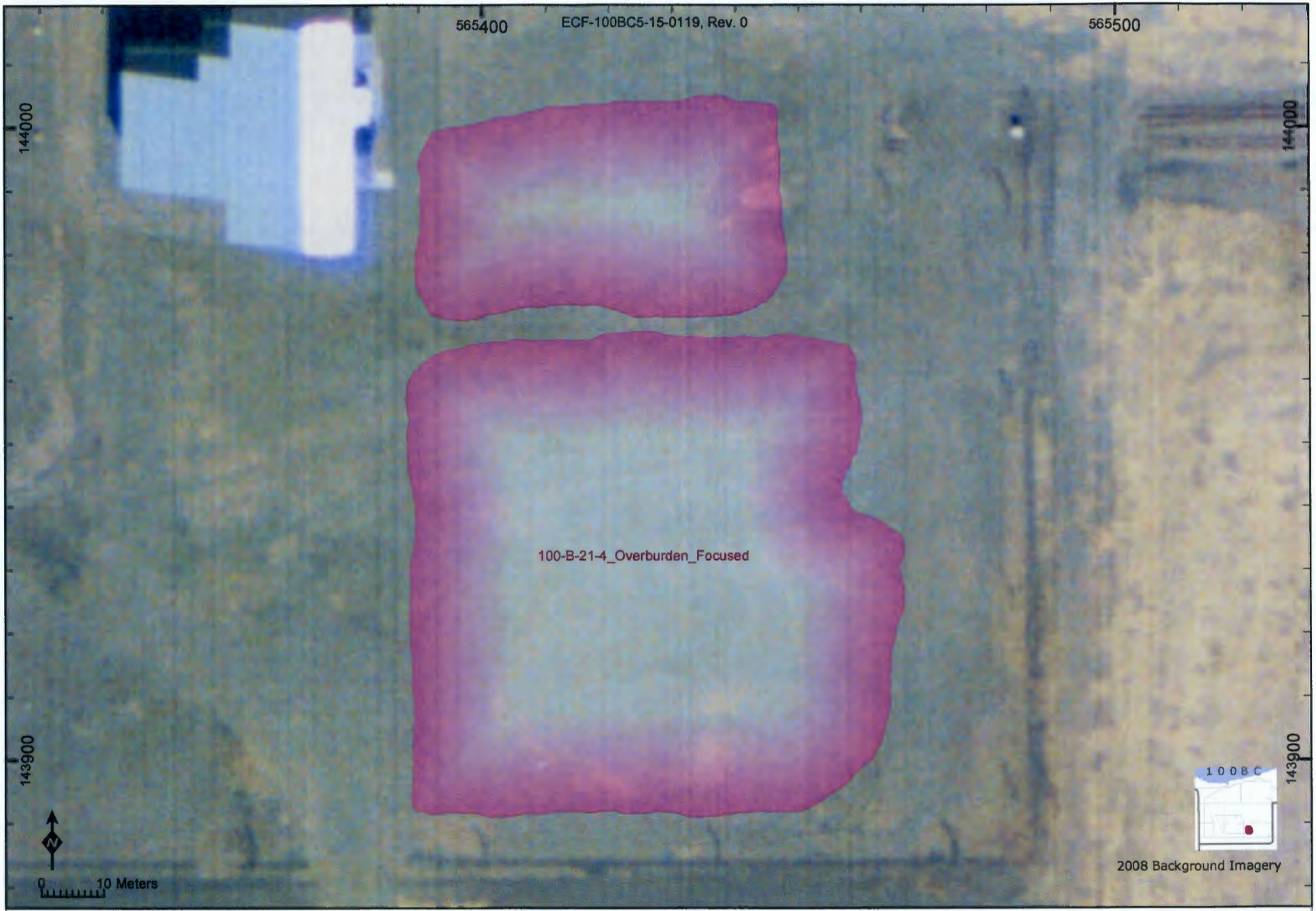
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-21-3_Overburden_Focused	**12.8**	47	**7.5**	3	69	0.3	12



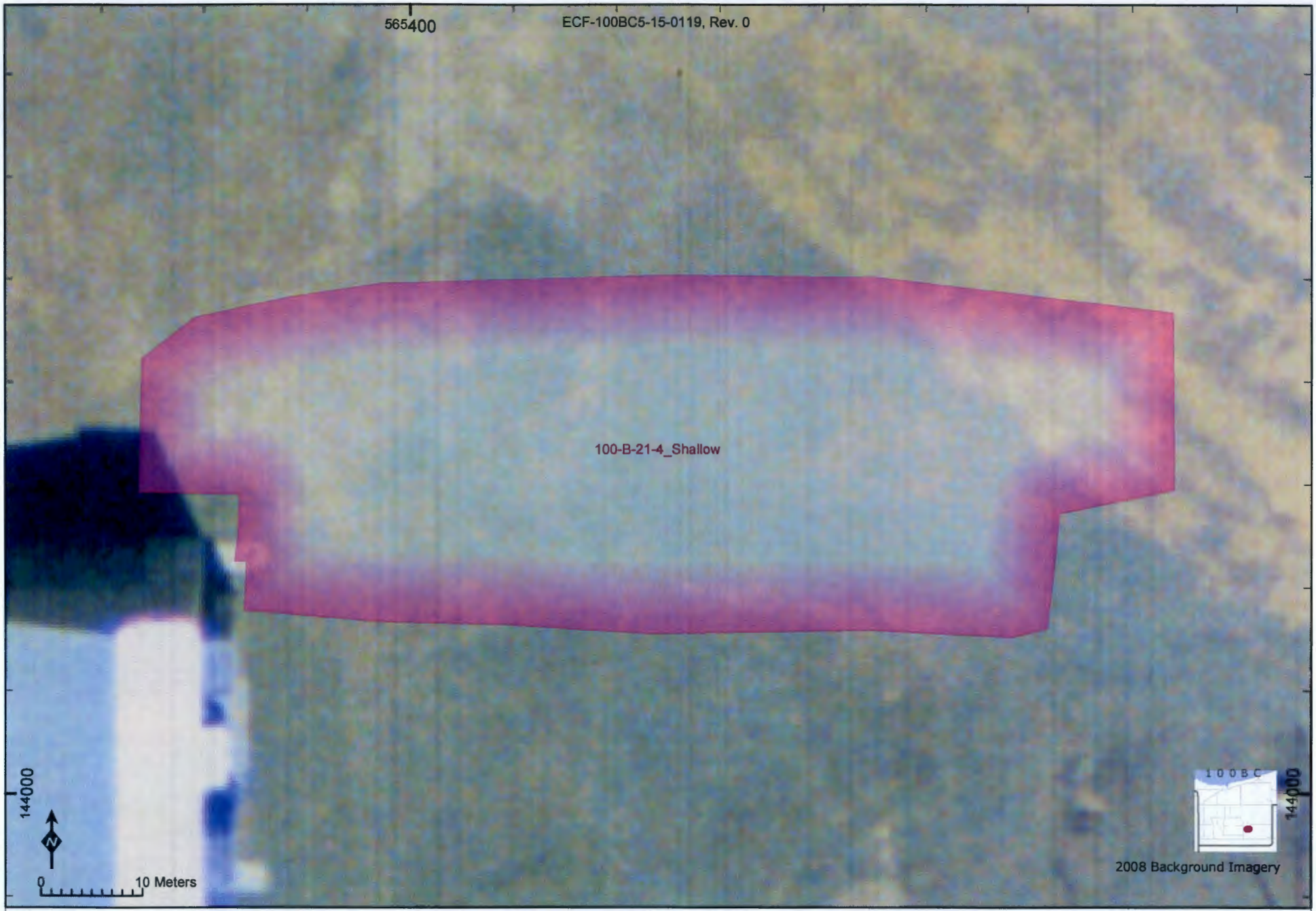
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-21-3_Shallow	**14.3**	48	**9.2**	9	70	1.1	39



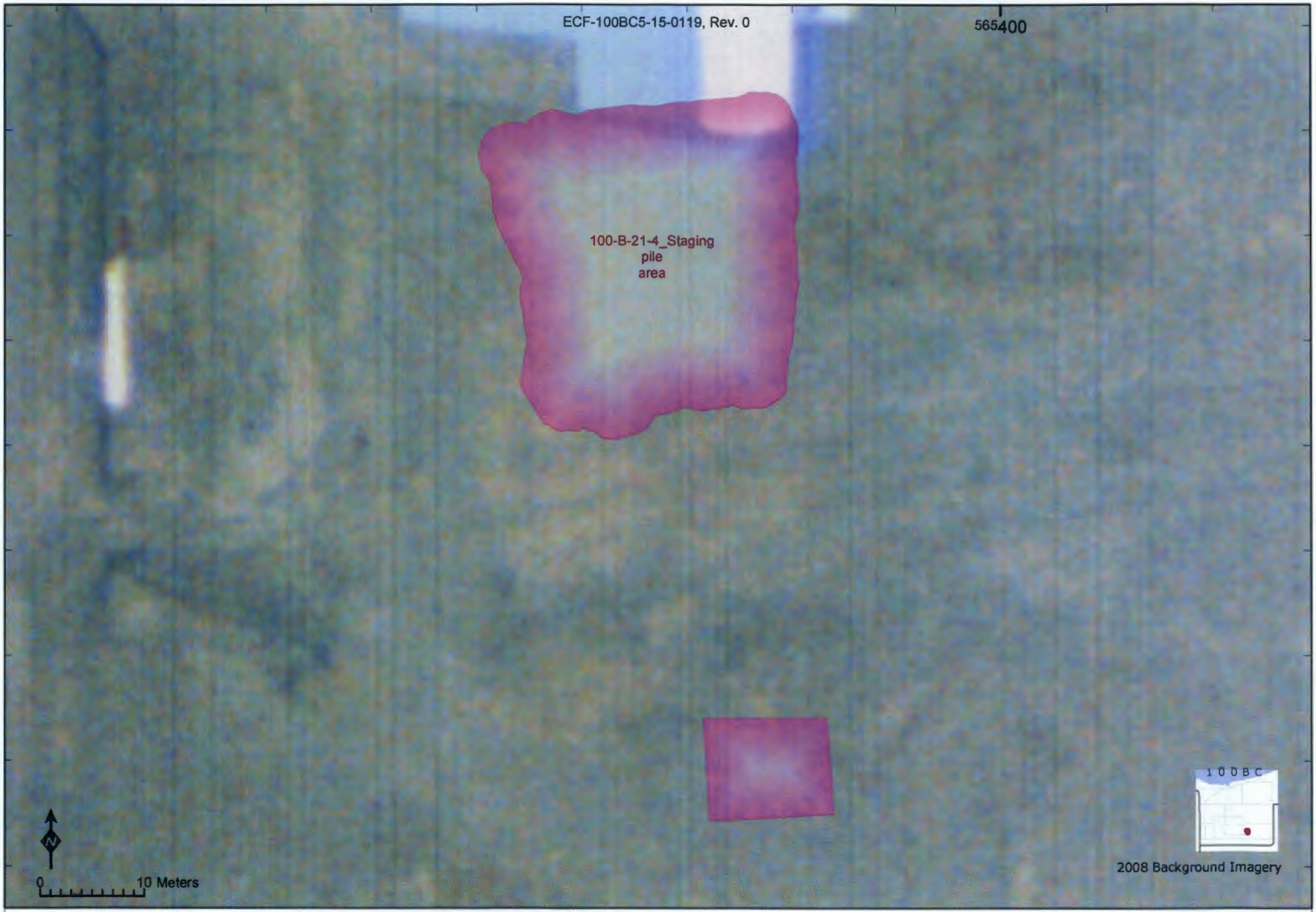
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-21-3_Staging pile area_Focused	**6.2**	49	**9.4**	6	13	1.5	17



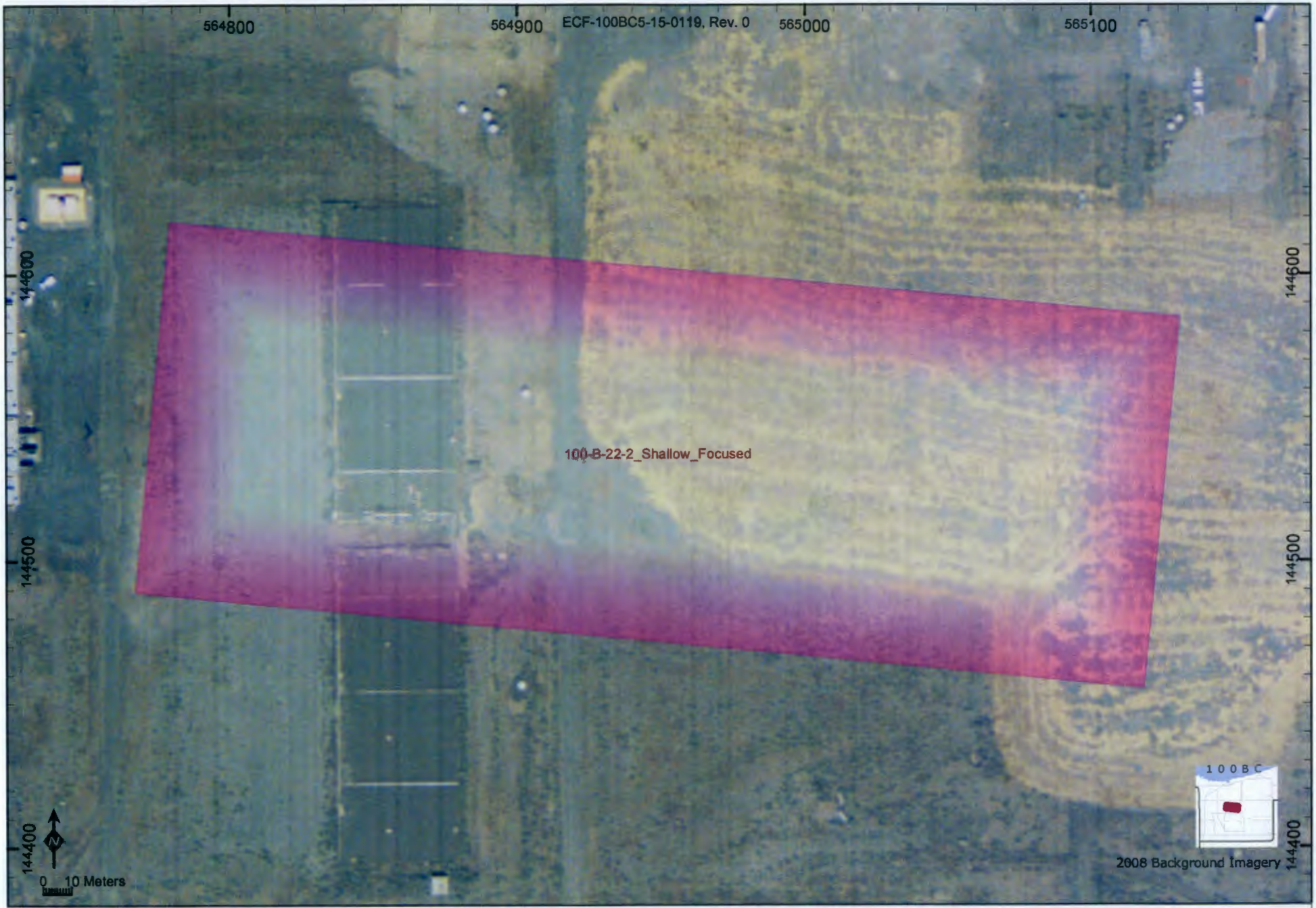
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-21-4_Overburden_Focused	**48.1**	50	**48.4**	25	150	0.1	76



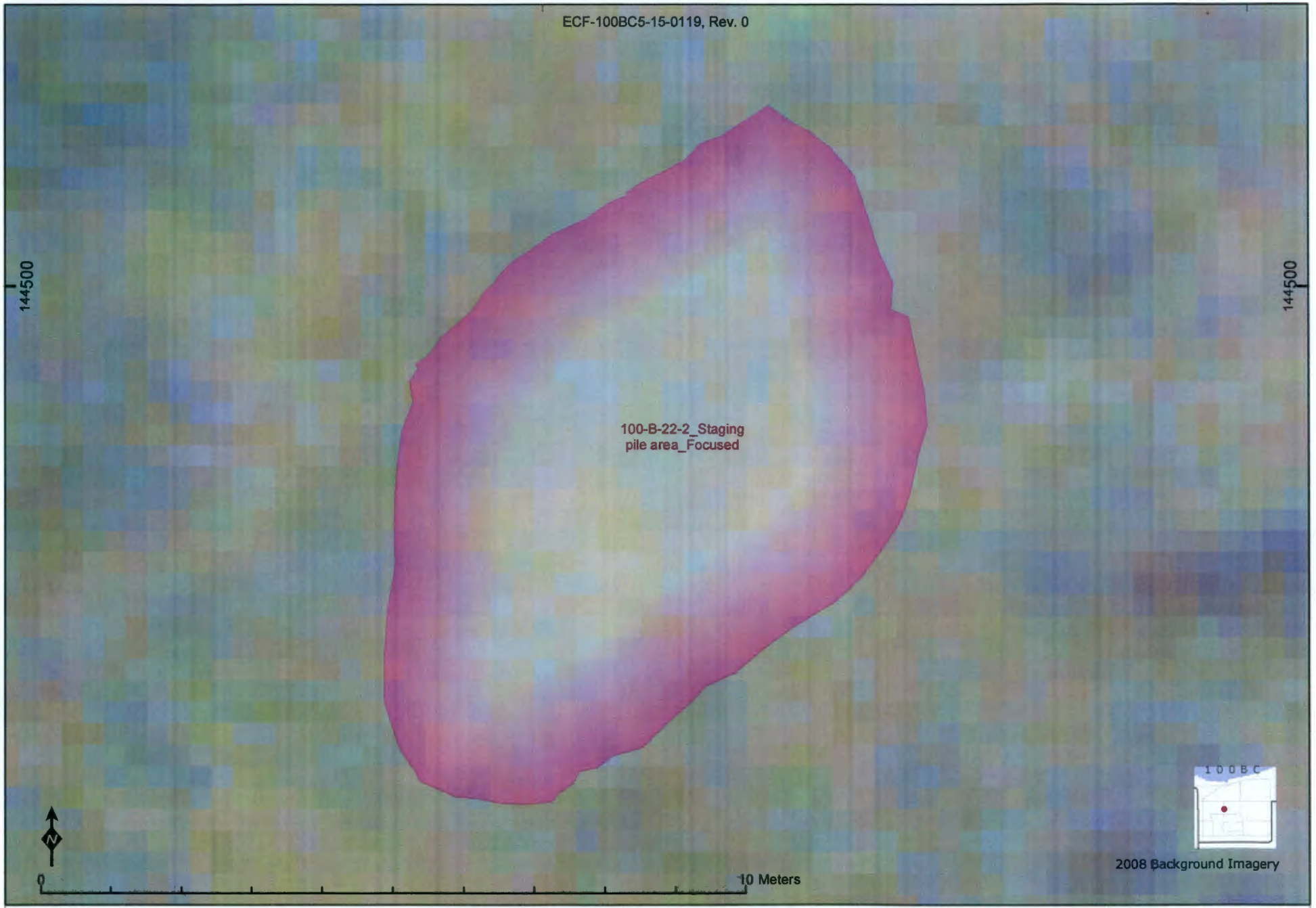
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-21-4_Shallow	**31**	51	**29.5**	8	102	0.5	35



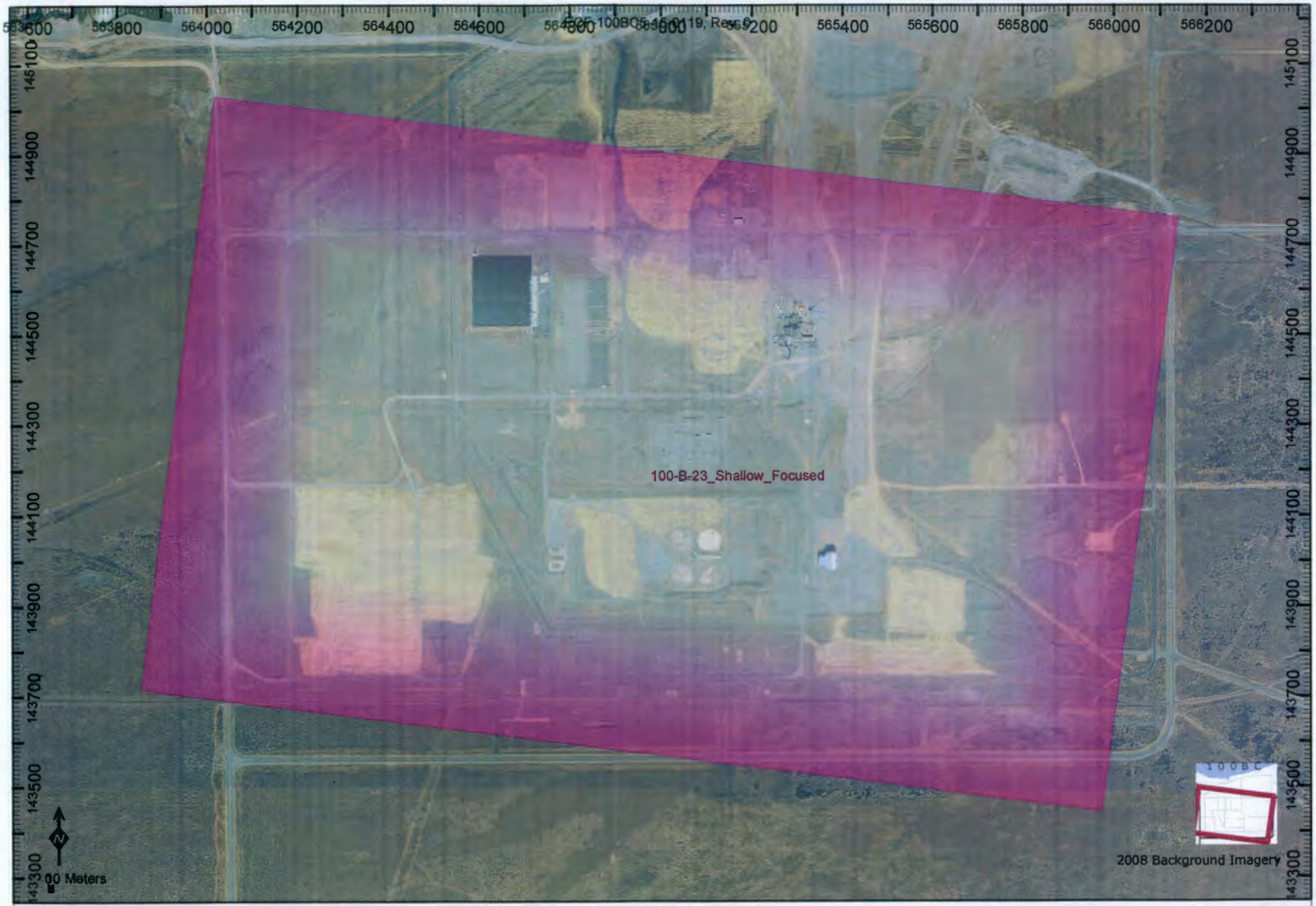
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-21-4_Staging pile area	**17.1**	52	**21.8**	10	42	4.1	32



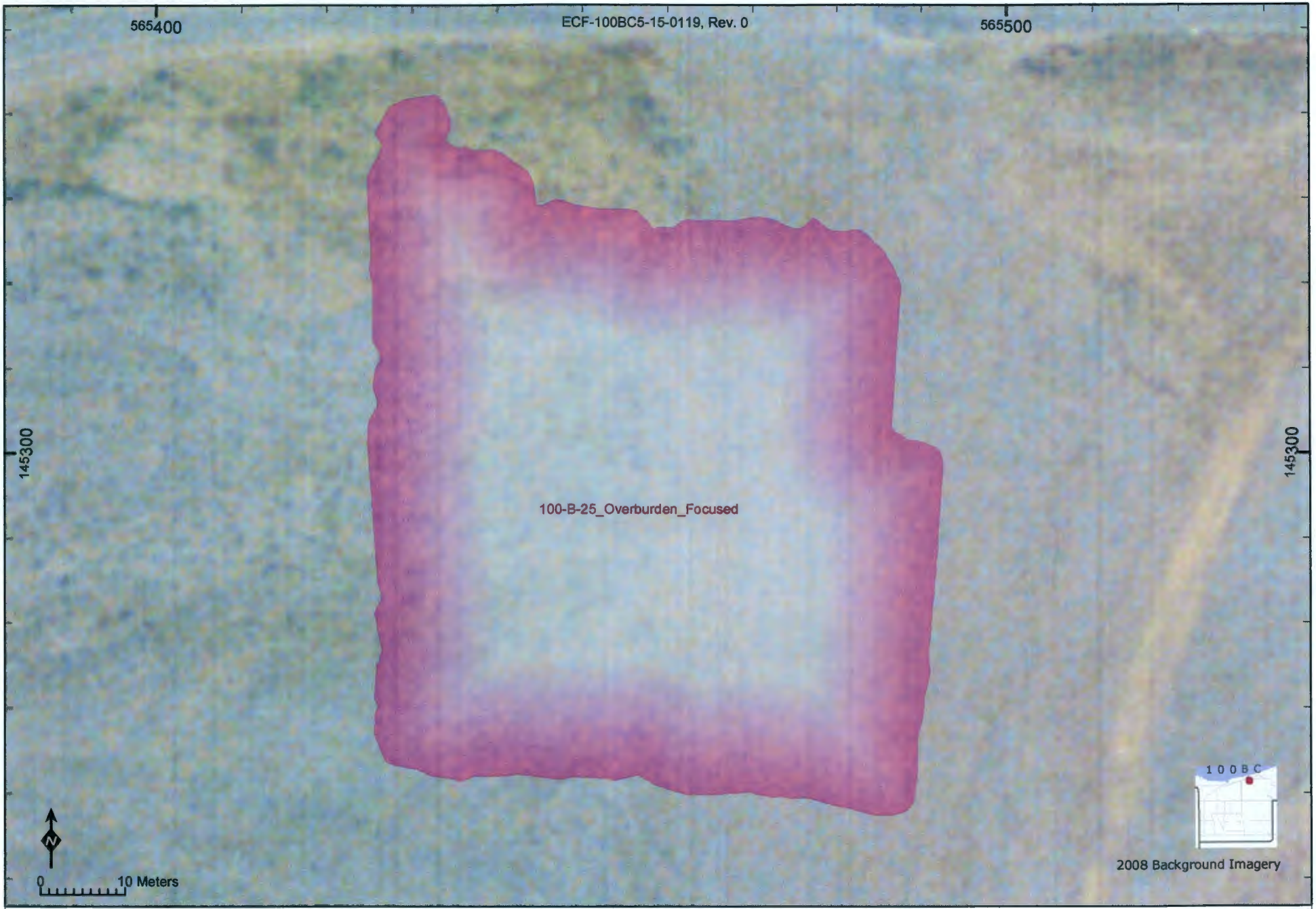
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-22-2_Shallow_Focused	**120.8**	53	**126.3**	19	363	5.4	131



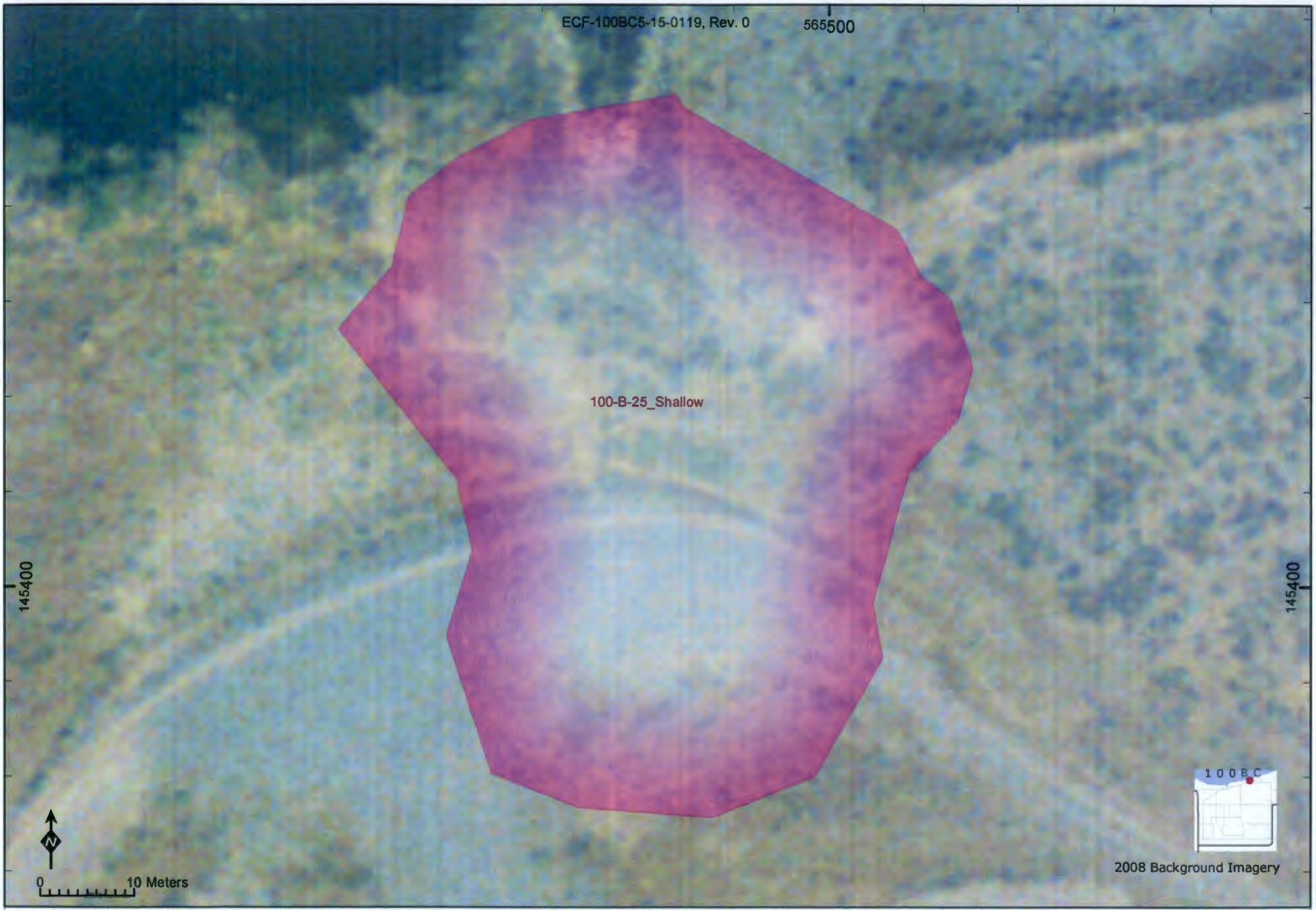
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-22-2_Staging pile area_Focused	**4**	54	**6.6**	2	8	3.1	8



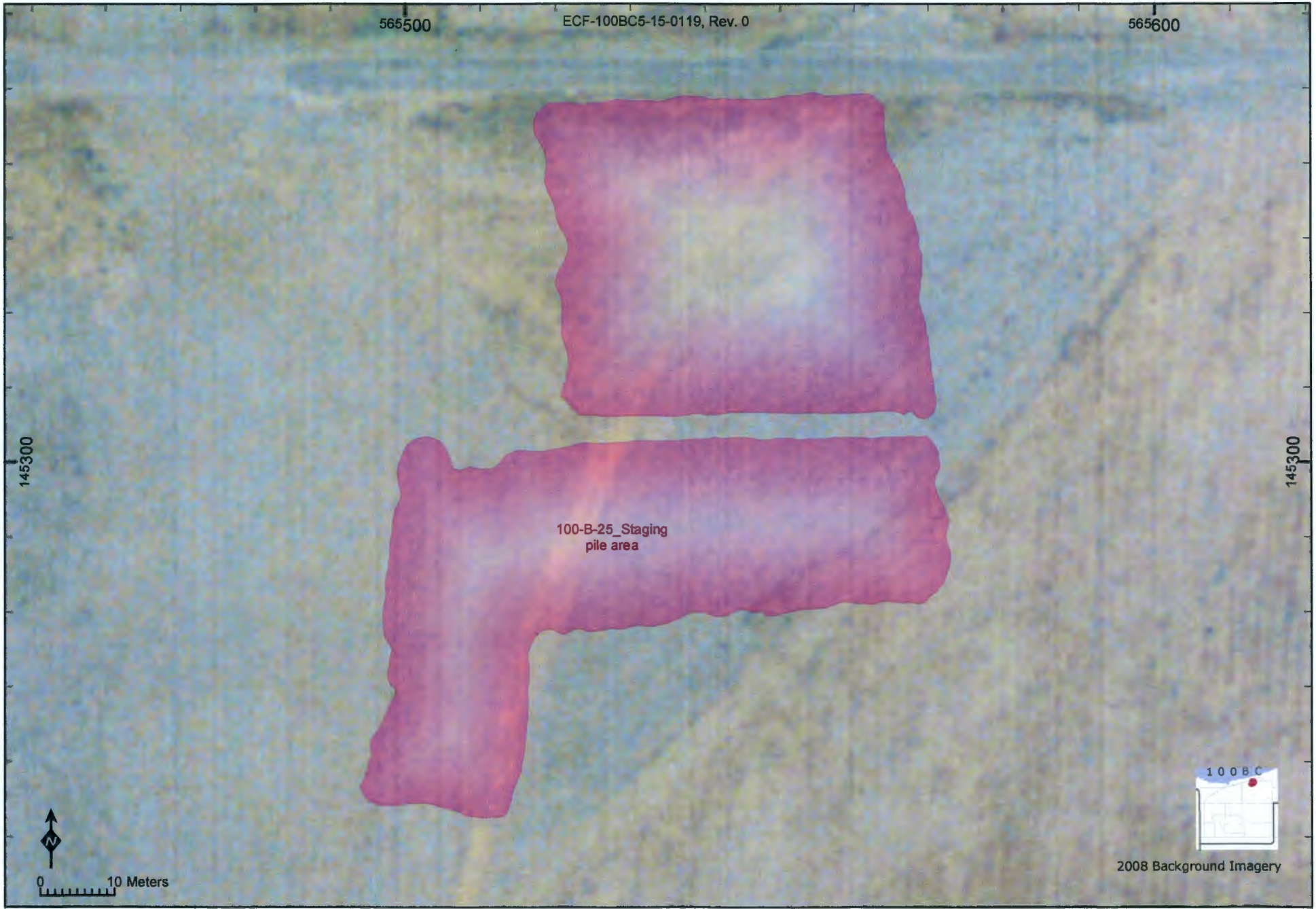
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-23_Shallow_Focused	**949.7**	**1237.8**	279	2289	3.2	1336



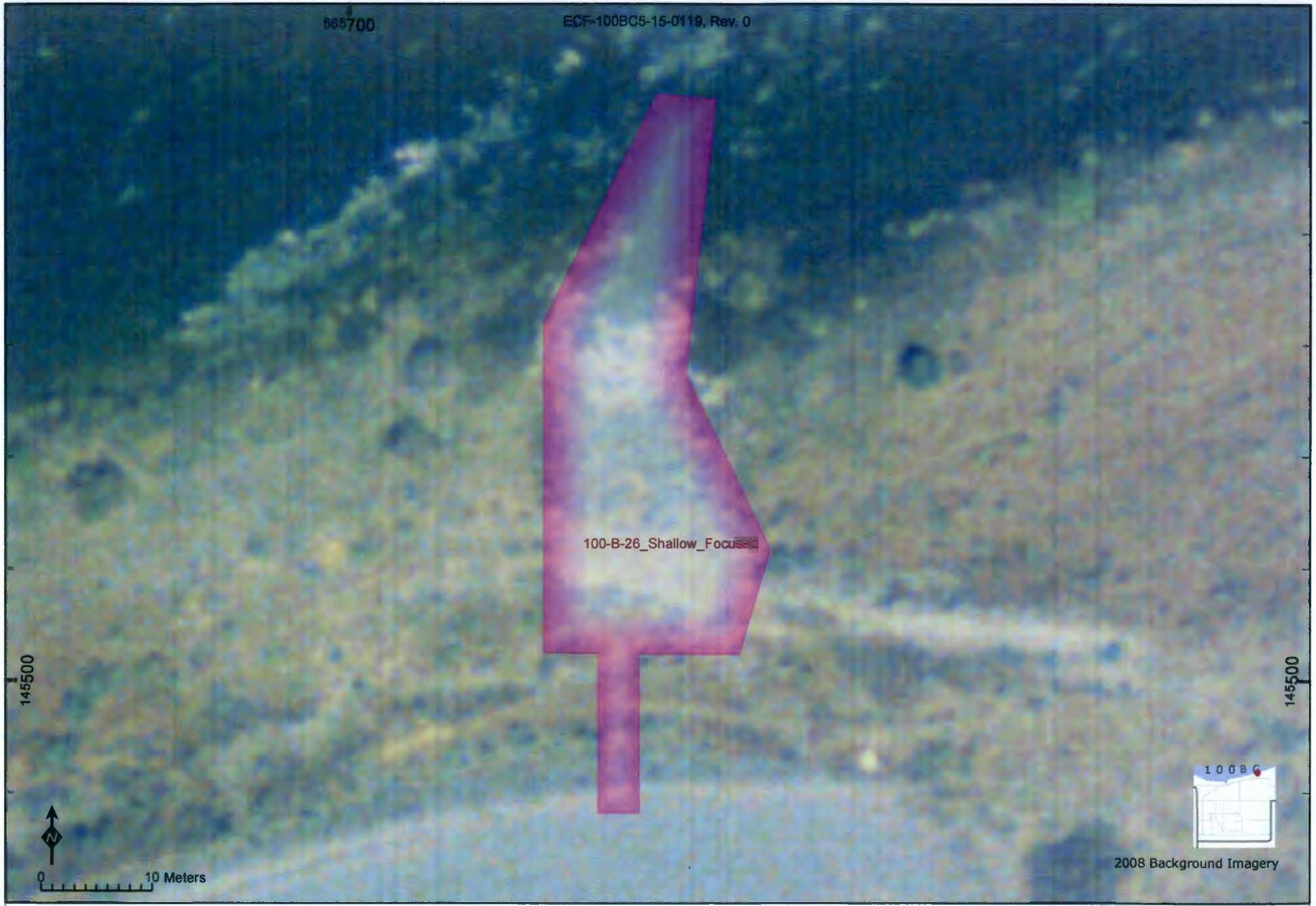
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-25_Overburden_Focused	**37.6**	56	**58.6**	23	76	1	80



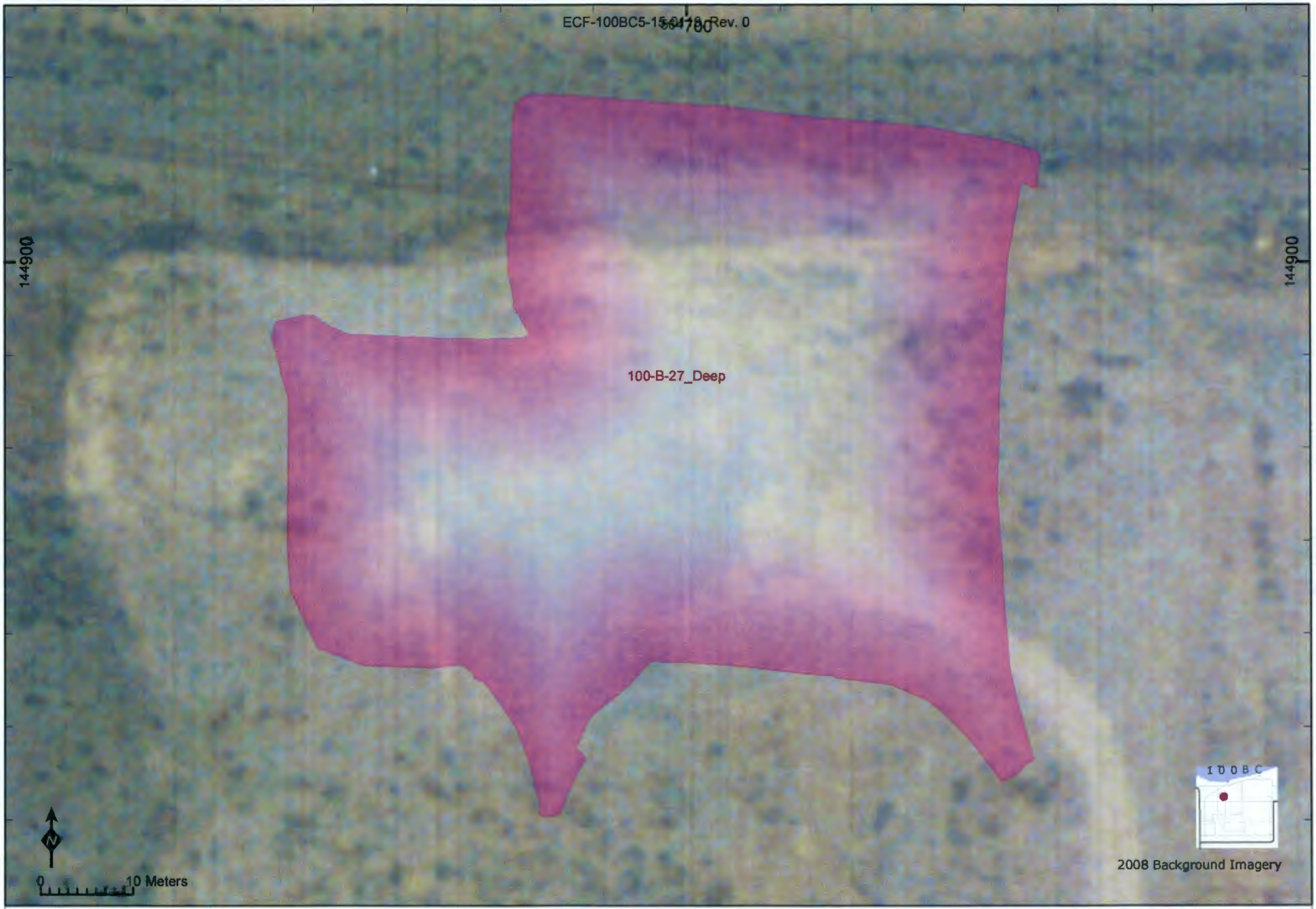
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-B-25_Shallow	**32.9**	57	**48**	27	71	1	76



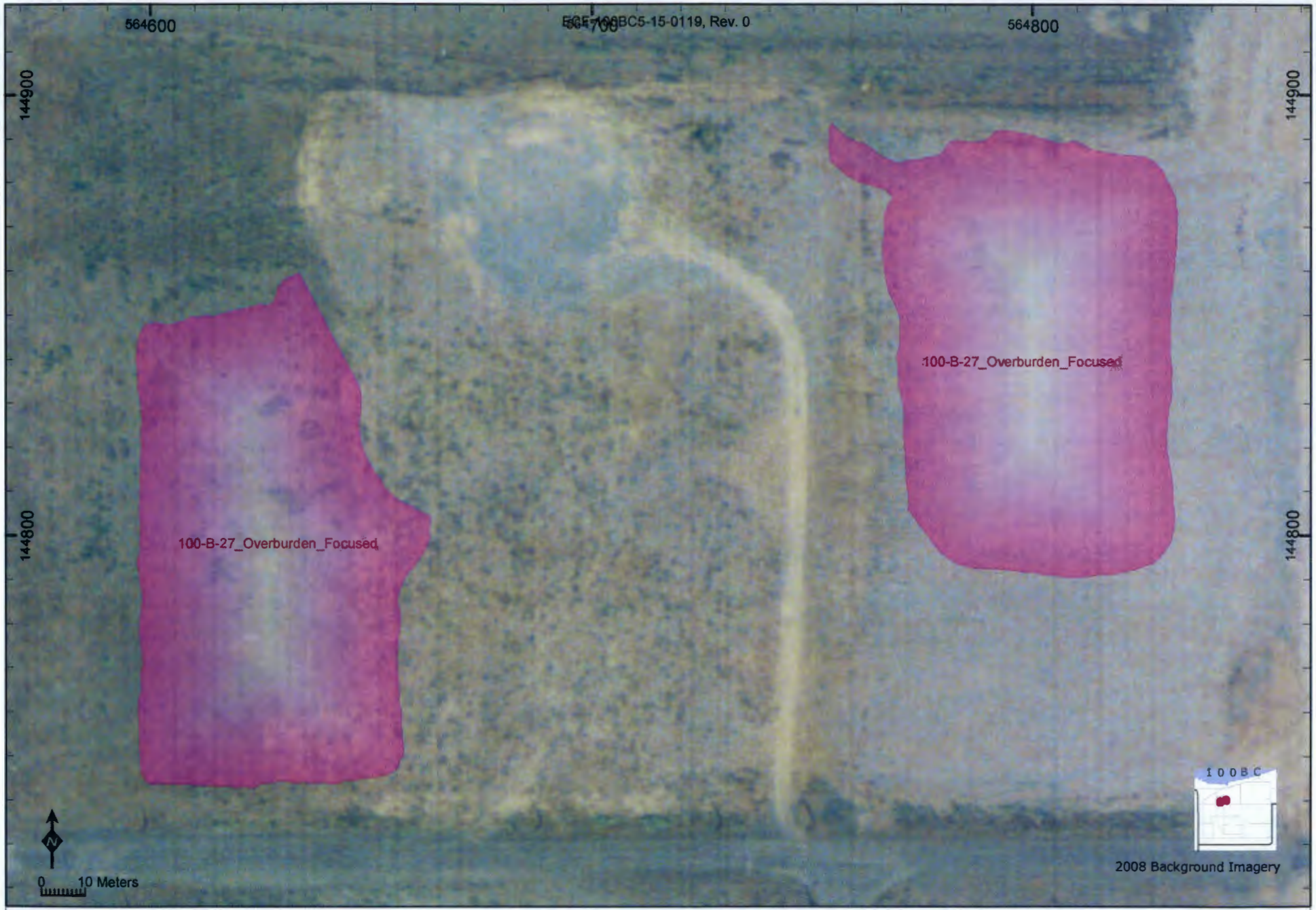
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-25_Staging pile area	**36.5**	58	**29.9**	13	140	0.2	49



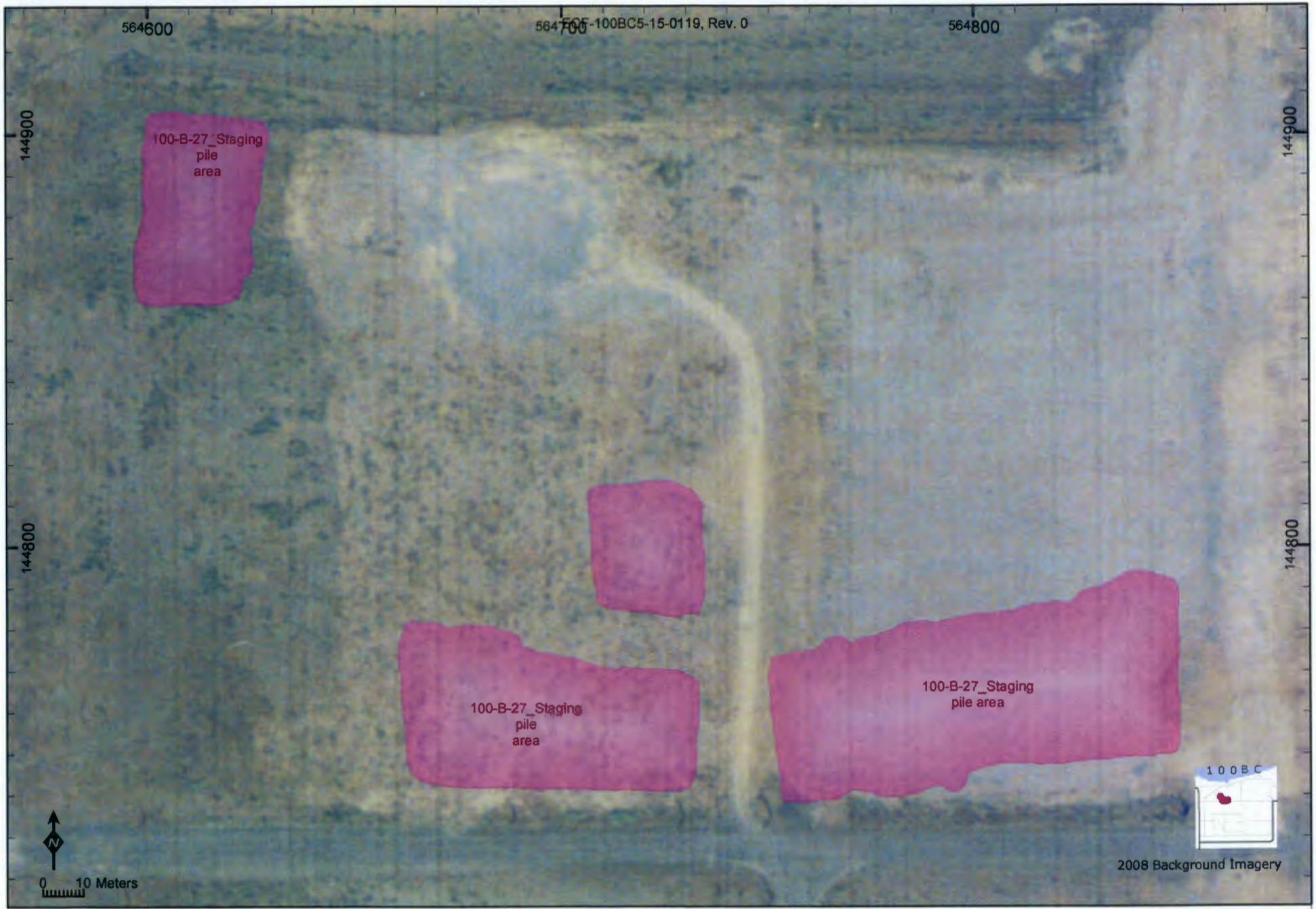
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-B-26_Shallow_Focused	**15.3**	59 **31.7**	18	23	1.7	60	



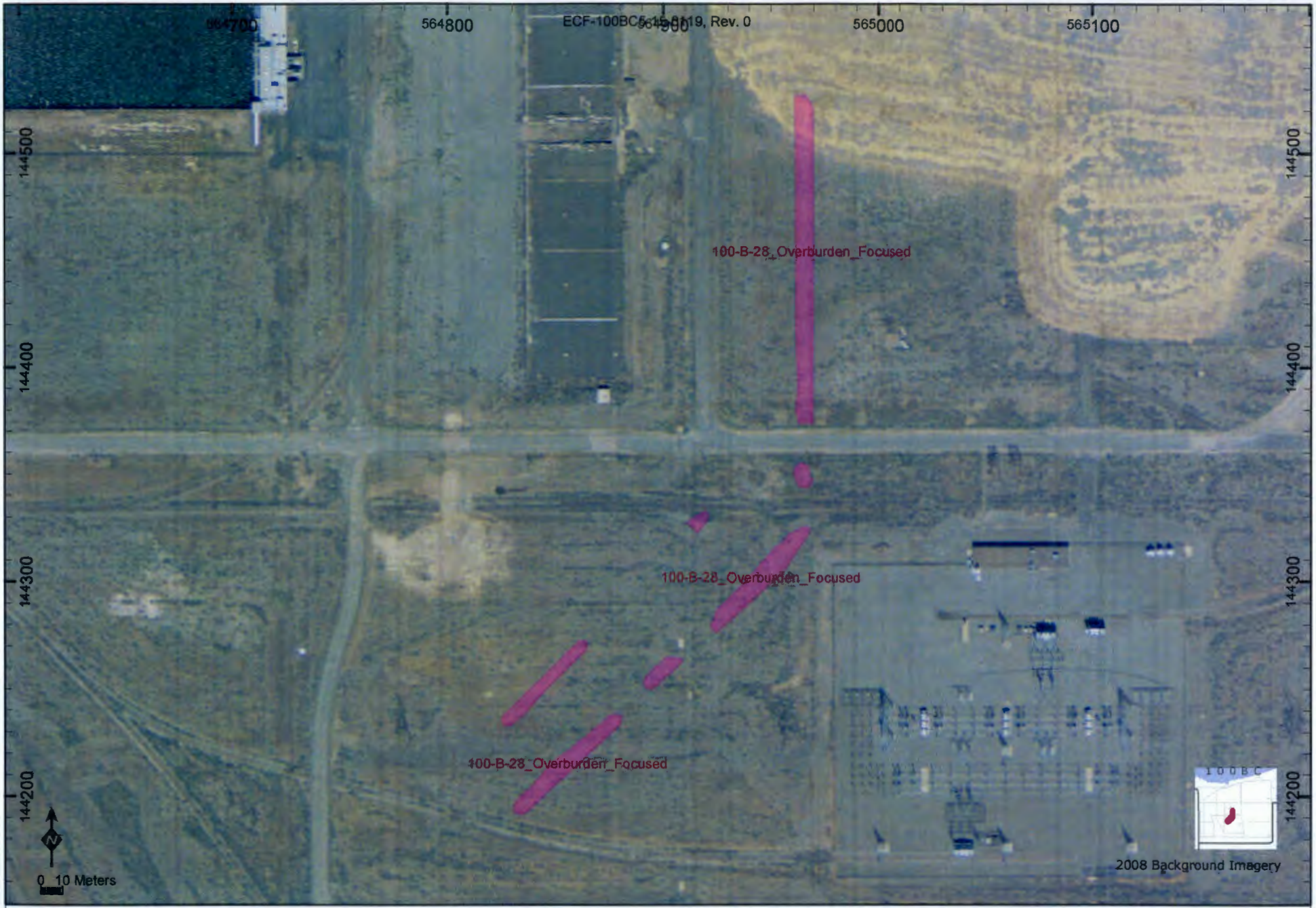
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-27_Deep	**36.8**	60	**47.1**	20	90	0.5	78



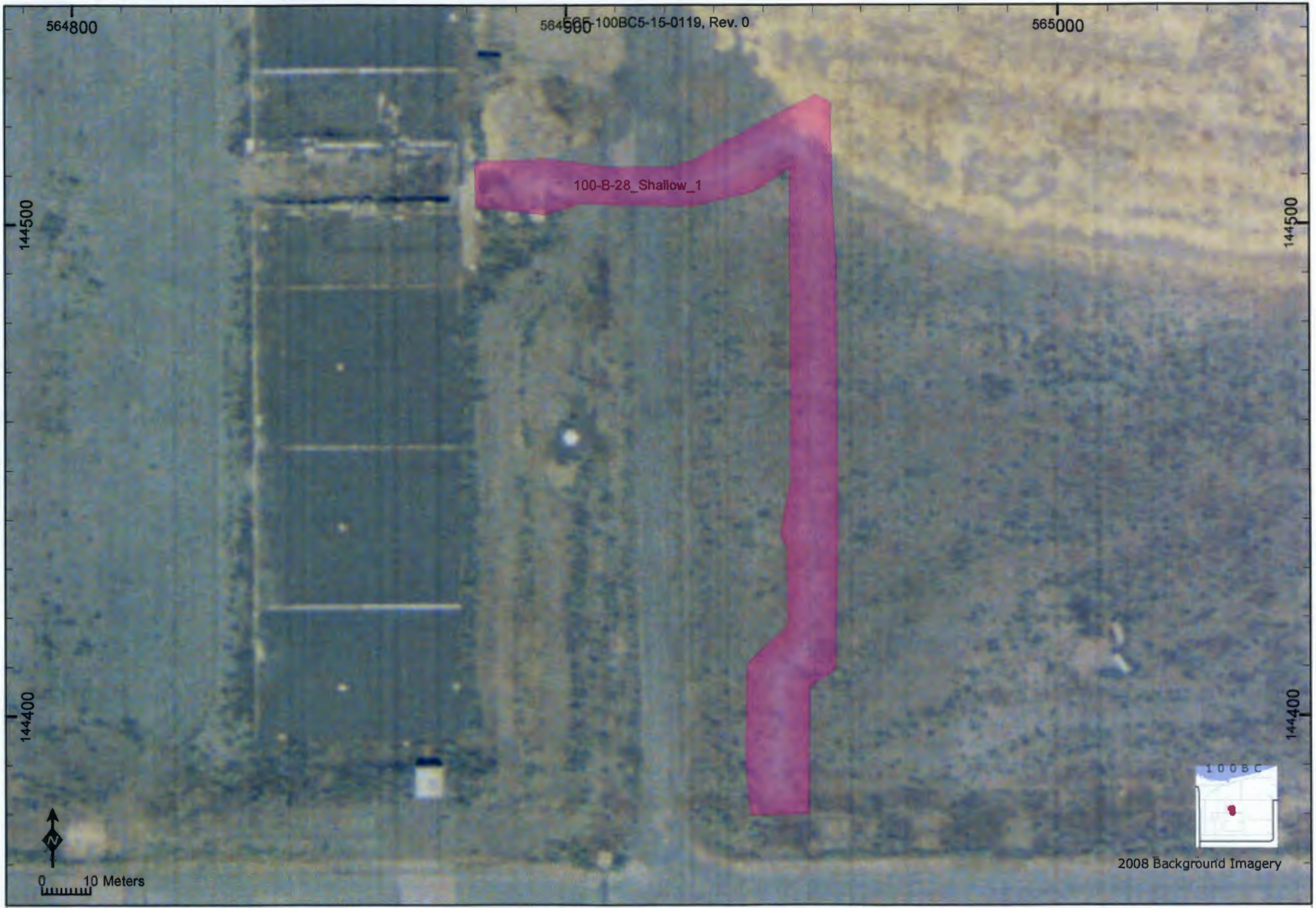
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-27_Overburden_Focused	**61.7**	61	**73.8**	40	162	0	116



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-27_Staging pile area	**51.4**	62	**34.6**	9	240	0.6	47

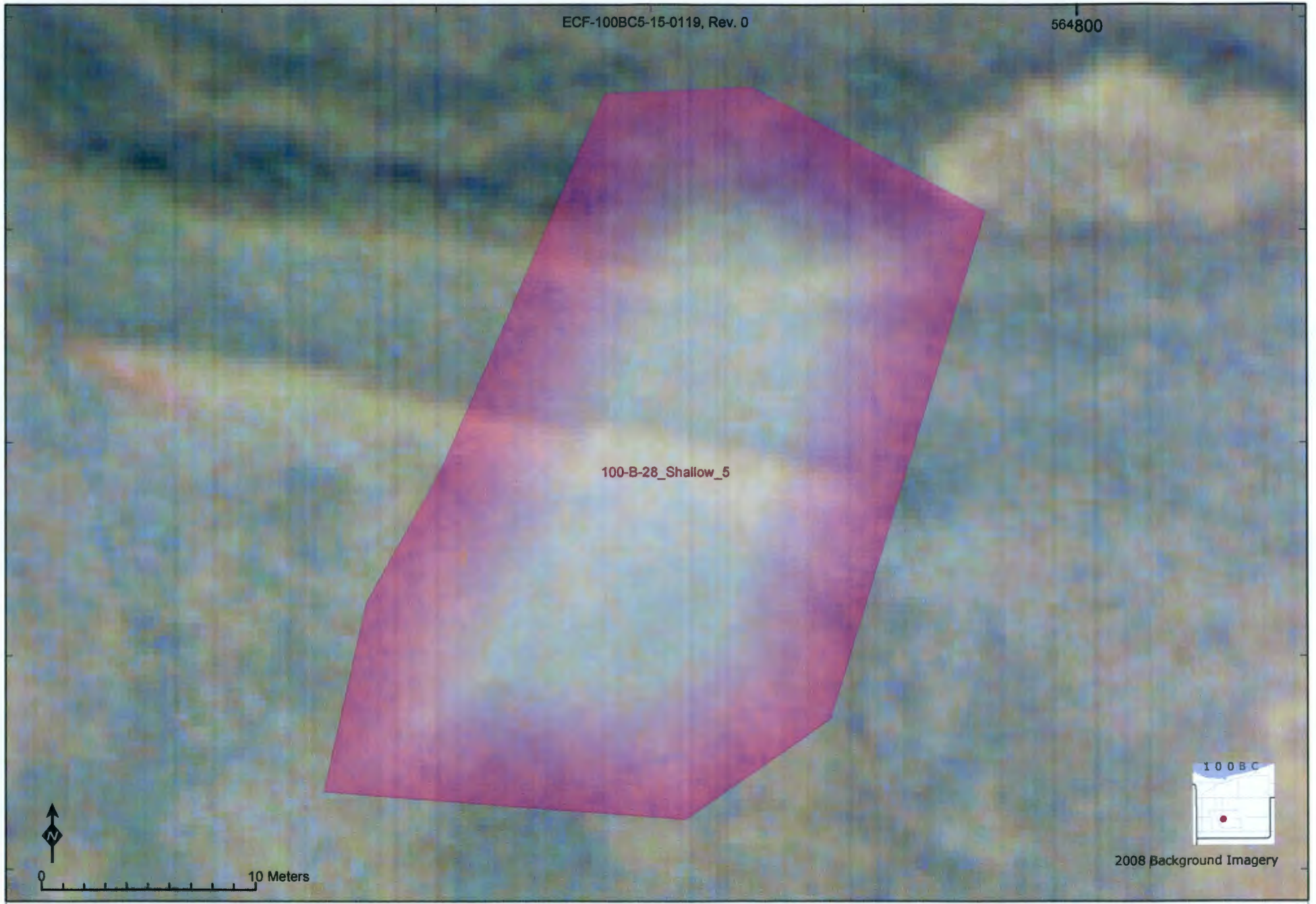


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-28_Overburden_Focused	**29.5**	63	**14.8**	29	184	0.2	153



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-28_Shallow_1	**26.1**	**24.9**	36	84	2	145

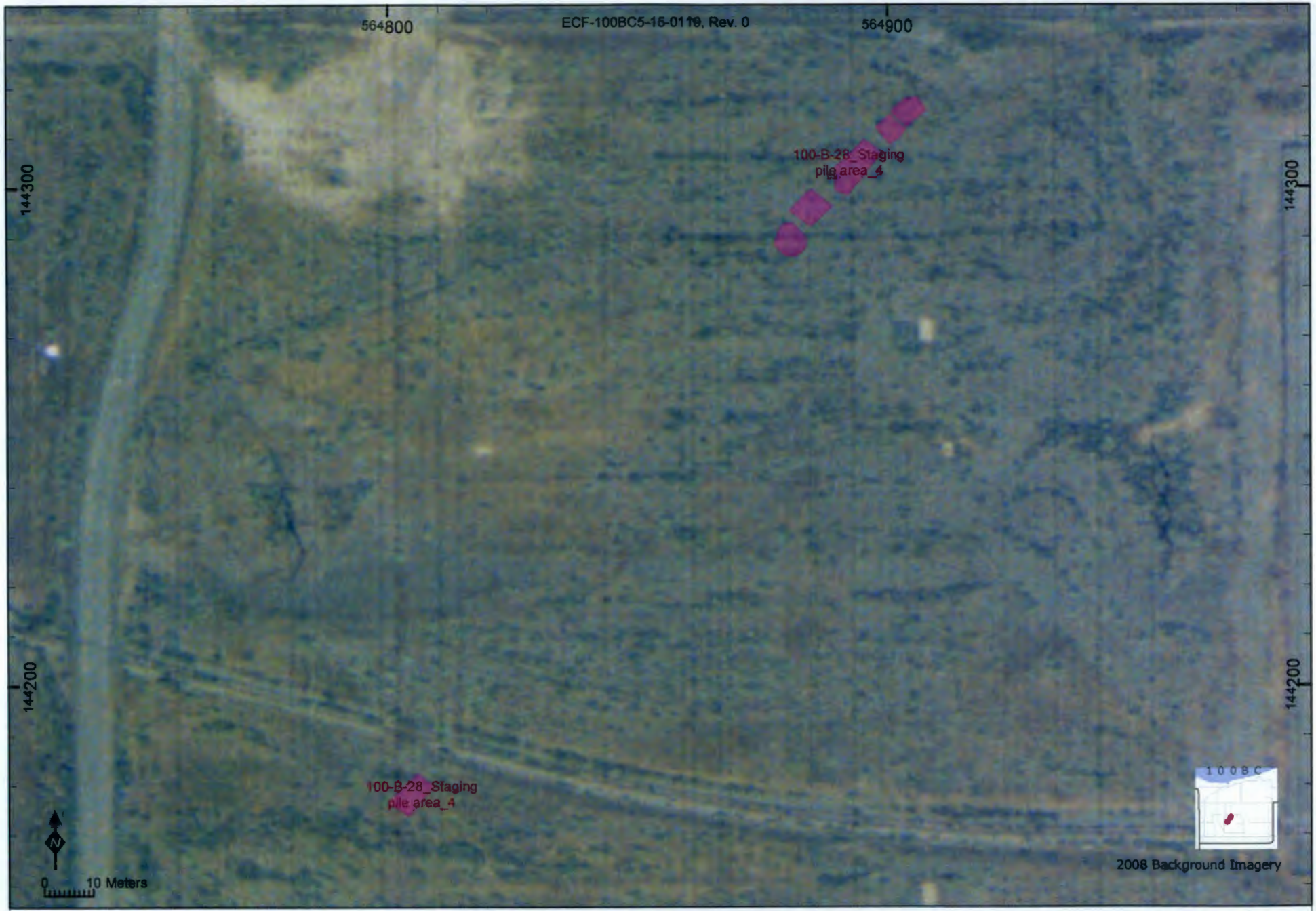
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-28_Shallow_3	**32.7**	65	**19.3**	9	174	5.6	55



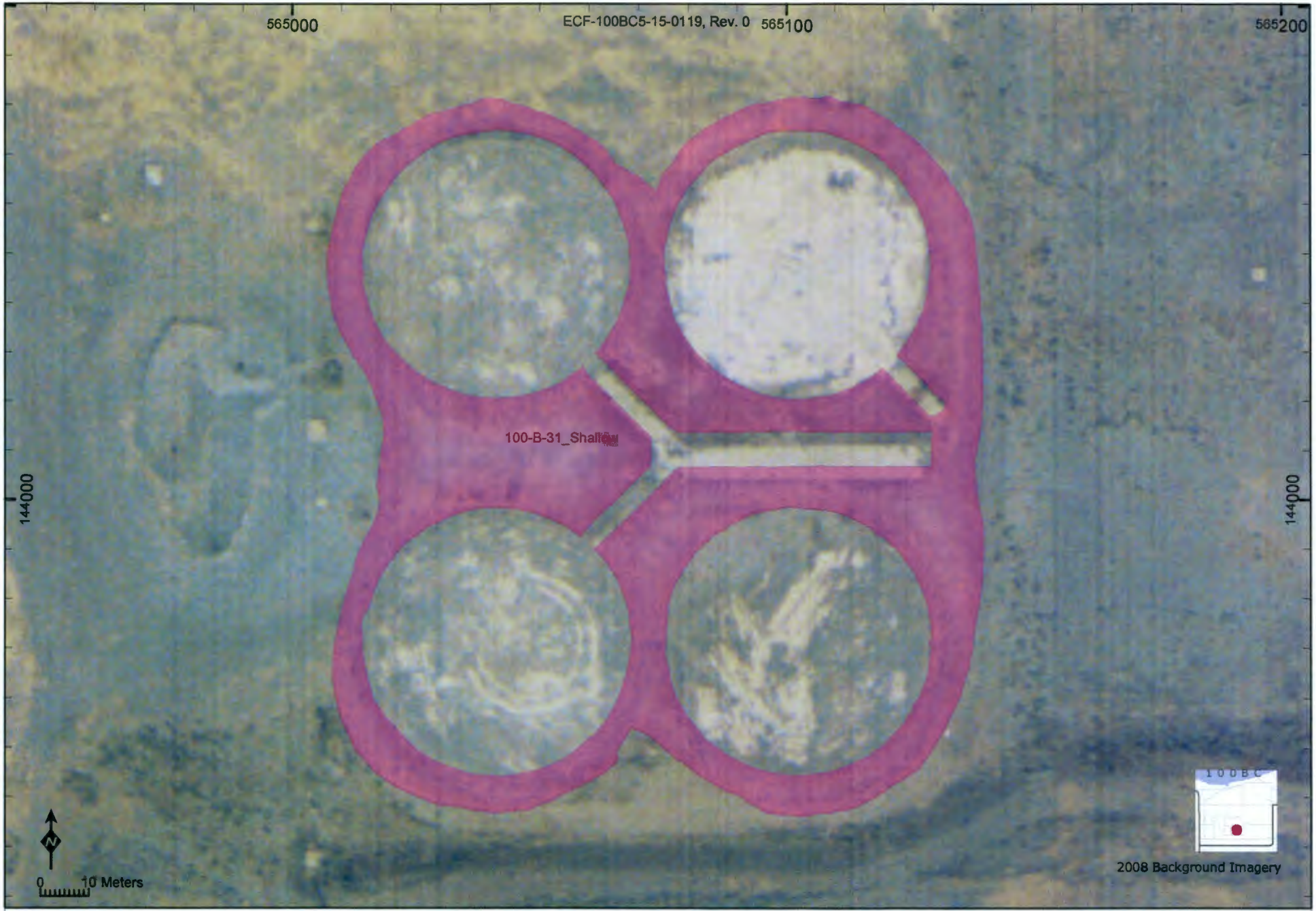
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-B-28_Shallow_5	**14.7**	66 **22**	11	31	1.3	34	

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-28_Shallow_Focused	**98.2**	67	**150.6**	77	201	0.3	232

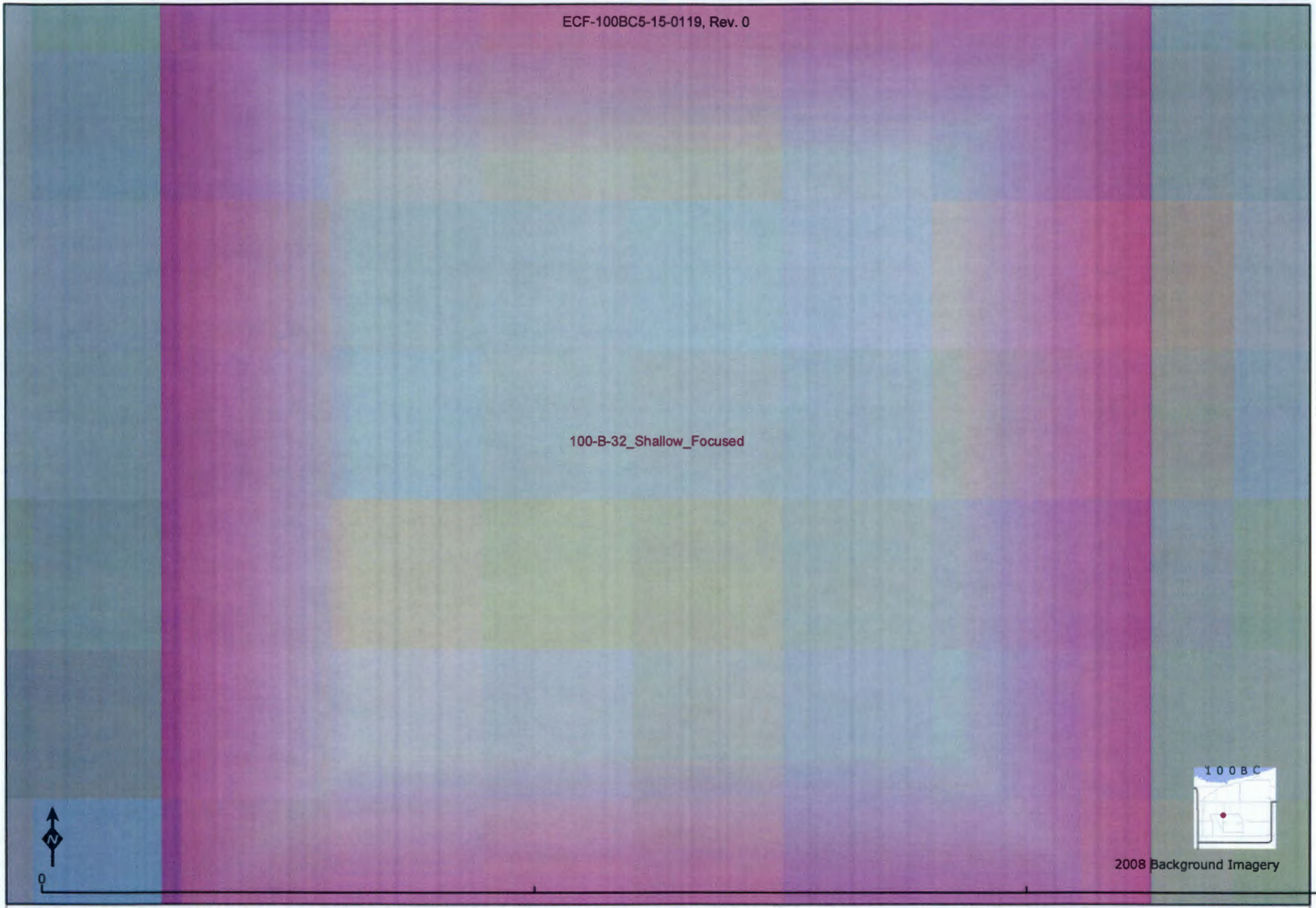
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-28_Staging pile area_2	**16.2**	68	**70.2**	49	12	0.1	112



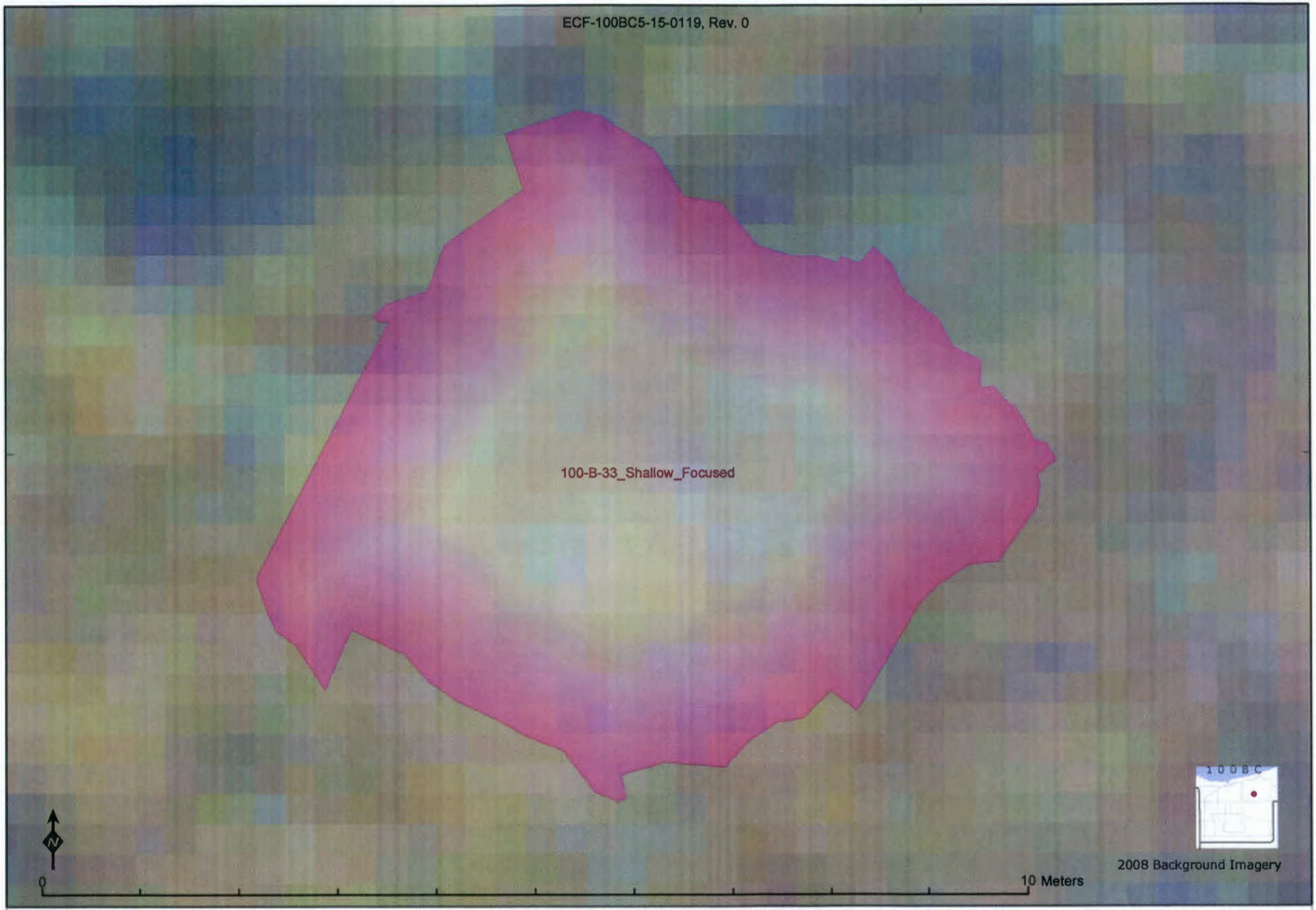
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-28_Staging pile area_4	**7.9**	69	**4.3**	2	45	0.7	8



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-31_Shallow	**46.8**	**15.1**	15	454	0.1	109

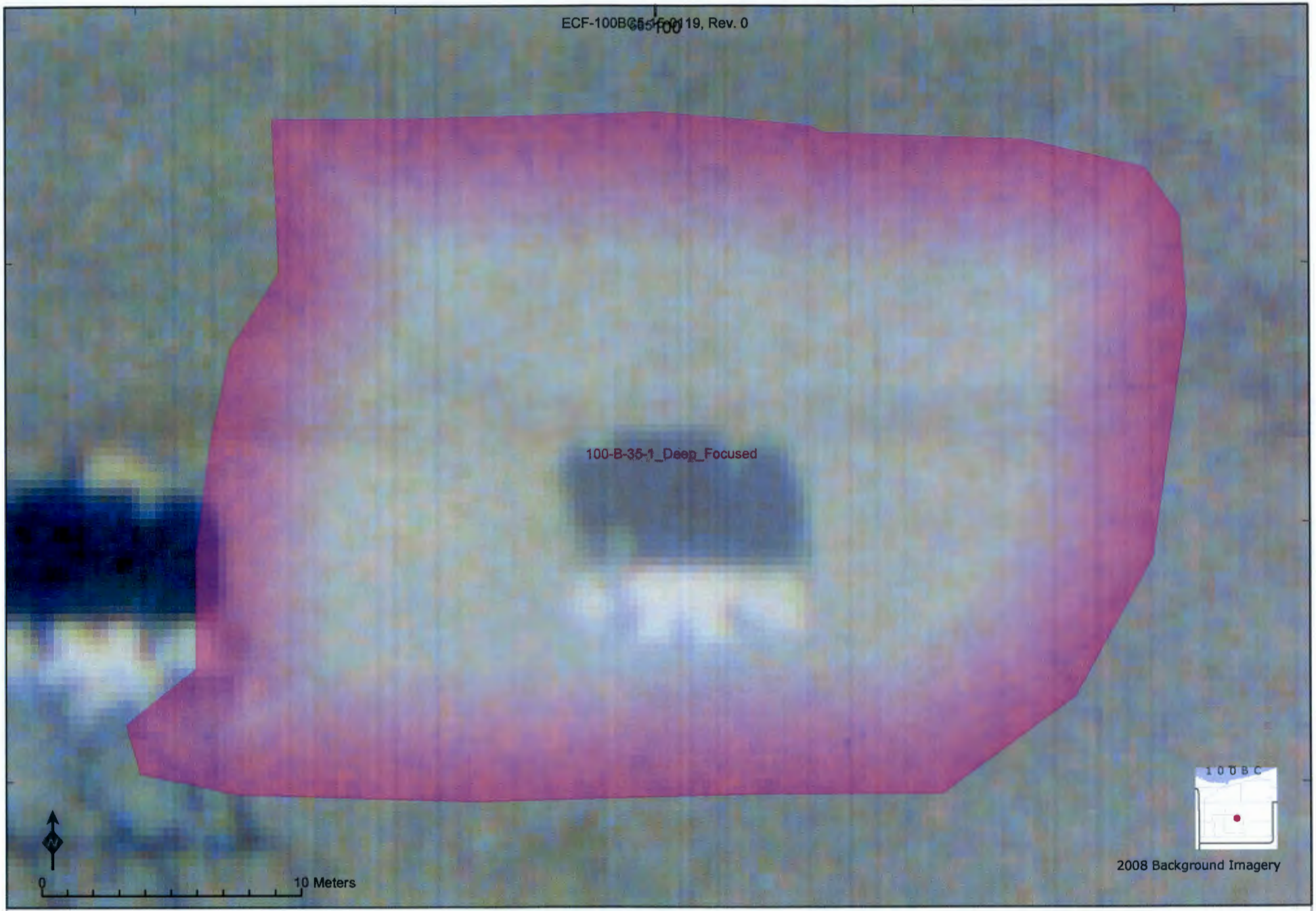


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-B-32_Shallow_Focused	**1.1**	71	**2**	0	3	2	2

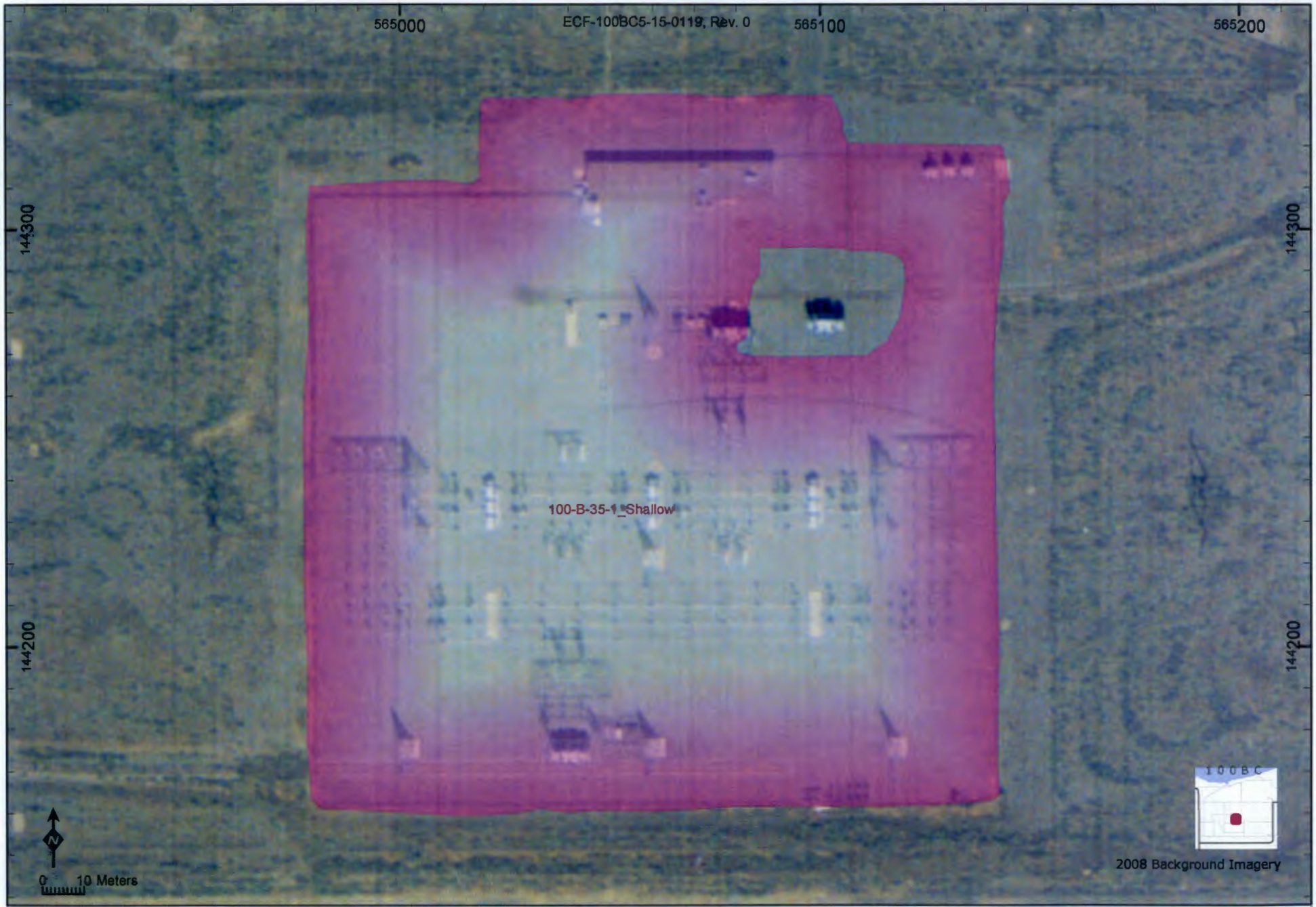


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-33_Shallow_Focused	**3.2**	72	**4.2**	2	8	1.1	6

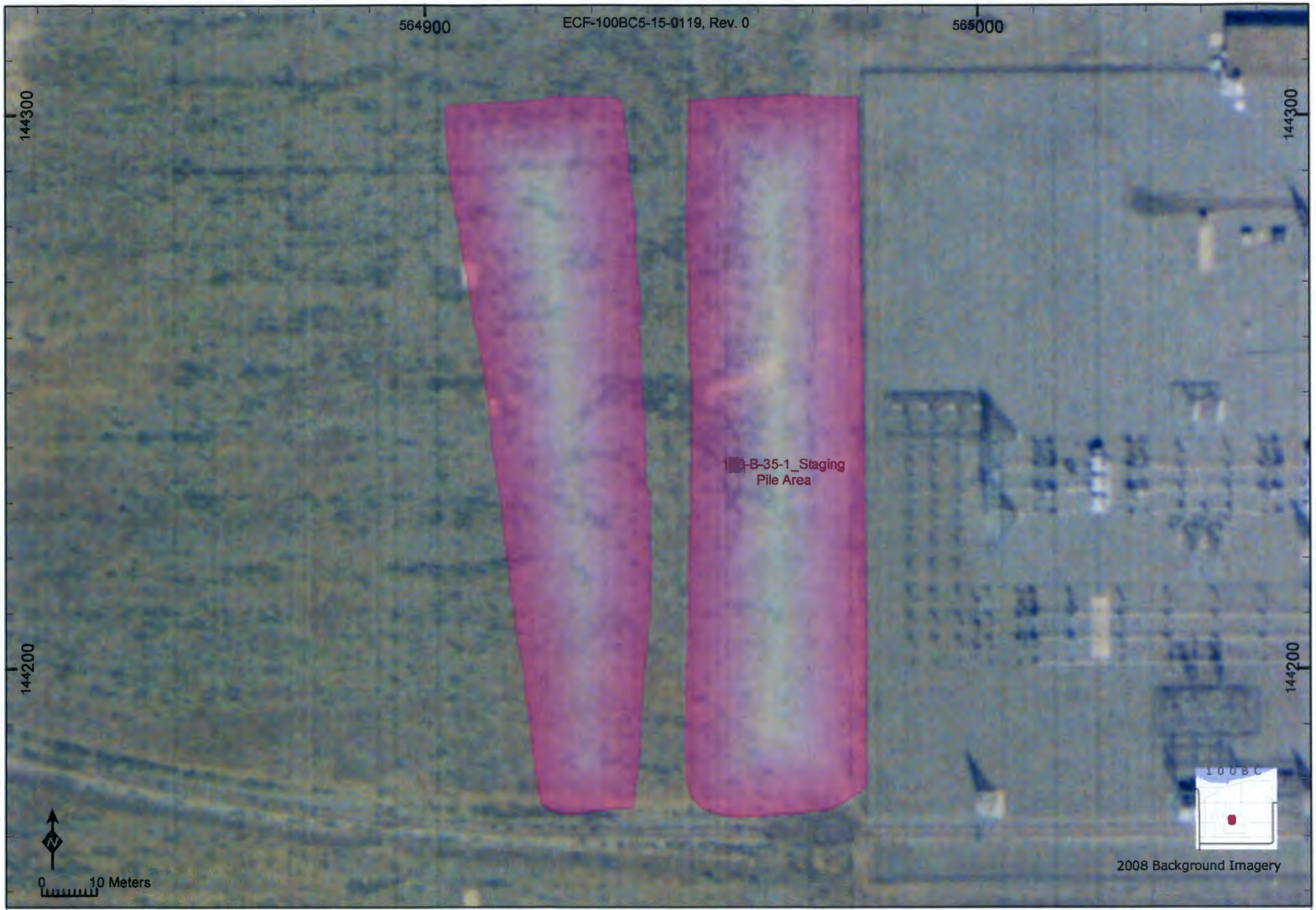
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-33_Staging pile area_Focused	**2.8**	73	**4.4**	1	6	1.8	5



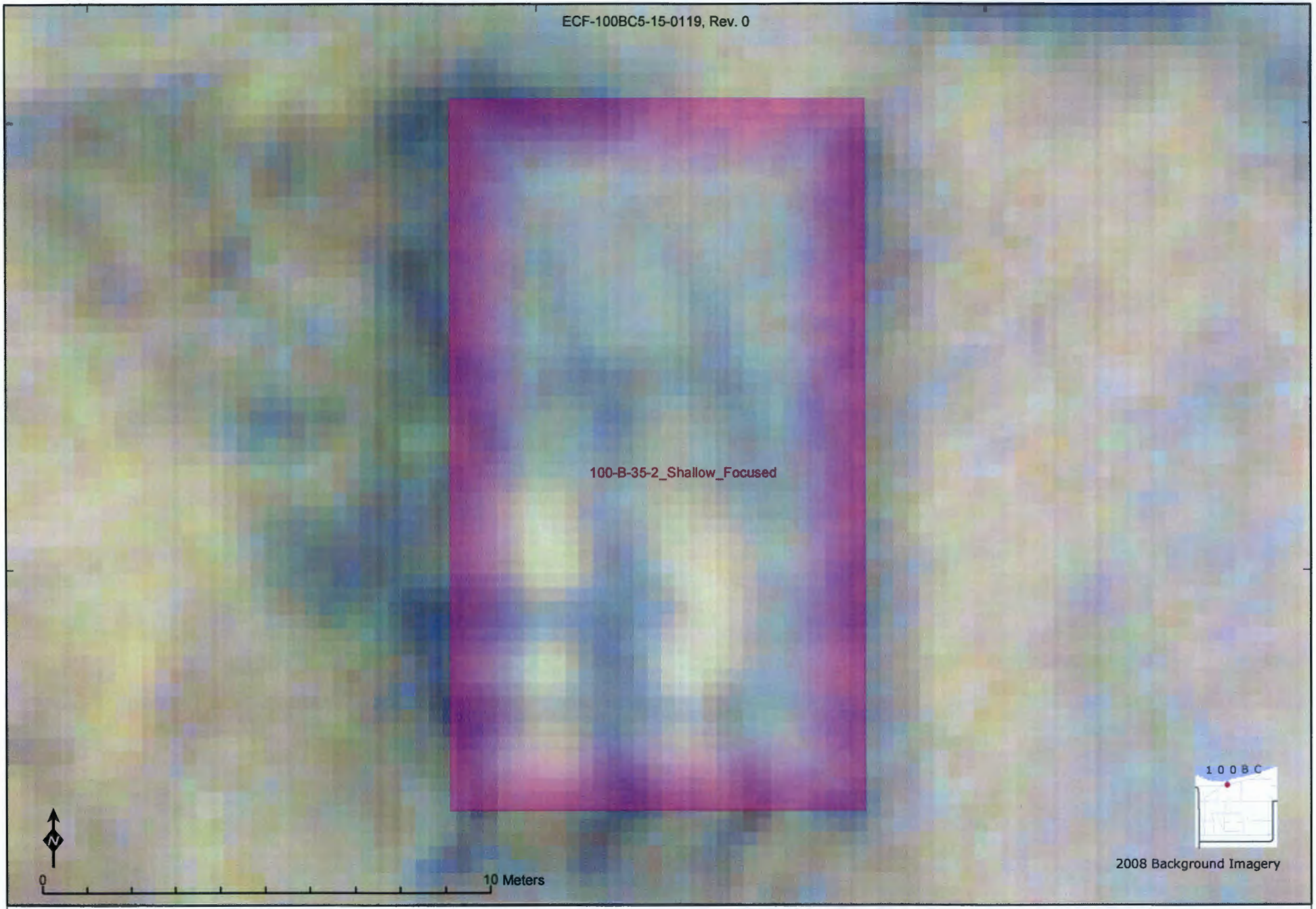
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-35-1_Deep_Focused	**17**	**22.2**	7	41	1.8	26



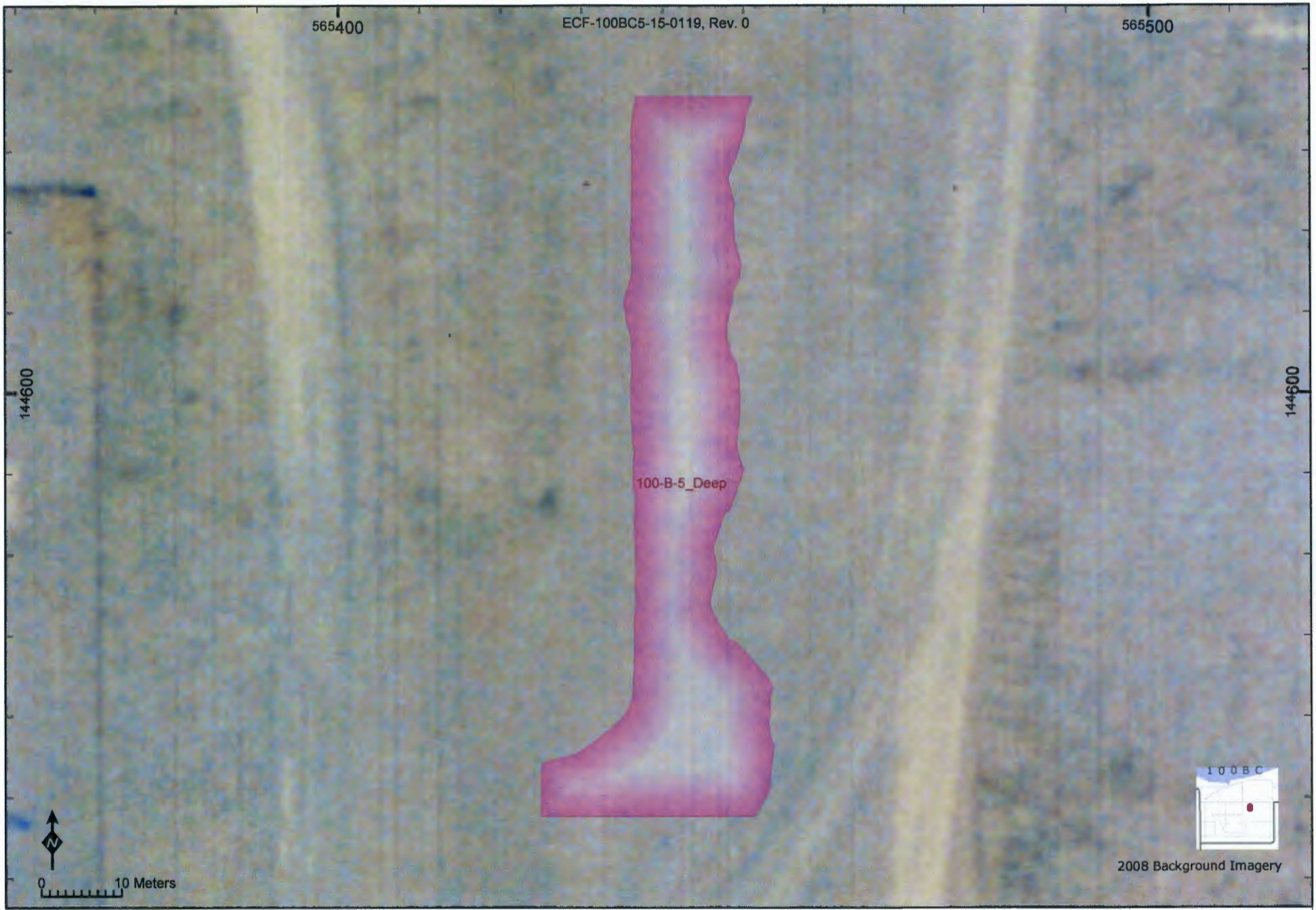
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-35-1_Shallow	**90.9**	75	**122**	53	213	0.6	172



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-35-1_Staging Pile Area	**48.9**	76	**101.5**	43	74	0.2	130

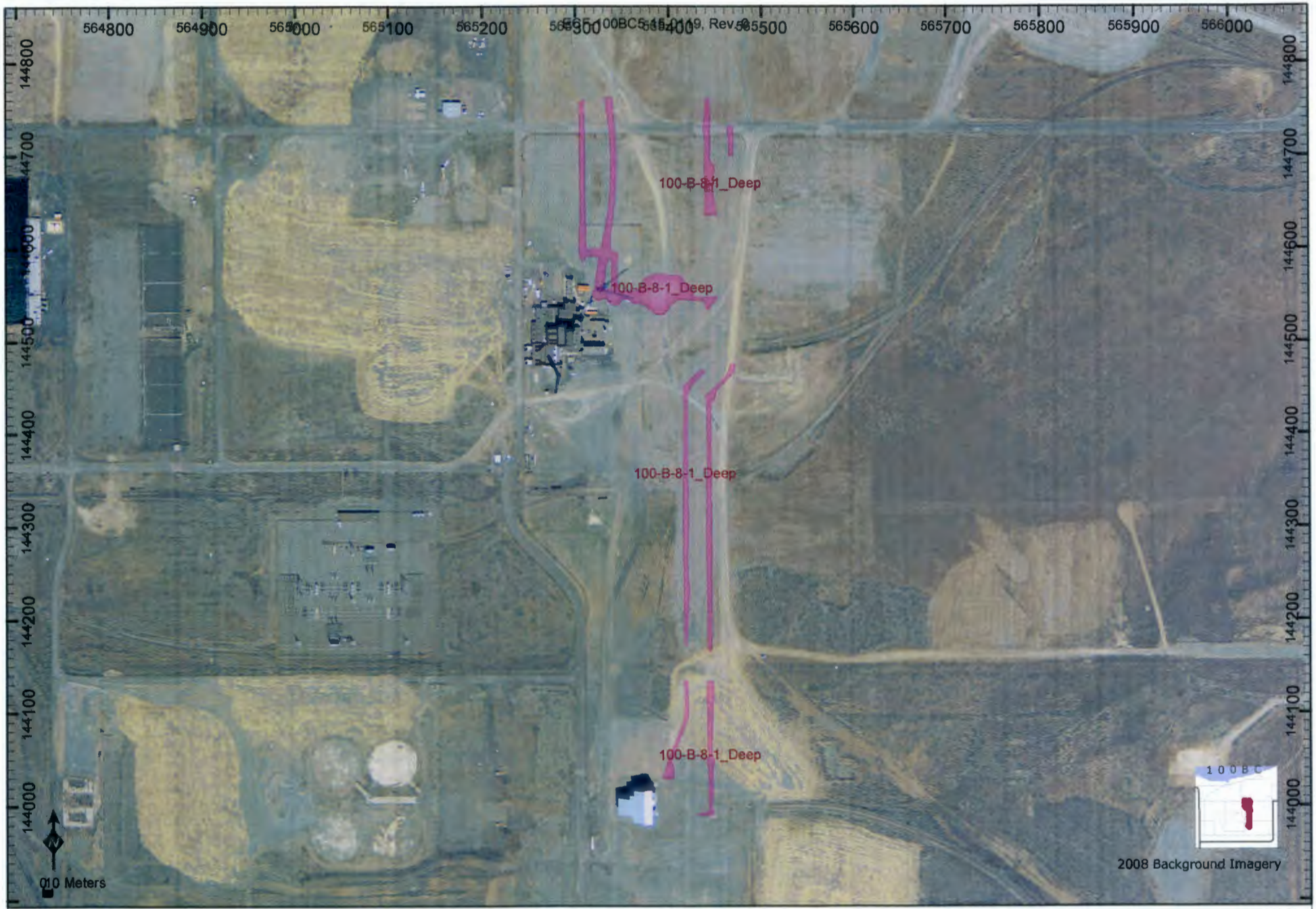


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-35-2_Shallow_Focused	**6.8**	77	**15.9**	0	9	15.9	16



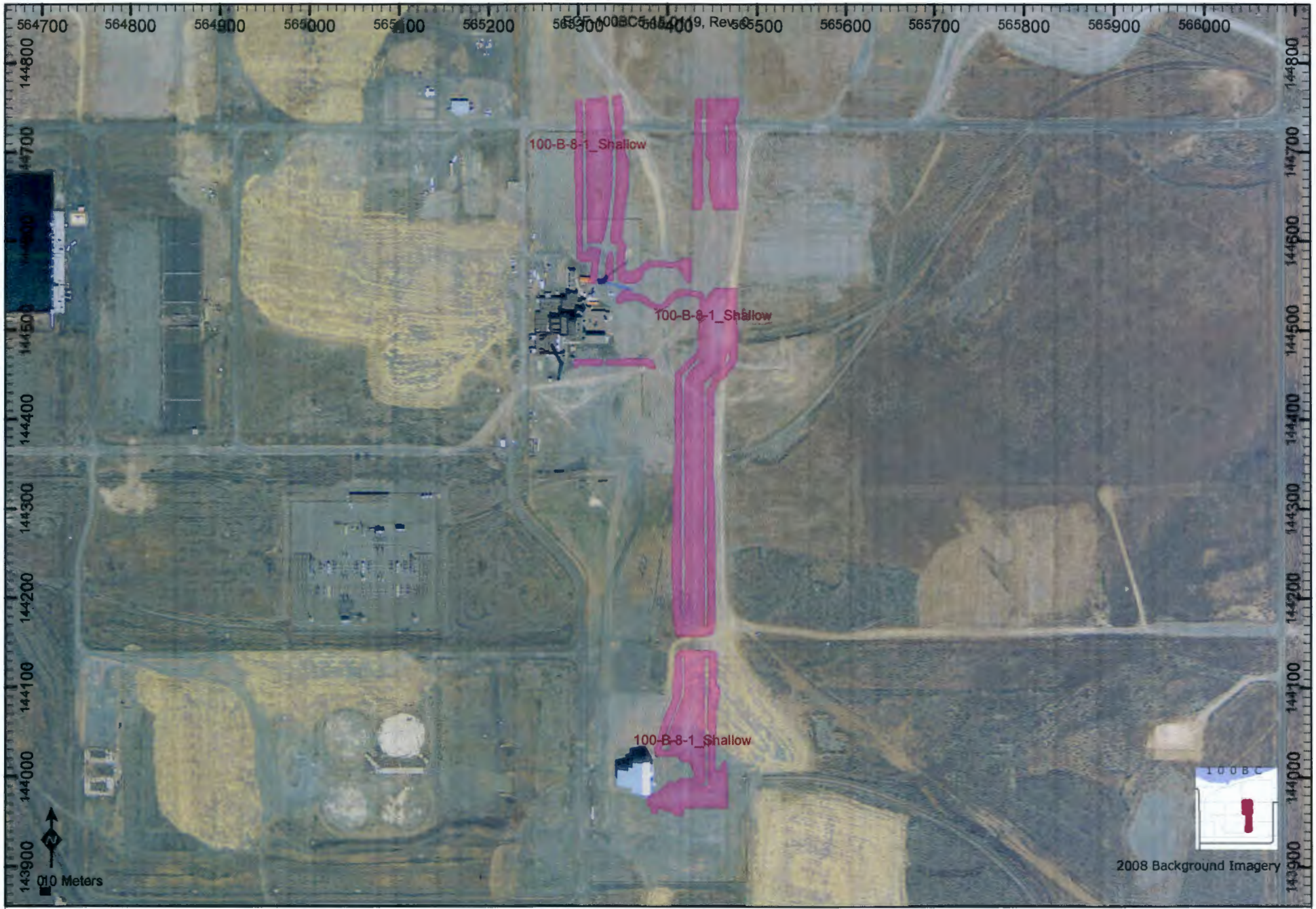
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-5_Deep	**20.2**	78	**27.6**	33	46	0.1	89

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-5_Shallow	**31.8**	79	**52.2**	39	61	0.4	89



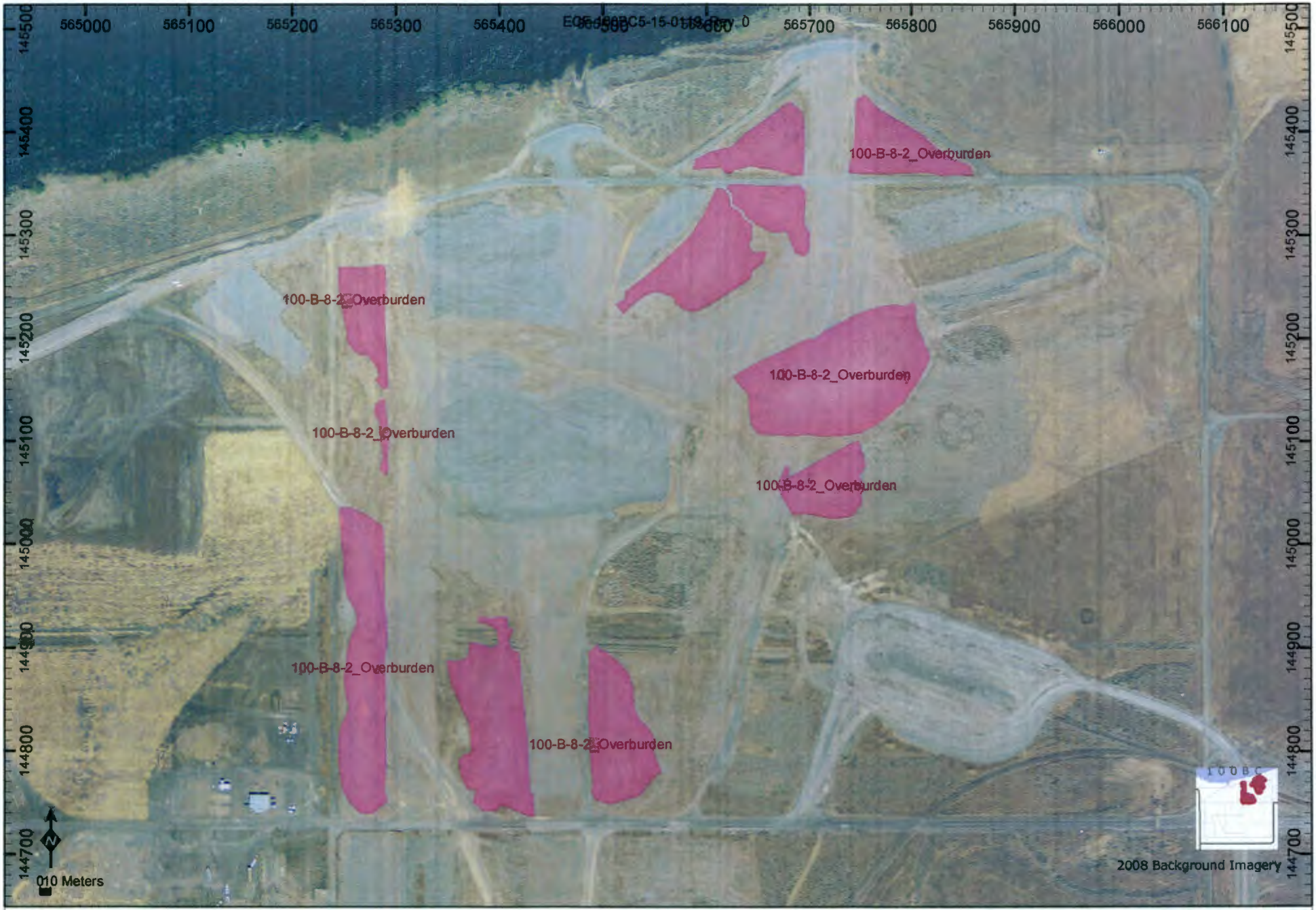
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-8-1_Deep	**55.9**	**28.9**	47	339	0	281

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-B-8-1_Overburden	**118**	81 **43.2**	29	1012	0.4	136	



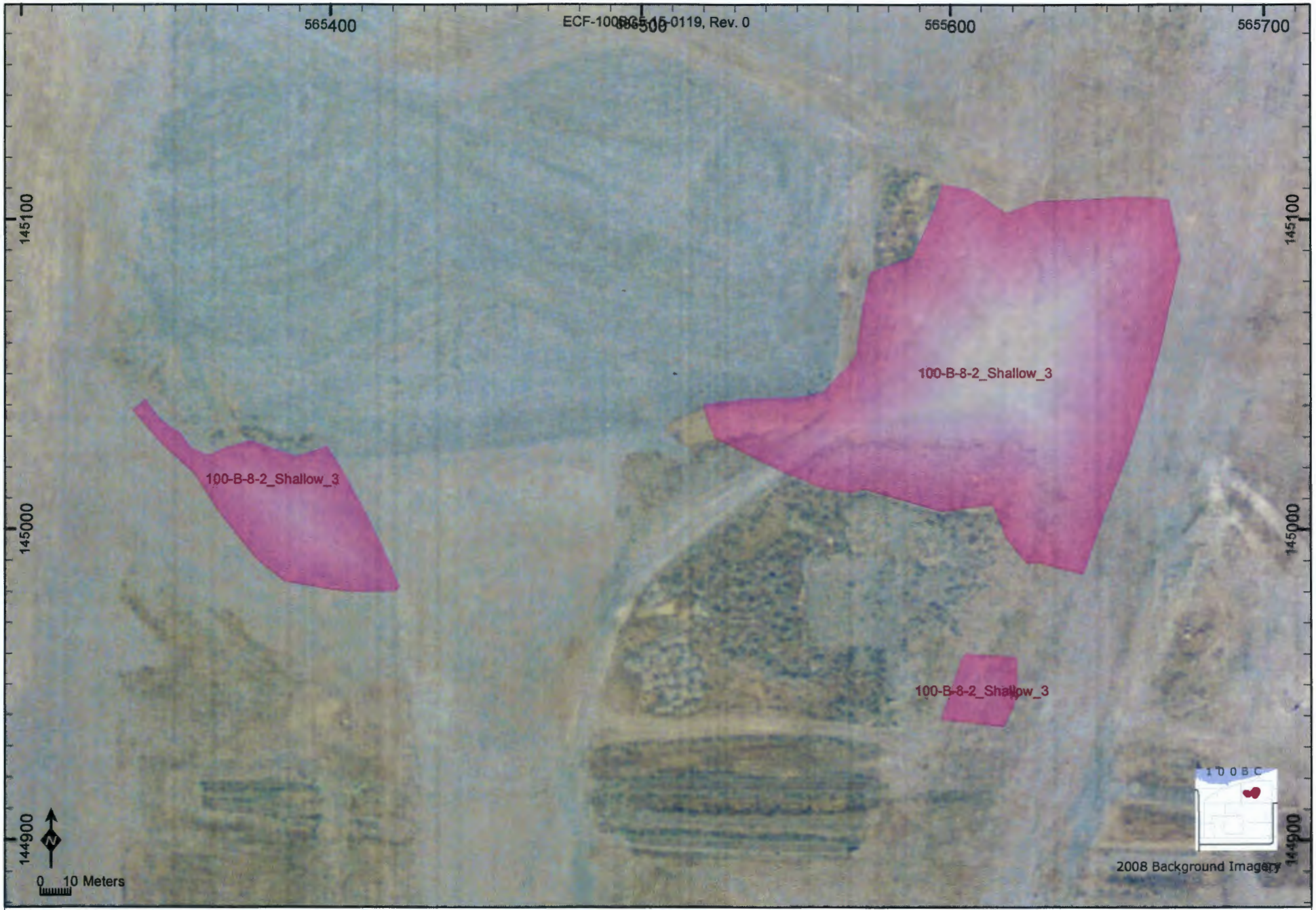
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-8-1_Shallow	**110.6**	**48.6**	67	792	0.4	384

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-B-8-2_Deep	**76.4**	83 **19.2**	24	956	0.1	169	

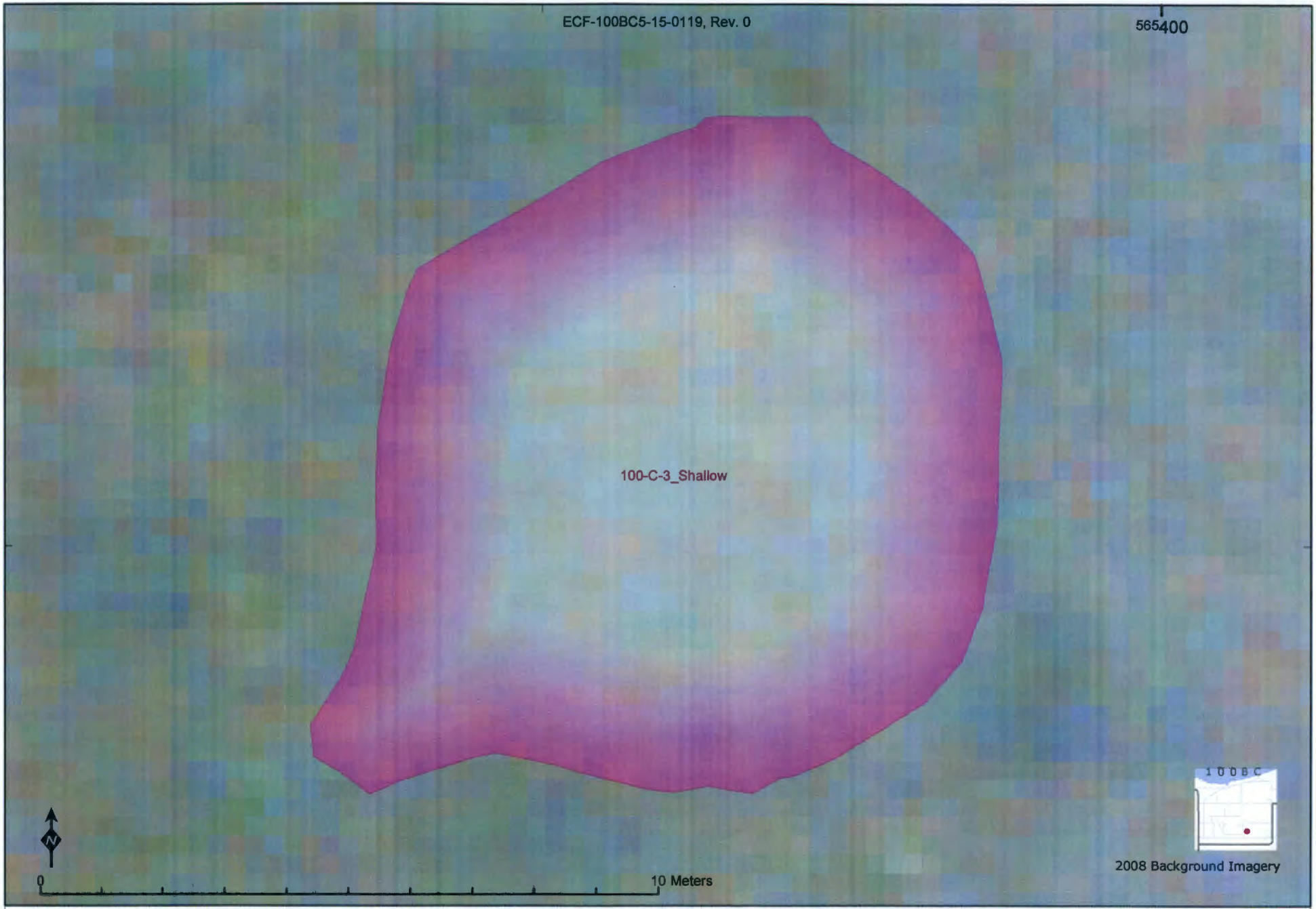


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-8-2_Overburden	**150.3**	84	**65.3**	54	1087	0.1	290

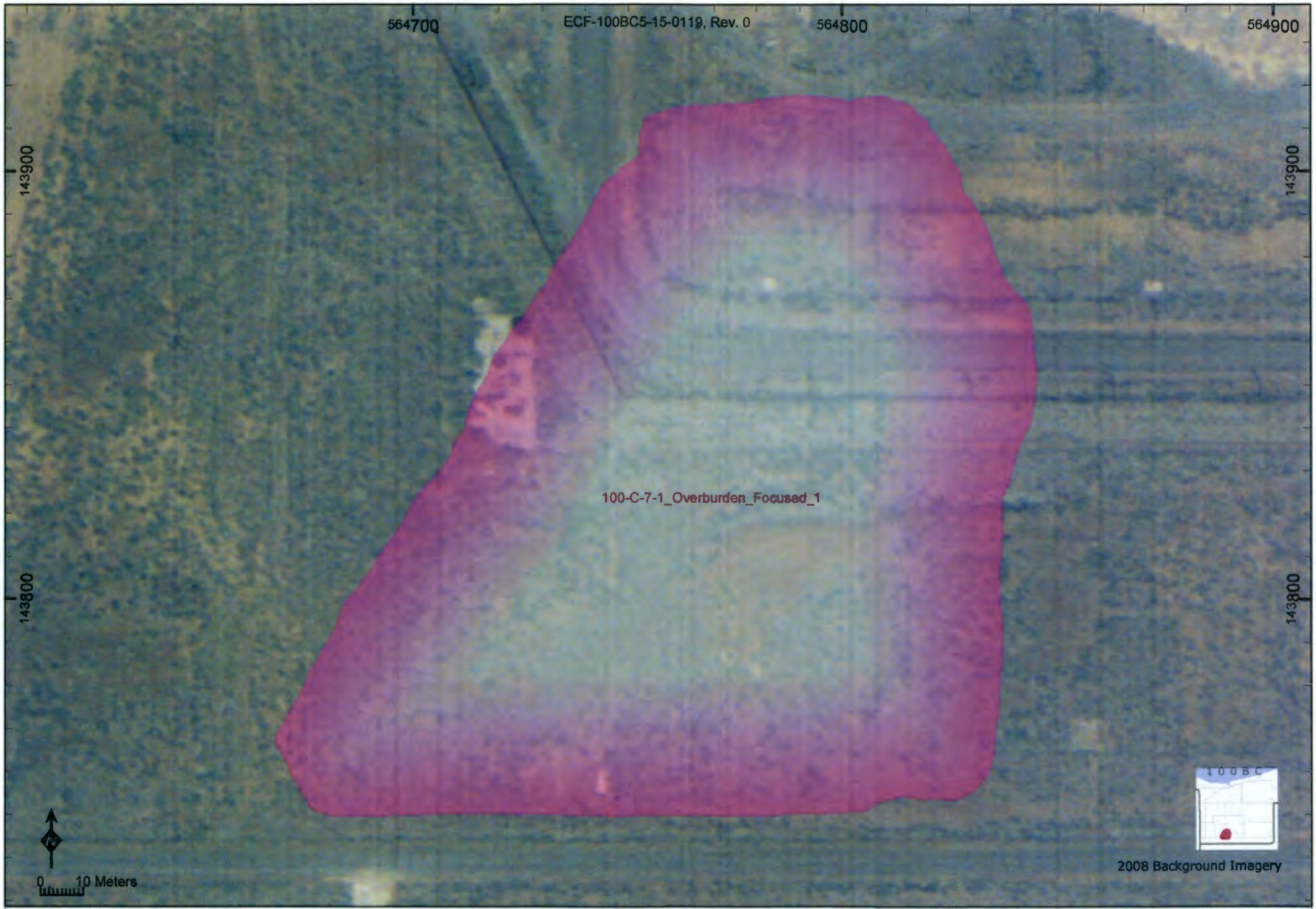
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-B-8-2_Shallow_1	**126.5**	85 **30.9**	49	1631	0.1	511	



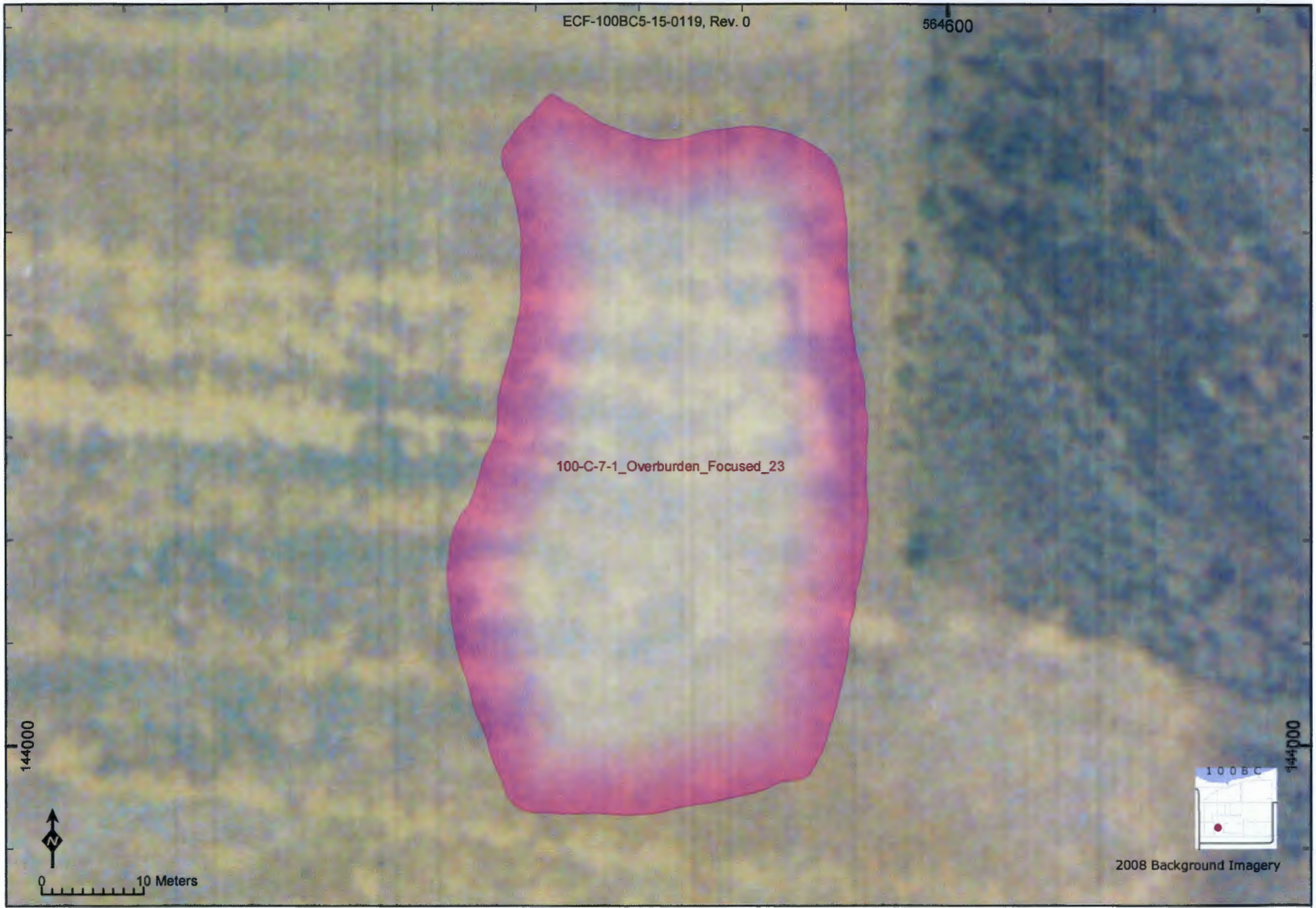
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-B-8-2_Shallow_3	**64.5**	86 **49.7**	38	263	0.5	120



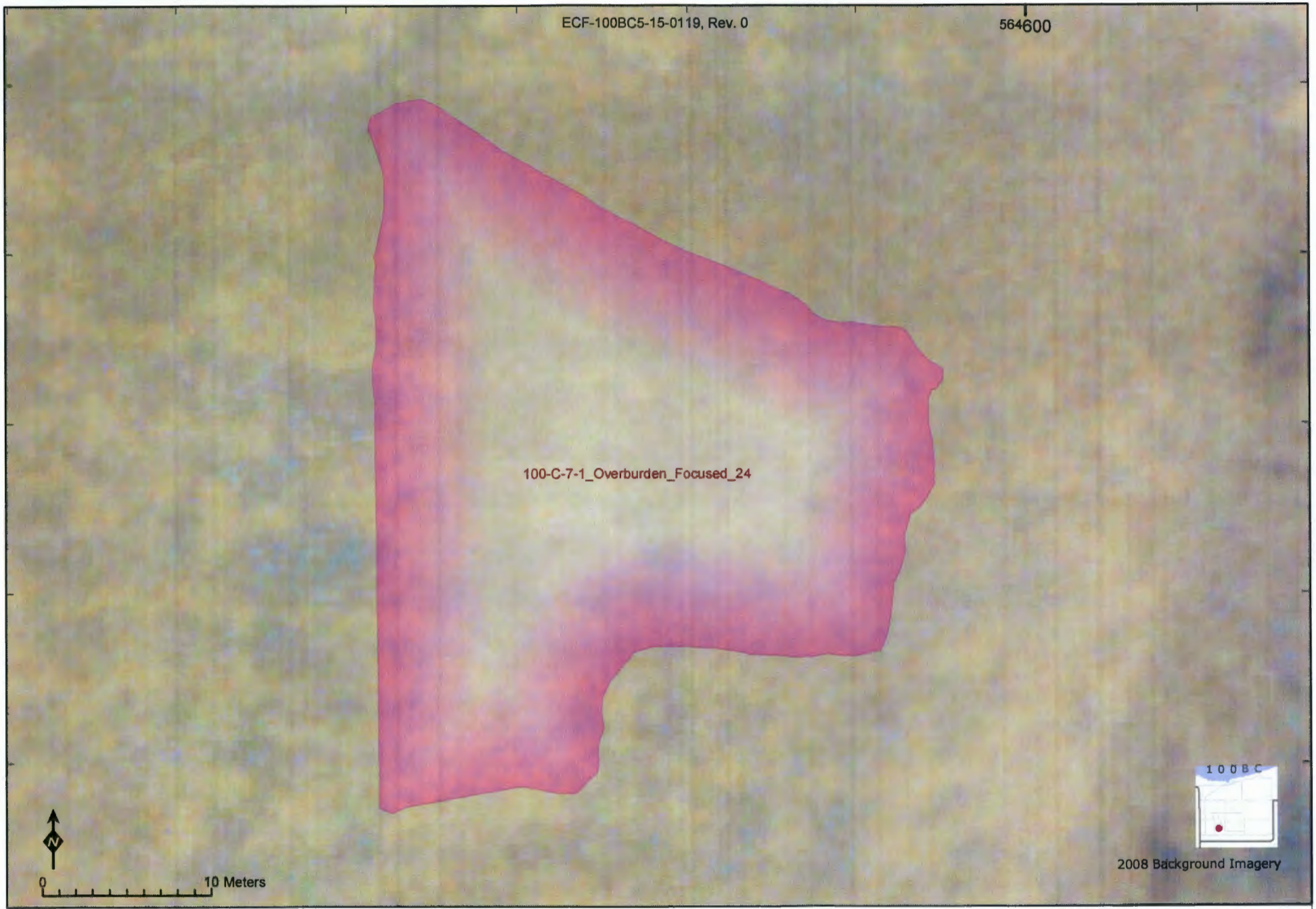
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-3_Shallow	**5.5**	87	**8.6**	3	11	2.4	11



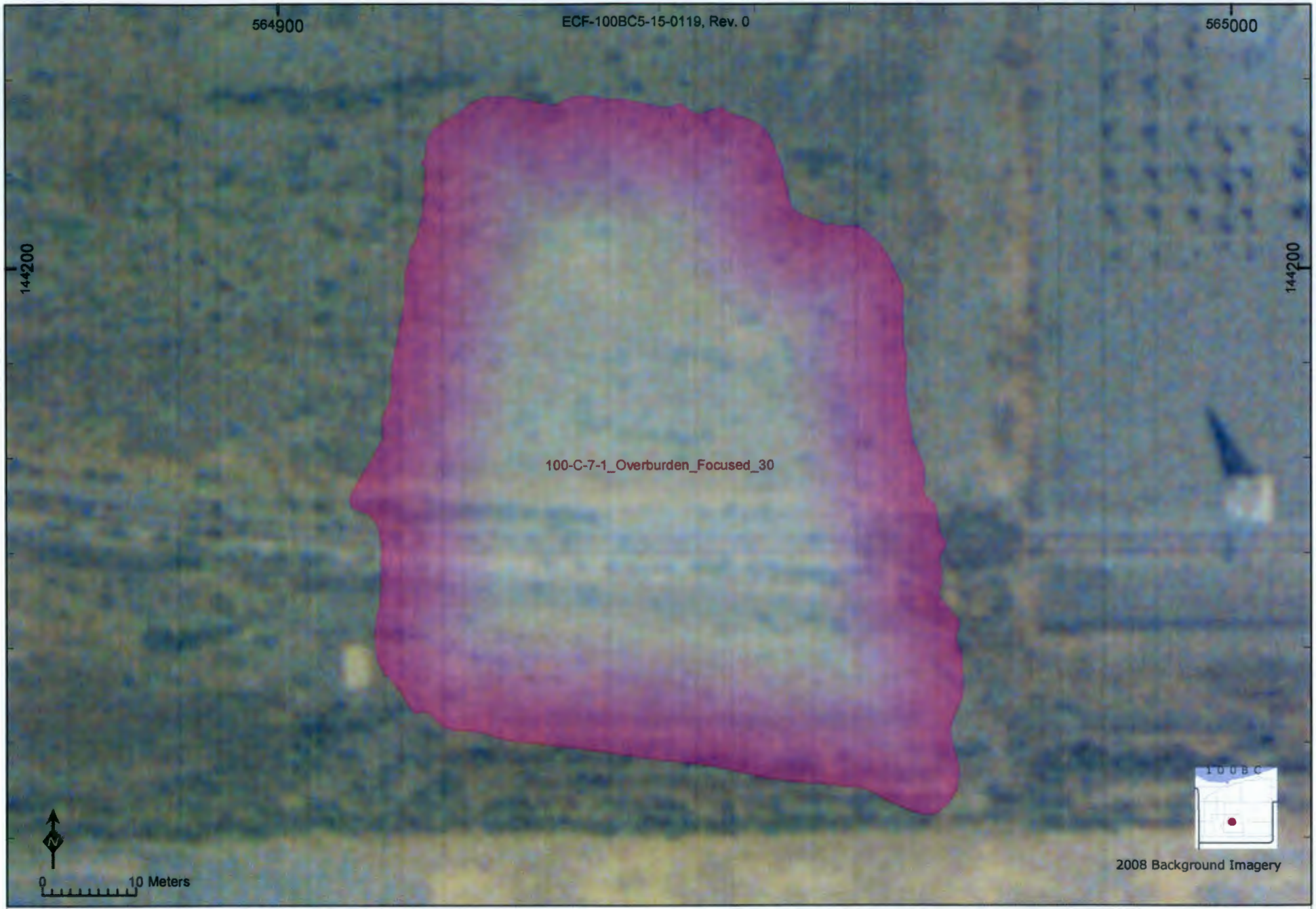
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Overburden_Focused_1	**82.4**	**117.8**	52	181	0.2	167



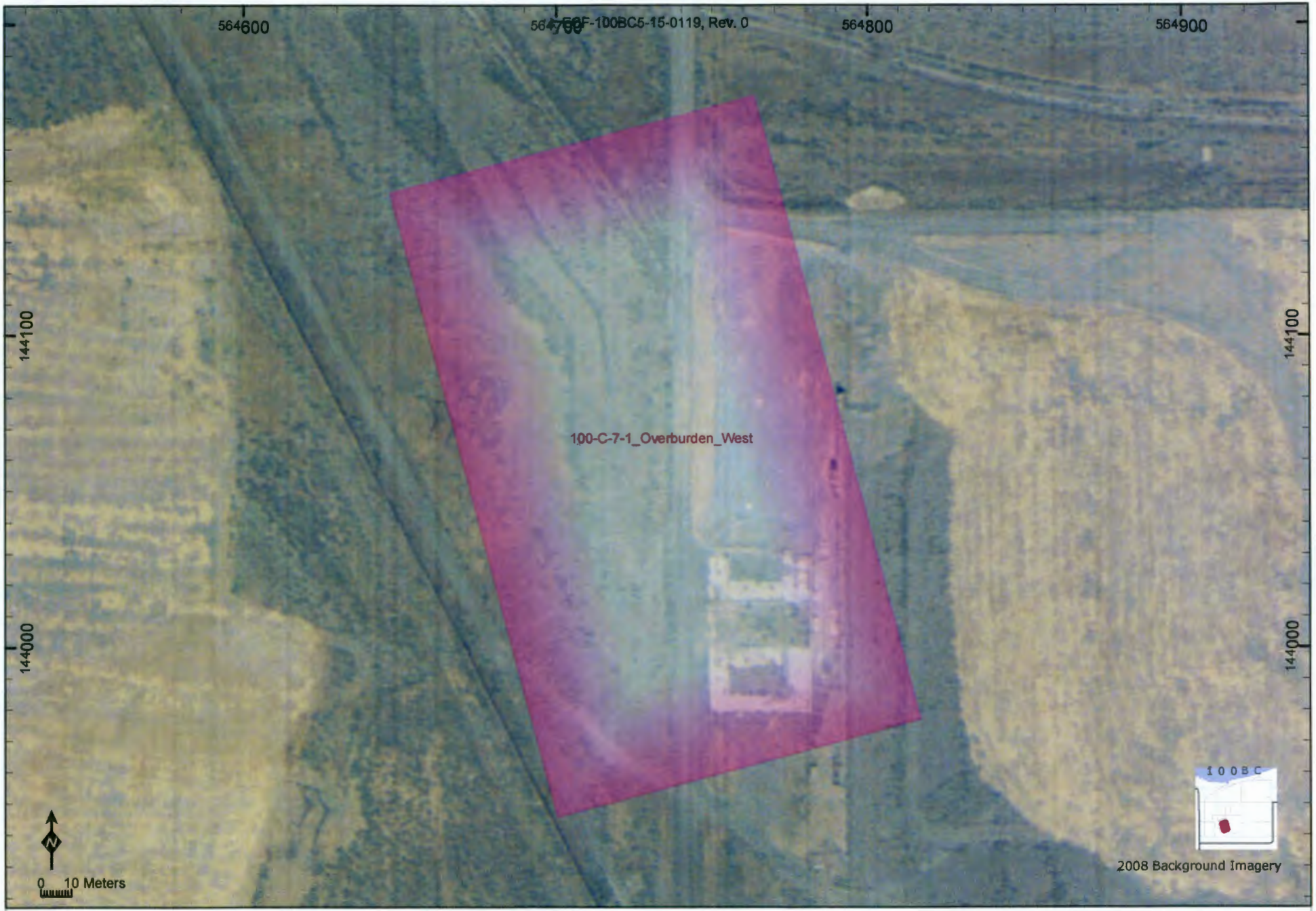
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Overburden_Focused_23	**27**	89	**52.1**	22	44	1.8	70



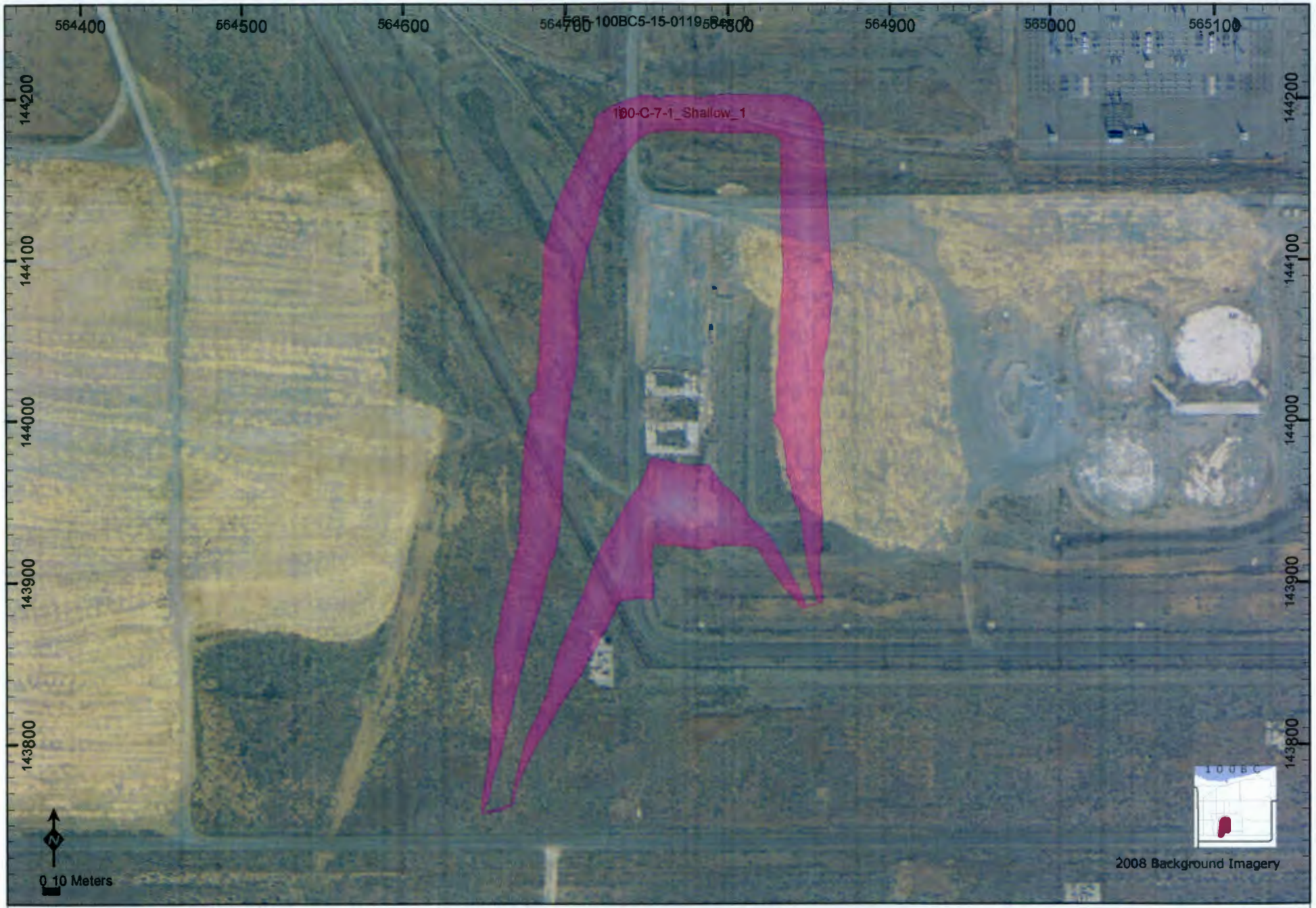
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Overburden_Focused_24	**17**	90	**26.2**	11	35	0.6	42



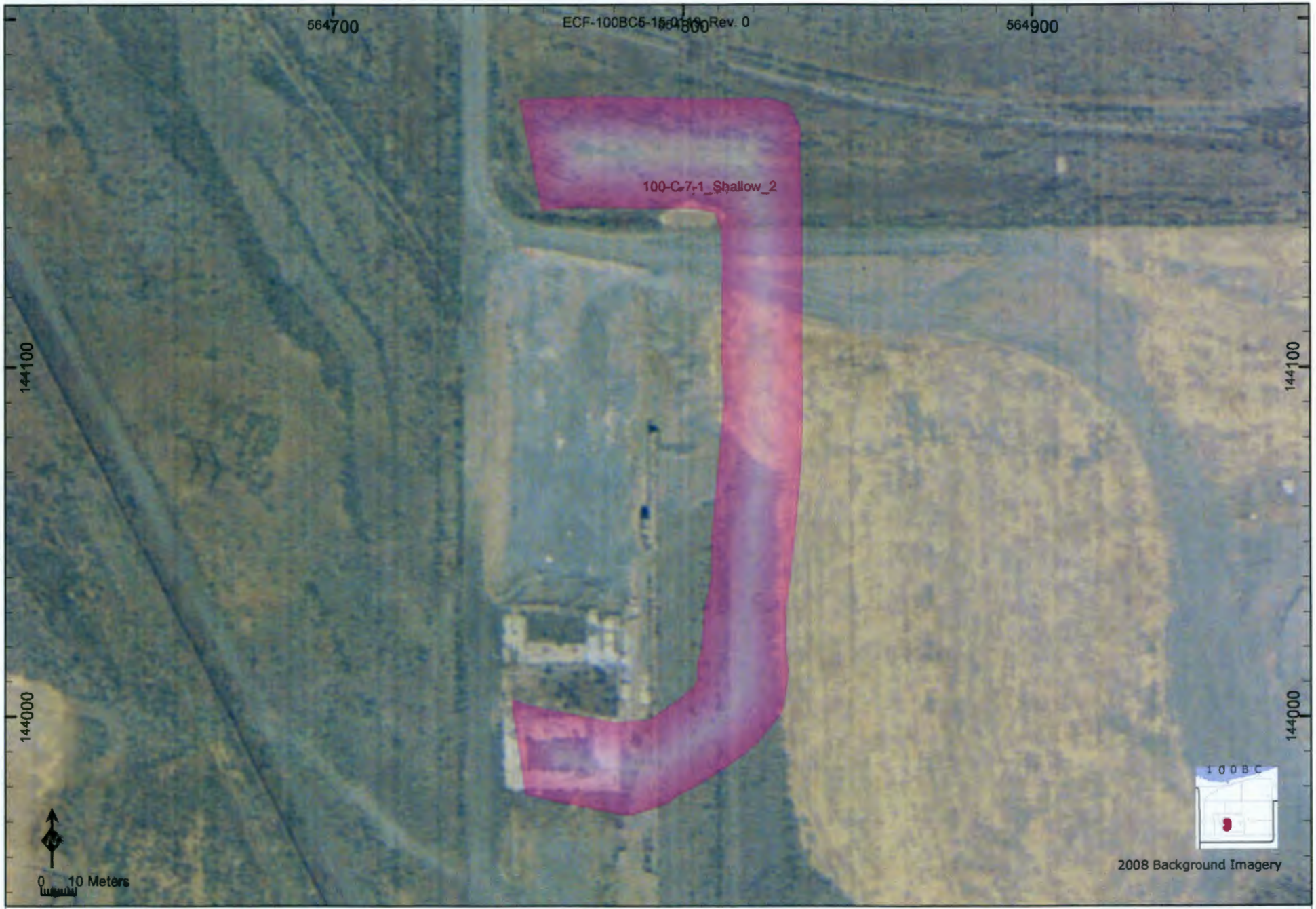
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Overburden_Focused_30	**34.3**	91	**55.8**	20	66	0.2	70



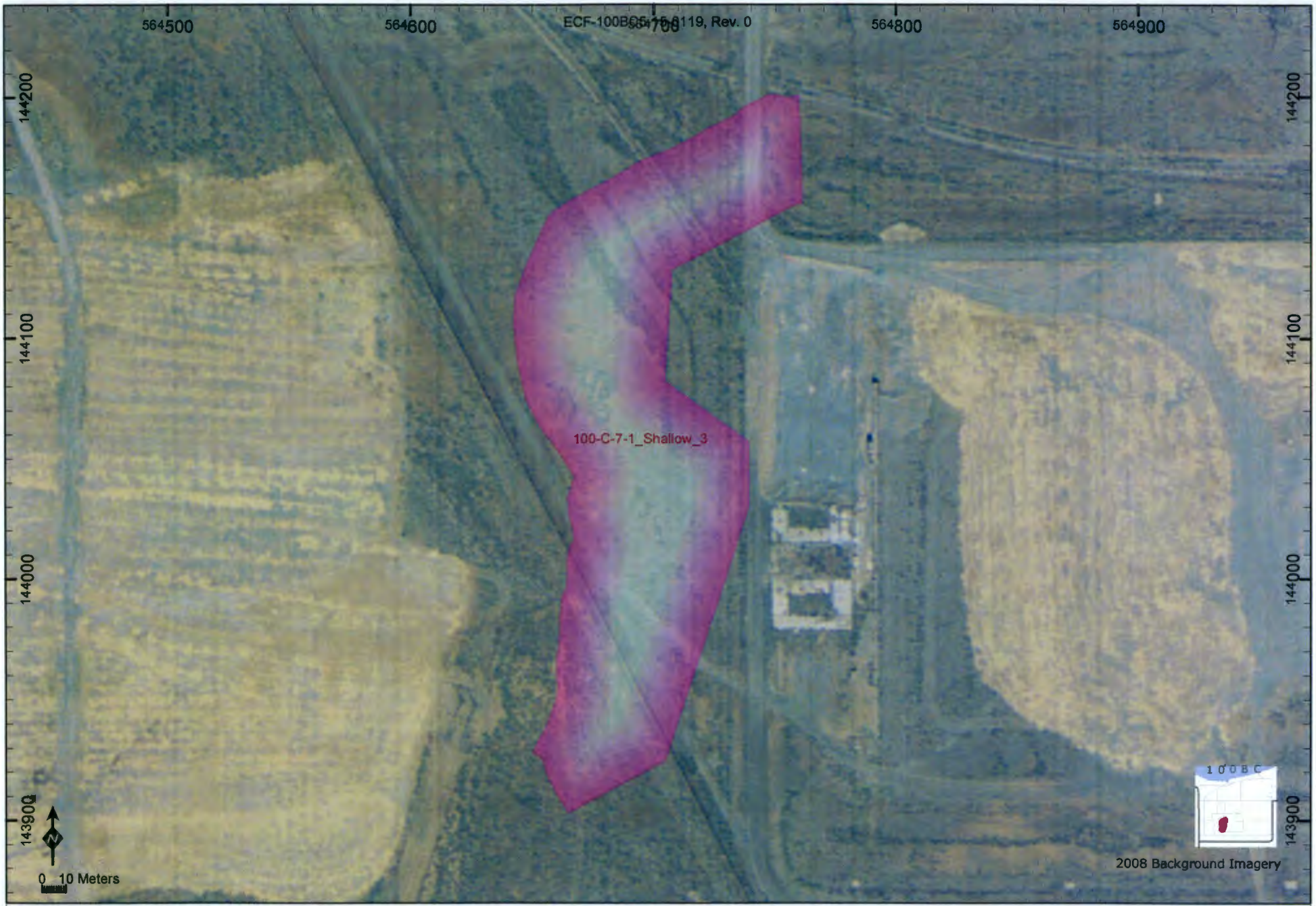
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Overburden_West	**89.2**	92	**146.9**	72	170	1.4	214



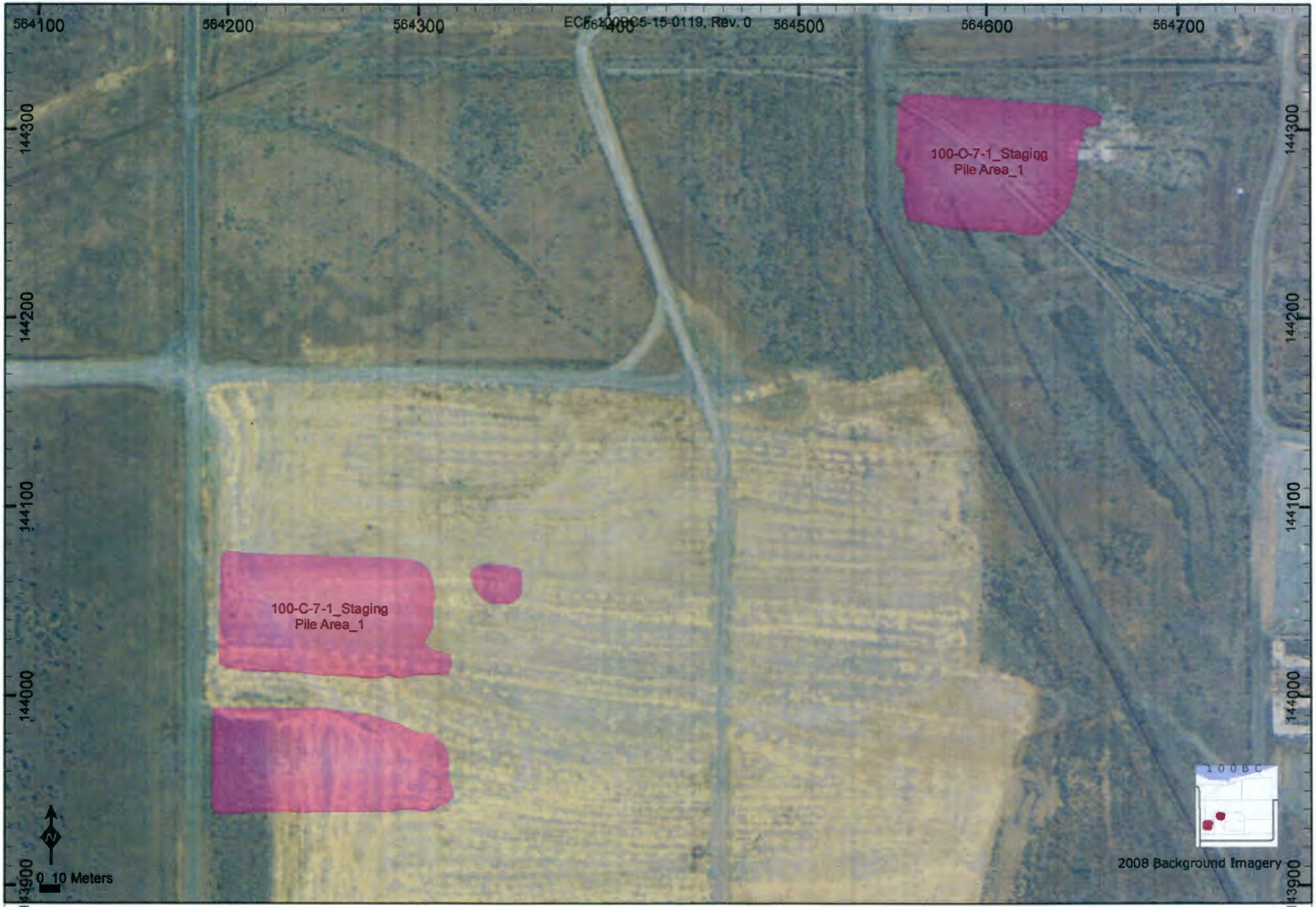
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-C-7-1_Shallow_1	**89.9**	93 **55.4**	64	458	0.1	304	



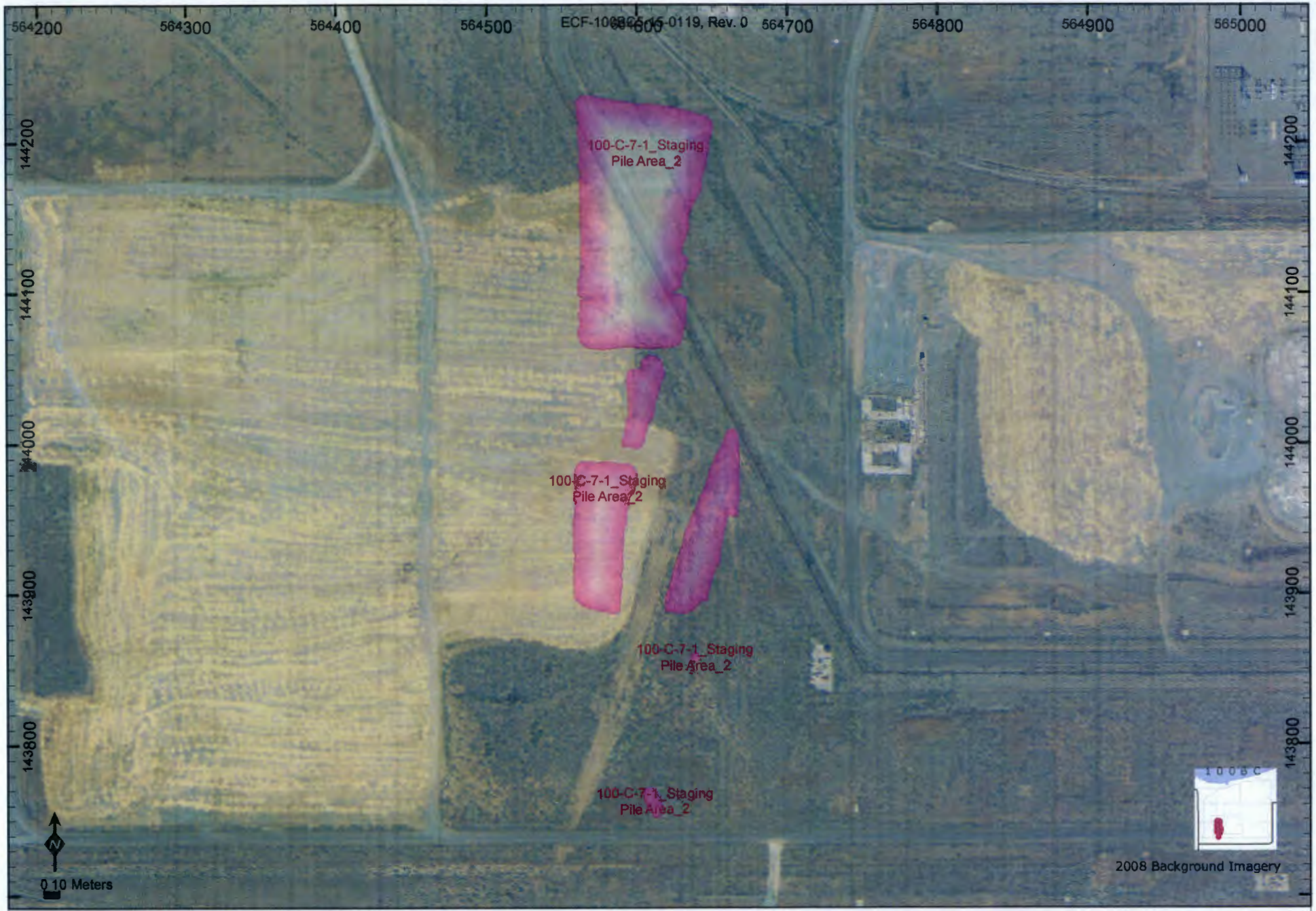
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Shallow_2	**48.4**	94 **51.6**	53	143	2.2	191



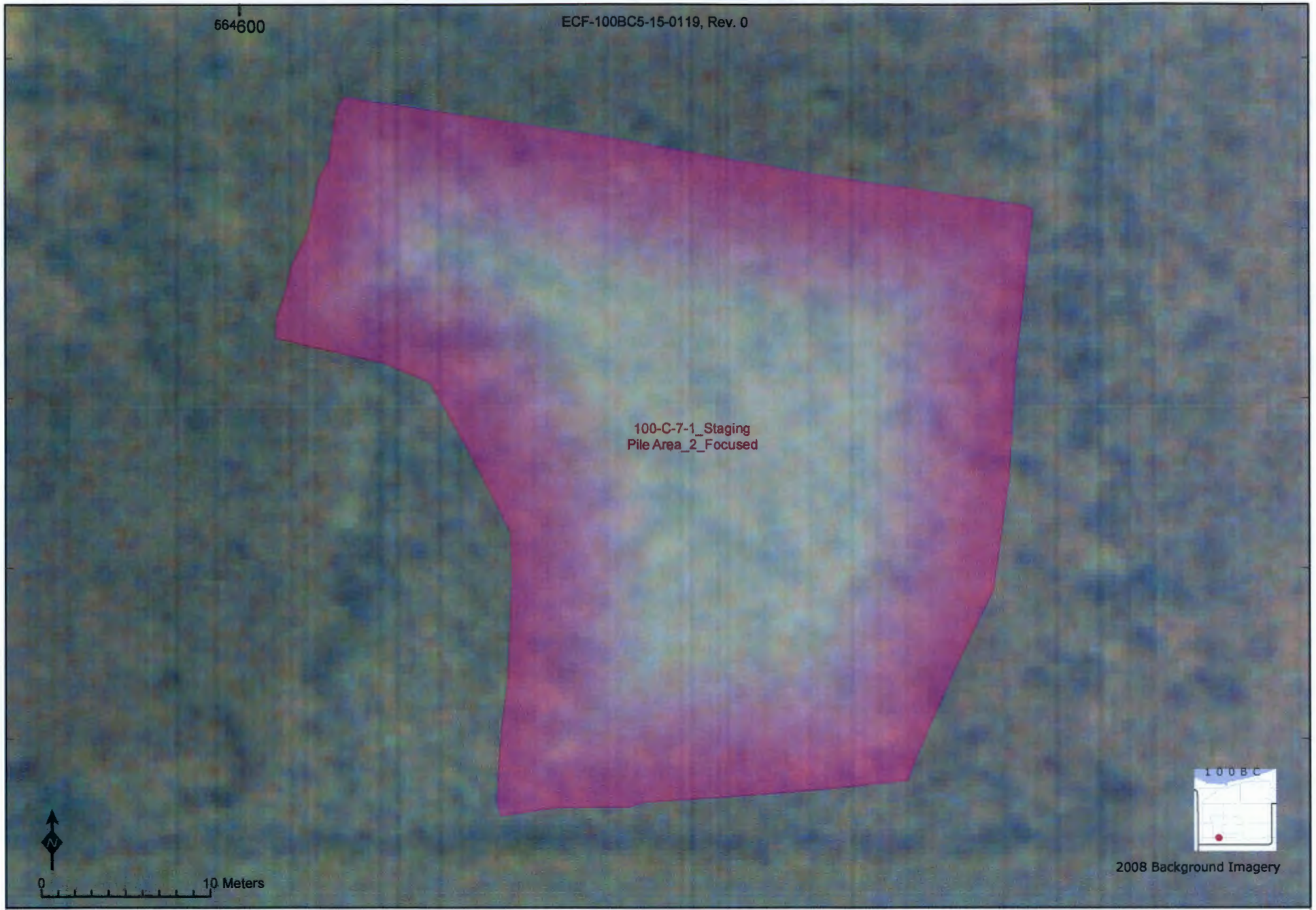
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-C-7-1_Shallow_3	**76.4**	95 **103.5**	83	177	0.9	254	



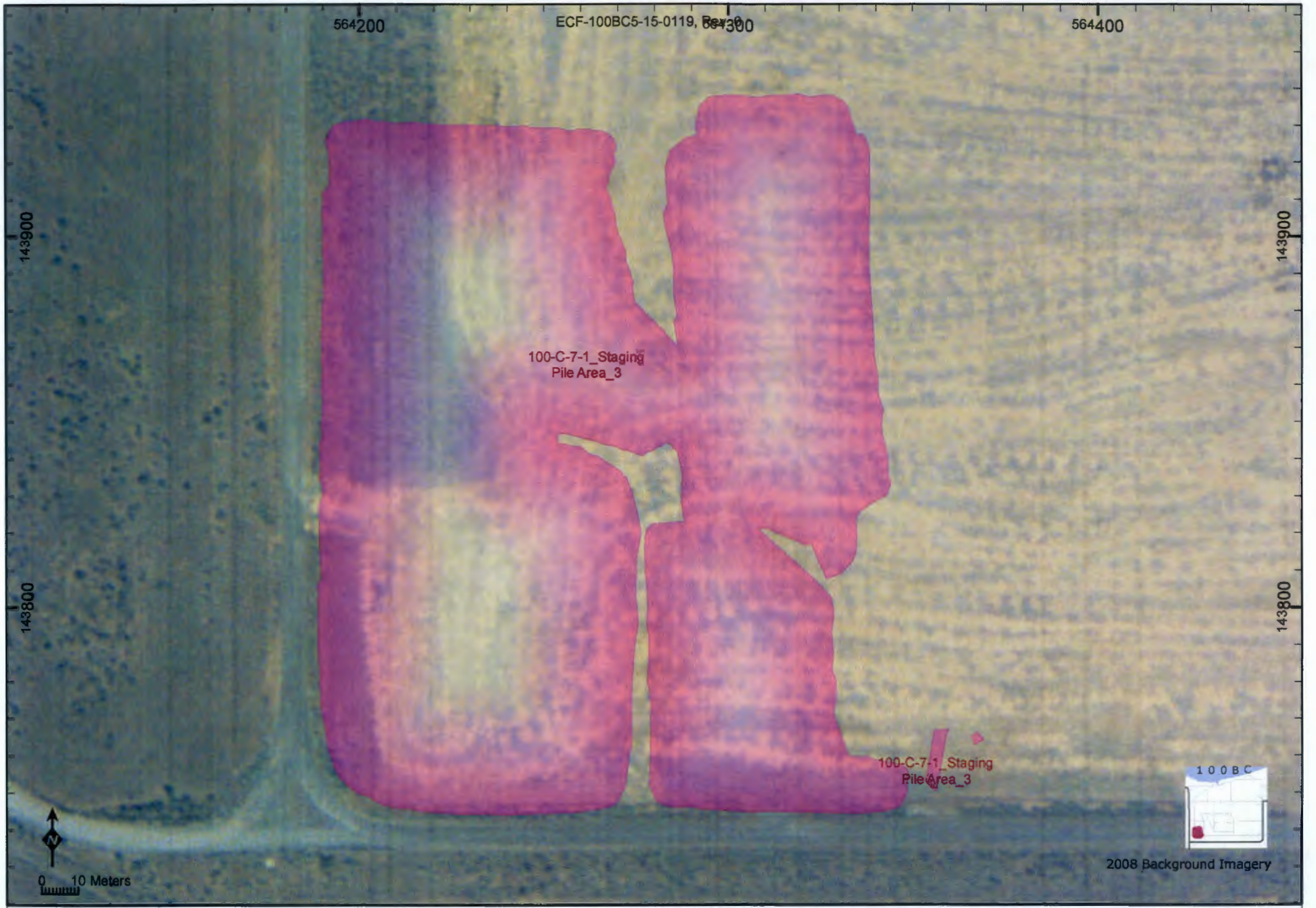
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Staging Pile Area_1	**79.6**	**50.7**	19	392	0.1	70



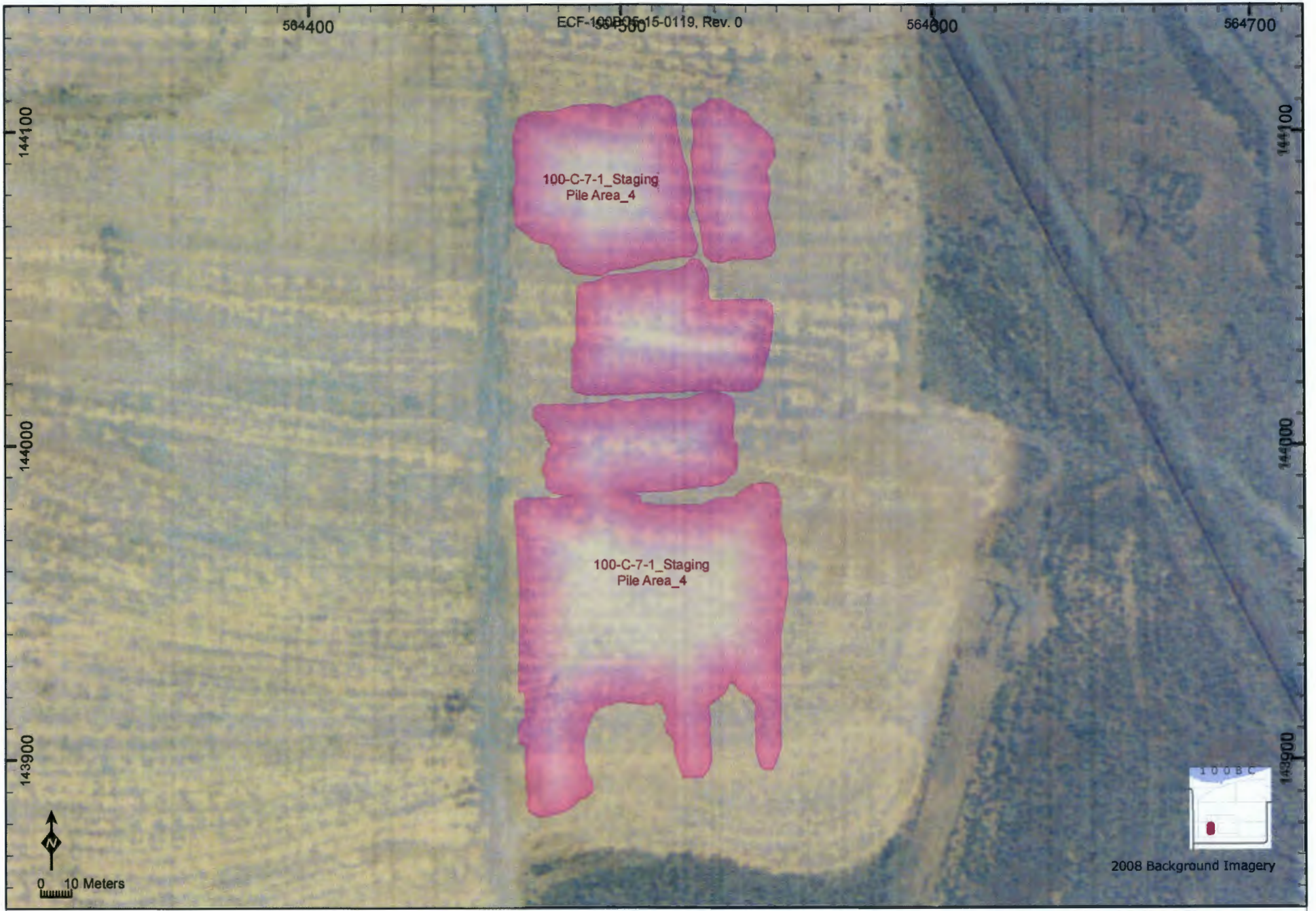
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Staging Pile Area_2	**78.6**	97	**70.6**	56	275	0.4	168



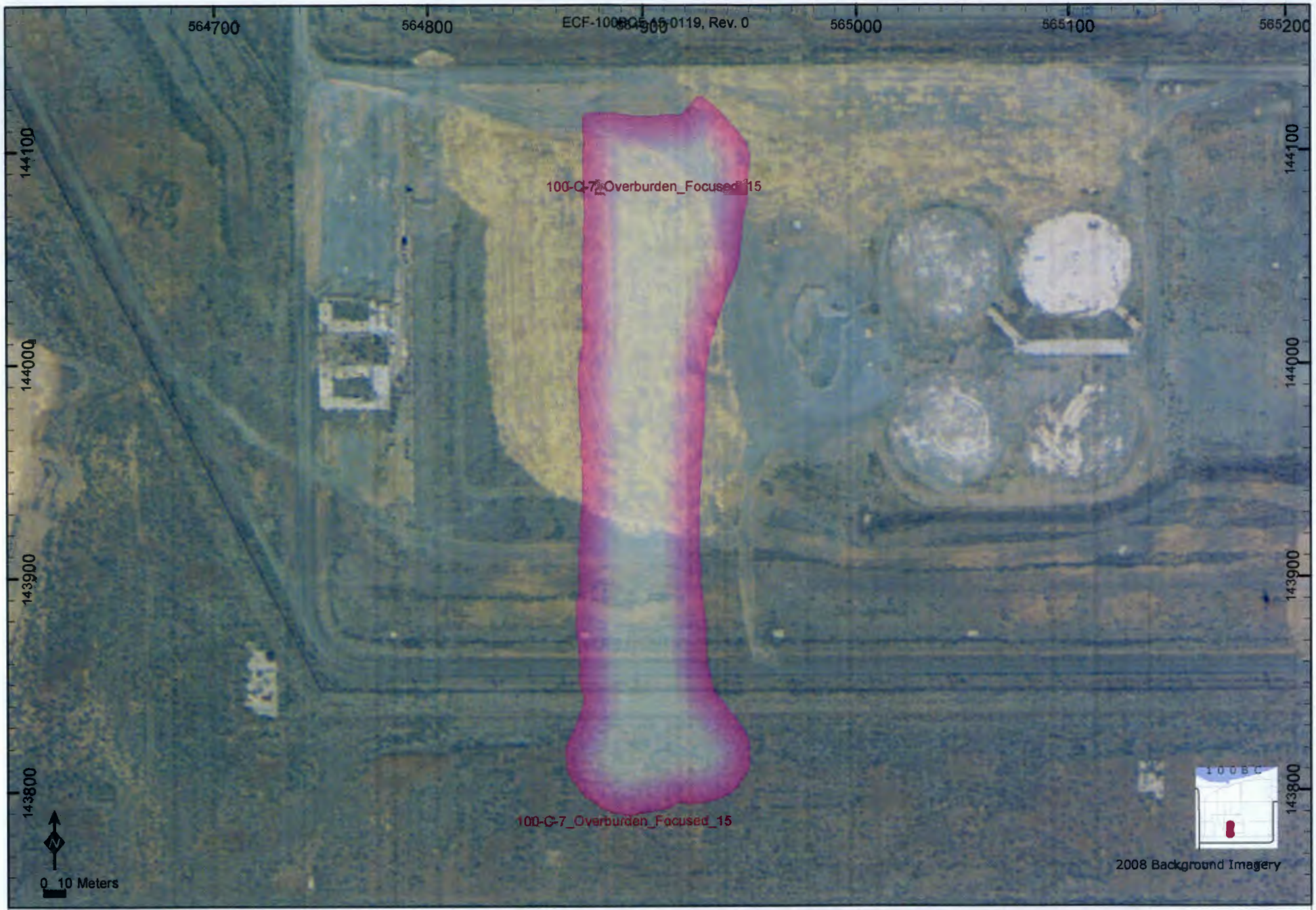
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Staging Pile Area_2_Focused	**20**	98	**28.7**	11	44	4.4	41



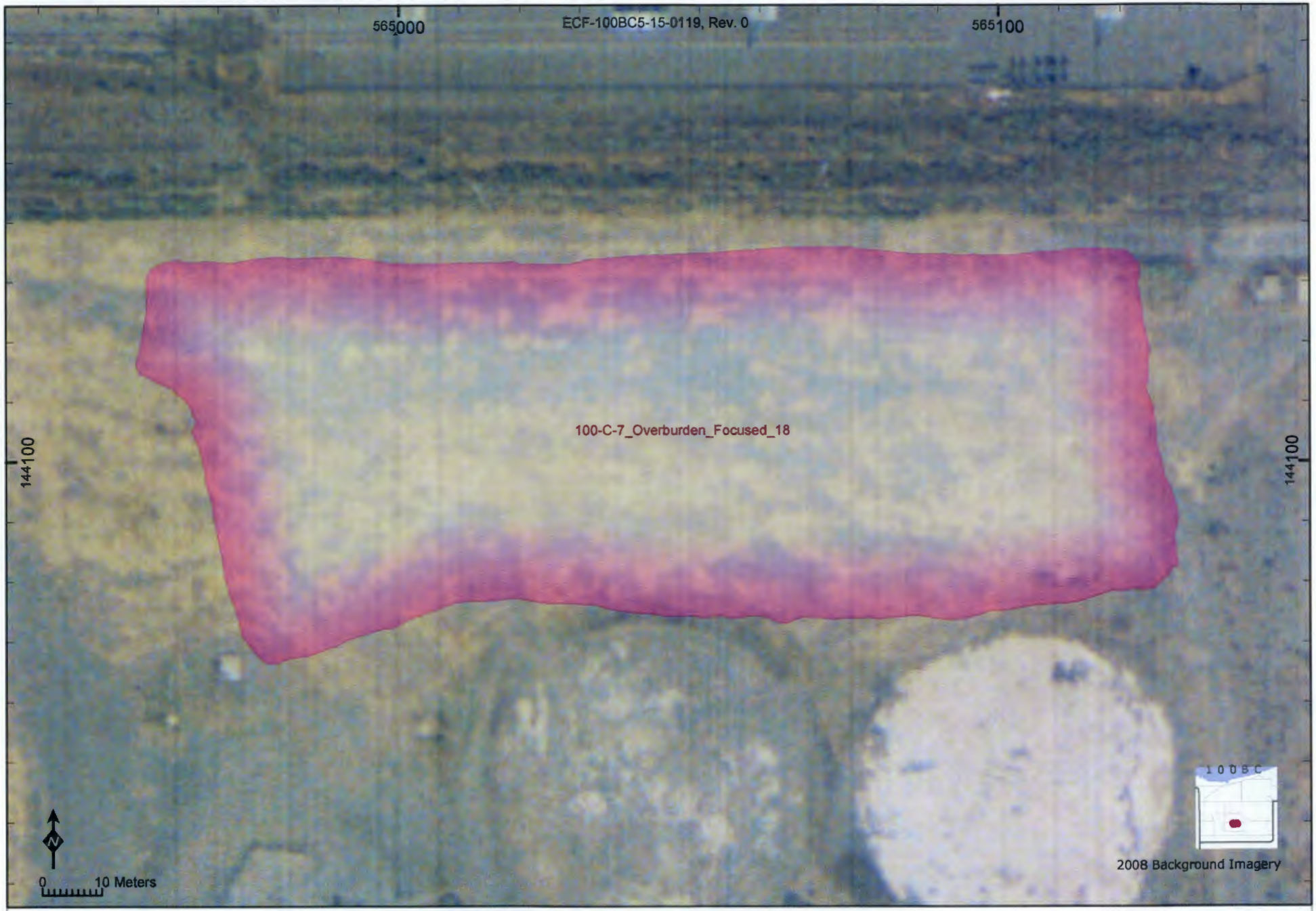
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Staging Pile Area_3	**90.9**	99 **99.1**	68	262	0.2	193



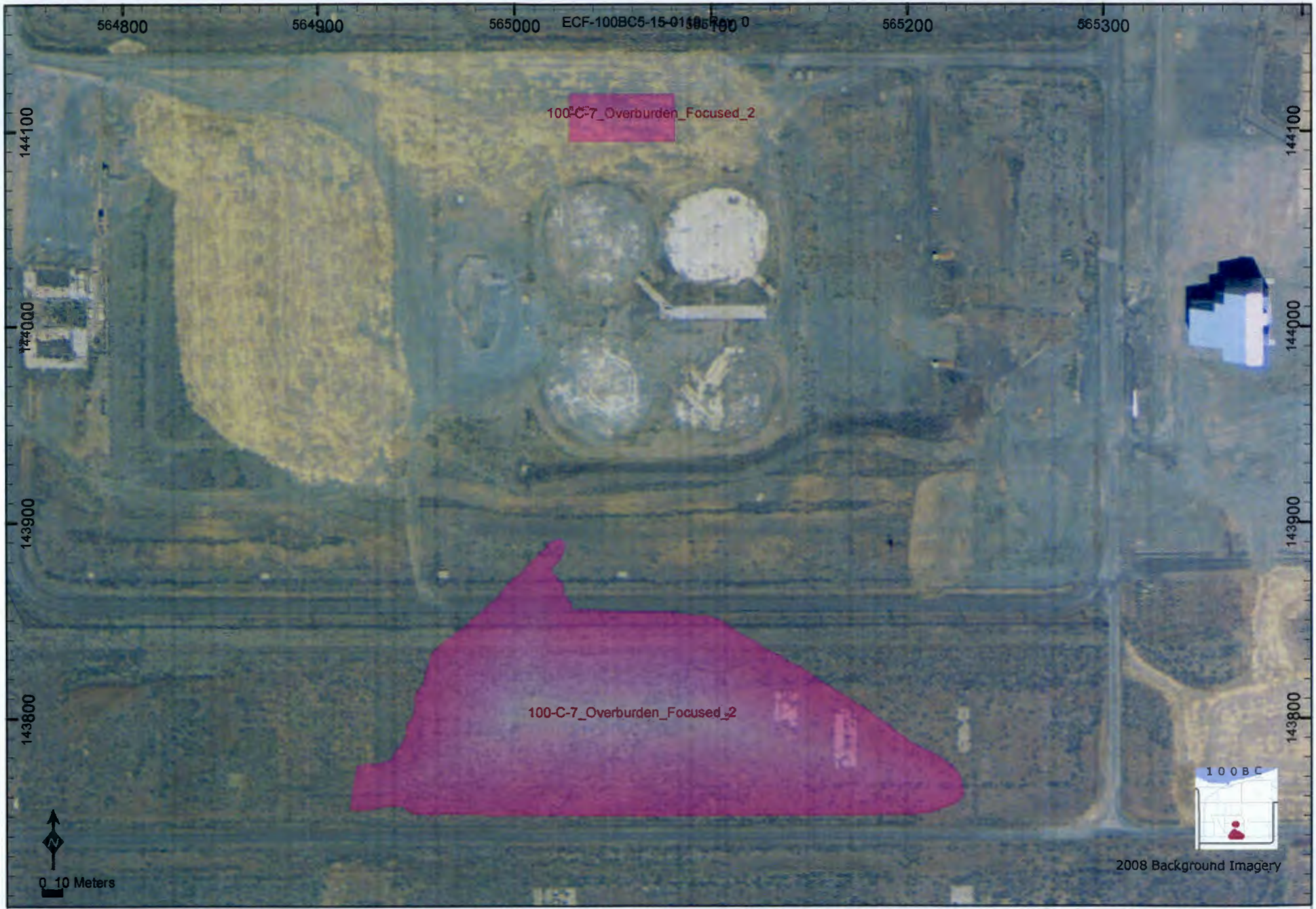
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7-1_Staging Pile Area_4	**67.8**	100	**46.5**	28	311	0	128



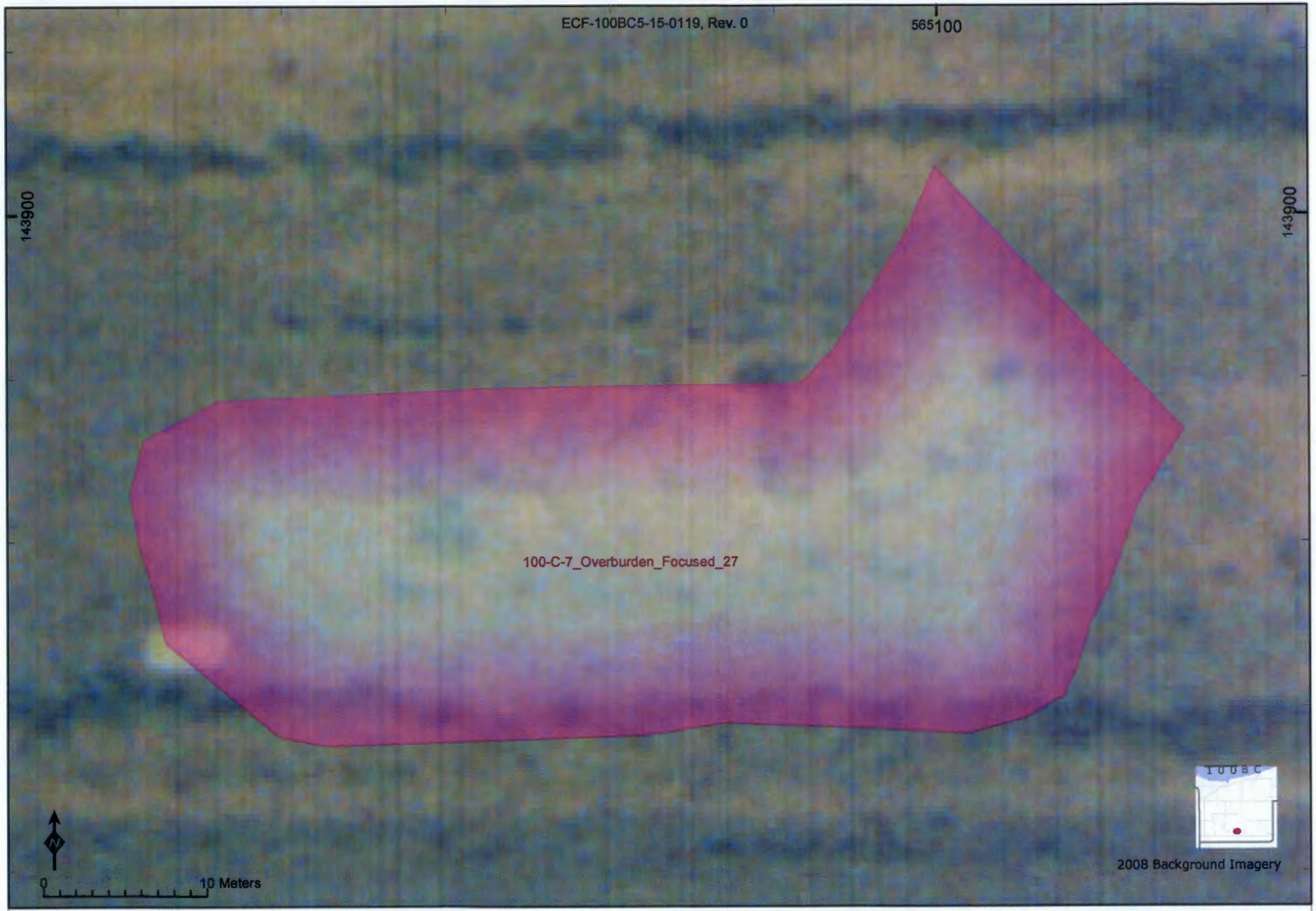
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7_Overburden_Focused_15	**82.2**	101	**159.5**	141	133	0	330



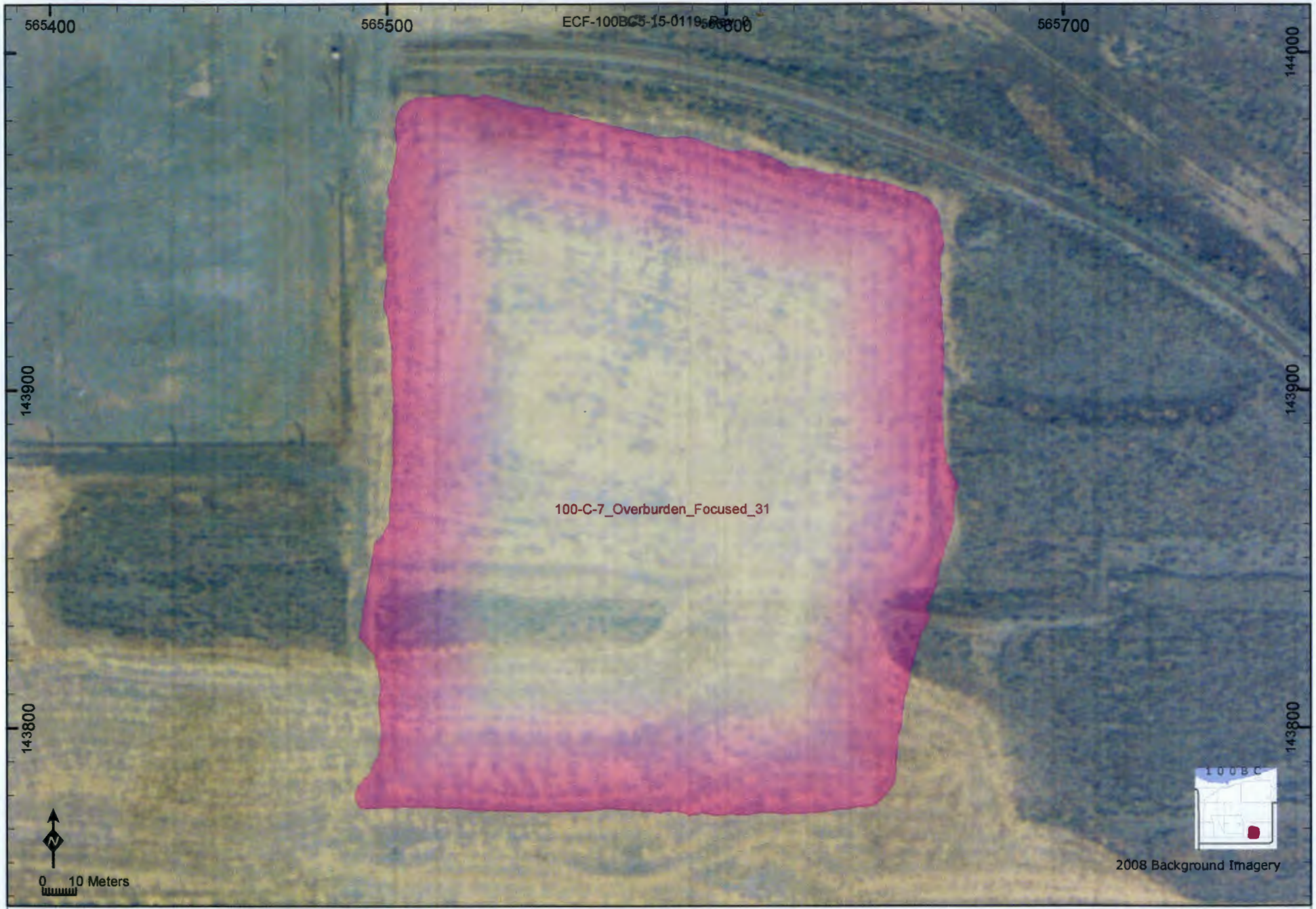
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7_Overburden_Focused_18	**55.4**	102	**54.9**	14	176	1.4	68



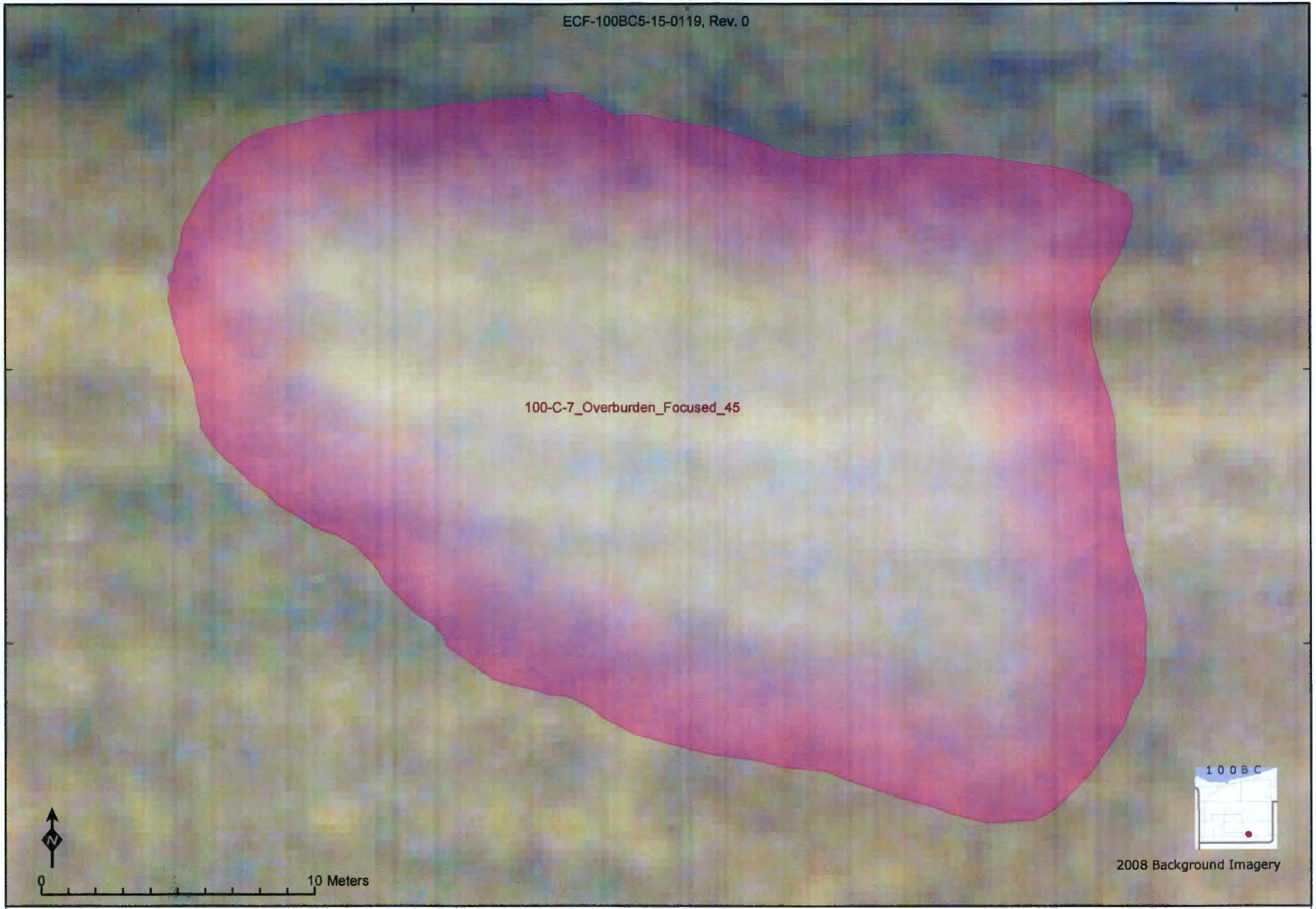
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7_Overburden_Focused_2	**90.9**	103	**69.3**	37	375	0.5	139



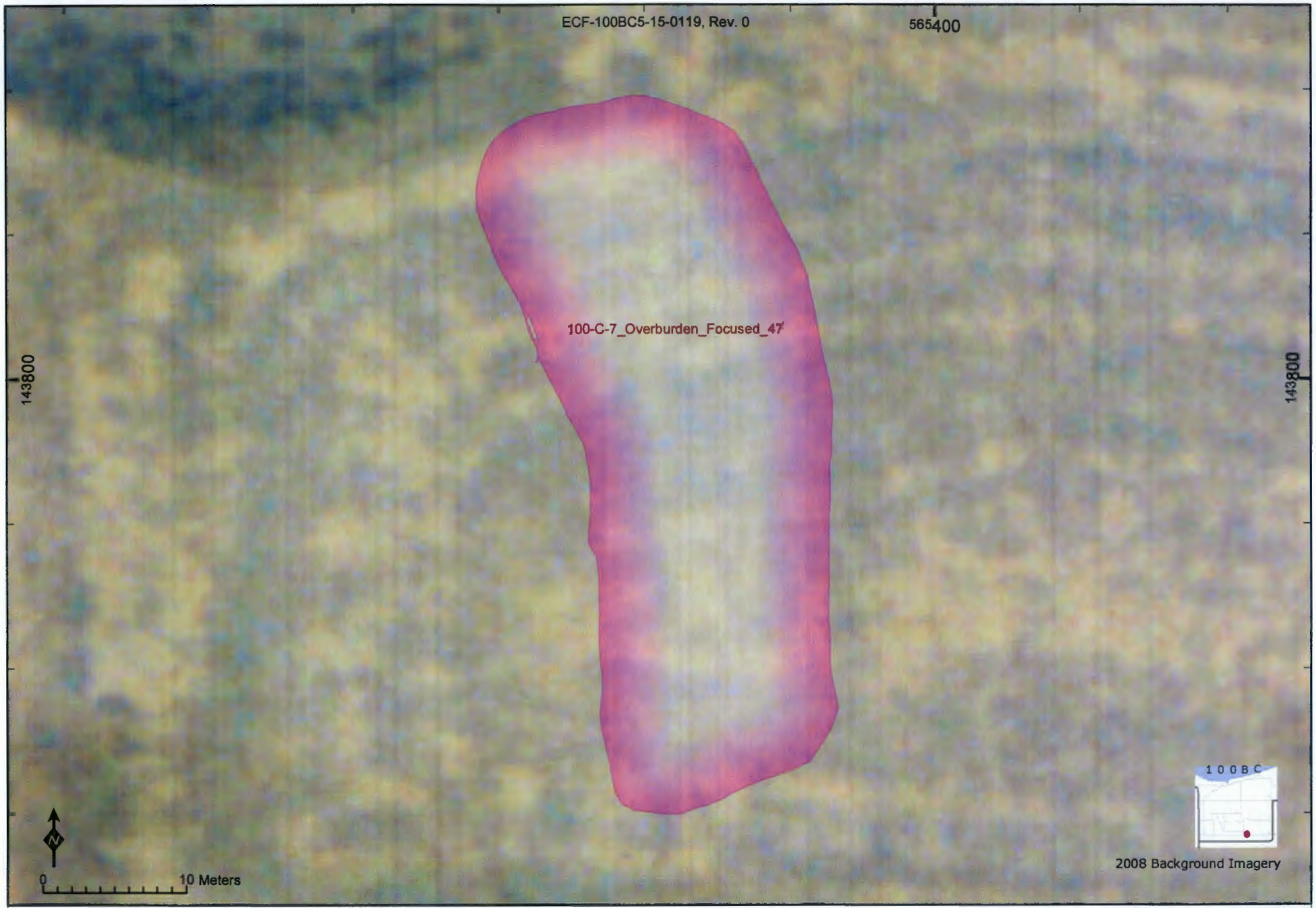
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7_Overburden_Focused_27	**20.7**	104	**20.9**	6	64	2	34



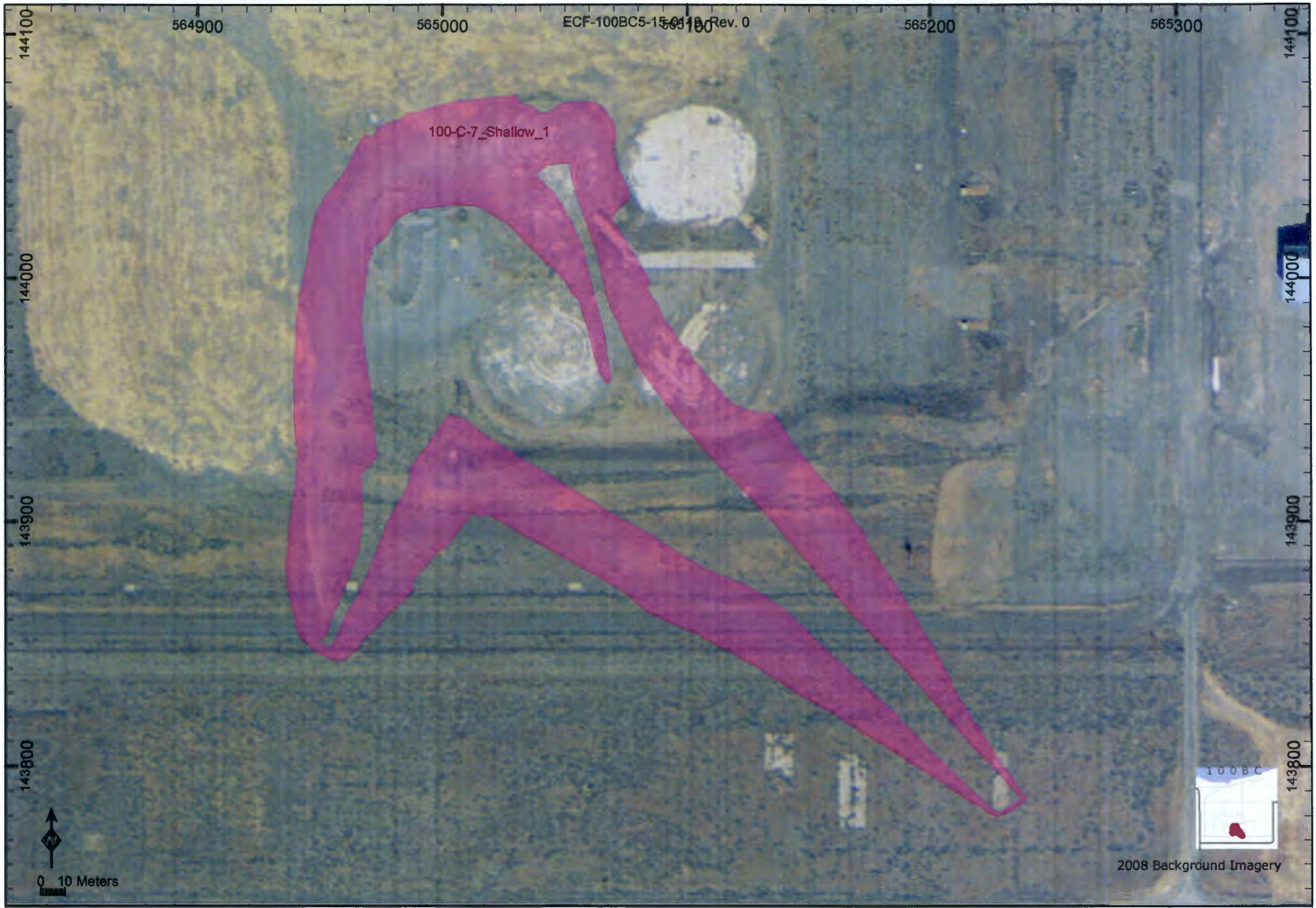
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7_Overburden_Focused_31	**101.3**	105	**163.6**	70	197	0.1	212



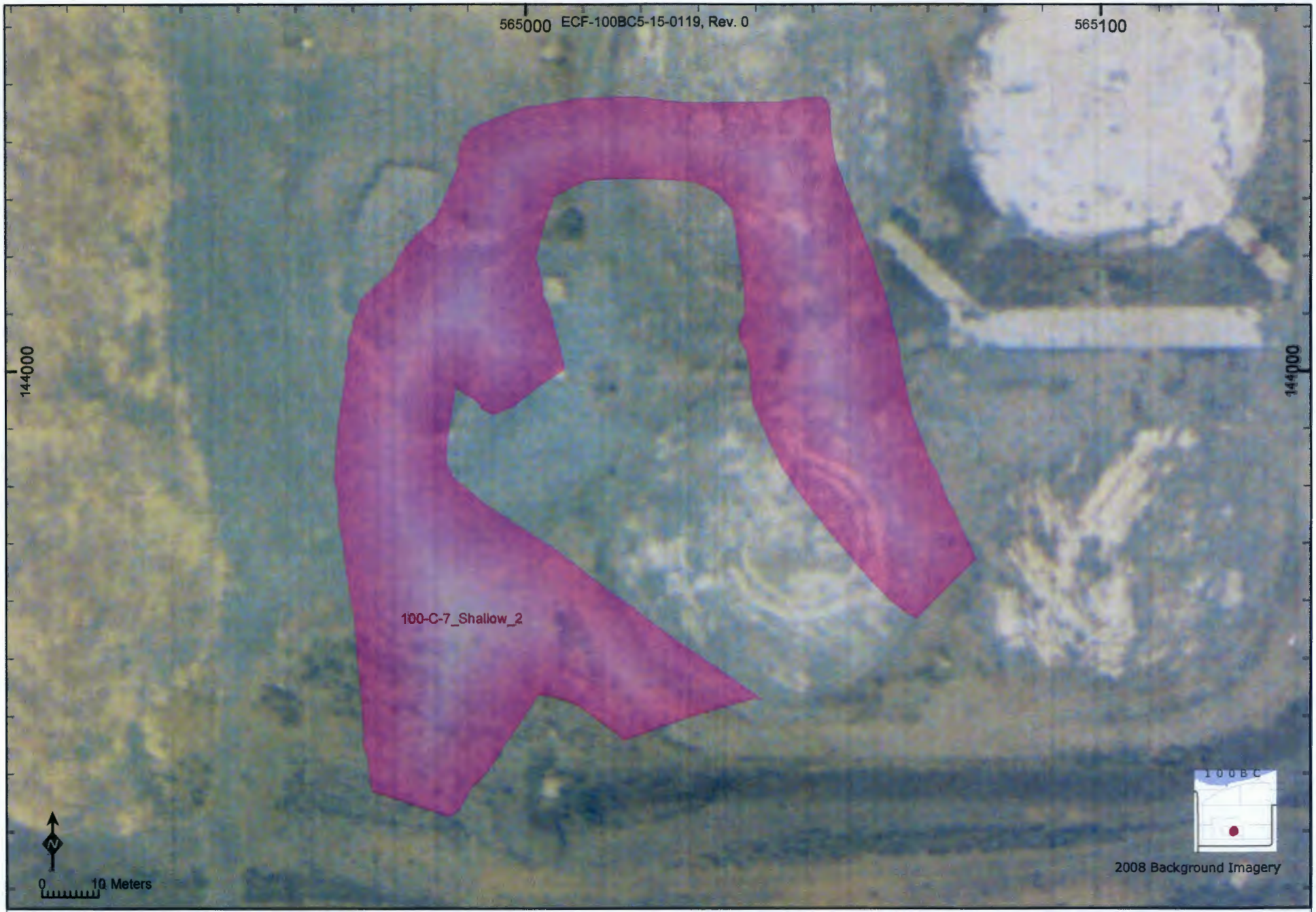
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7_Overburden_Focused_45	**14.9**	106	**18.7**	6	37	1.5	24



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7_Overburden_Focused_47	**16.2**	107	**31.8**	17	26	0.3	49

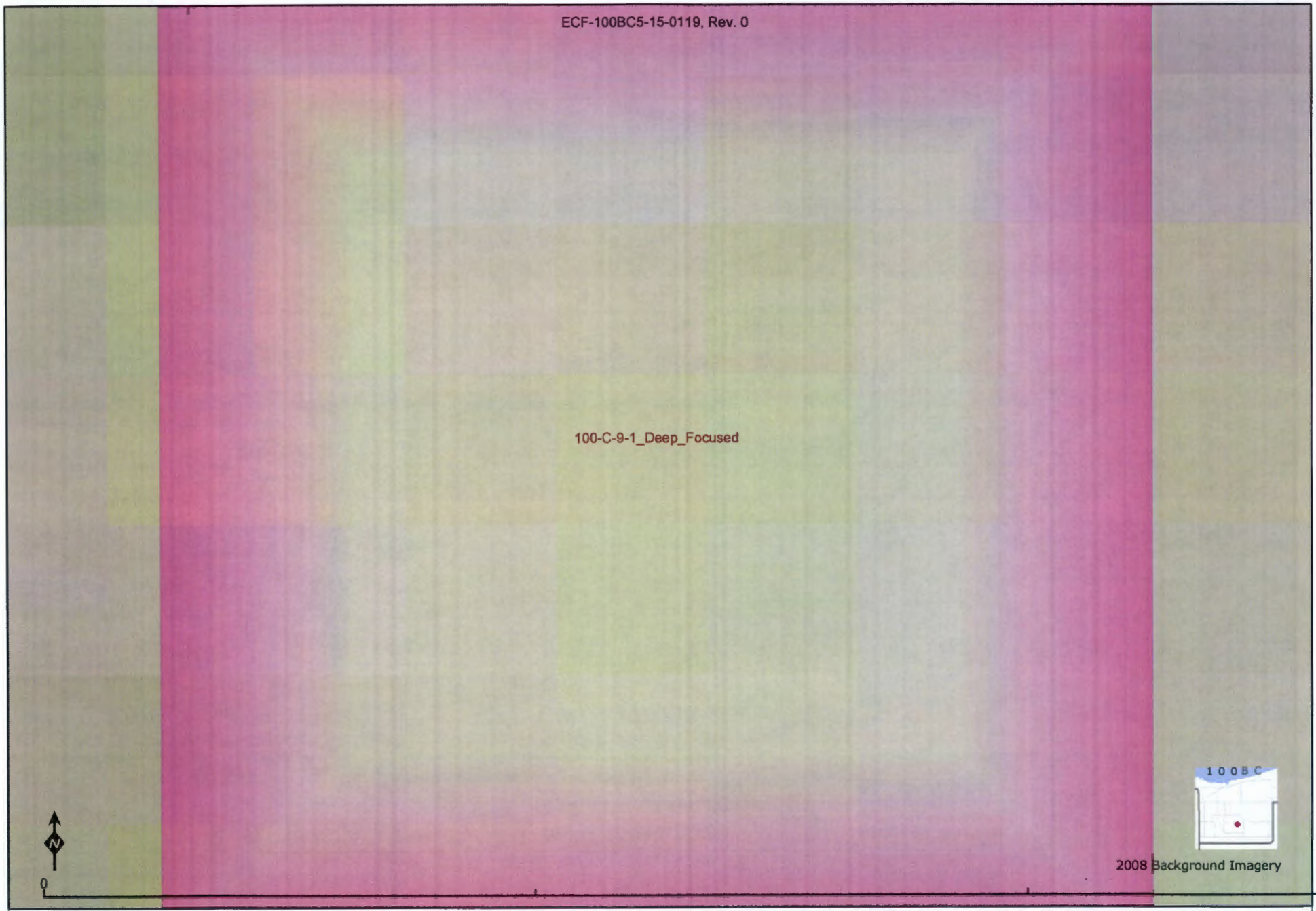


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7_Shallow_1	**85.4**	108	**35.7**	31	641	0.7	182



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7_Shallow_2	**44.5**	109	**35.9**	26	173	0.3	105

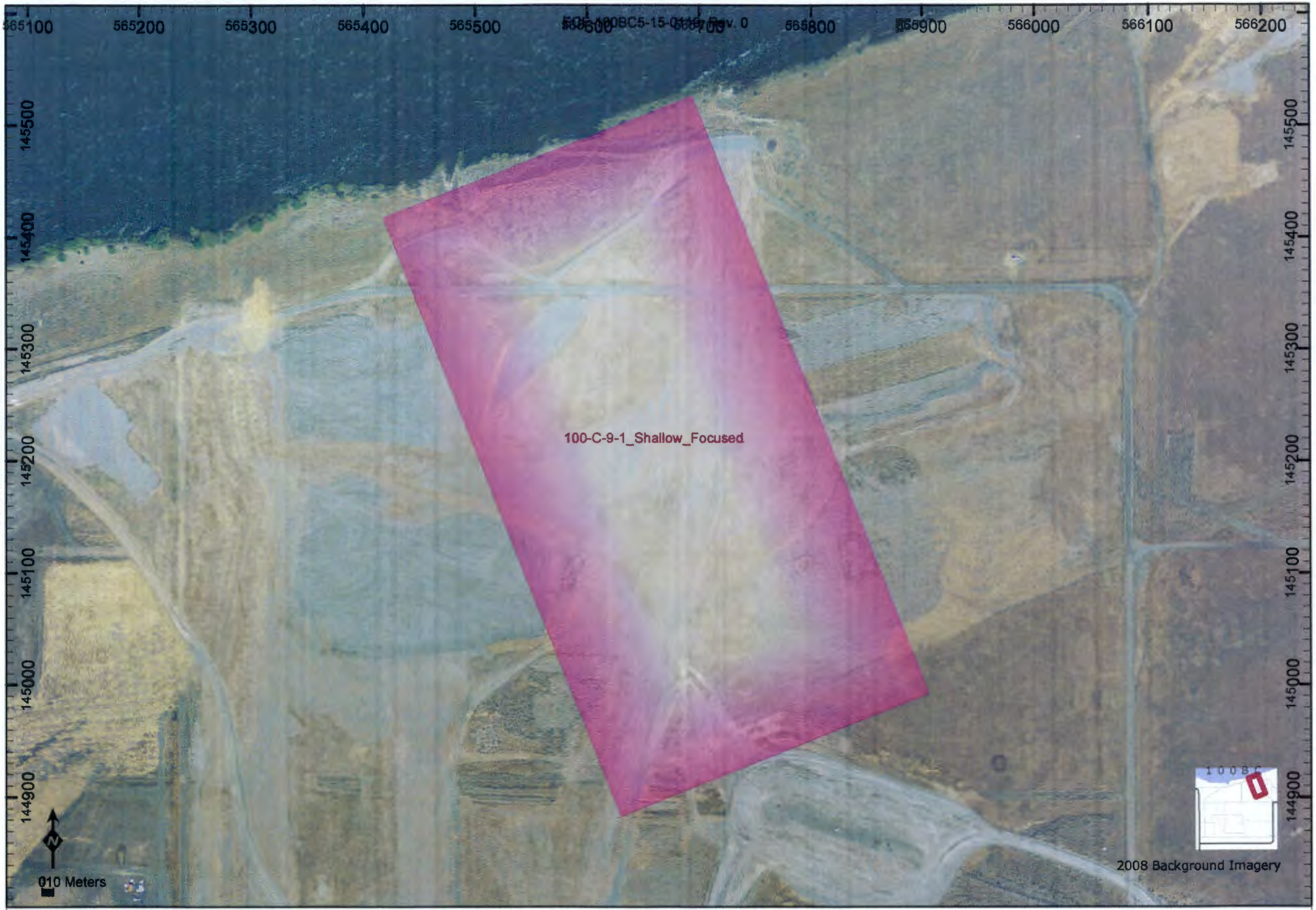
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-7_Staging Pile Area	**93.4**	110	**45.2**	37	606	0.1	204



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
100-C-9-1_Deep_Focused	**1.1**	111	**2**	0	2	2	2

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-9-1_Overburden_Focused	**122**	112	**44.6**	33	1049	0.1	166

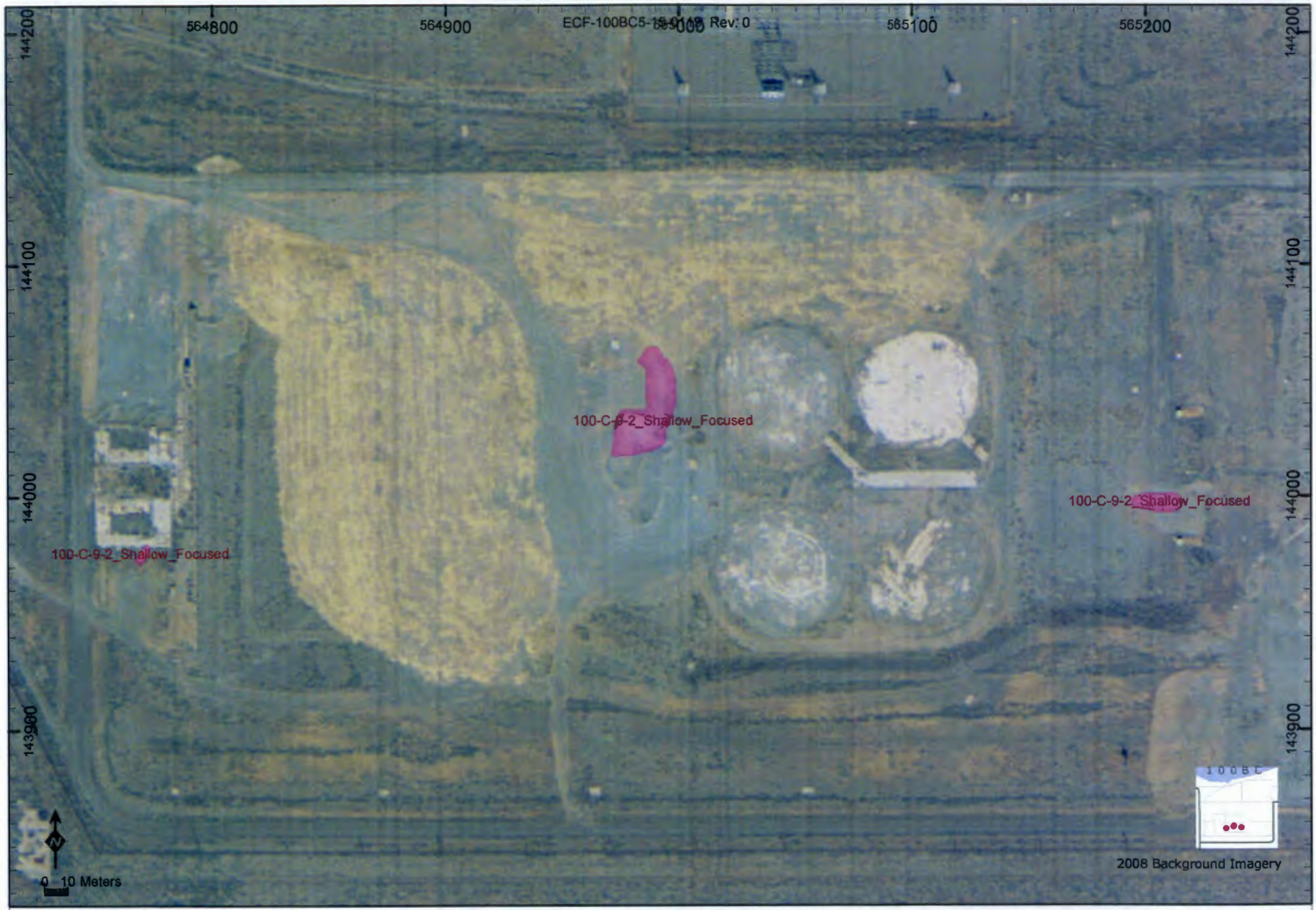
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-9-1_Shallow_2	**53.5**	113	**26.1**	19	344	0.7	80



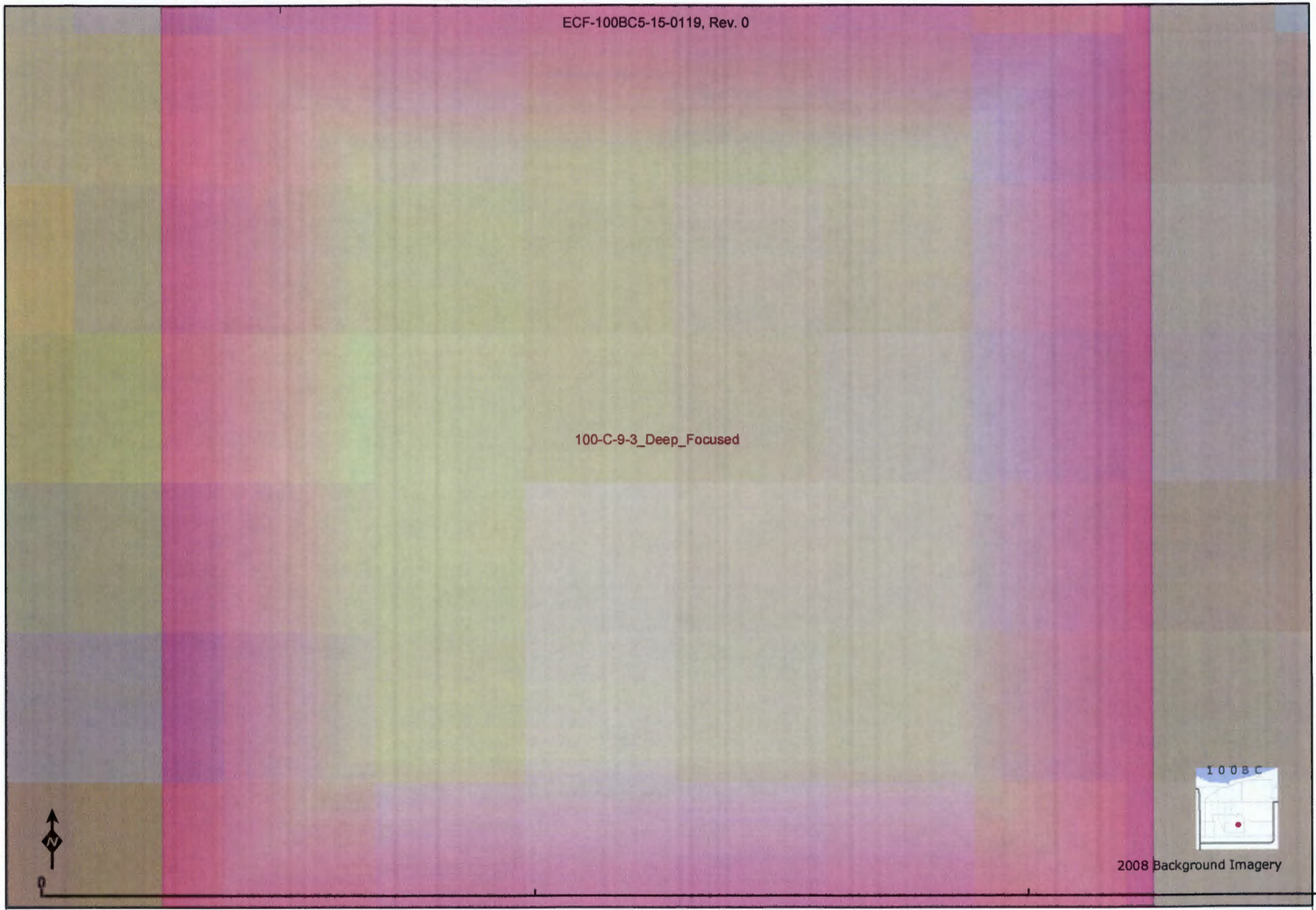
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-9-1_Shallow_Focused	**232.5**	114	**348.7**	197	487	0.4	617

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-9-2_Overburden_Focused	**17.8**	115	**16.6**	9	60	1.5	48

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-9-2_Shallow	**26.2**	116	**11.7**	20	185	0.5	98



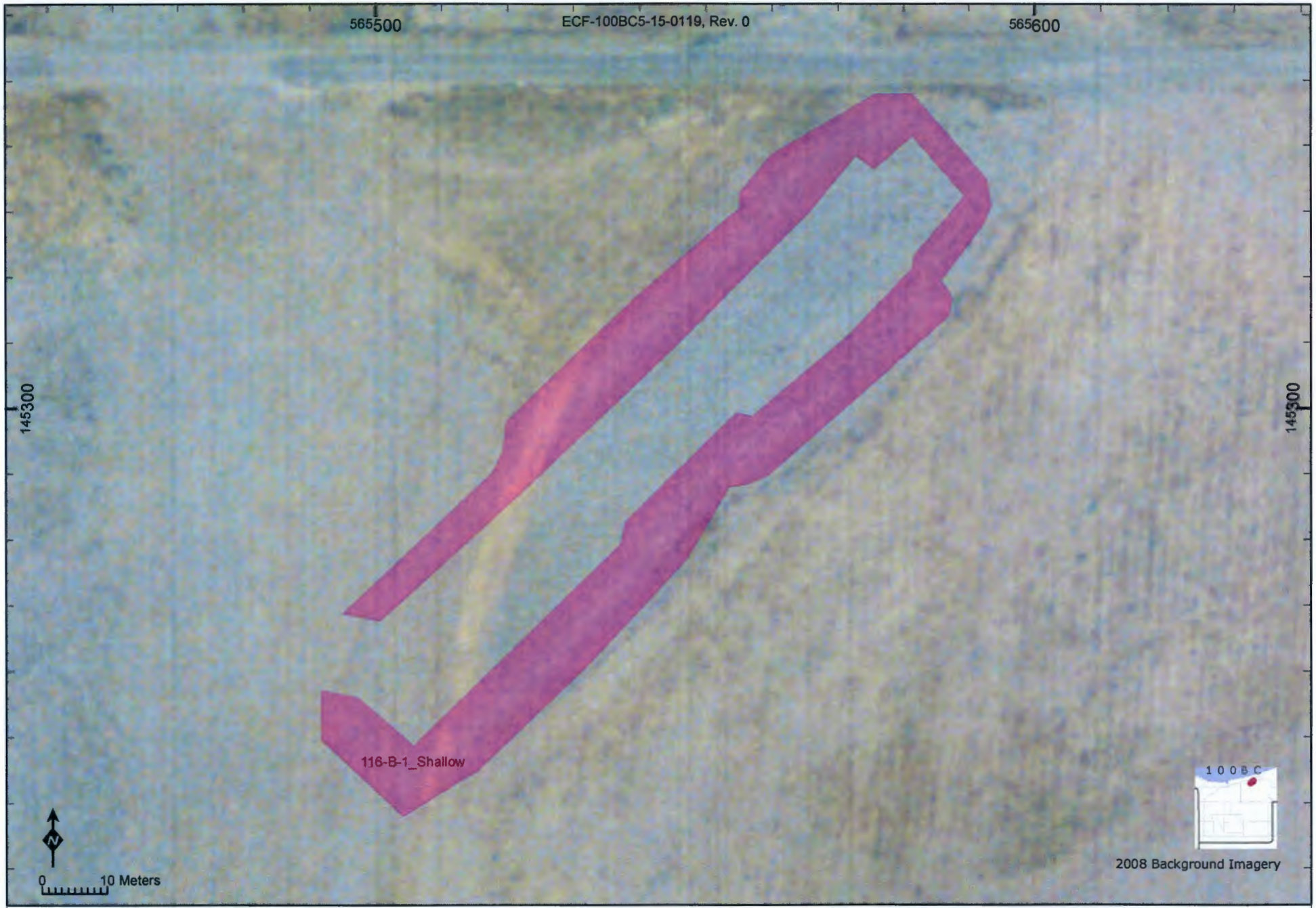
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-9-2_Shallow_Focused	**16.7**	117	**14.8**	13	59	1.2	45



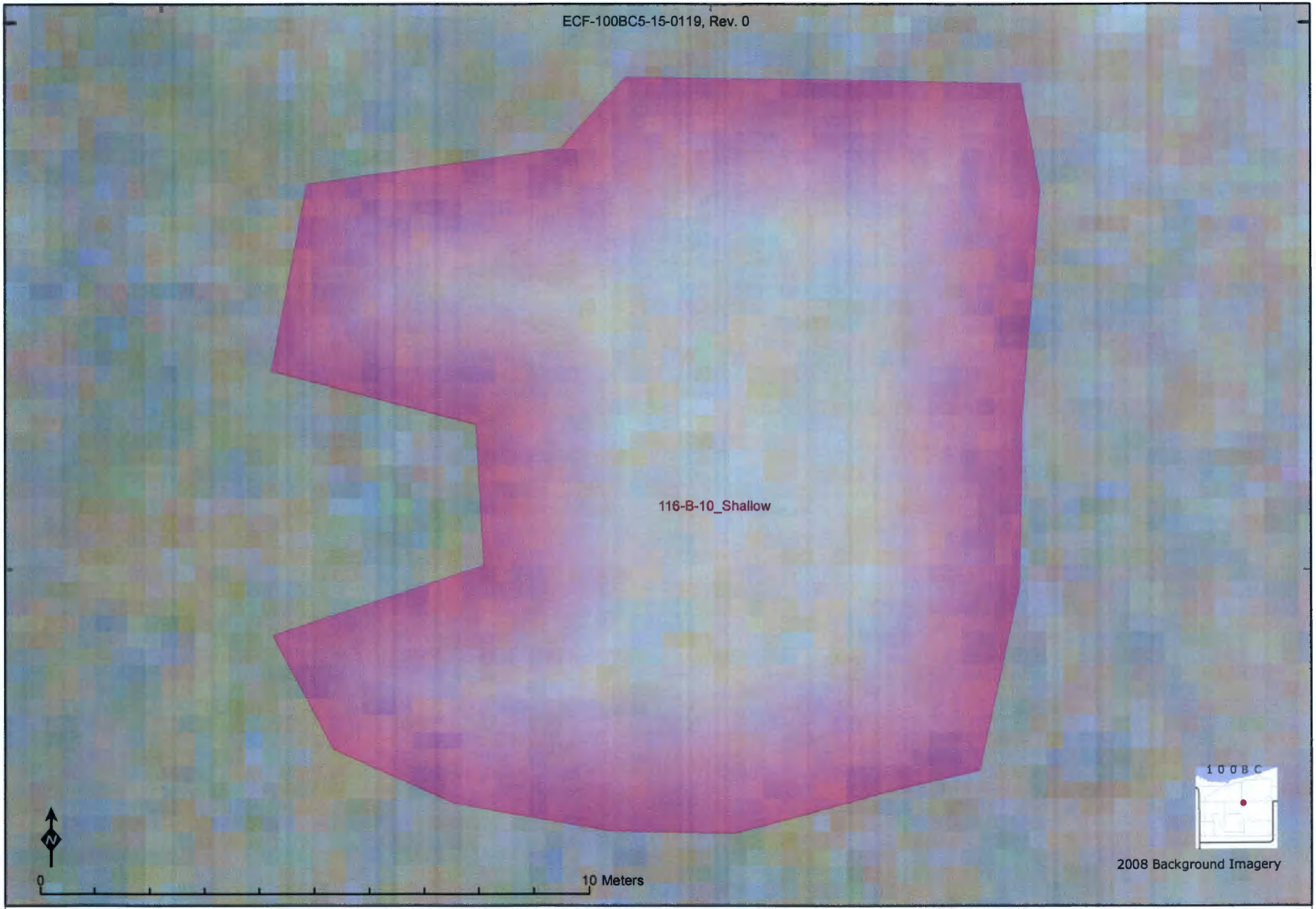
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-9-3_Deep_Focused	**1.1**	118	**2**	0	2	2	2

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
100-C-9_1_Shallow_1	**74.9**	119	**112**	66	158	3.3	297

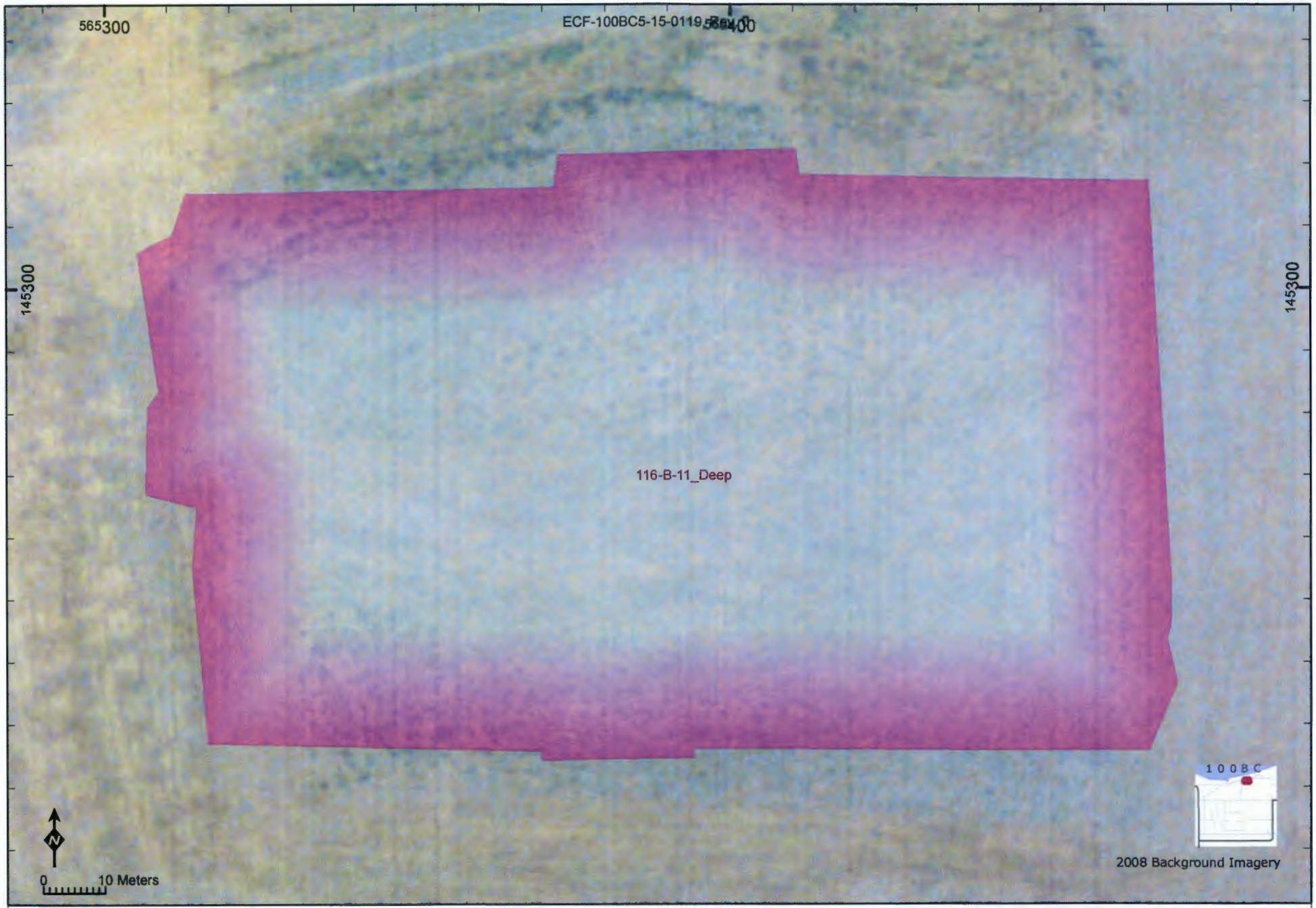
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-1_Deep	**24.4**	120	**20**	6	93	0.1	26



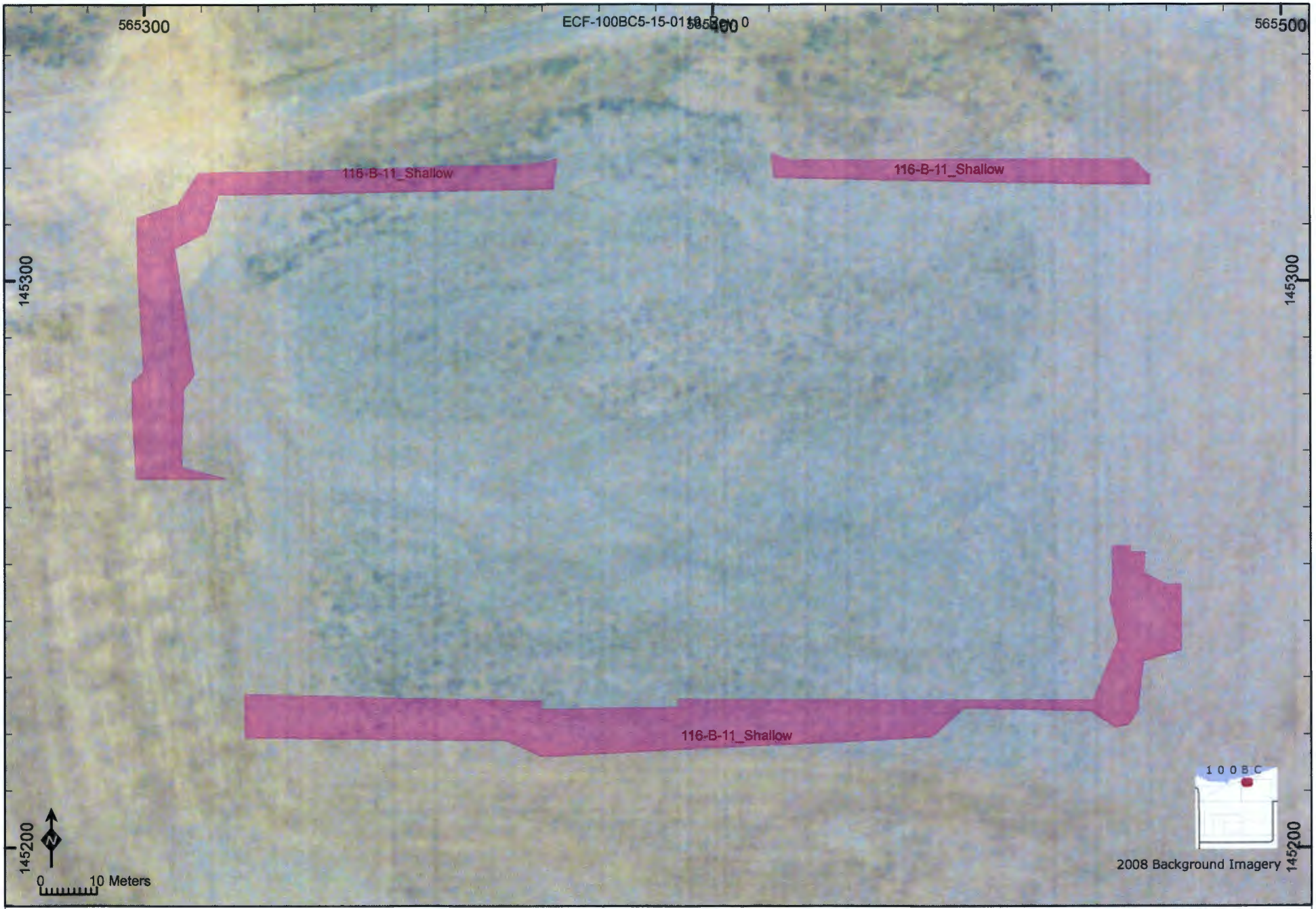
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-1_Shallow	**26.2**	121	**10.8**	3	199	0.1	15



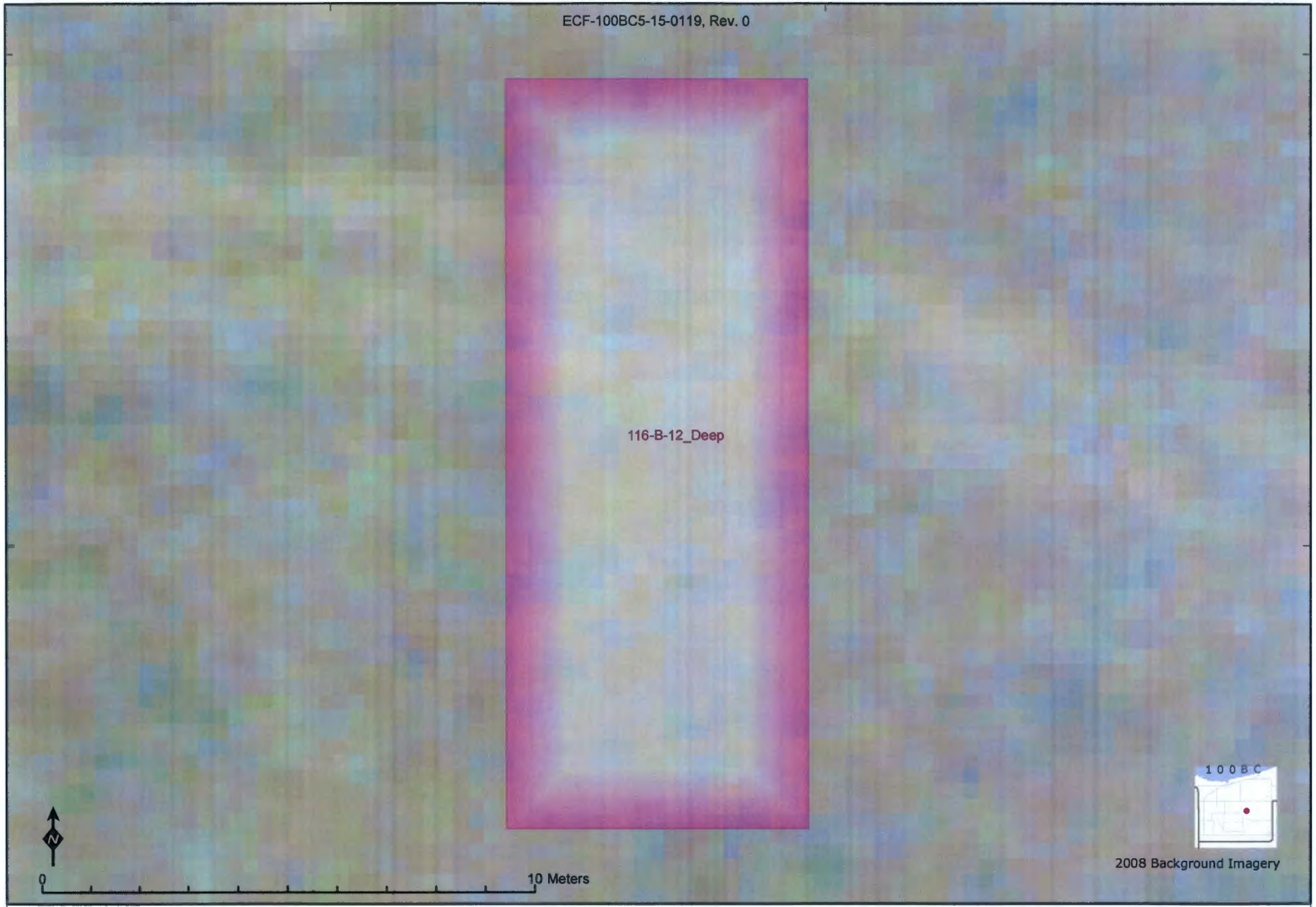
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-10_Shallow	**7**	122	**8.4**	5	18	0	14



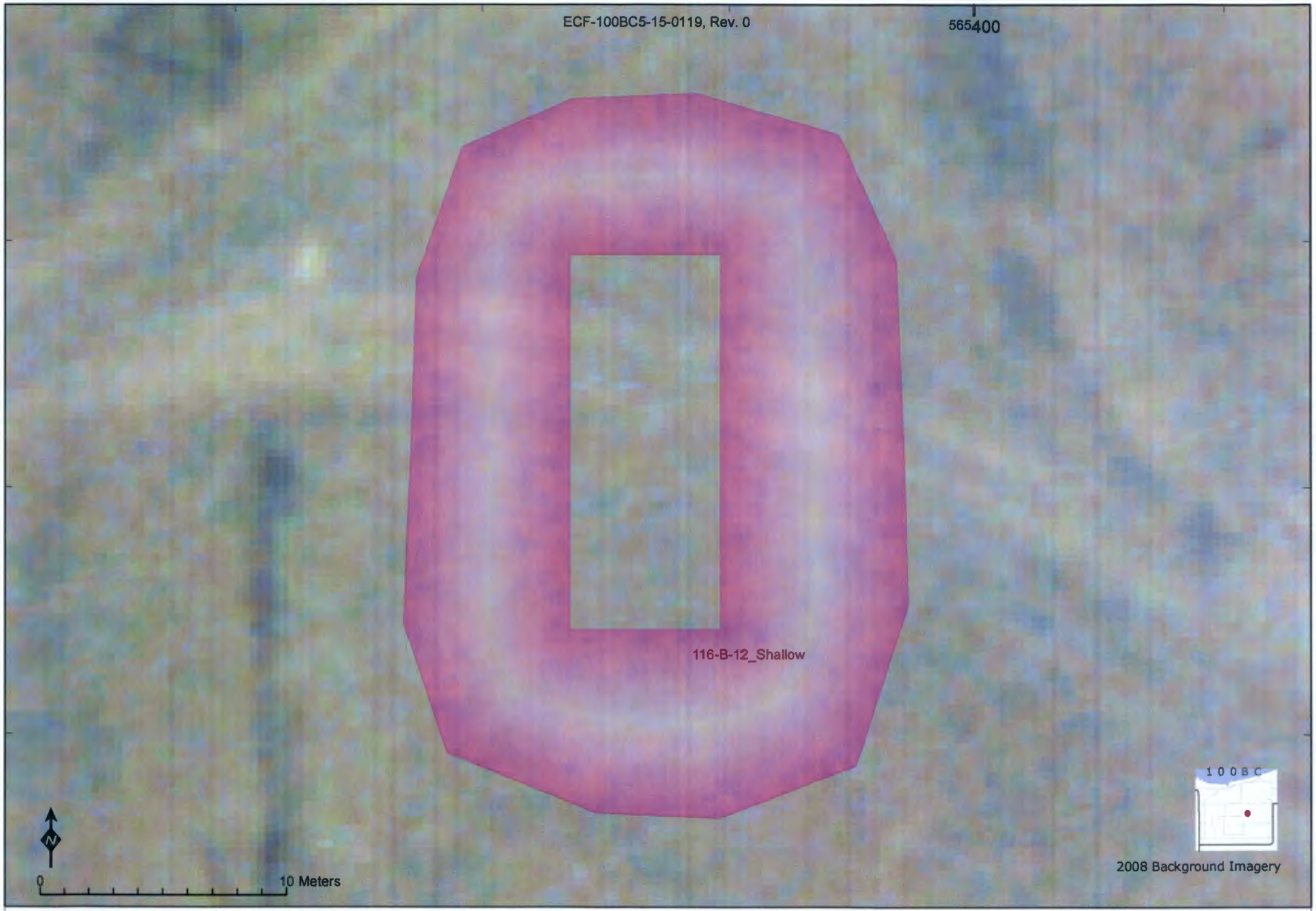
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
116-B-11_Deep	**68.1**	123 **85.7**	20	170	0.6	97	



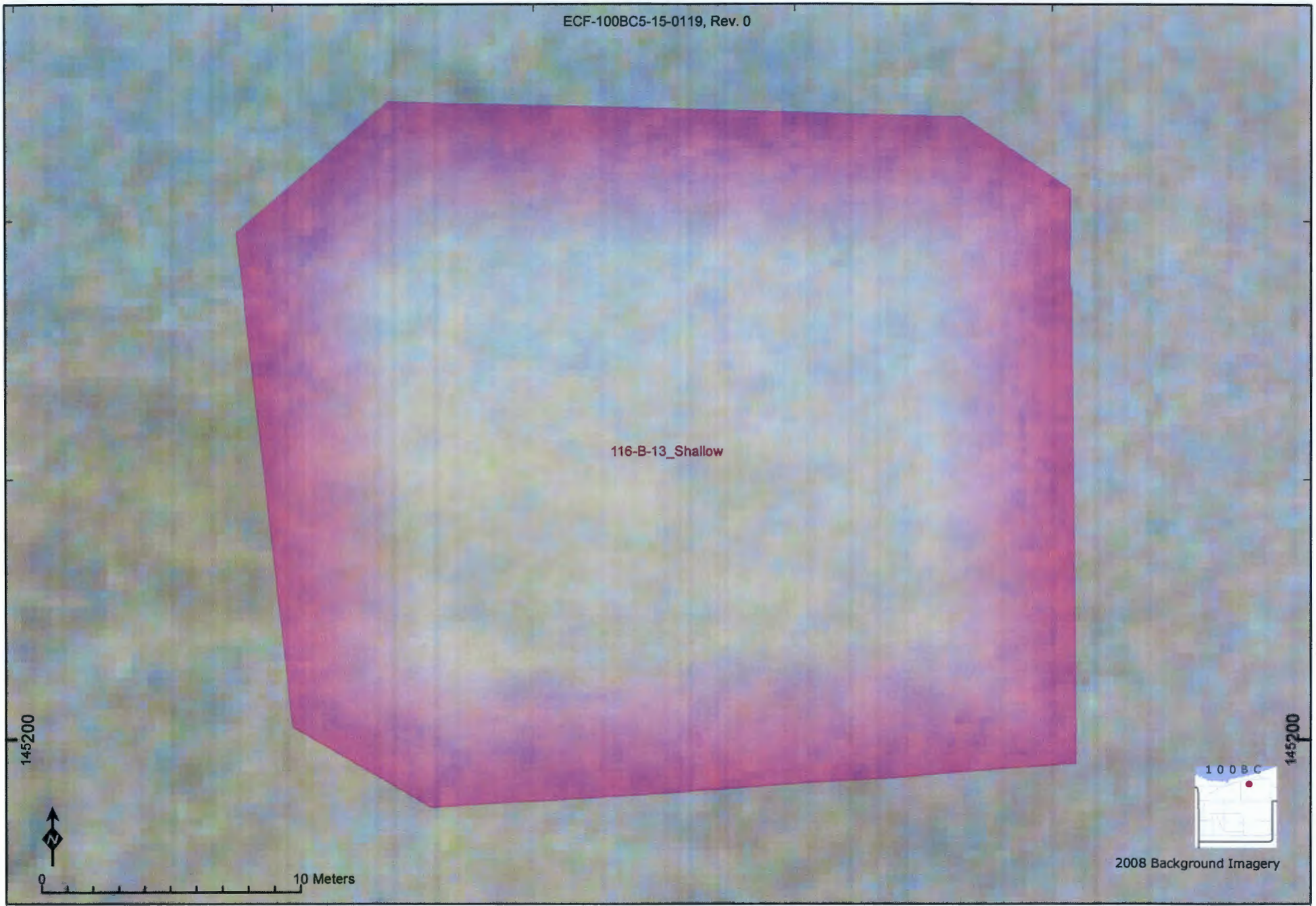
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-11_Shallow	**26.3**	124	**6.8**	7	320	0.1	48



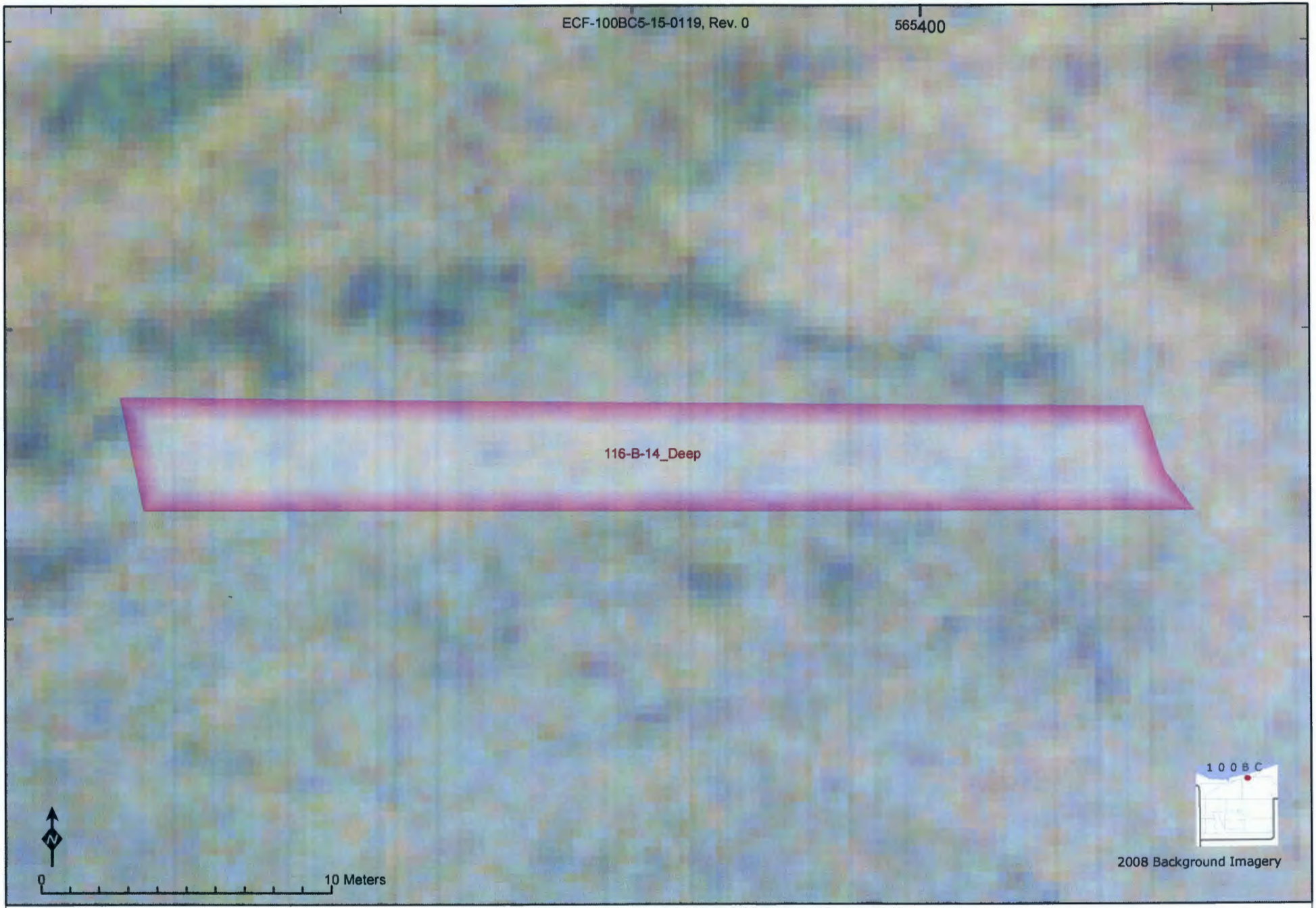
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-12_Deep	**5.4**	125	**15.2**	0	6	15.2	15



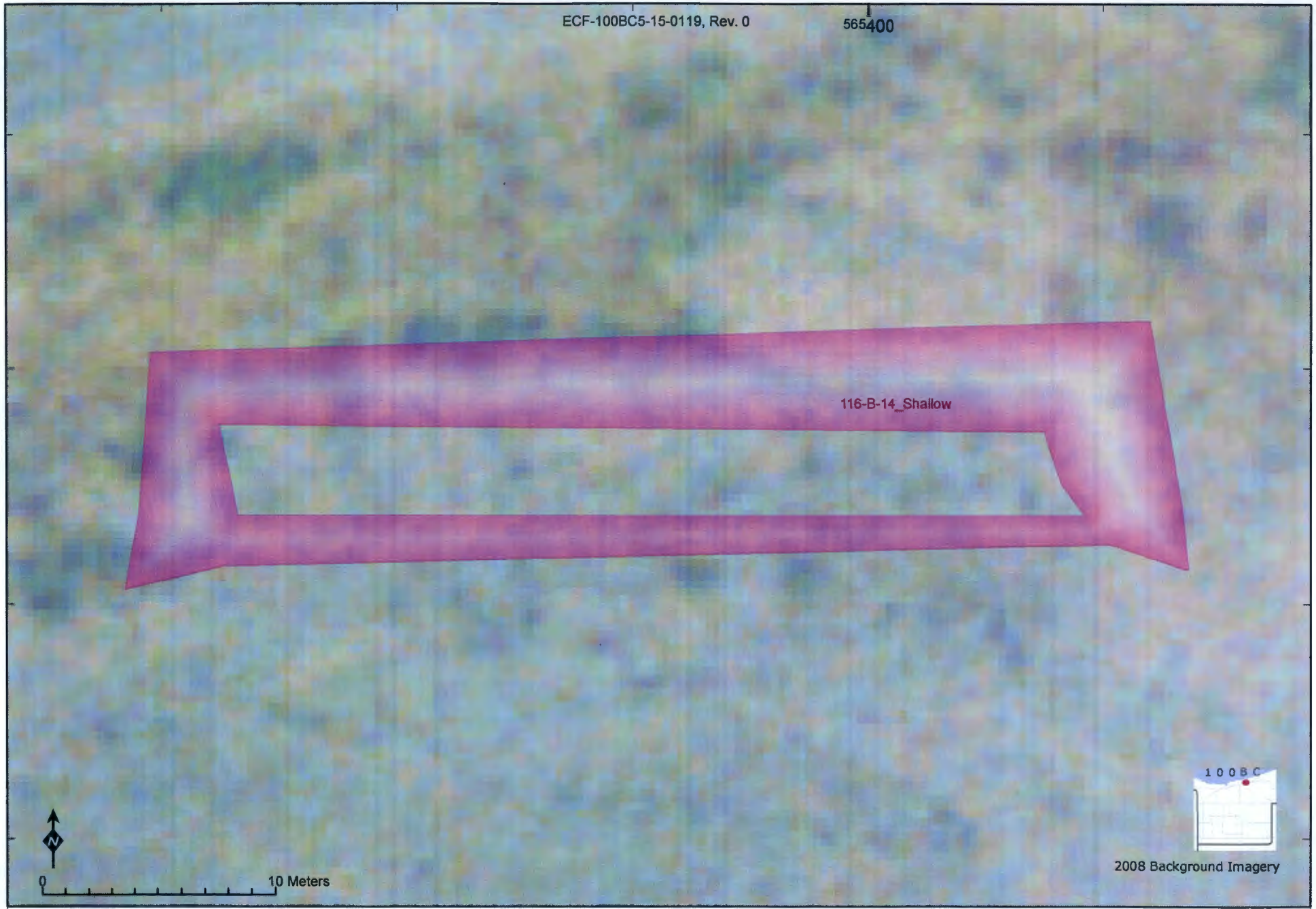
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-12_Shallow	**11.7**	126	**15.9**	10	27	5	29



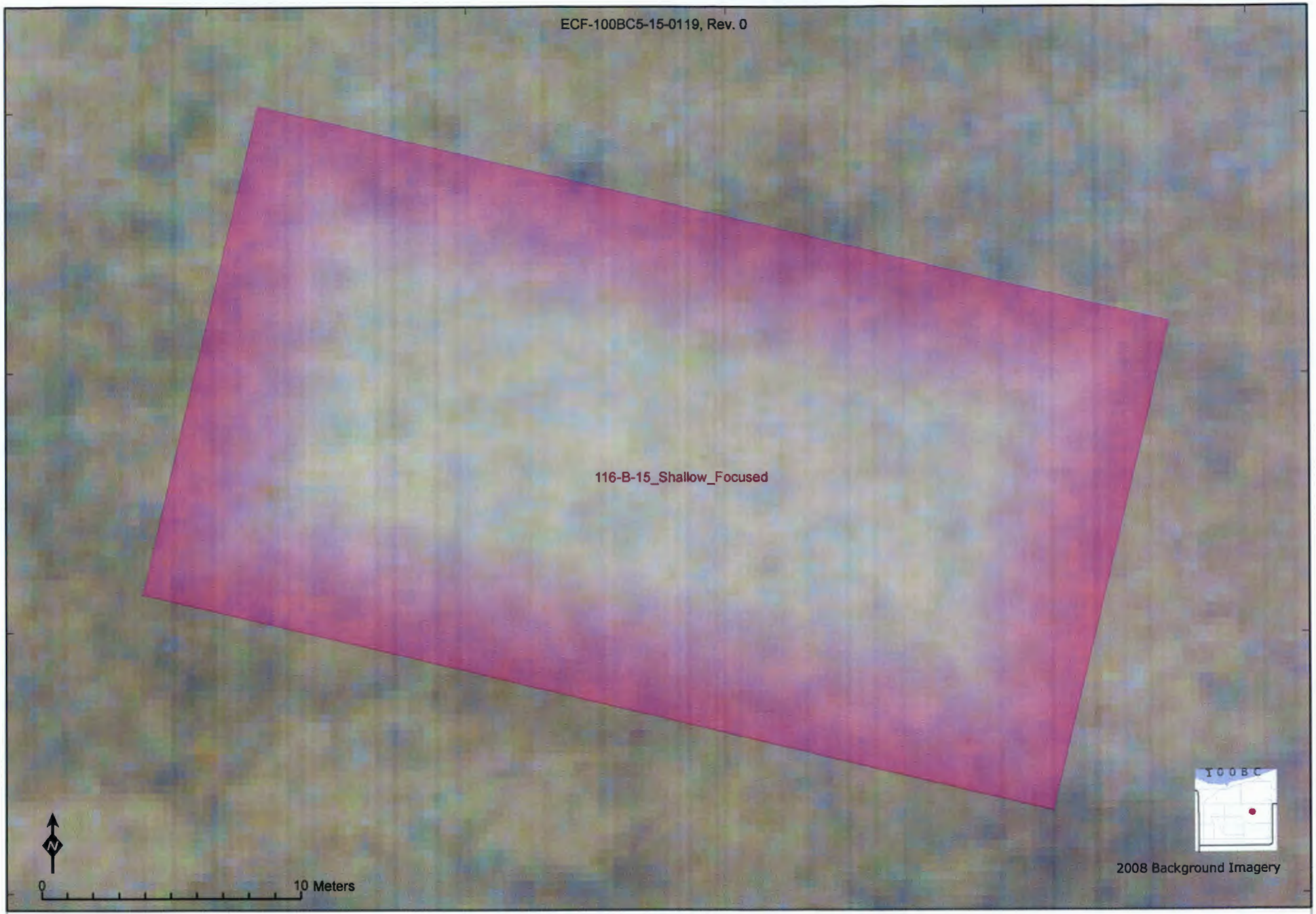
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-13_Shallow	**15.9**	127	**24.6**	5	32	3.8	27



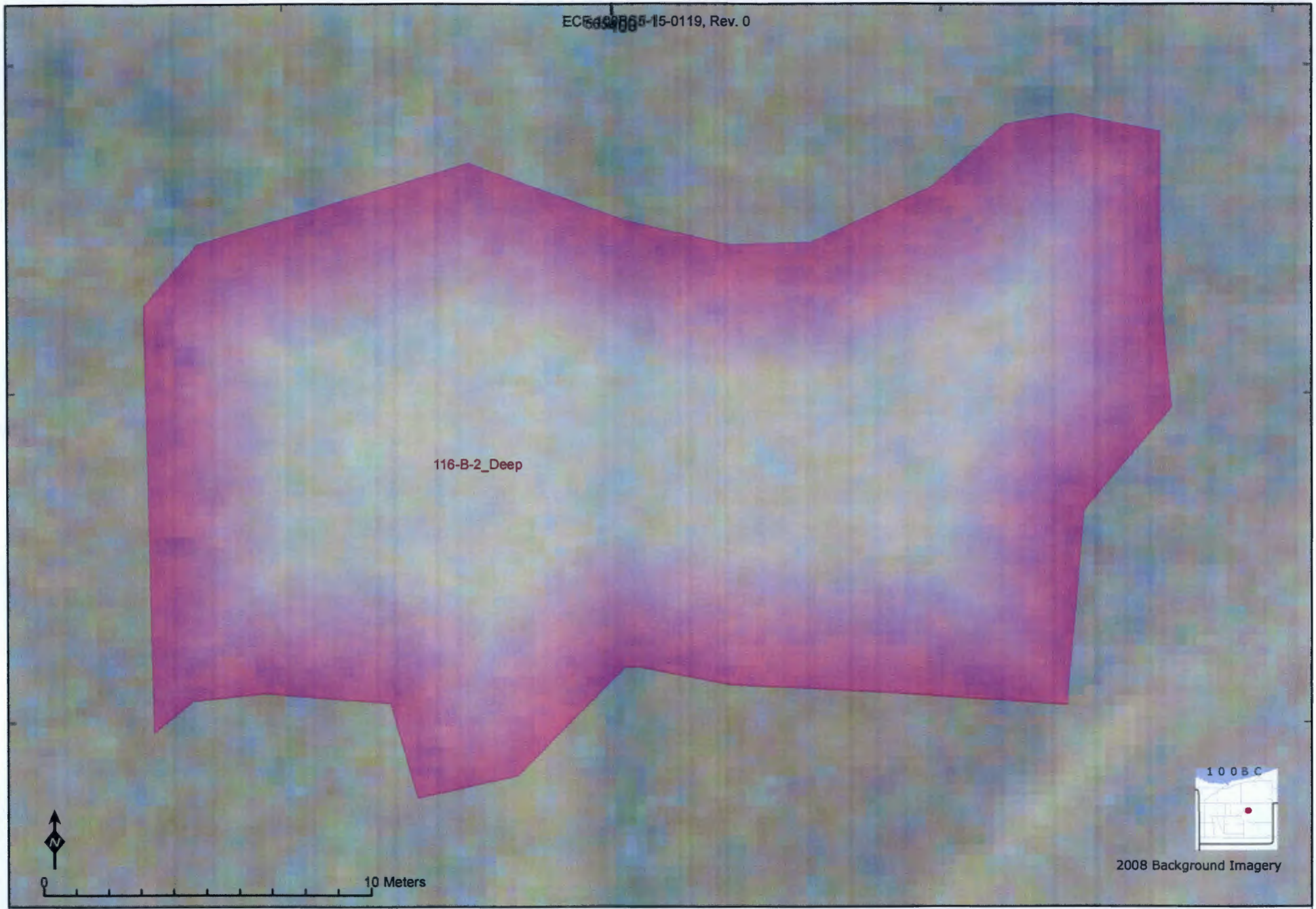
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-14_Deep	**6.5**	128	**3.6**	1	37	0.3	4



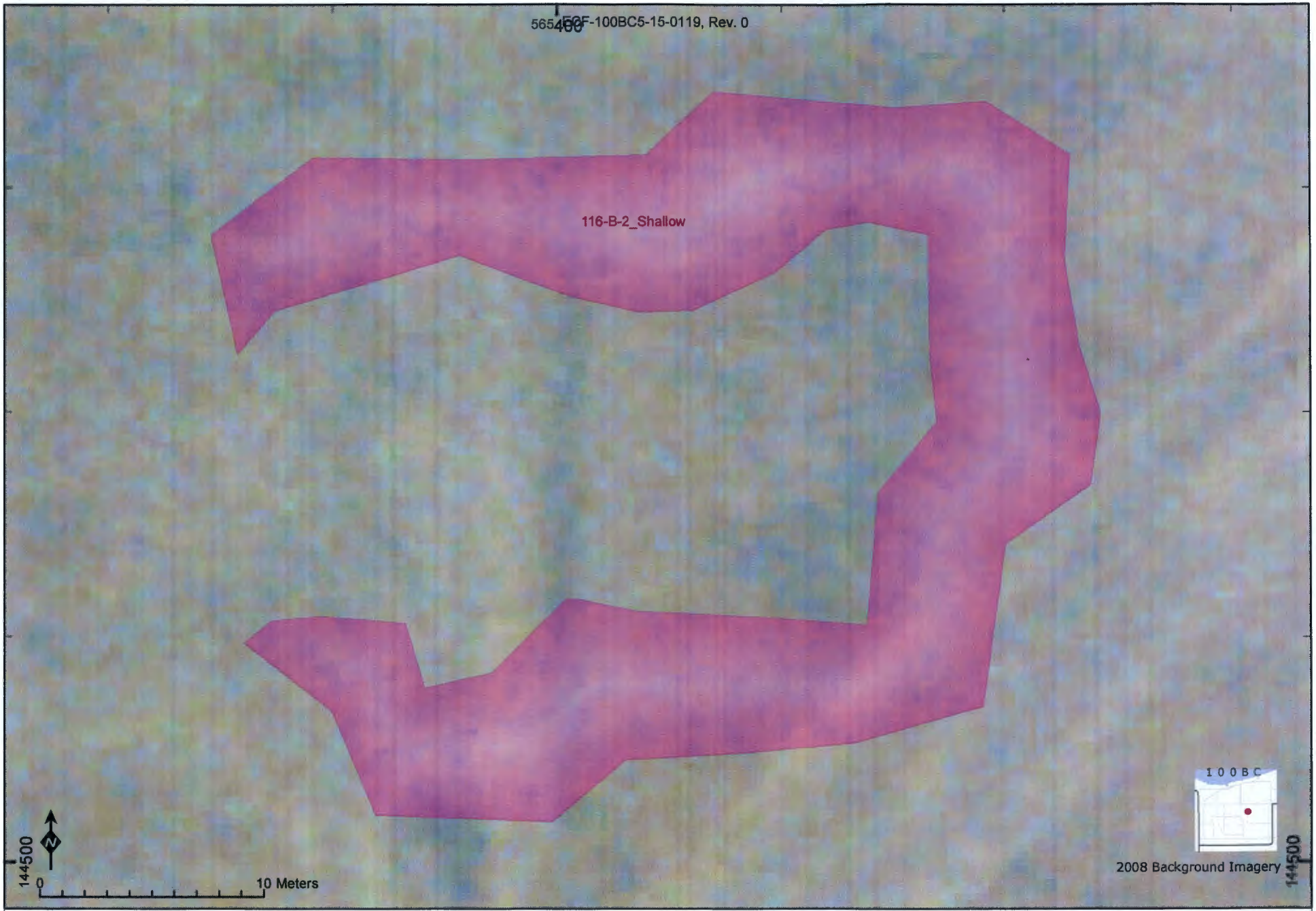
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-14_Shallow	**9.4**	129	**3.4**	2	82	1.2	10



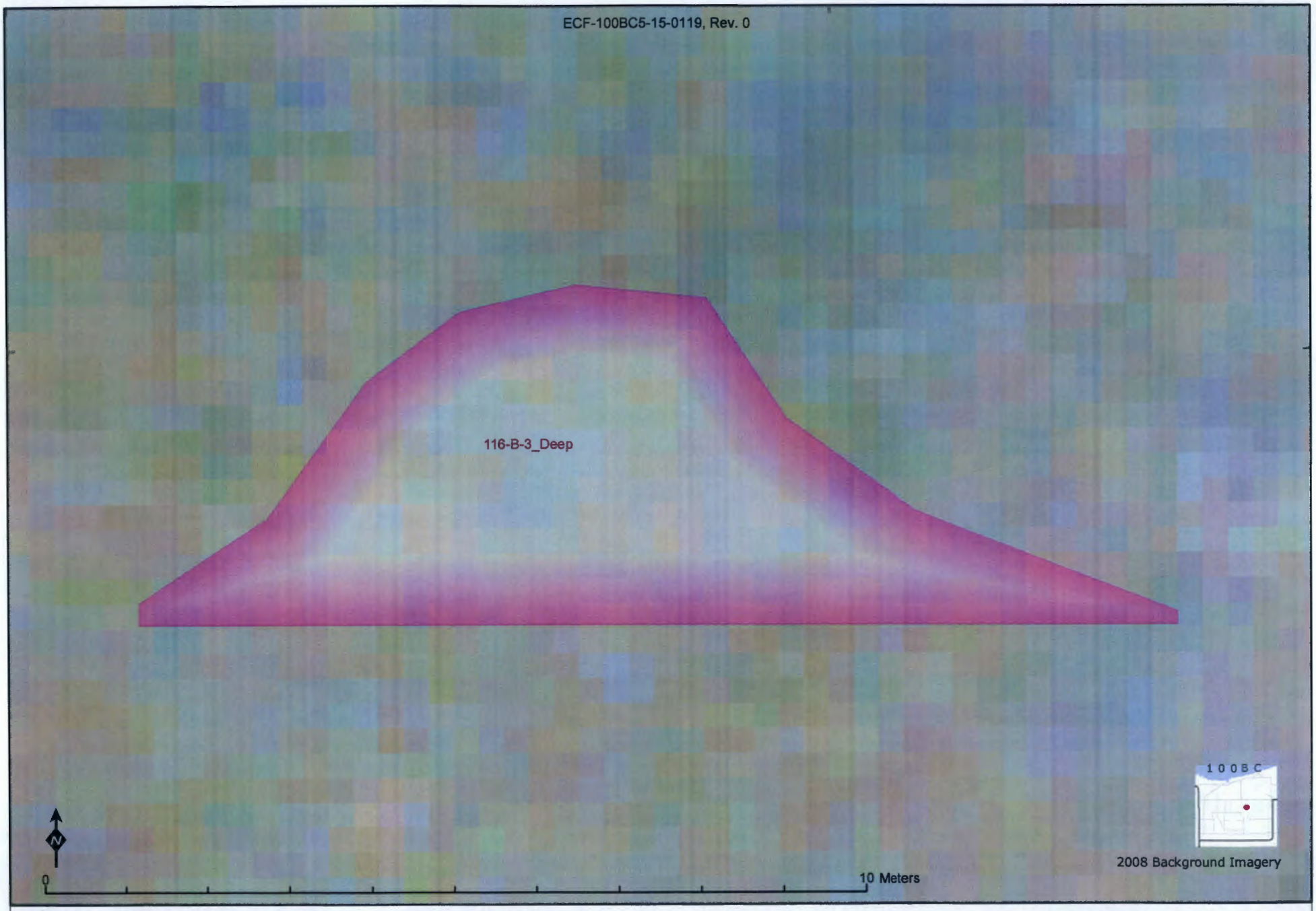
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-15_Shallow_Focused	**14.9**	130	**17.9**	5	39	2.2	20



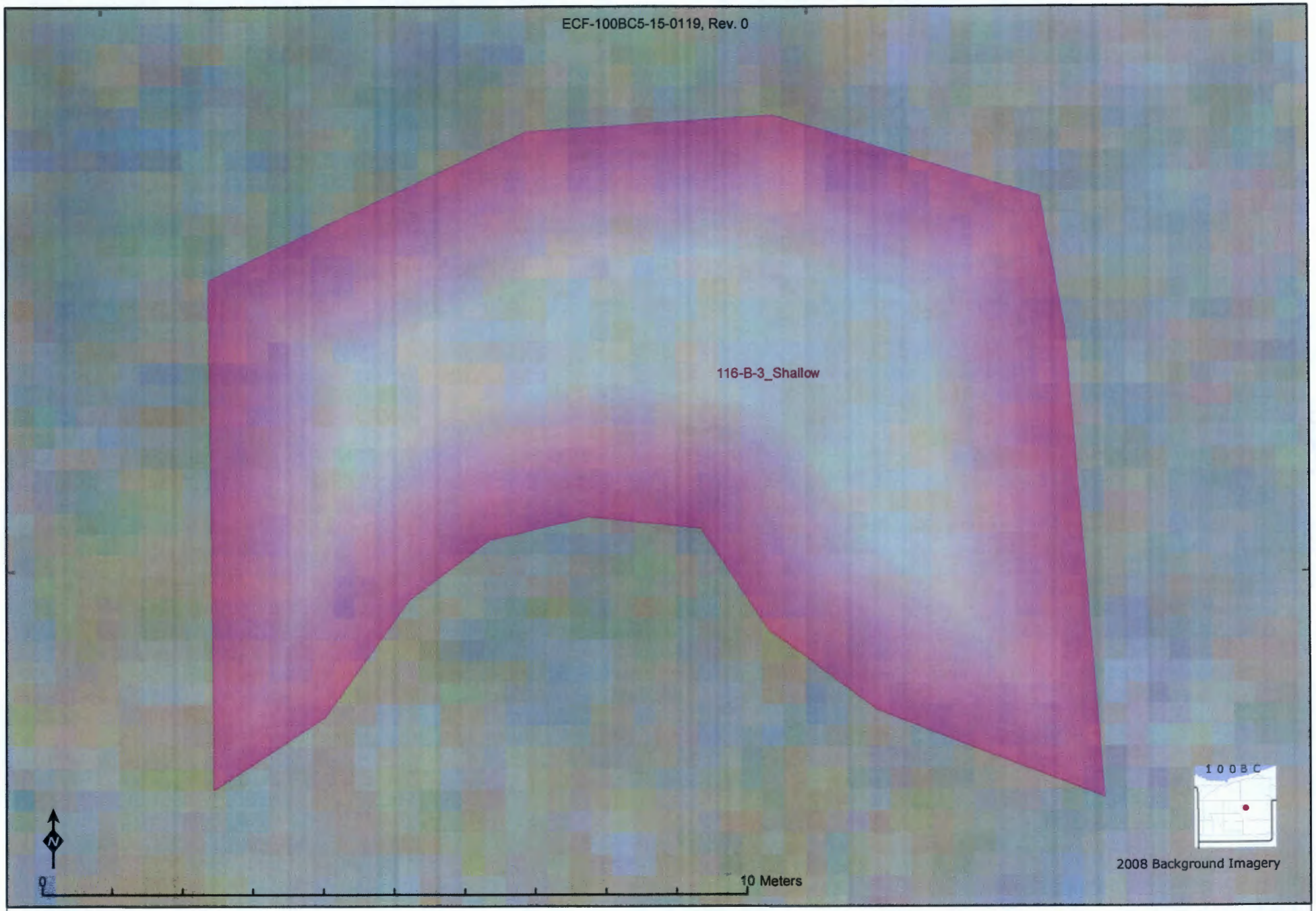
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-2_Deep	**12.1**	131	**14.9**	2	31	9.6	19



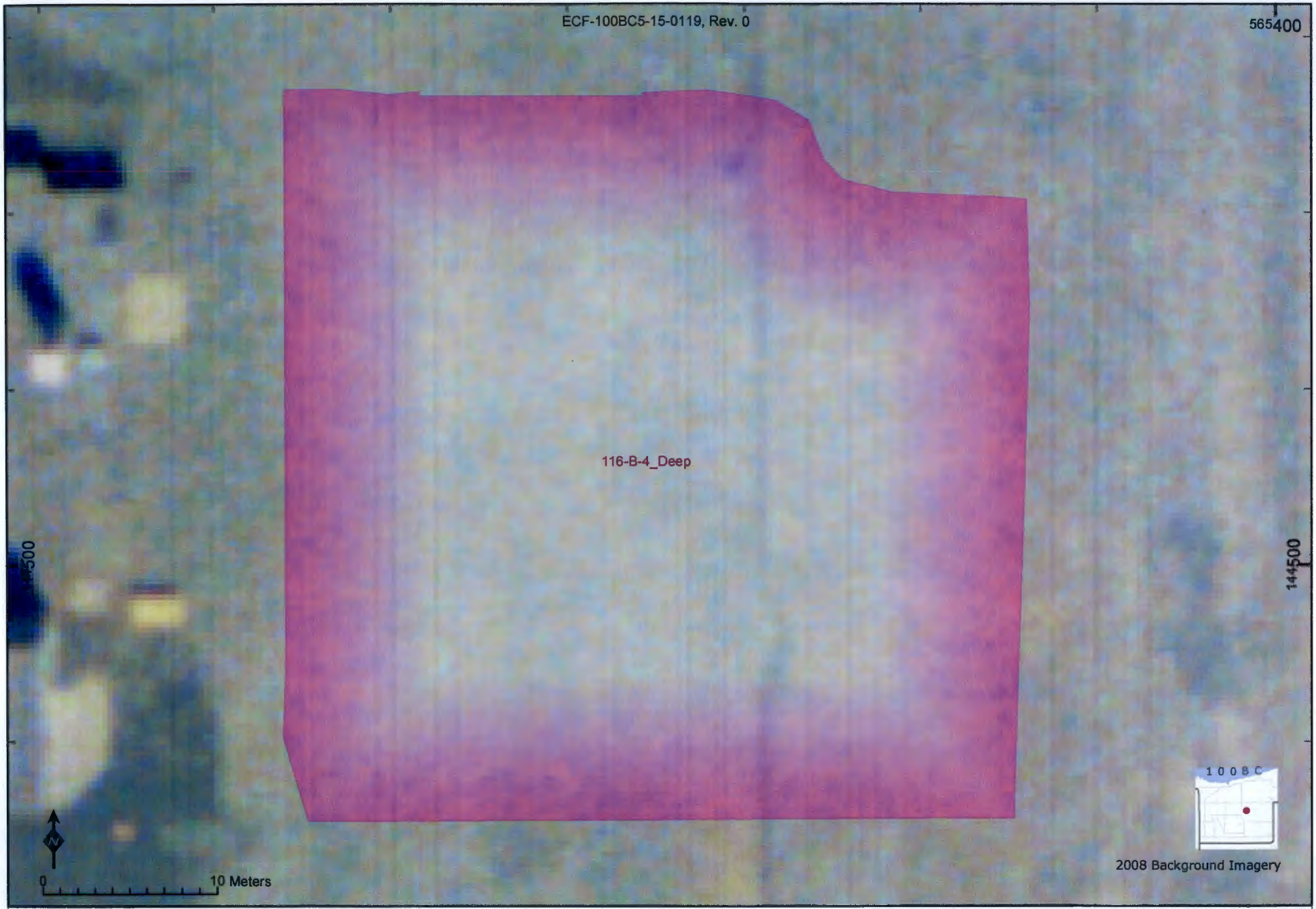
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-2_Shallow	**13.1**	132	**7.7**	5	70	1.5	27



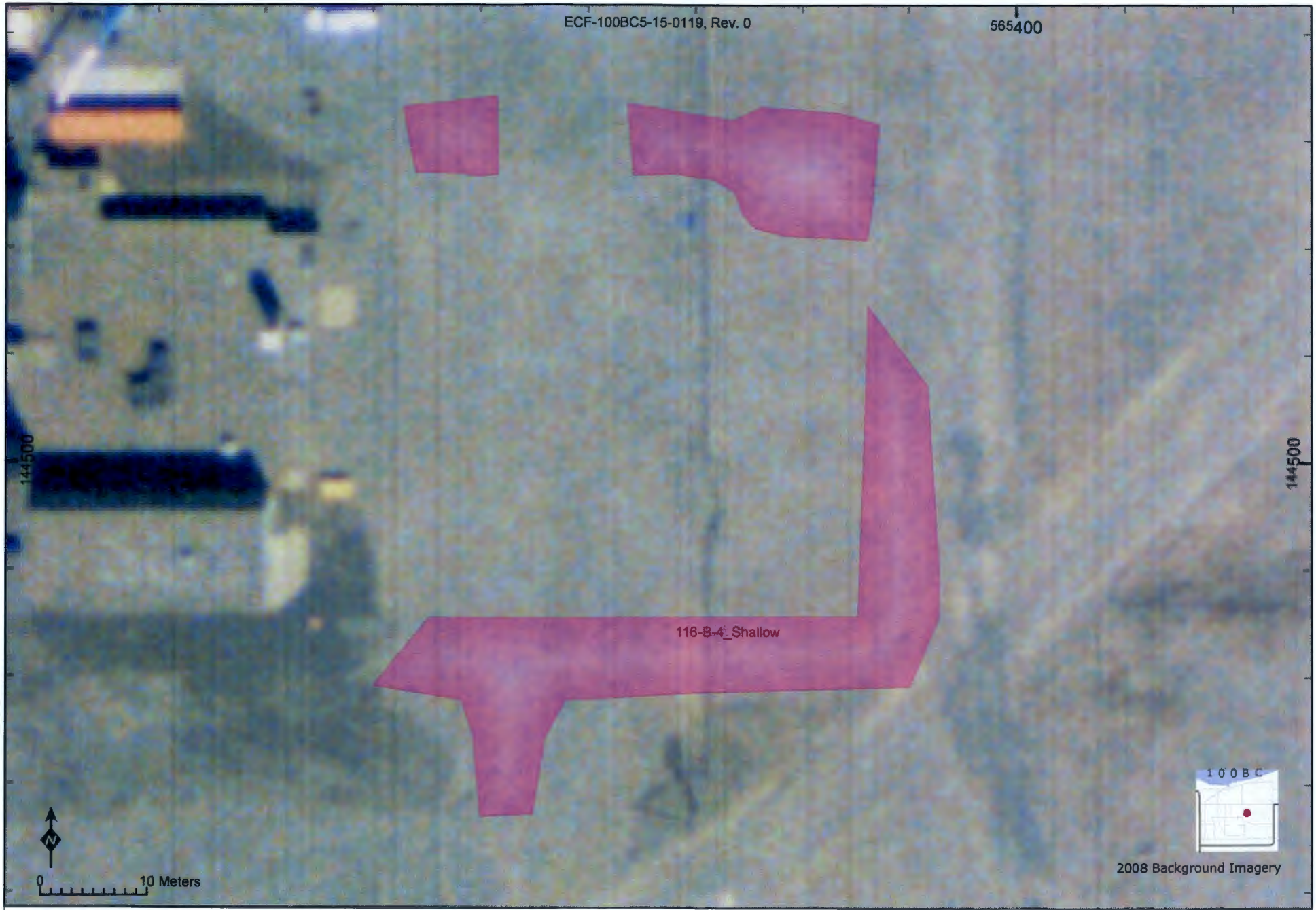
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
116-B-3_Deep	**3**	133	**2.2**	1	13	0.2	4



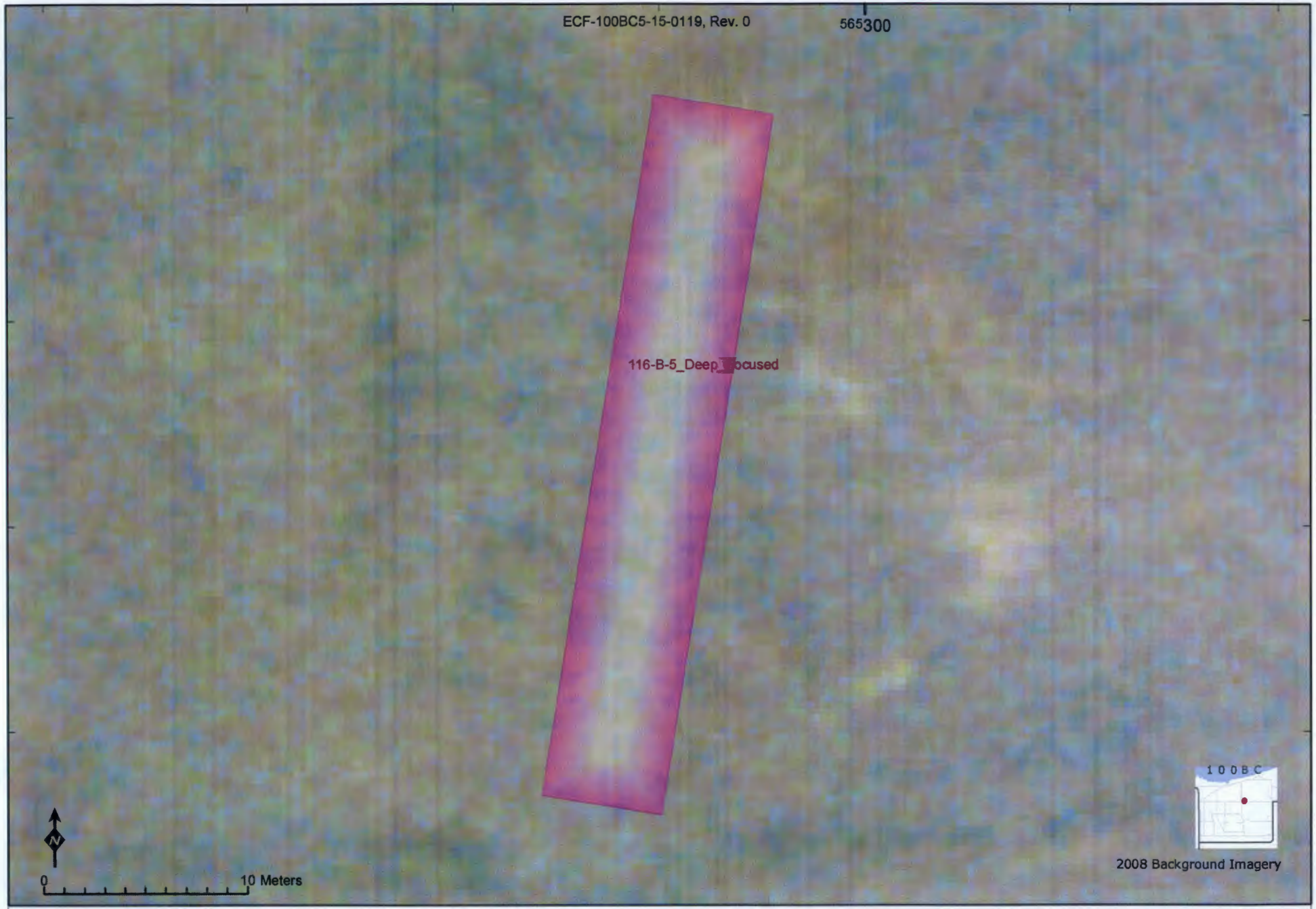
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-3_Shallow	**5.2**	134	**6.5**	2	13	2.6	8



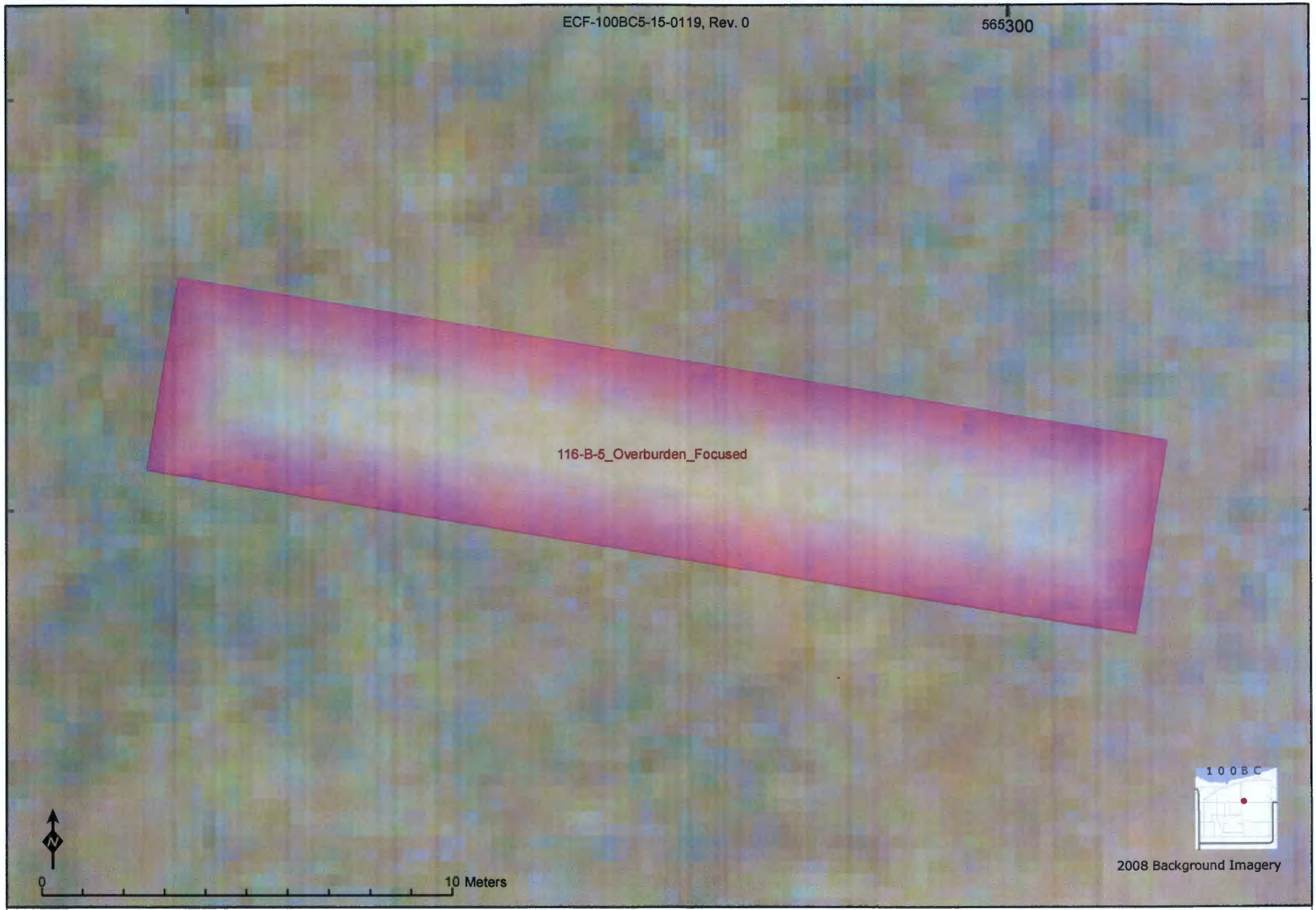
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
116-B-4_Deep	**22.9**	135	**38.9**	5	43	11.2	42



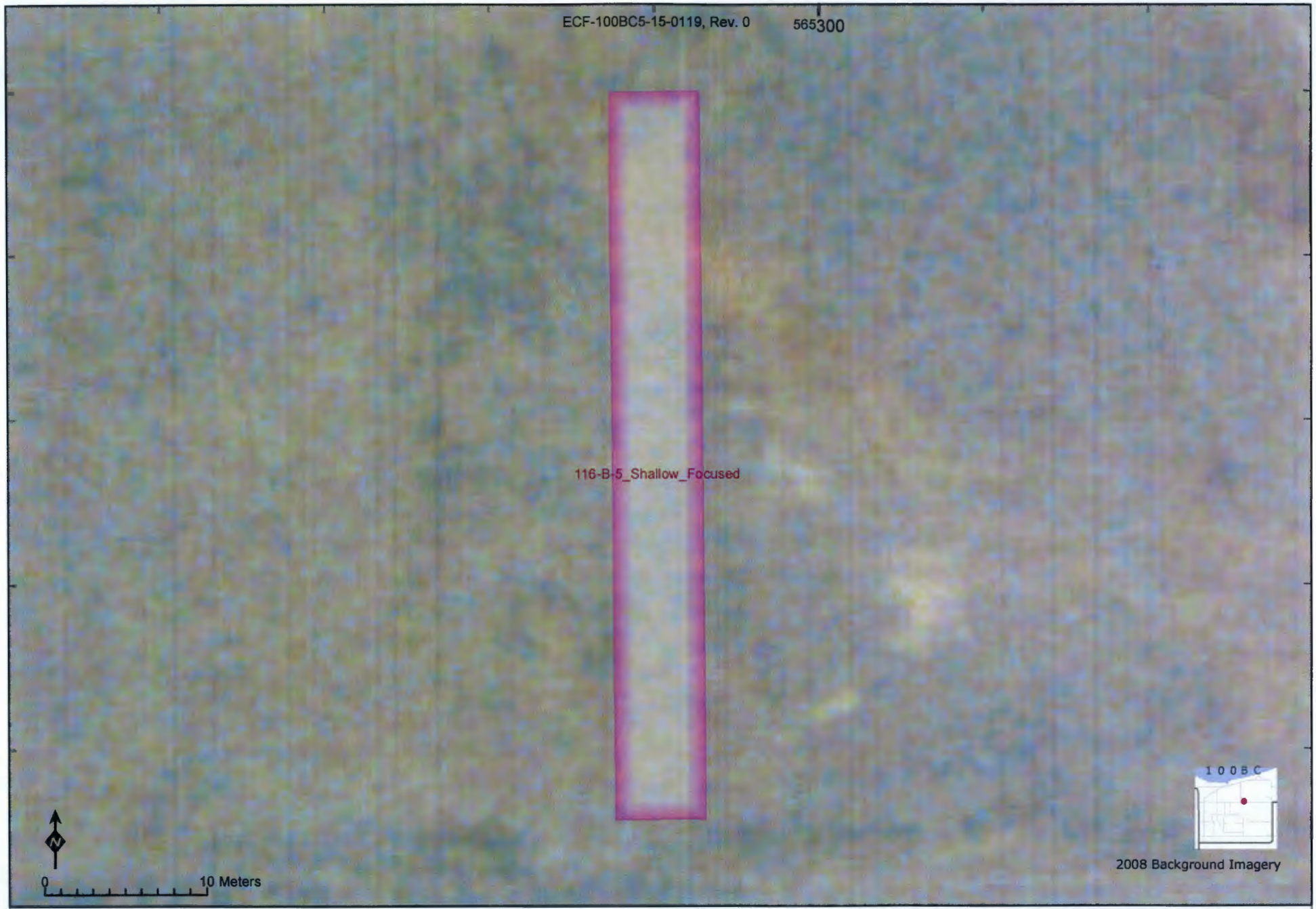
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-4_Shallow	**16.4**	136	**10**	7	85	0.9	34



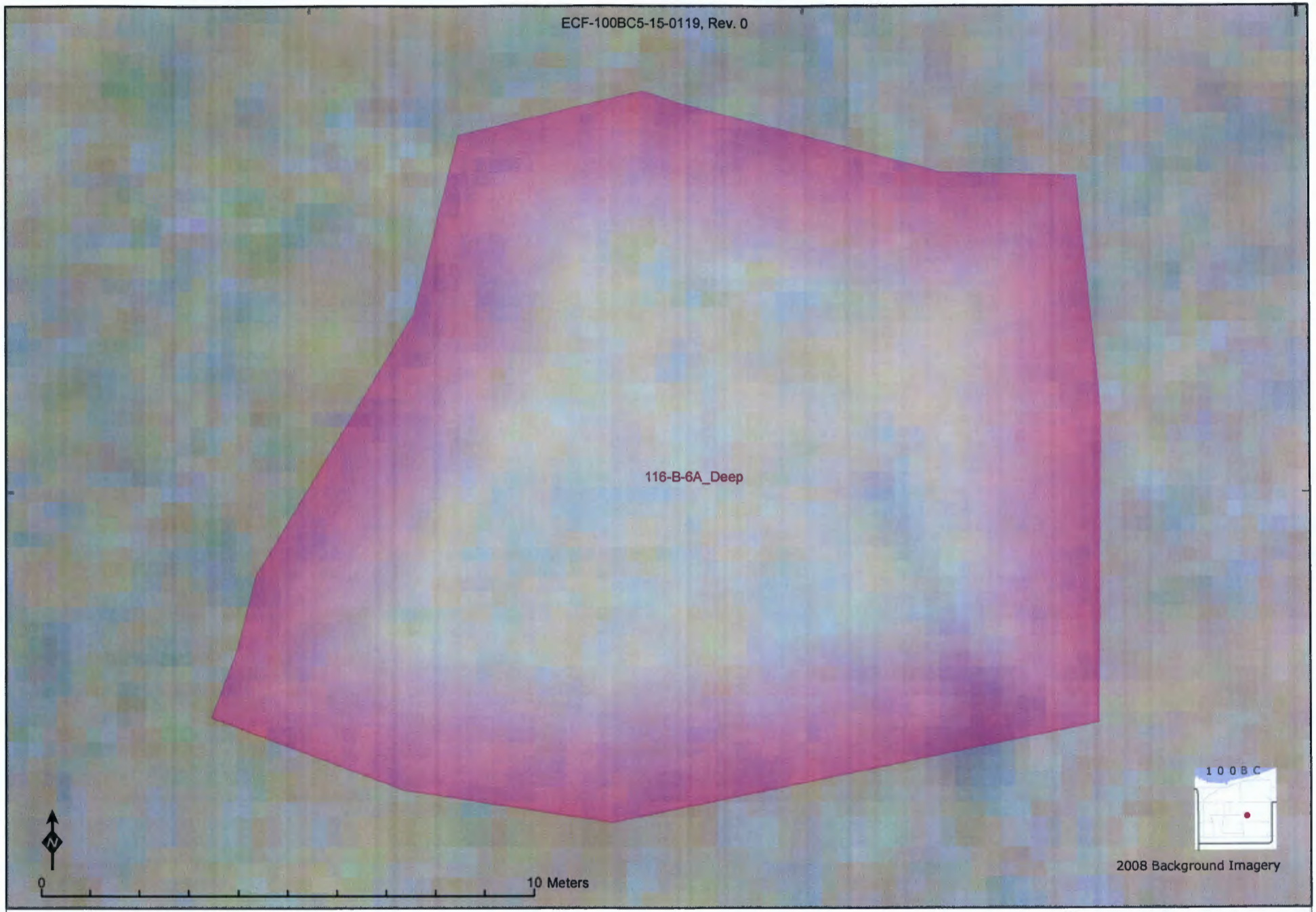
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-5_Deep_Focused	**8**	137	**18.5**	11	11	3.1	35



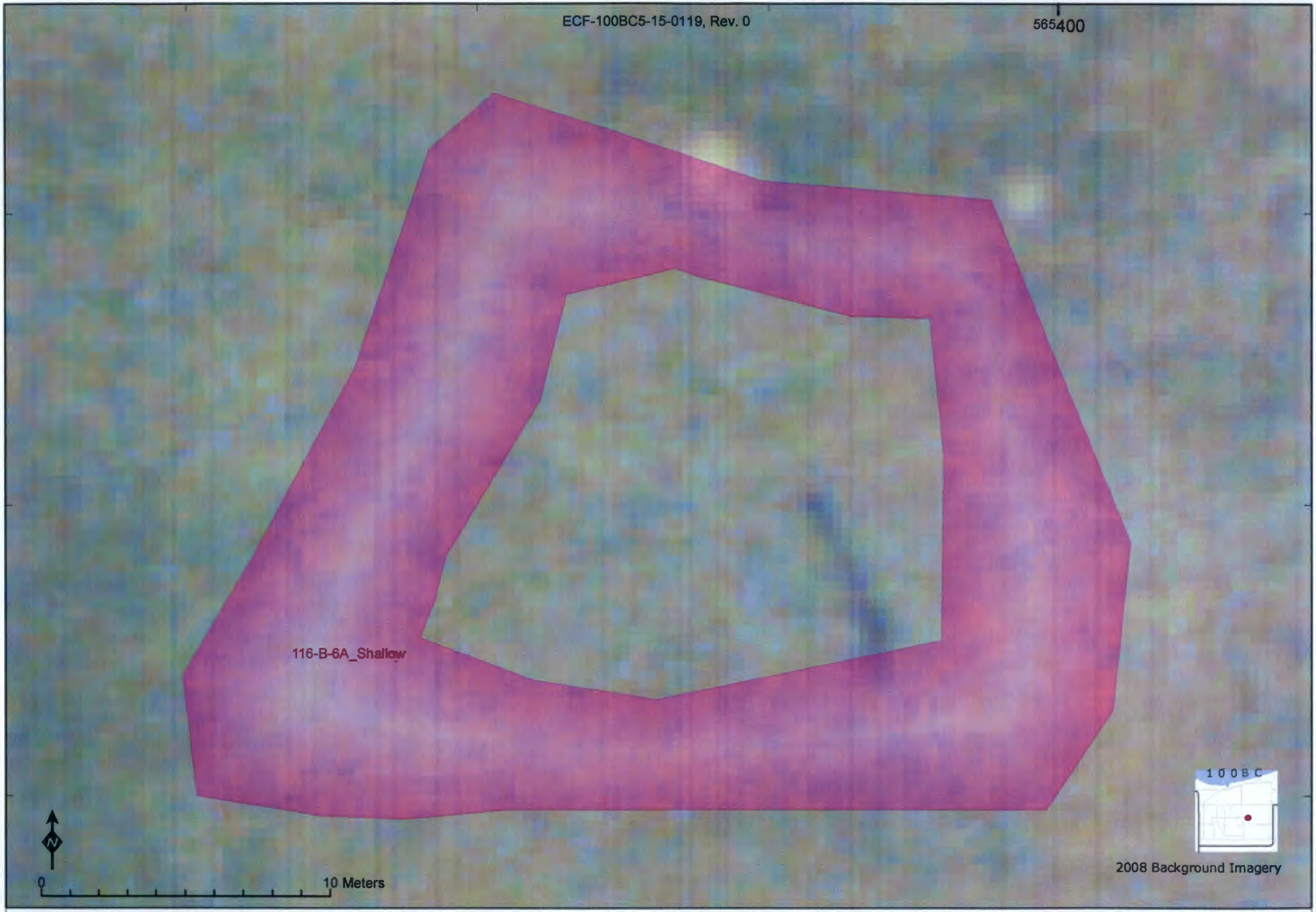
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-5_Overburden_Focused	**6.1**	138	**4.8**	0	24	4.8	5



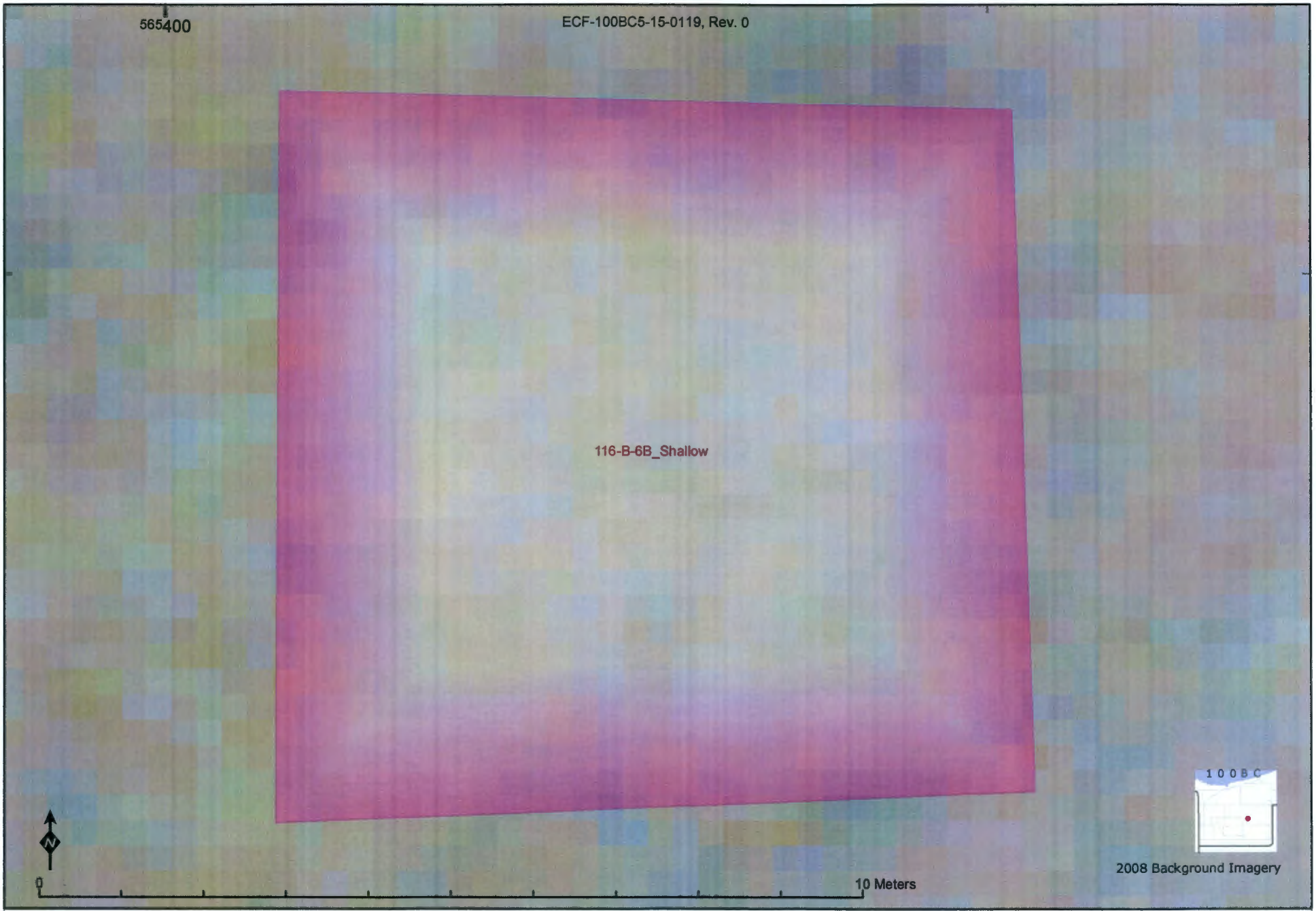
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
116-B-5_Shallow_Focused	**8.8**	139	**37.6**	16	6	4.4	44



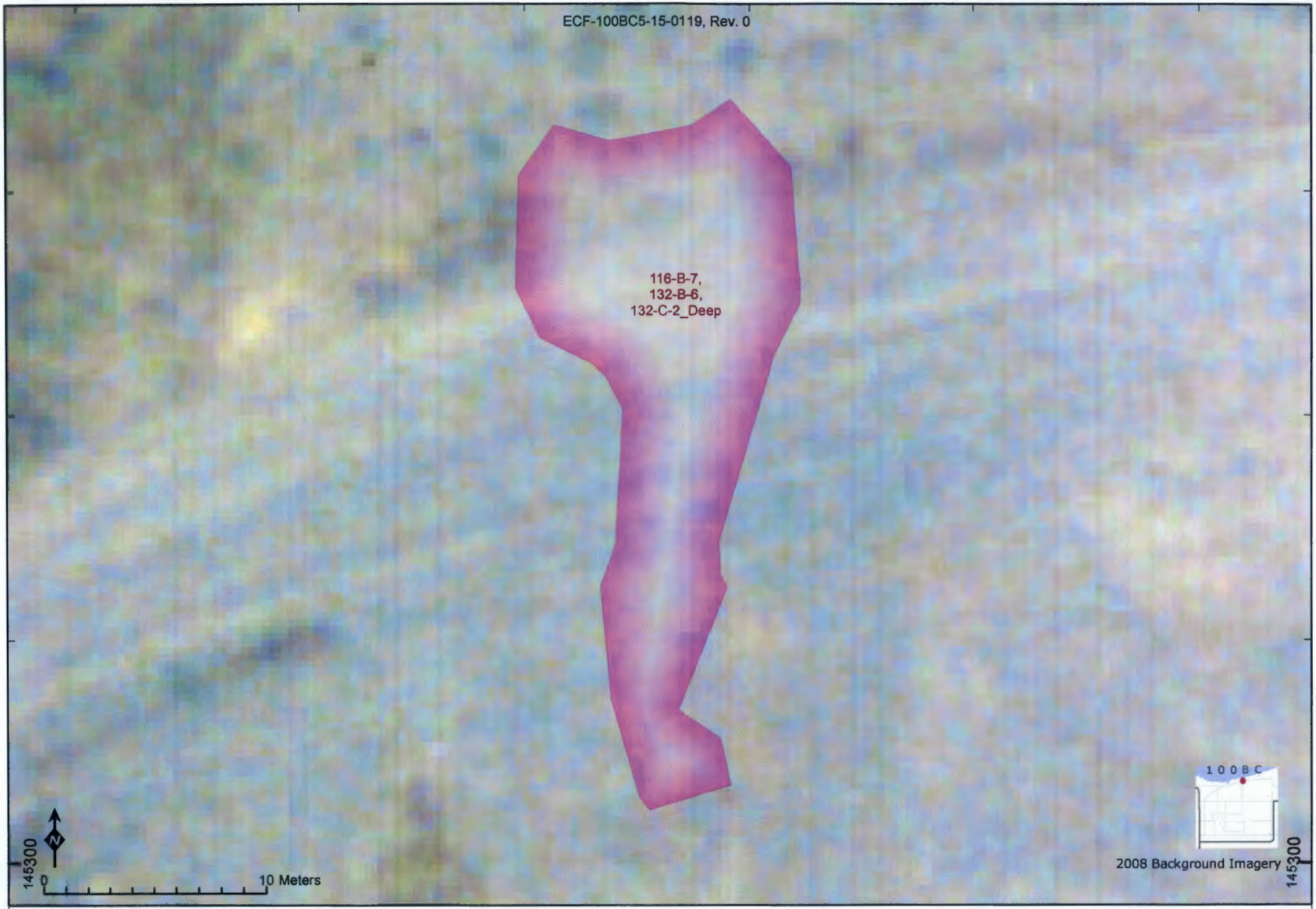
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
116-B-6A_Deep	**8**	140	**11**	4	18	2.4	15



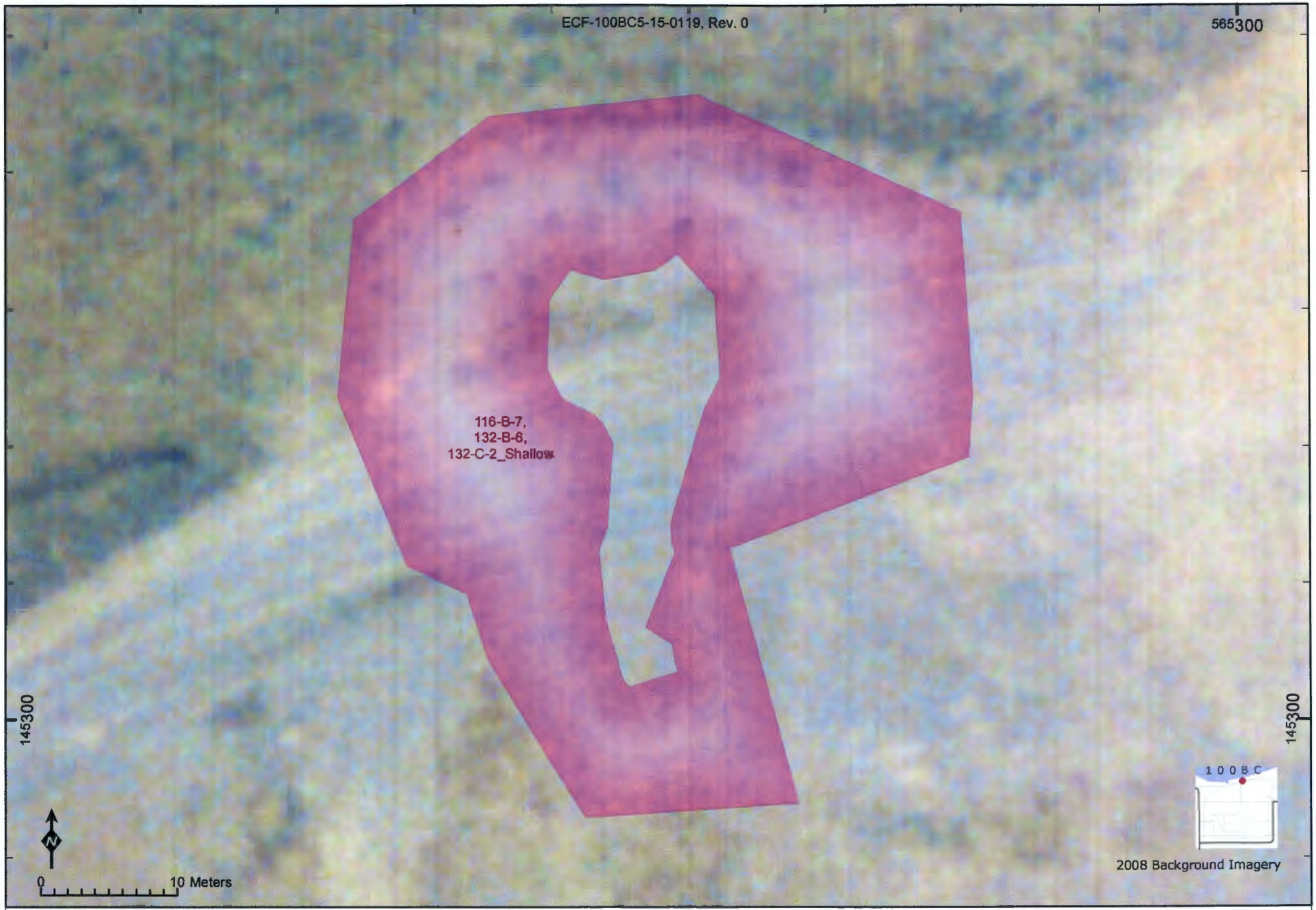
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-6A_Shallow	**11.3**	141	**7.9**	5	51	1.5	22



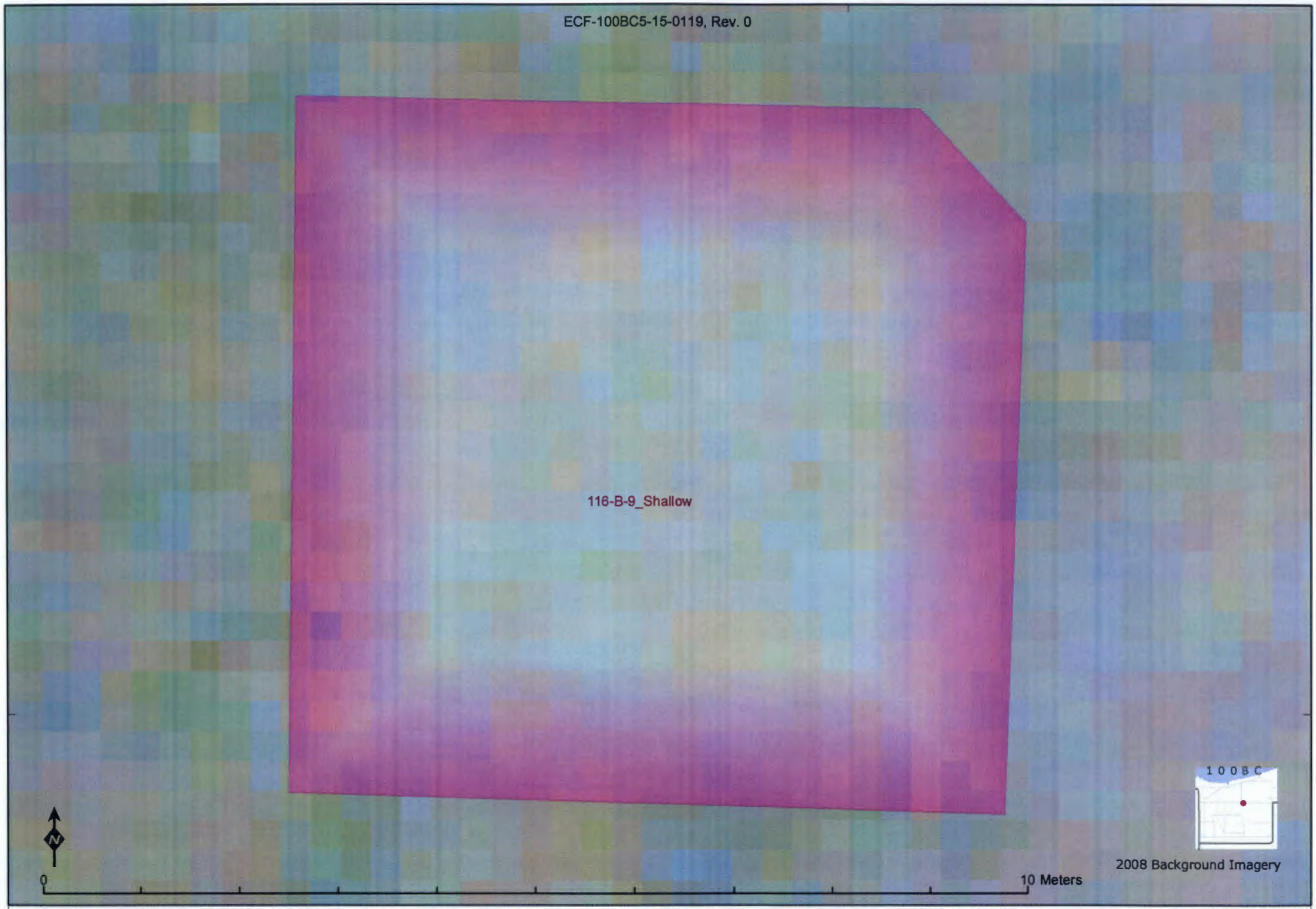
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-6B_Shallow	**5**	142	**8.6**	0	9	8.3	9



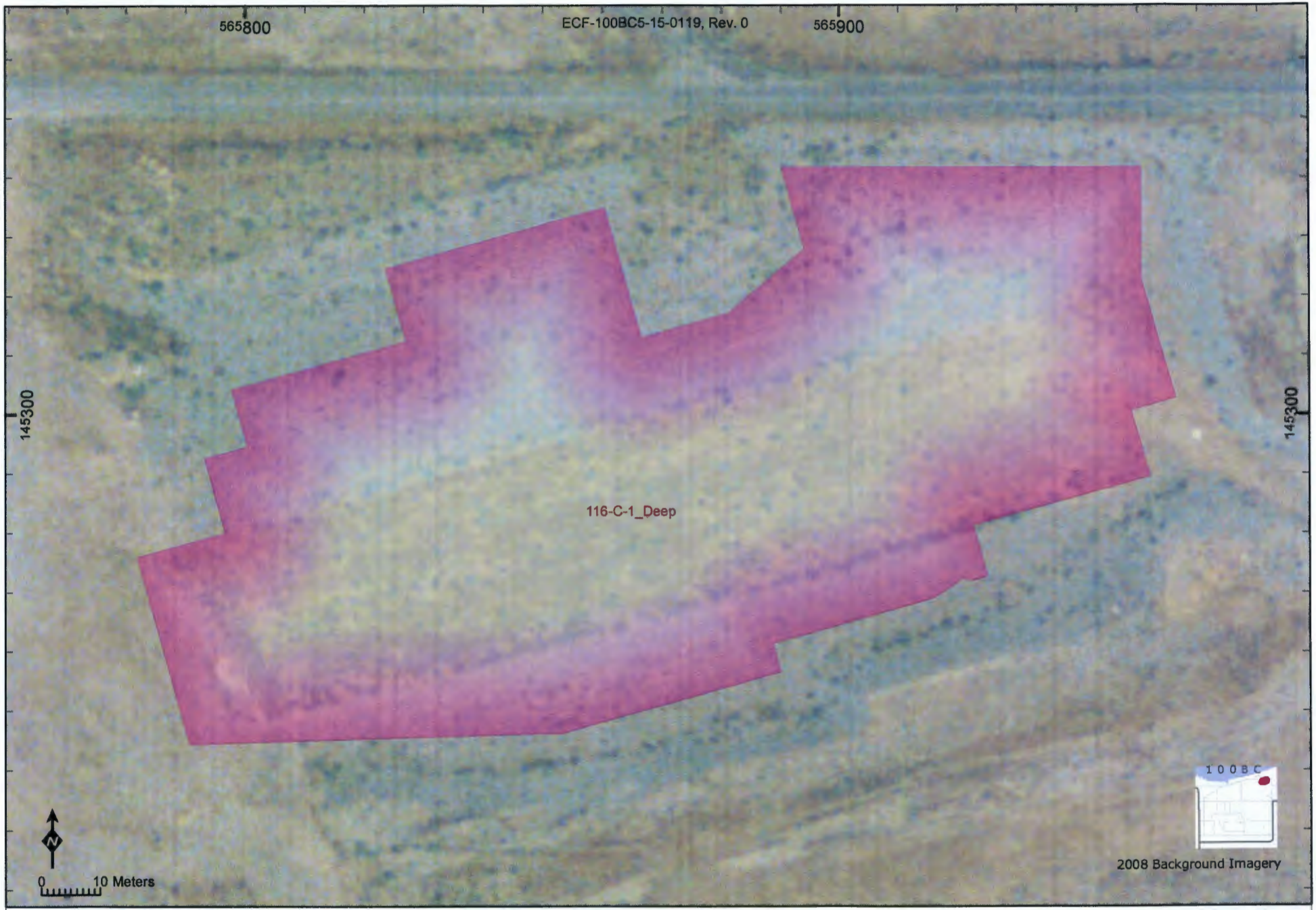
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-7, 132-B-6, 132-C-2_Deep	**8.3**	143	**12.7**	9	17	0.4	30



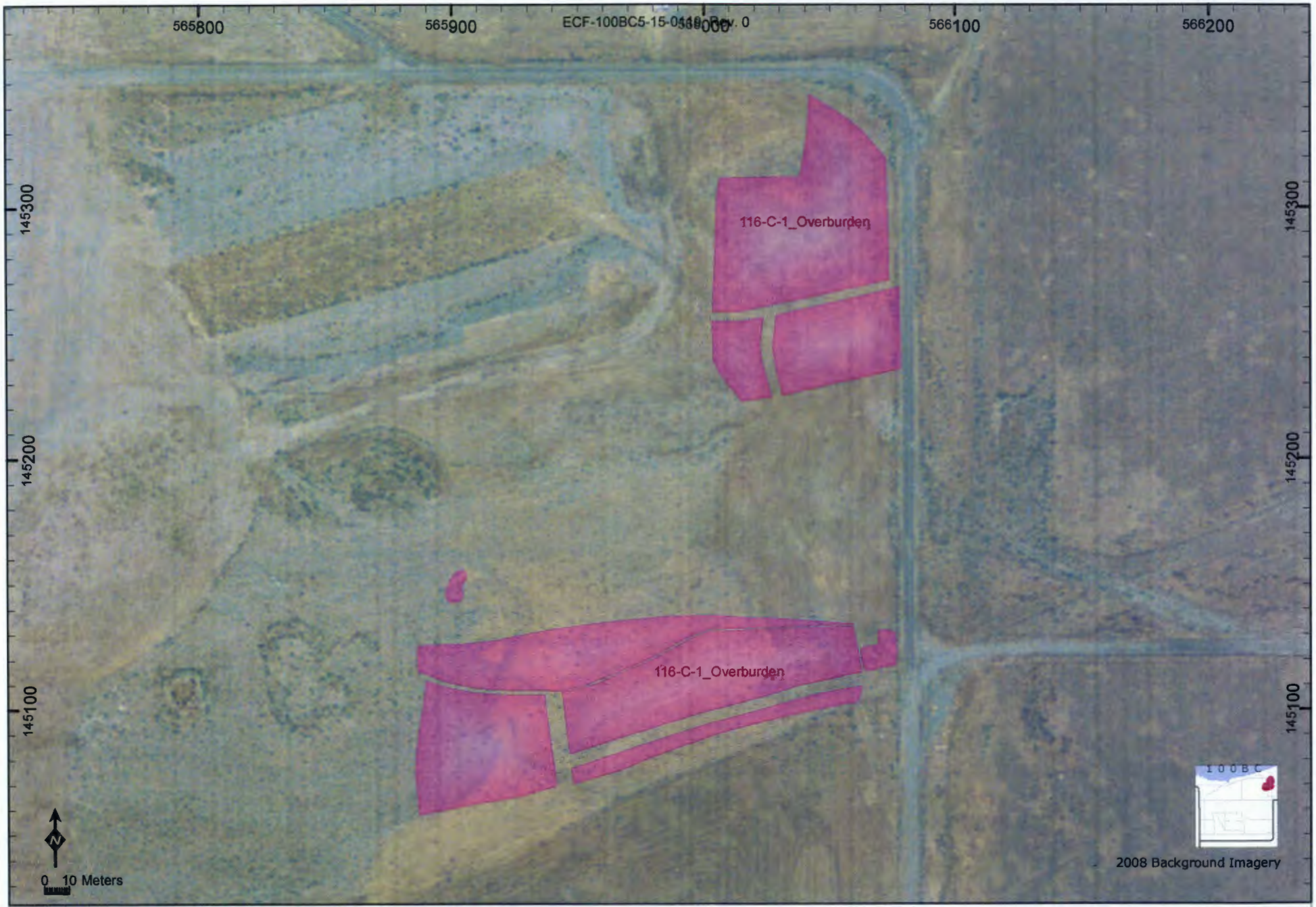
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-B-7, 132-B-6, 132-C-2_Shallow	**21.3**	144	**20.9**	11	68	0.8	46



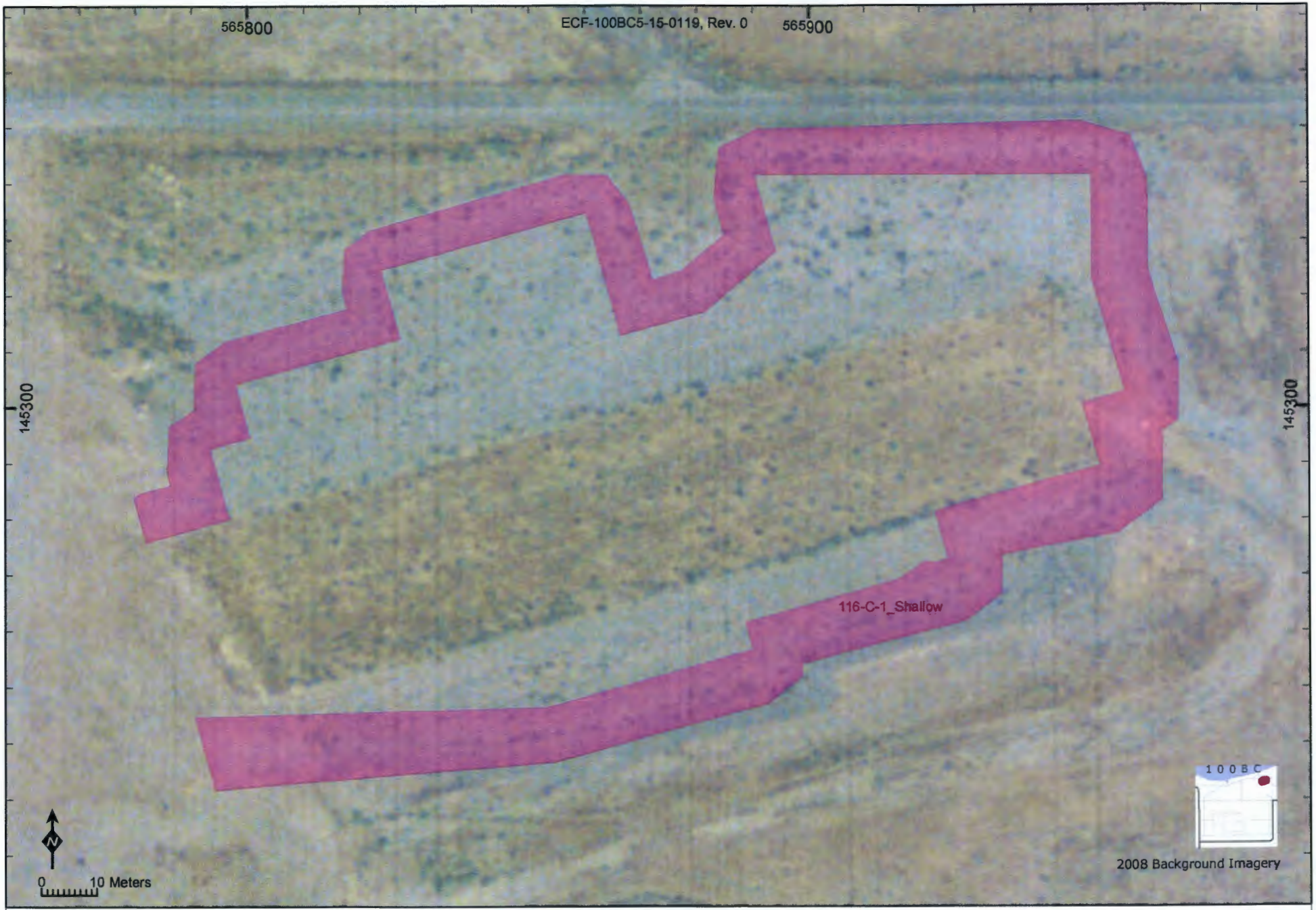
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
116-B-9_Shallow	**4**	145 **7.1**	0	7	6.8	7	



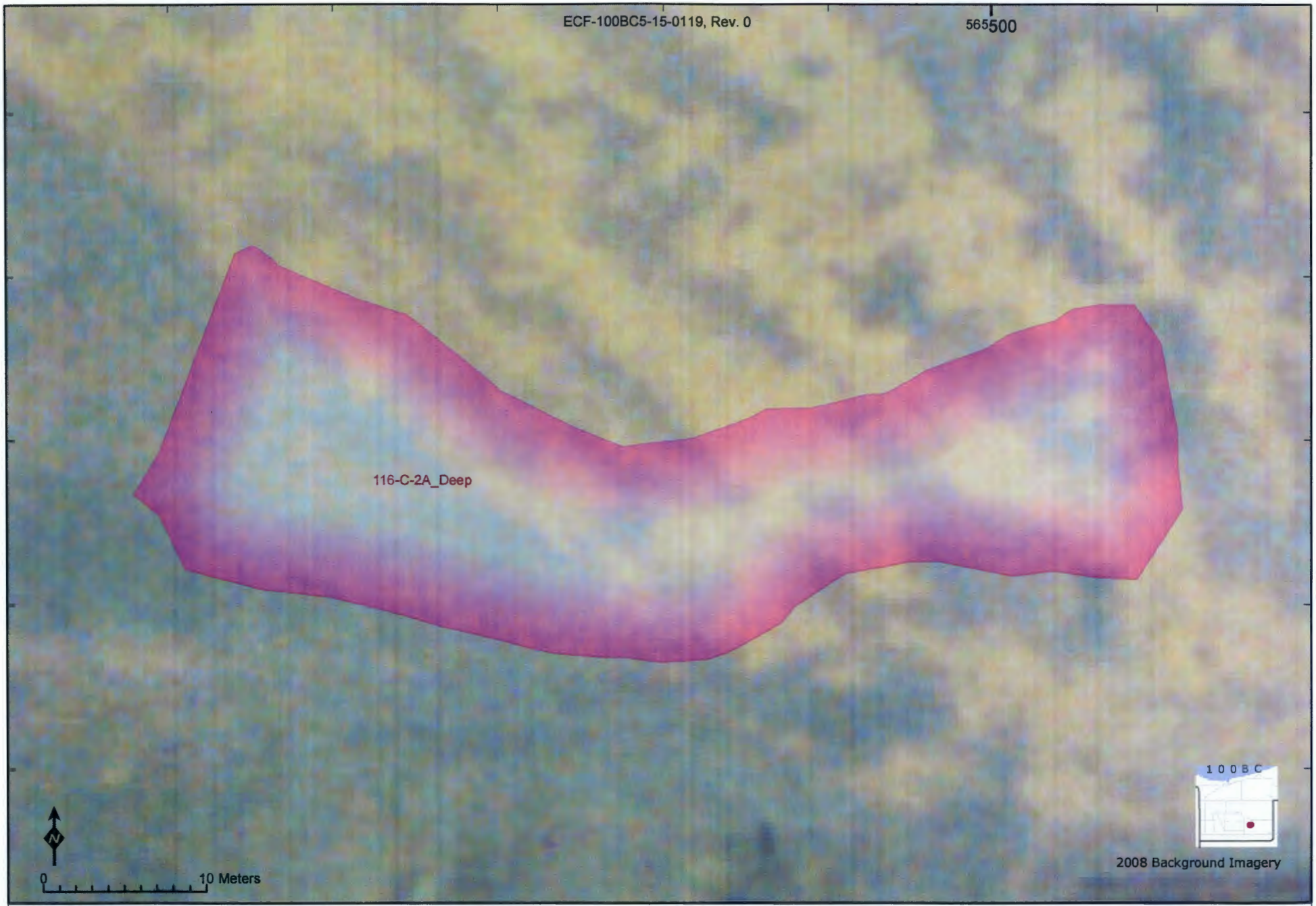
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-1_Deep	**59.5**	146	**57.5**	25	193	0.5	87



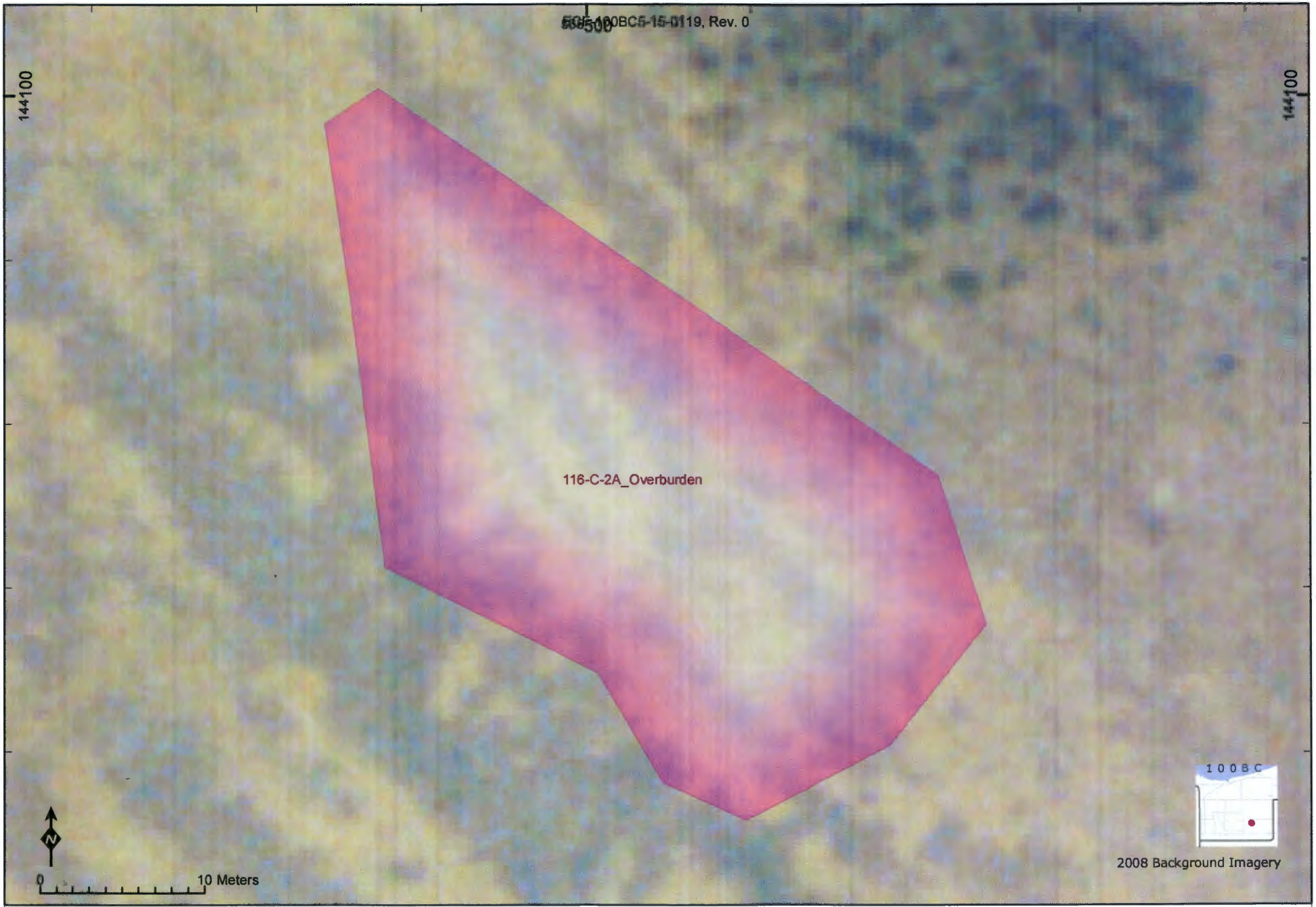
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-1_Overburden	**68.1**	147	**23**	18	632	0	80



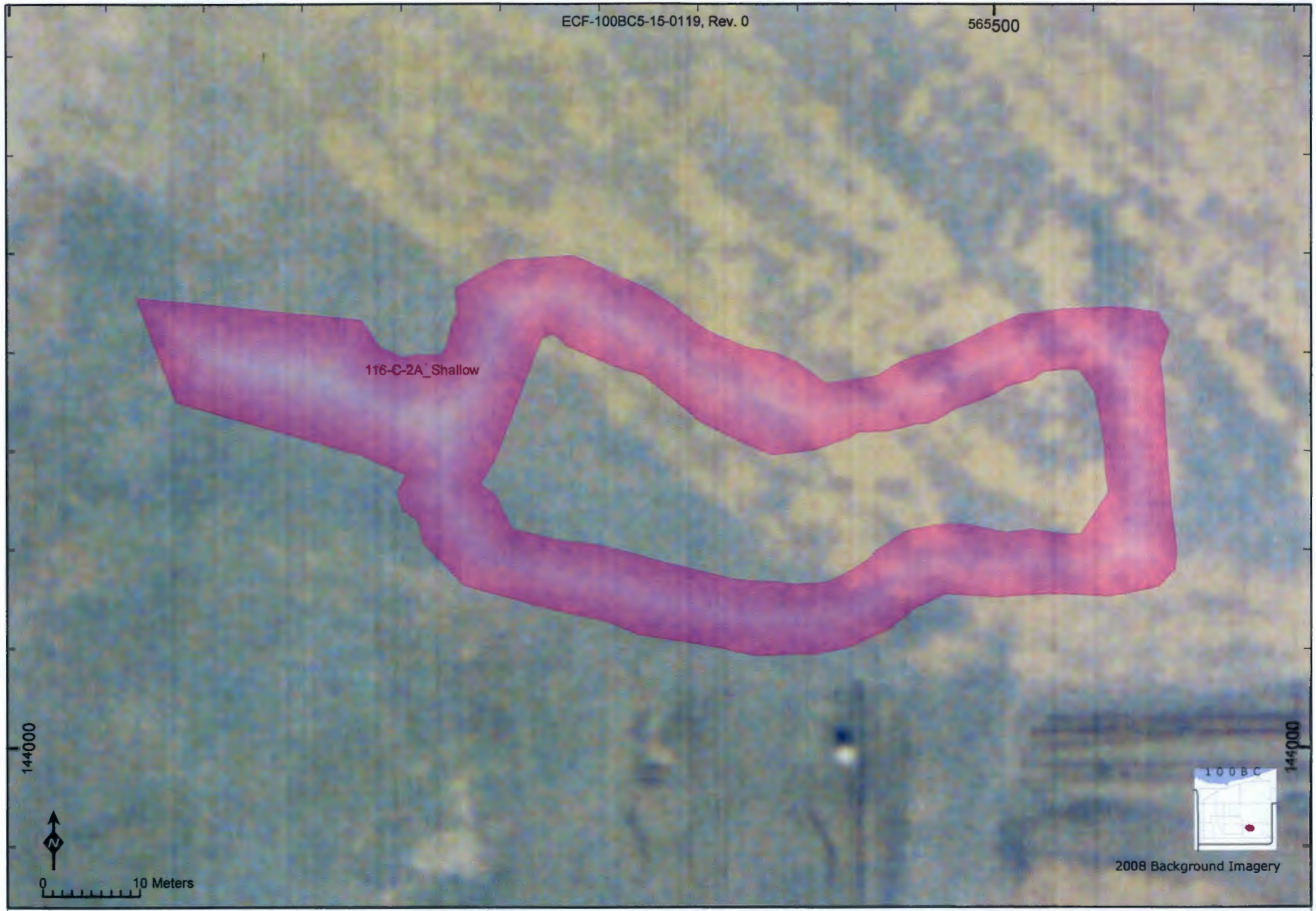
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-1_Shallow	**38.2**	148	**12.3**	8	374	0.8	69



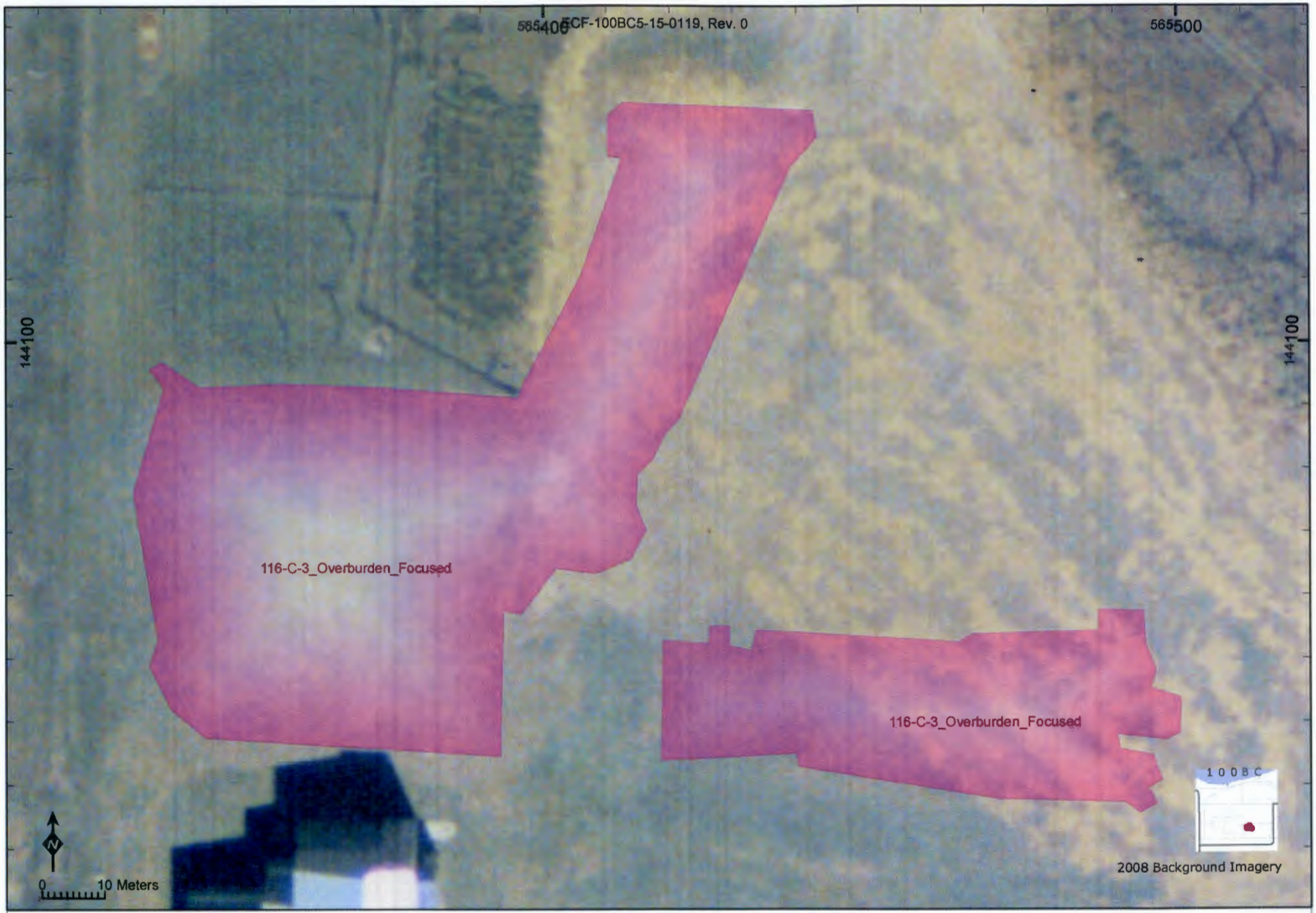
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-2A_Deep	**17**	149	**14.2**	4	64	0.4	21



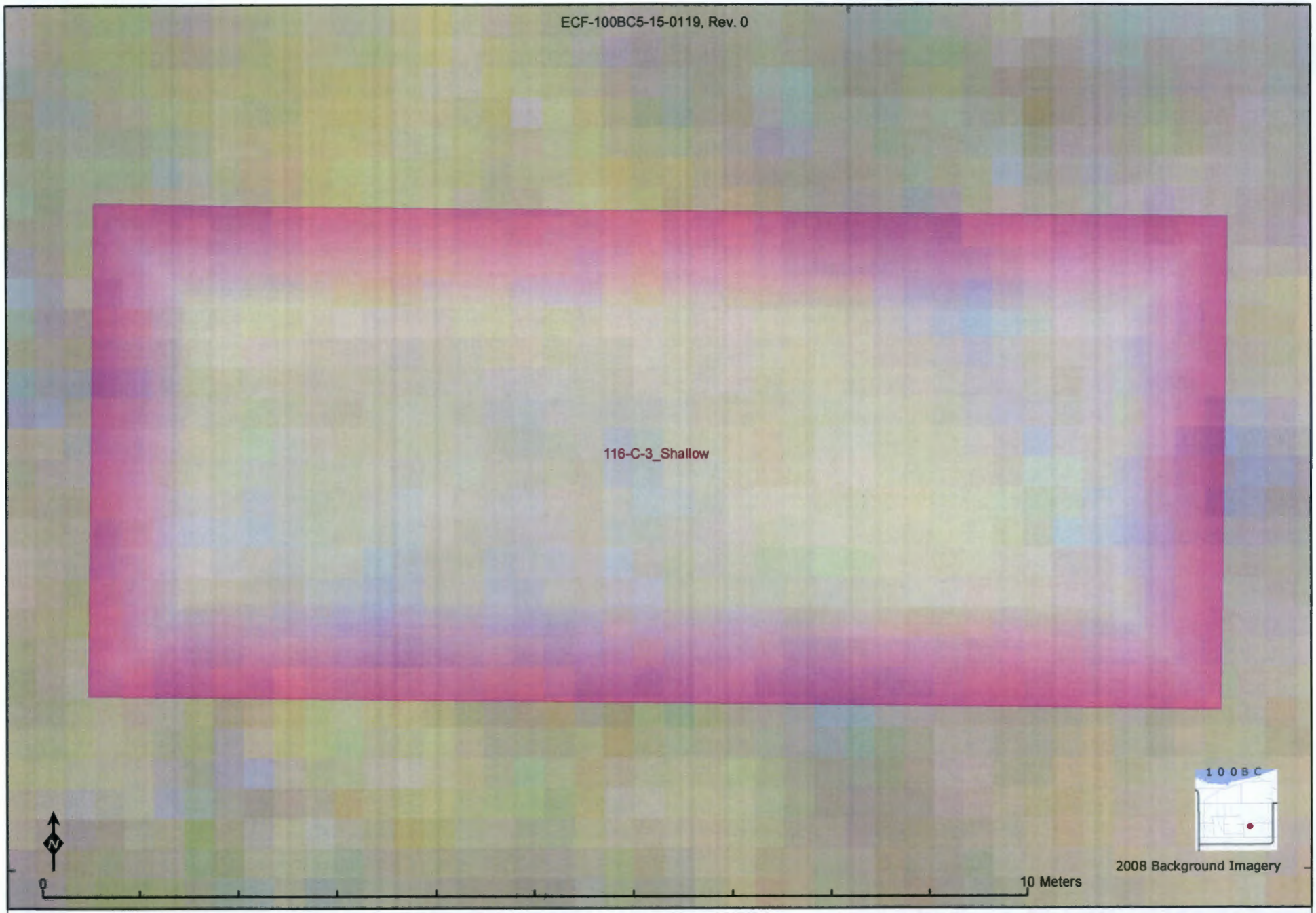
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-2A_Overburden	**17.3**	150 **23.6**	8	40	1.2	30



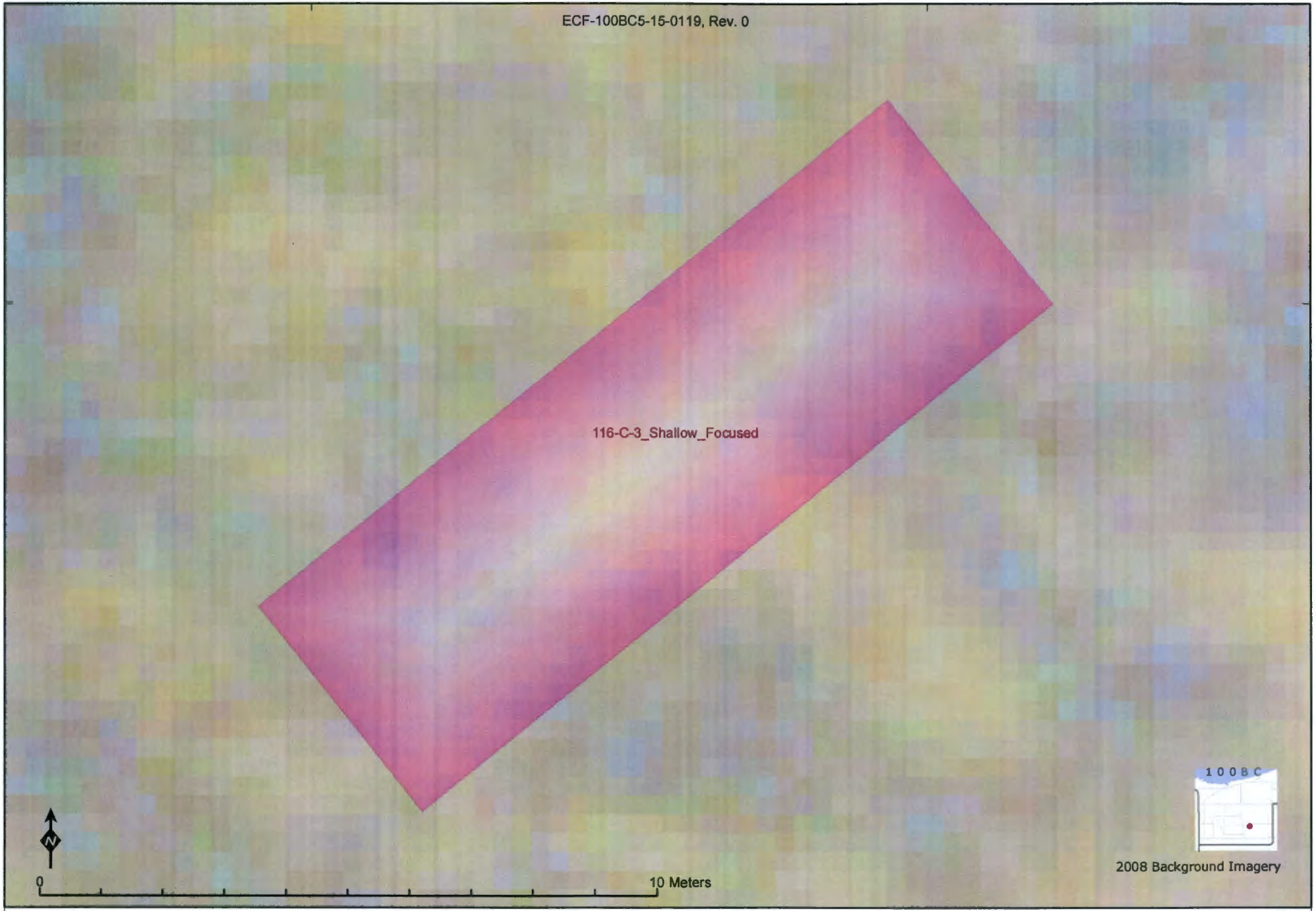
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
116-C-2A_Shallow	**23.1**	151 **9.8**	5	171	2.3	31	



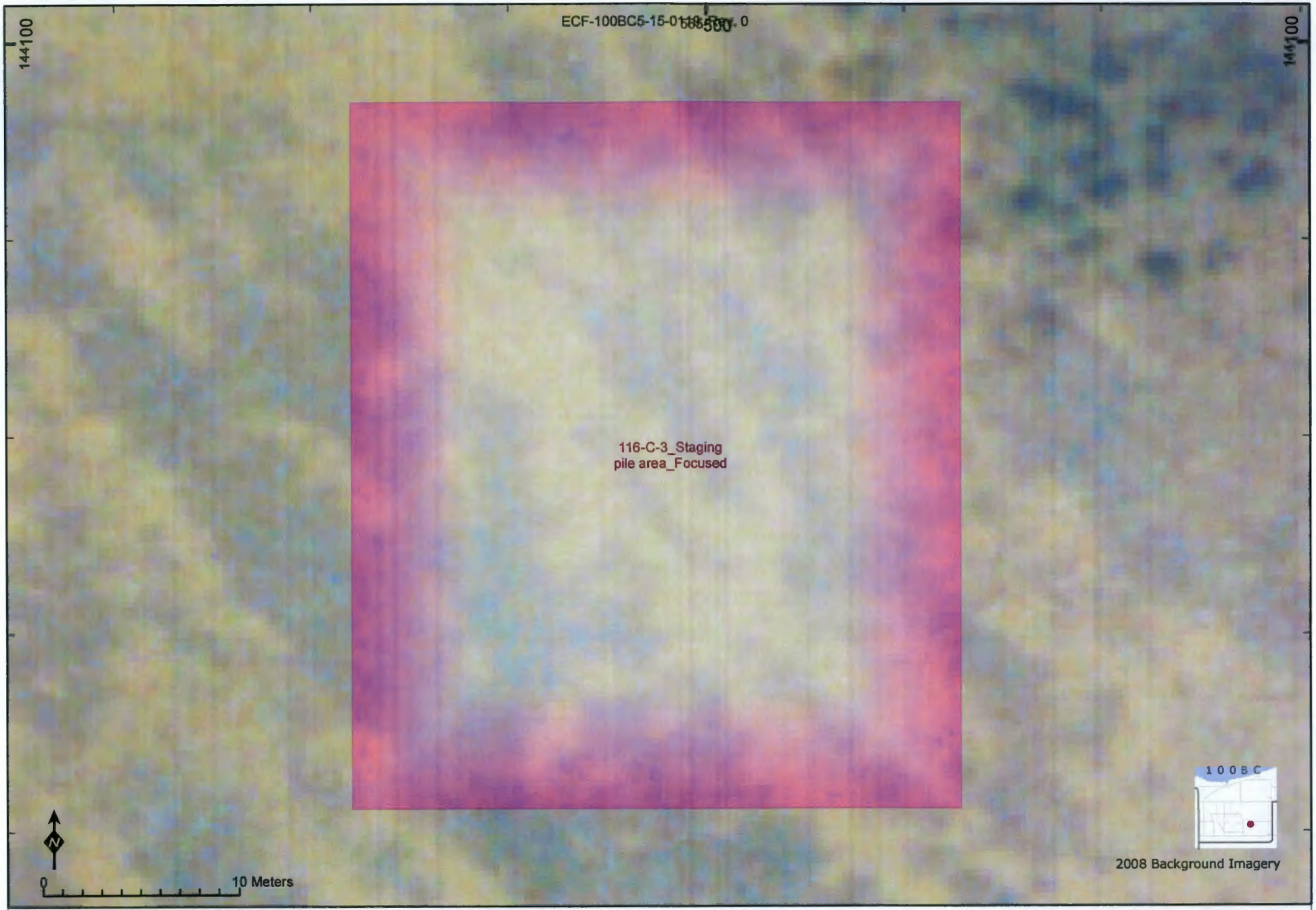
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-3_Overburden_Focused	**46.8**	152	**33.4**	19	206	0.3	72



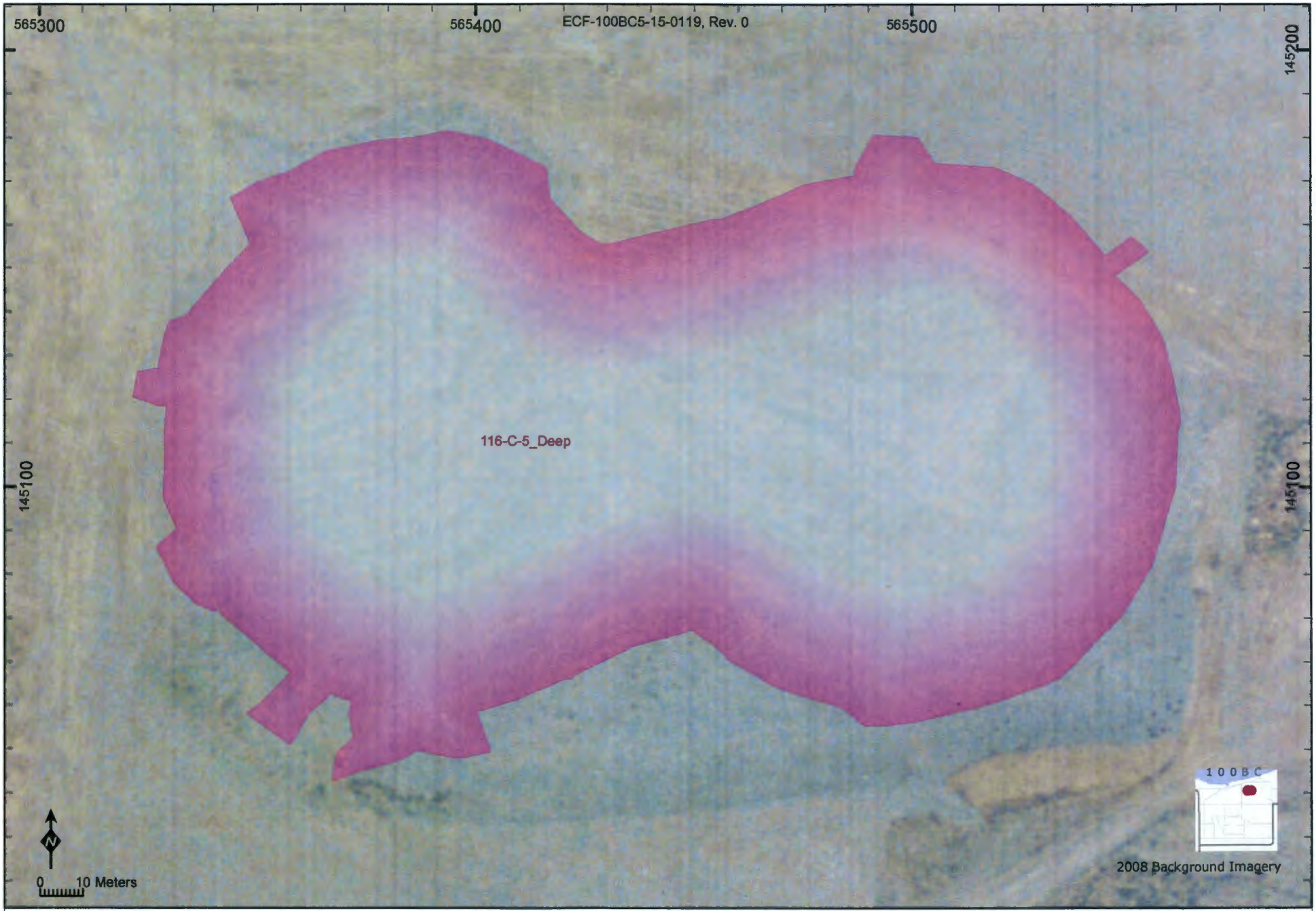
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
116-C-3_Shallow	**4.3**	153	**5**	0	11	5	5



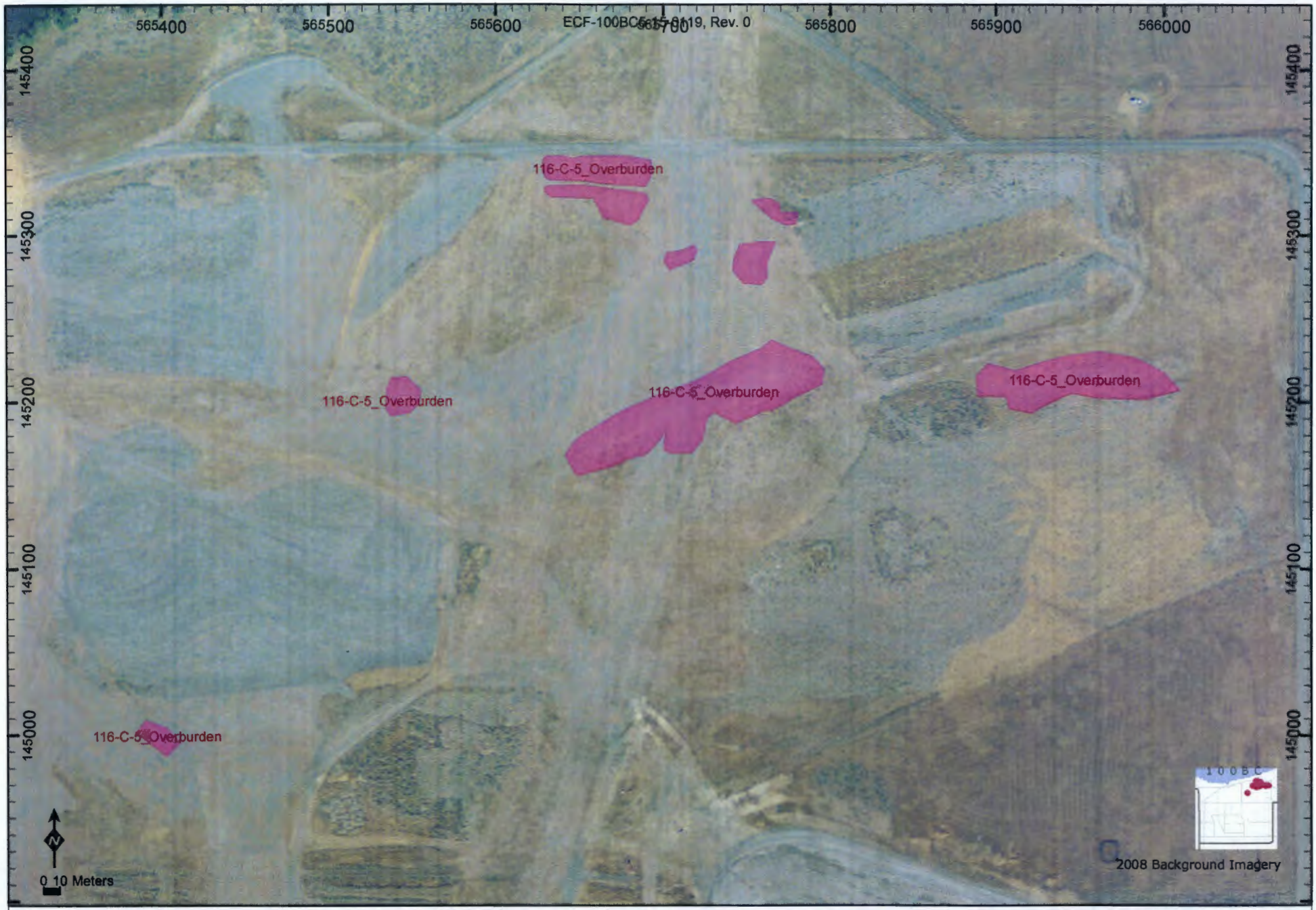
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-3_Shallow_Focused	**4.2**	154	**4.6**	1	12	1.7	5



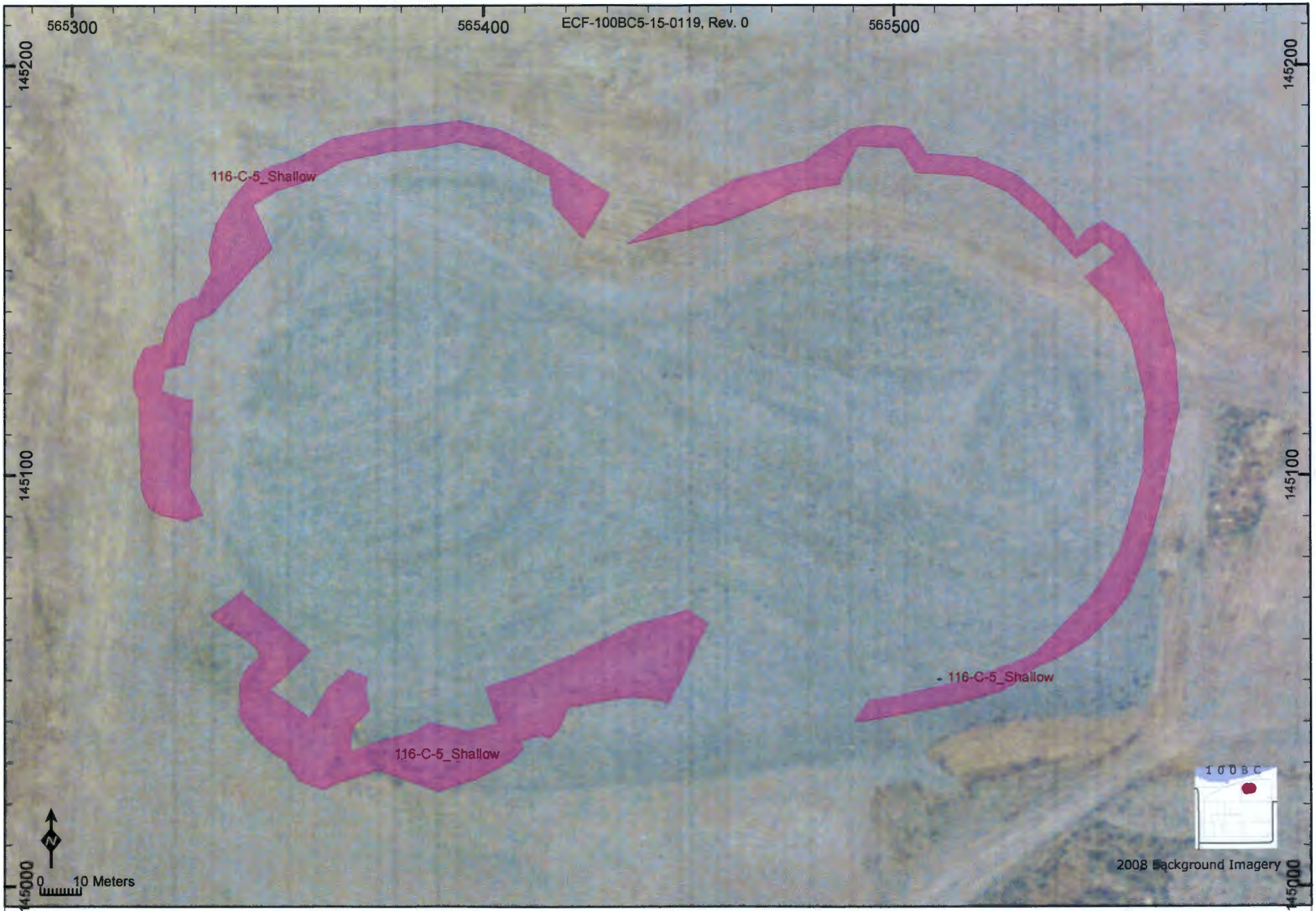
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
116-C-3_Staging pile area_Focused	**18.8**	155	**35.8**	0	31	35.8	36



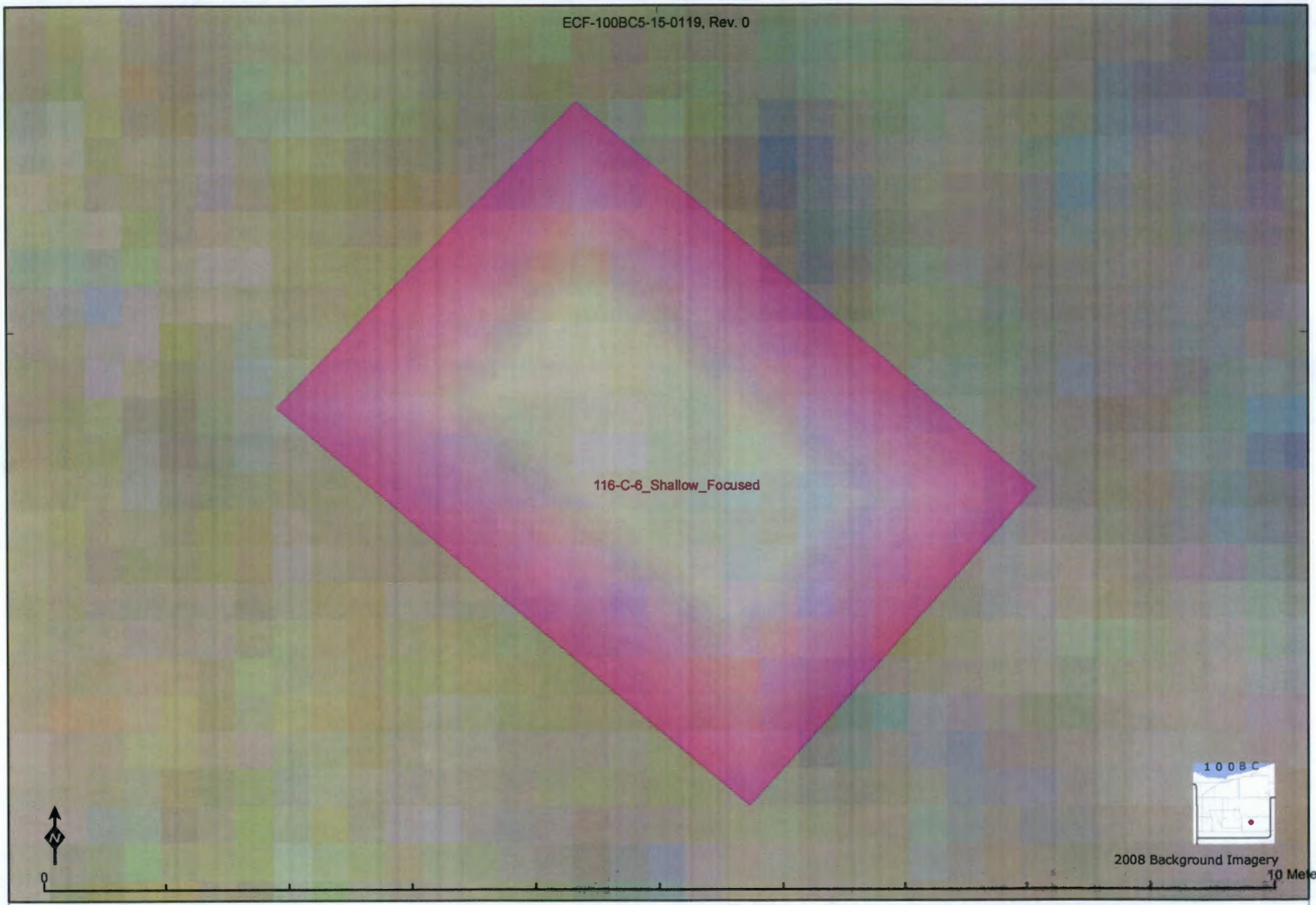
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-5_Deep	**90.4**	156	**93.1**	45	276	0.3	144



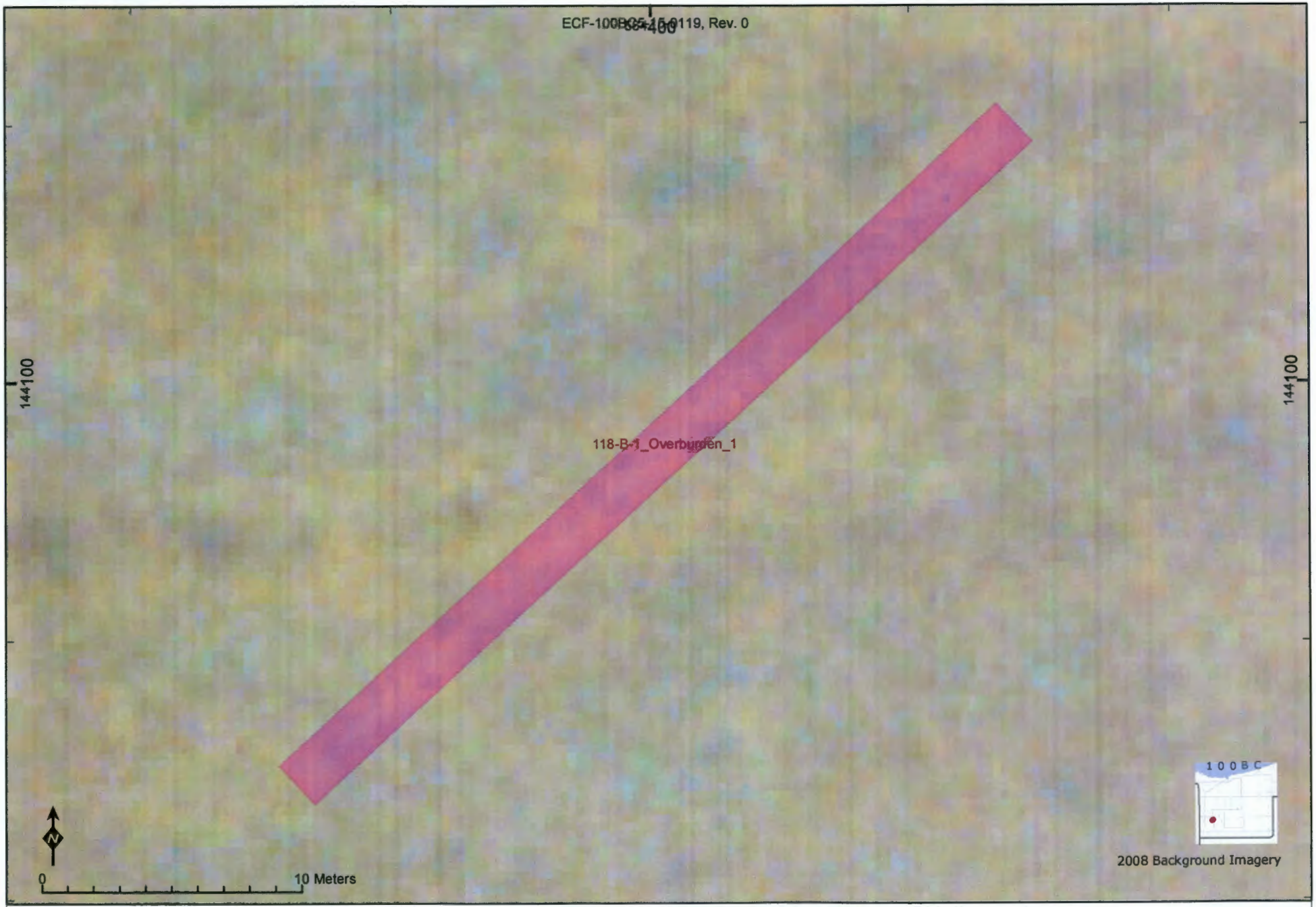
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-5_Overburden	**58.1**	157	**20.2**	10	525	0.3	42



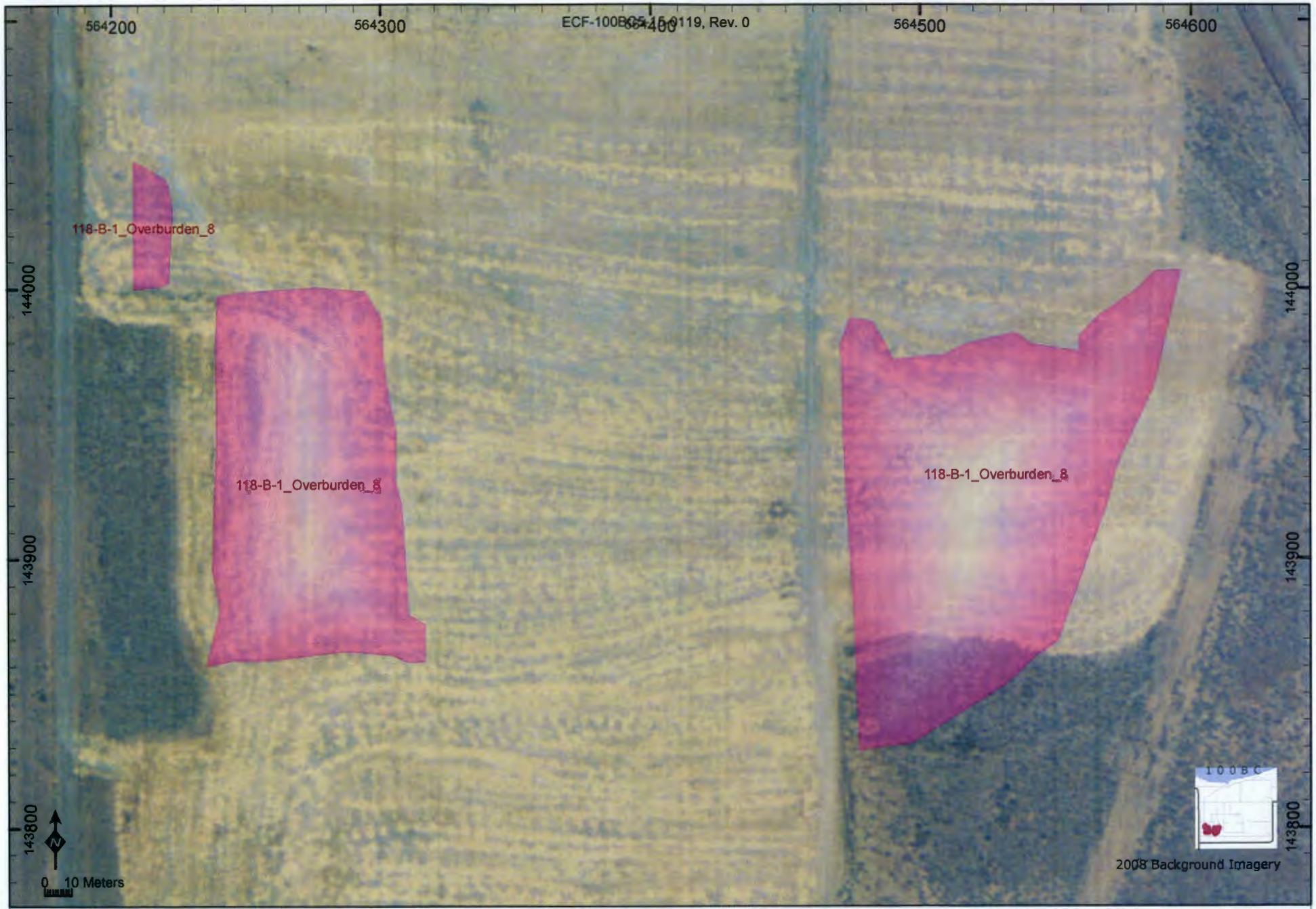
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-5_Shallow	**40.3**	158	**10.4**	8	490	0	66



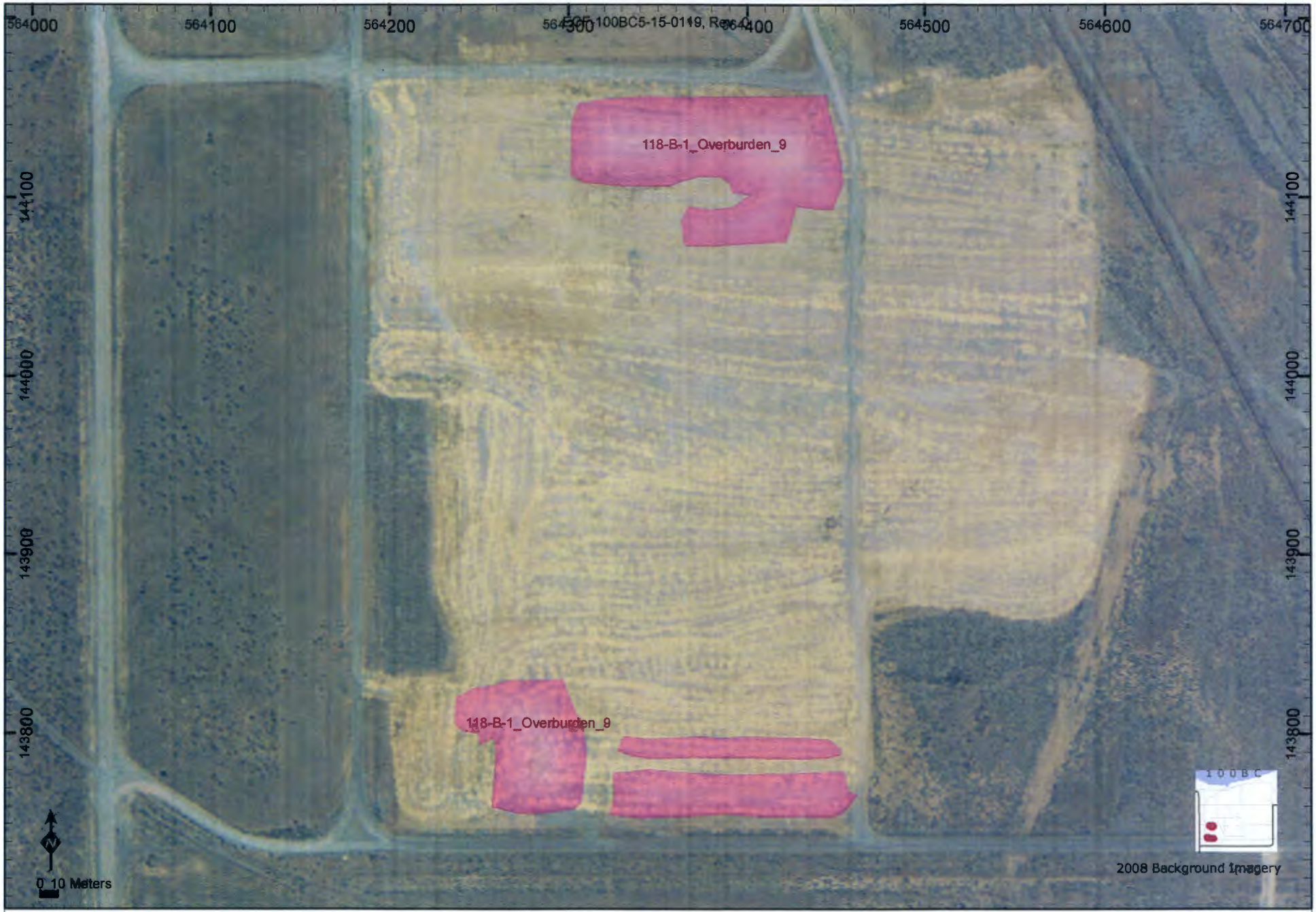
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
116-C-6_Shallow_Focused	**2.3**	159	**2.4**	2	7	0.1	5



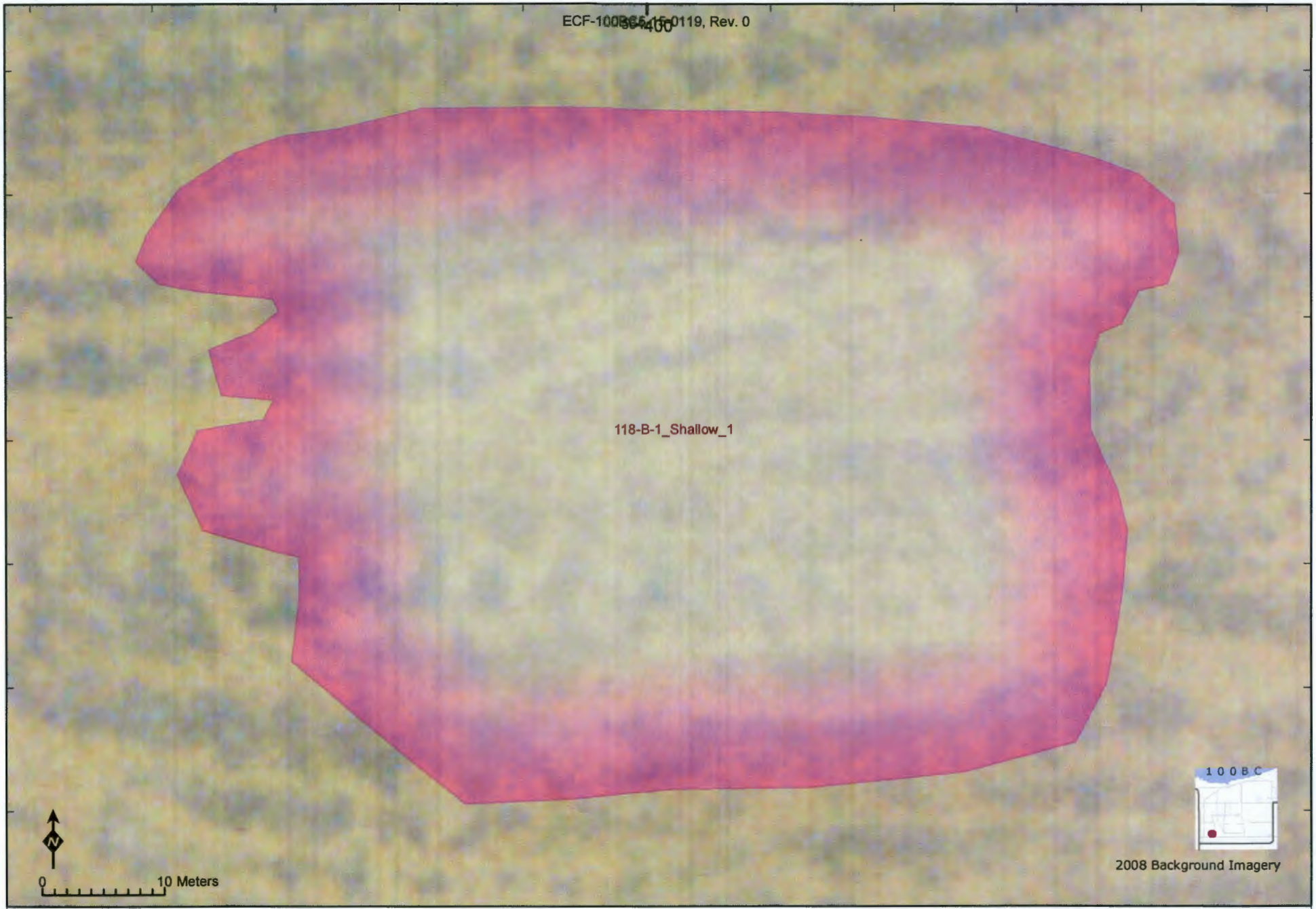
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-1_Overburden_1	**4.9**	160	**2.6**	0	29	0.7	3



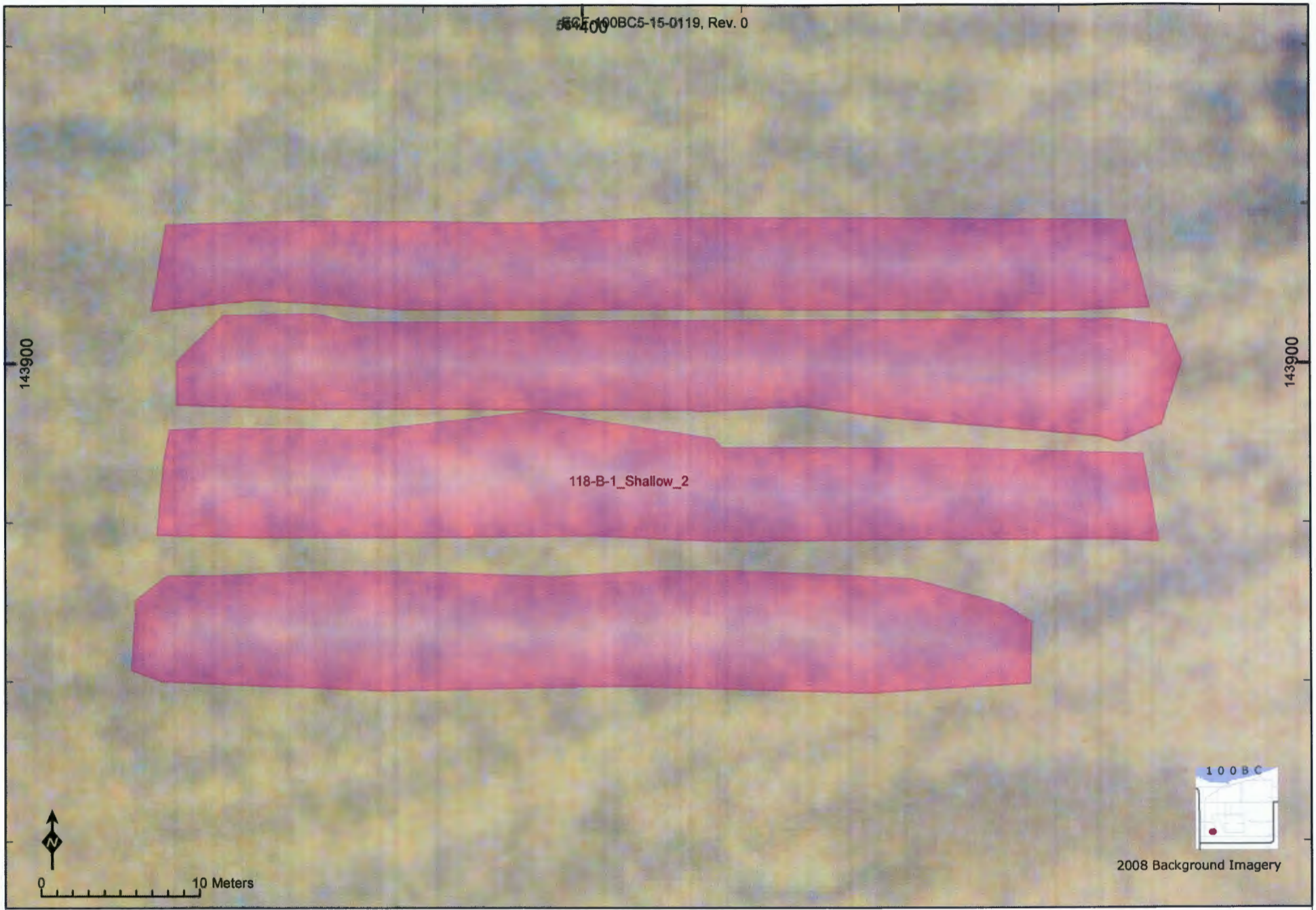
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-1_Overburden_8	**85.7**	161	**101.9**	46	226	0.9	160



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-1_Overburden_9	**74.2**	162	**32.7**	22	529	0.4	82

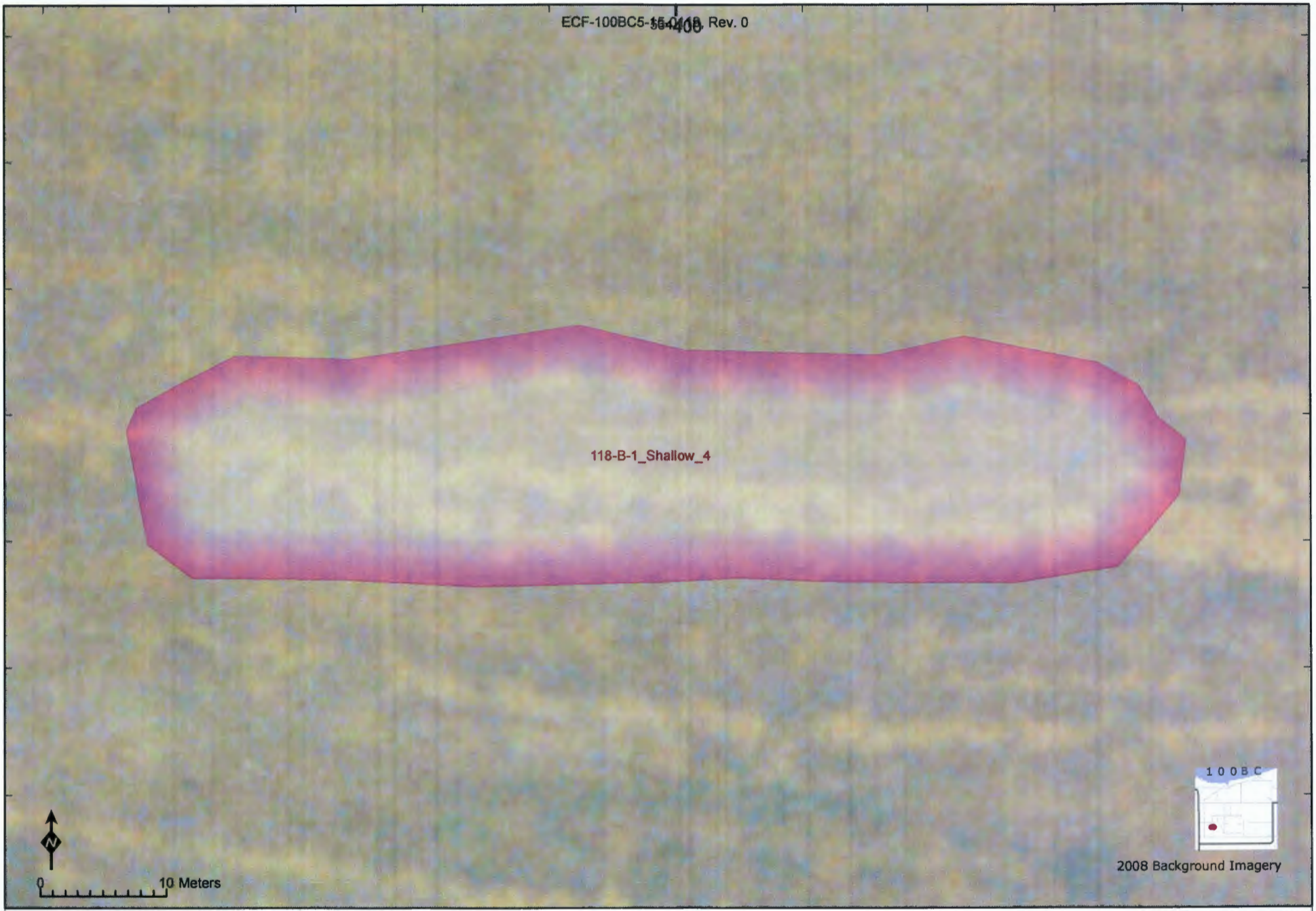


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
118-B-1_Shallow_1	**34.7**	163	**37.4**	21	101	0.3	56

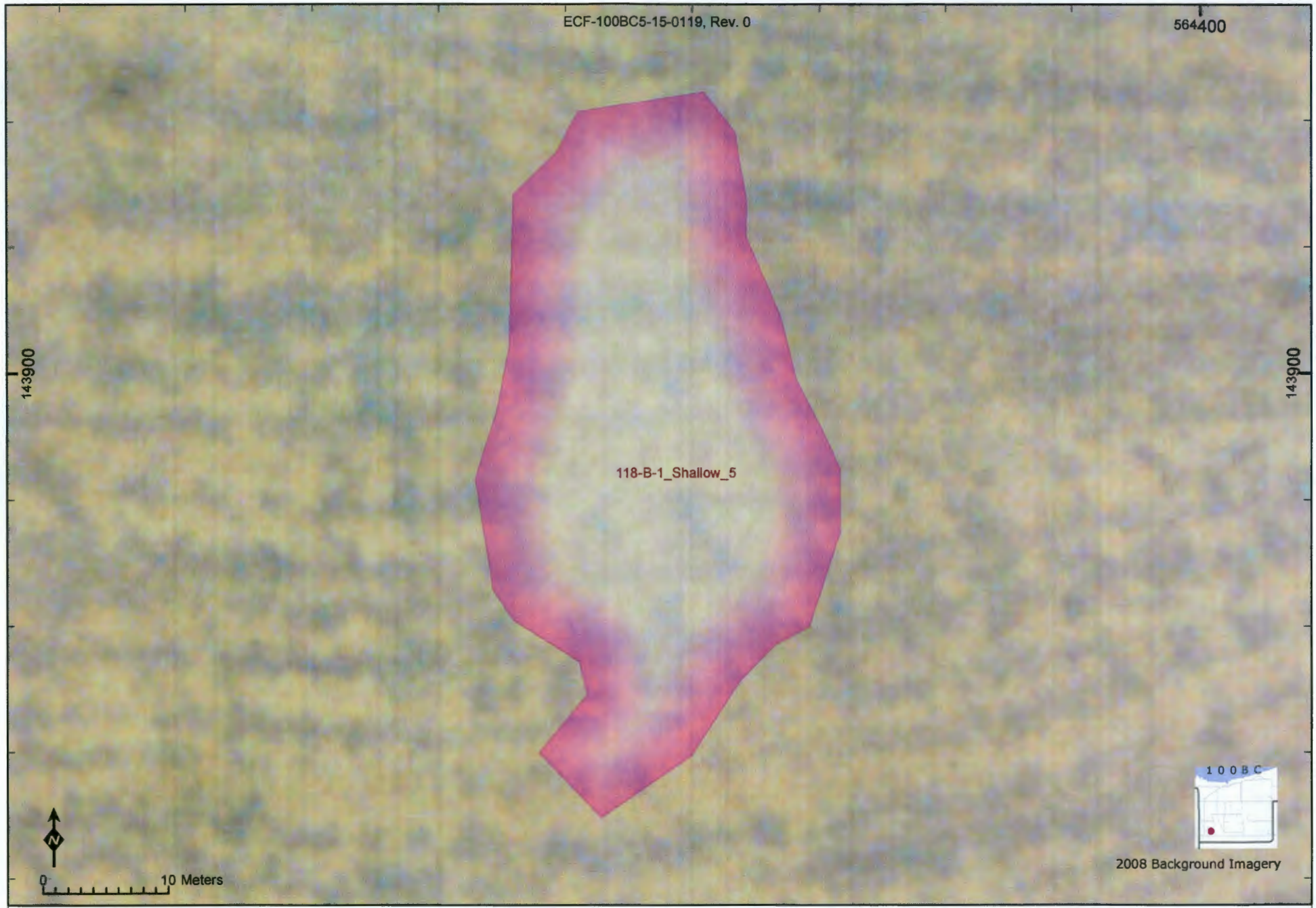


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-1_Shallow_2	**21.9**	164	**6.1**	1	246	0.1	8

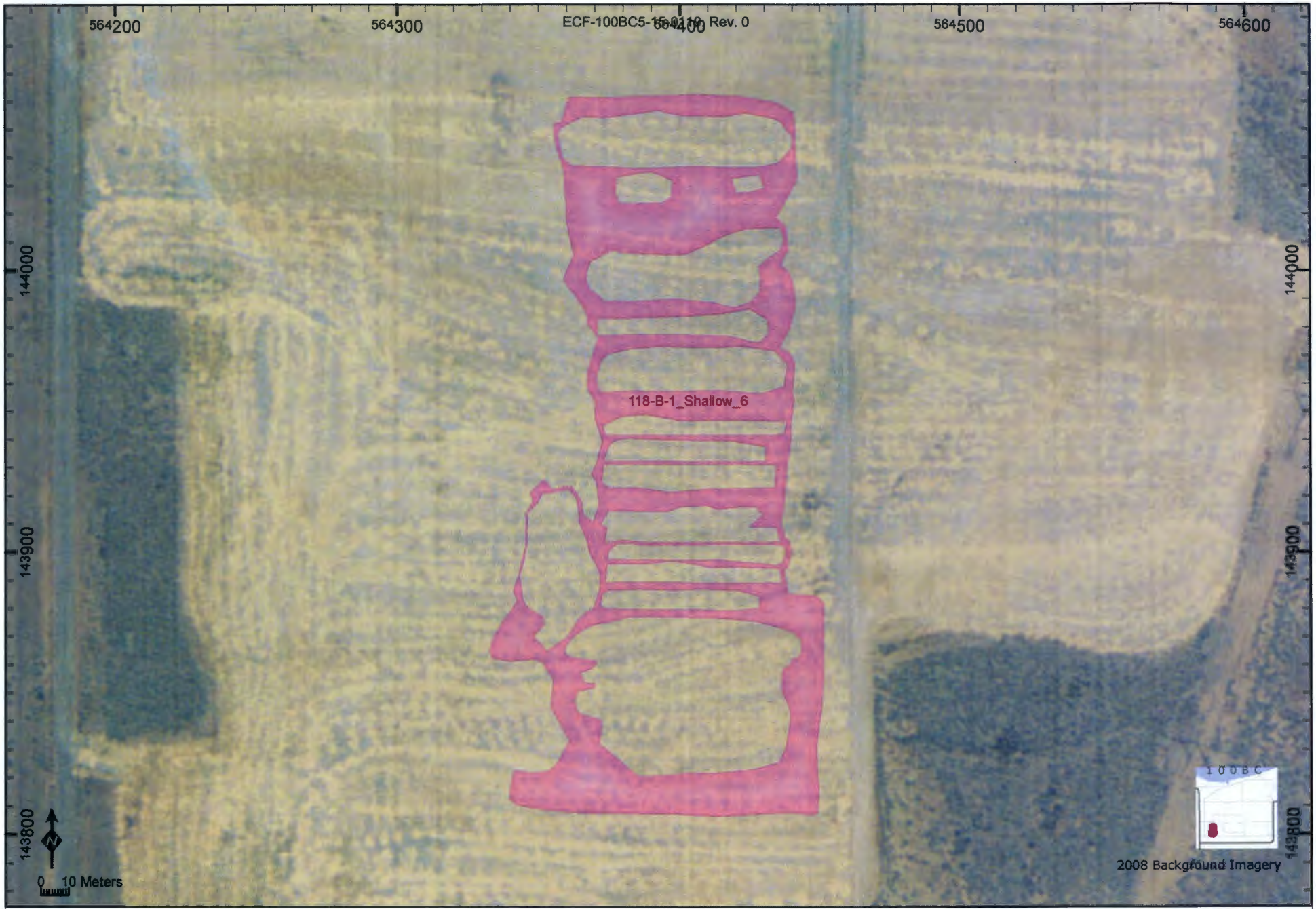
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-1_Shallow_3	**38.4**	165	**9.8**	5	475	0.5	27



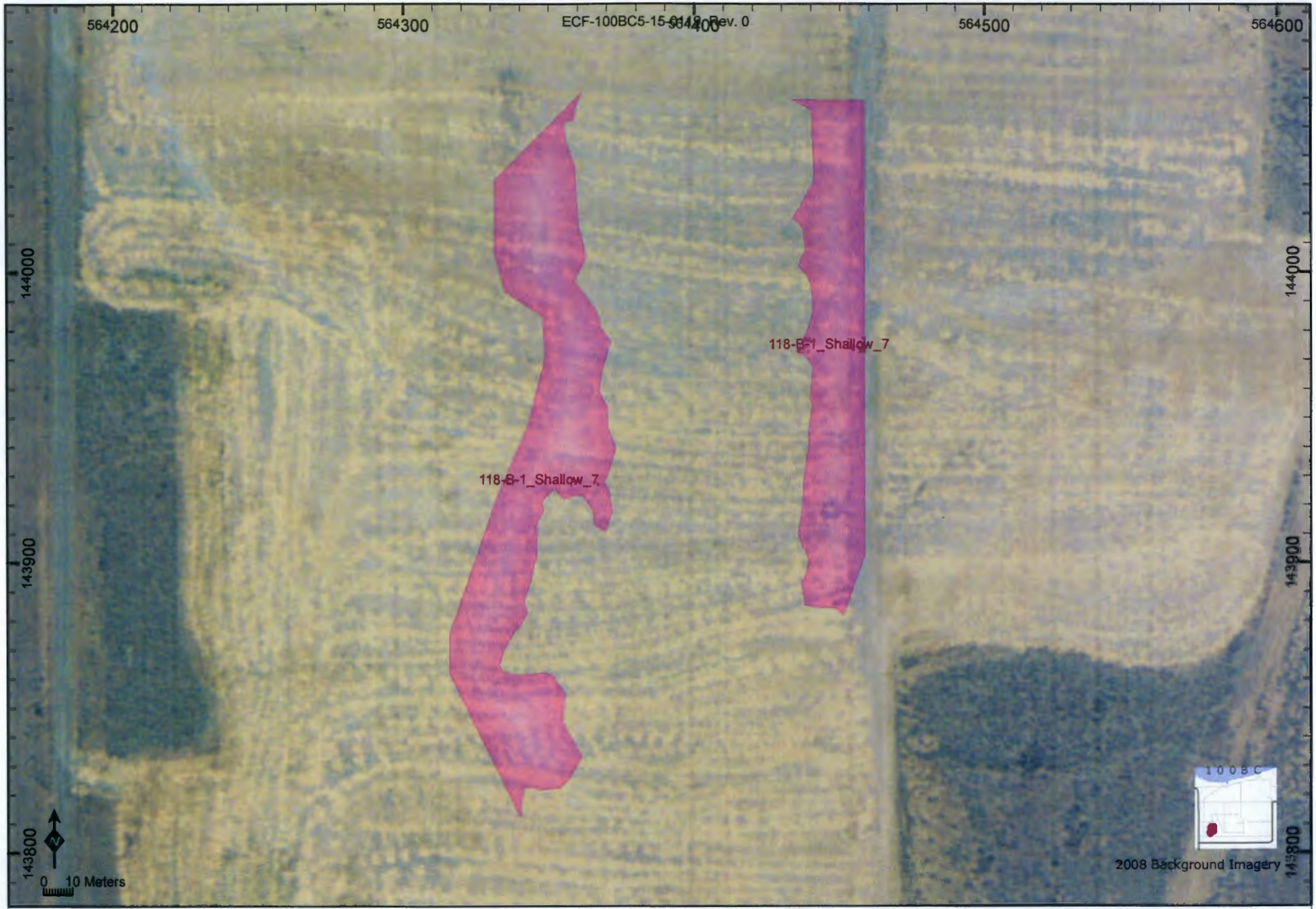
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-1_Shallow_4	**21.5**	166	**17.2**	4	84	0.8	20



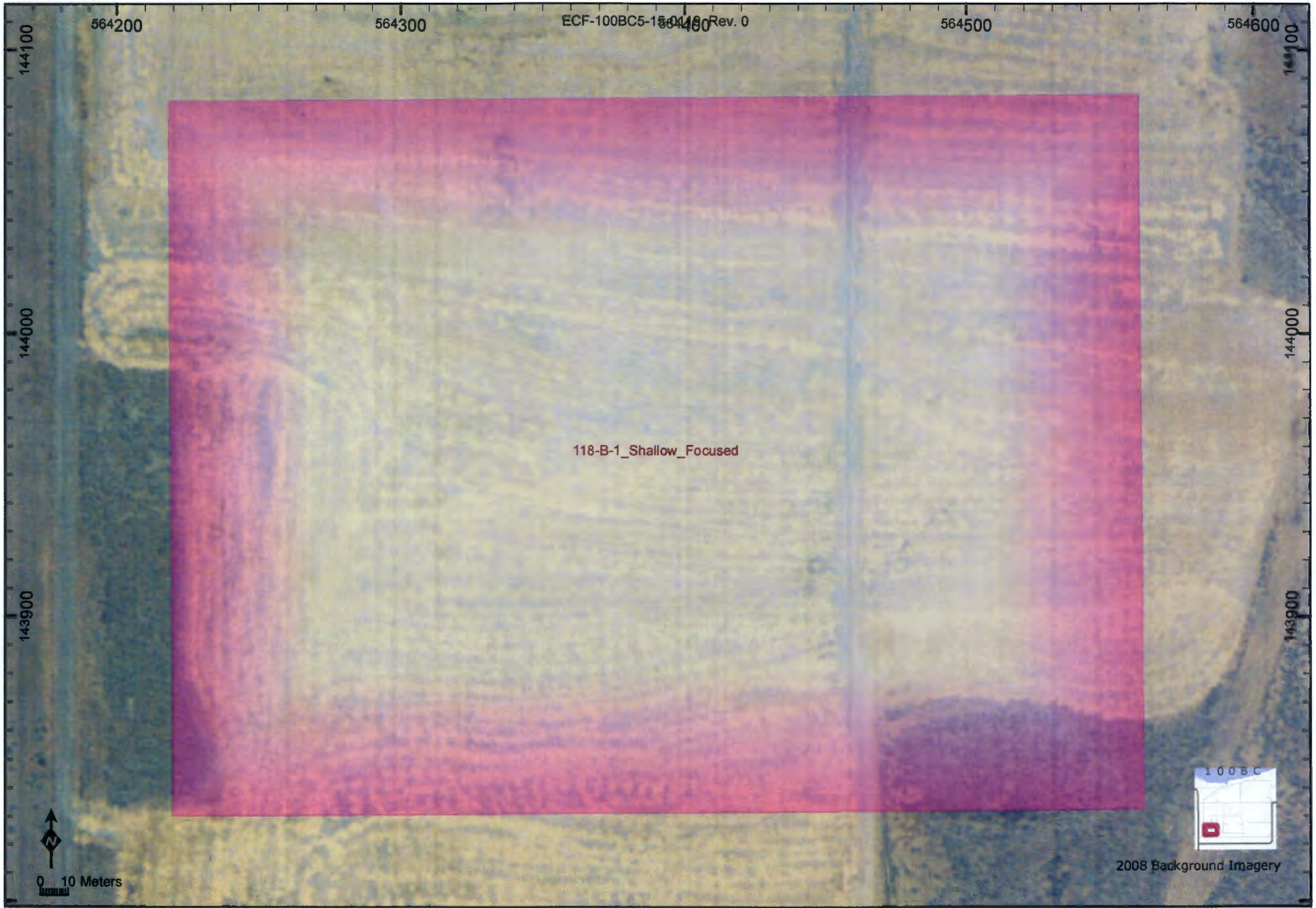
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
118-B-1_Shallow_5	**18.6**	167	**33.1**	19	33	0.4	56



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-1_Shallow_6	**54.3**	168	**8.6**	10	1081	0.1	77



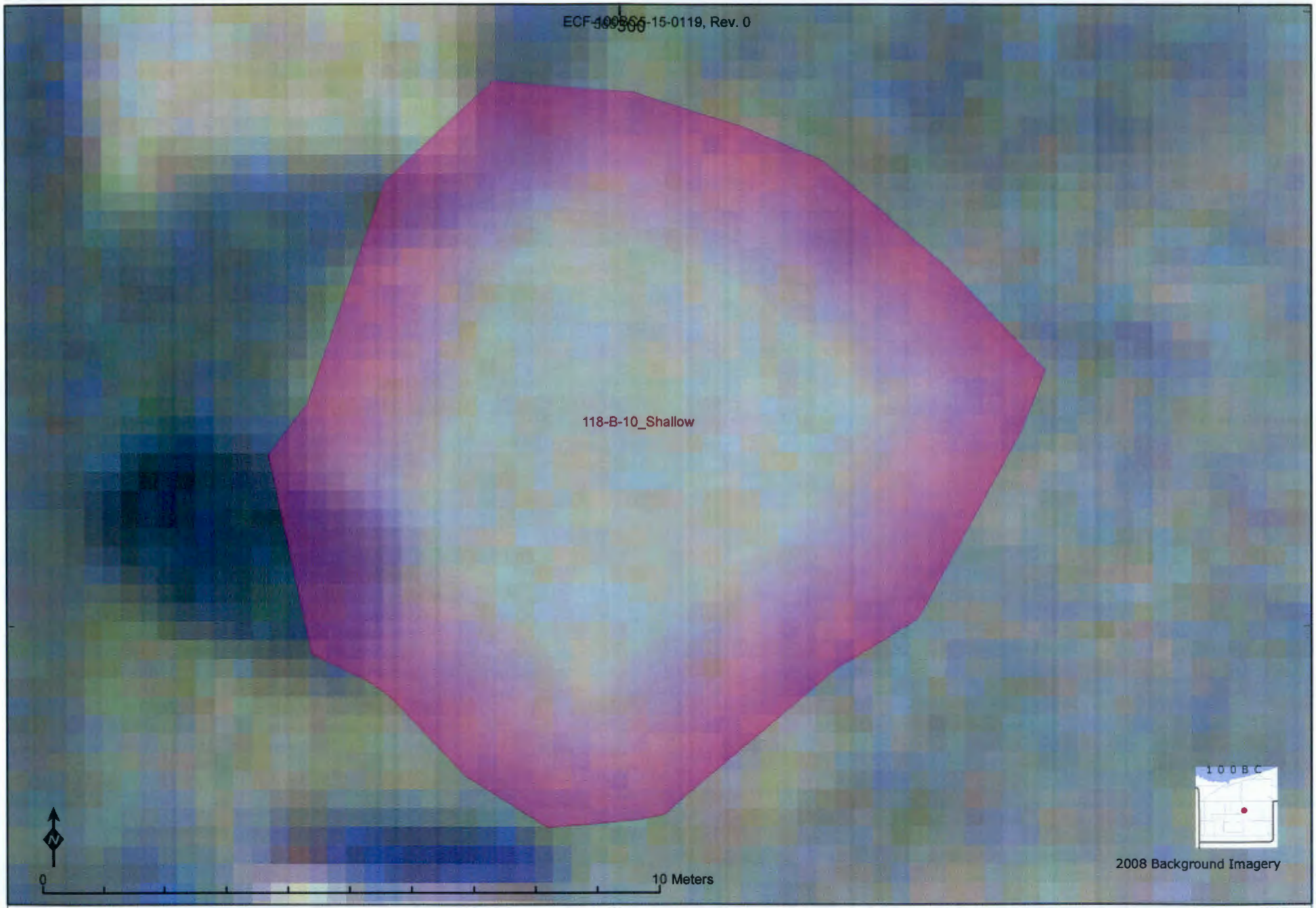
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
118-B-1_Shallow_7	**54.1**	169	**55**	51	168	0.5	177



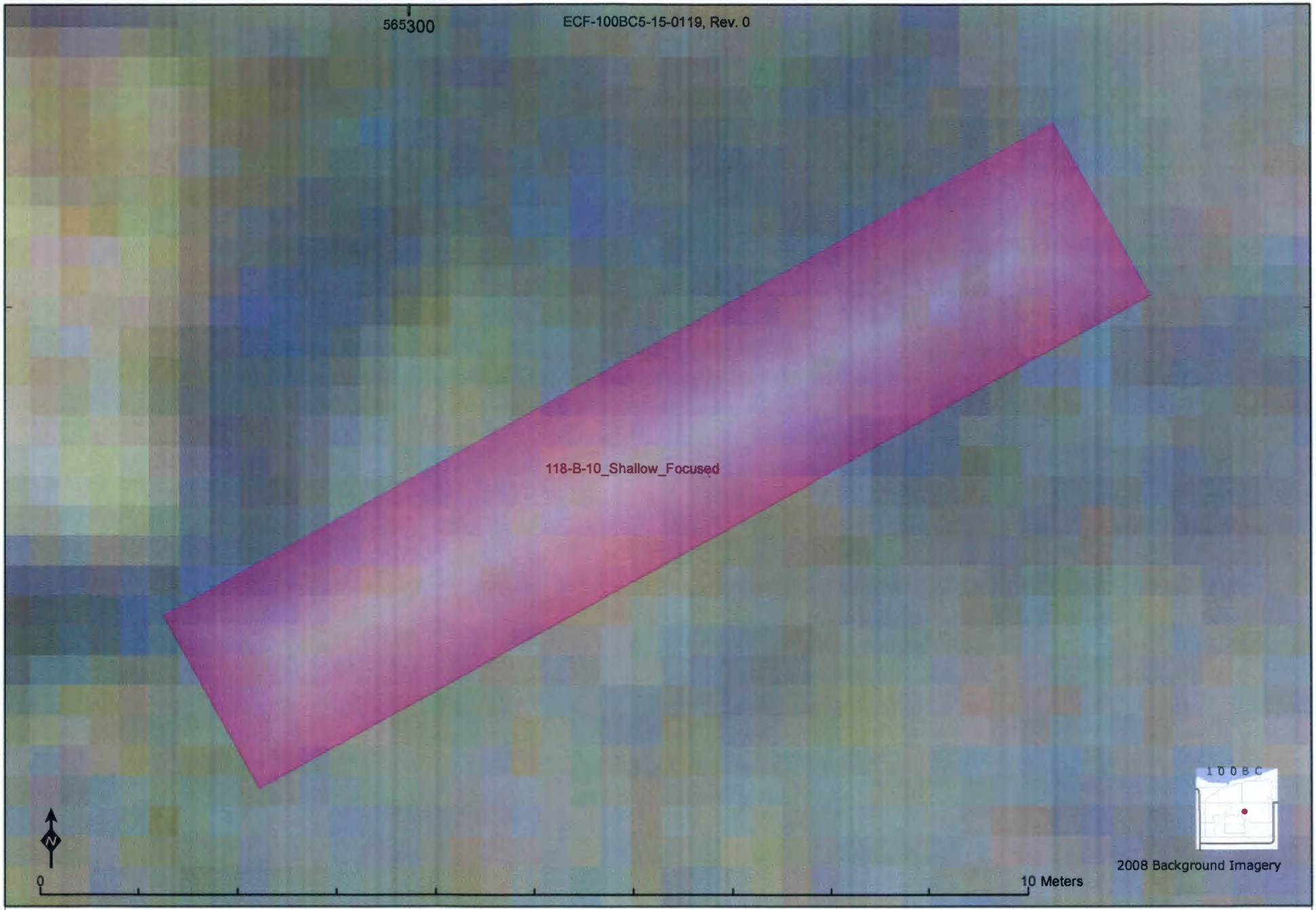
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics				
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-1_Shallow_Focused	**165.5**	170 **250.9**	13	343	52.7	252

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-1_Staging pile area	**94.2**	171	**103.6**	28	269	0.1	151

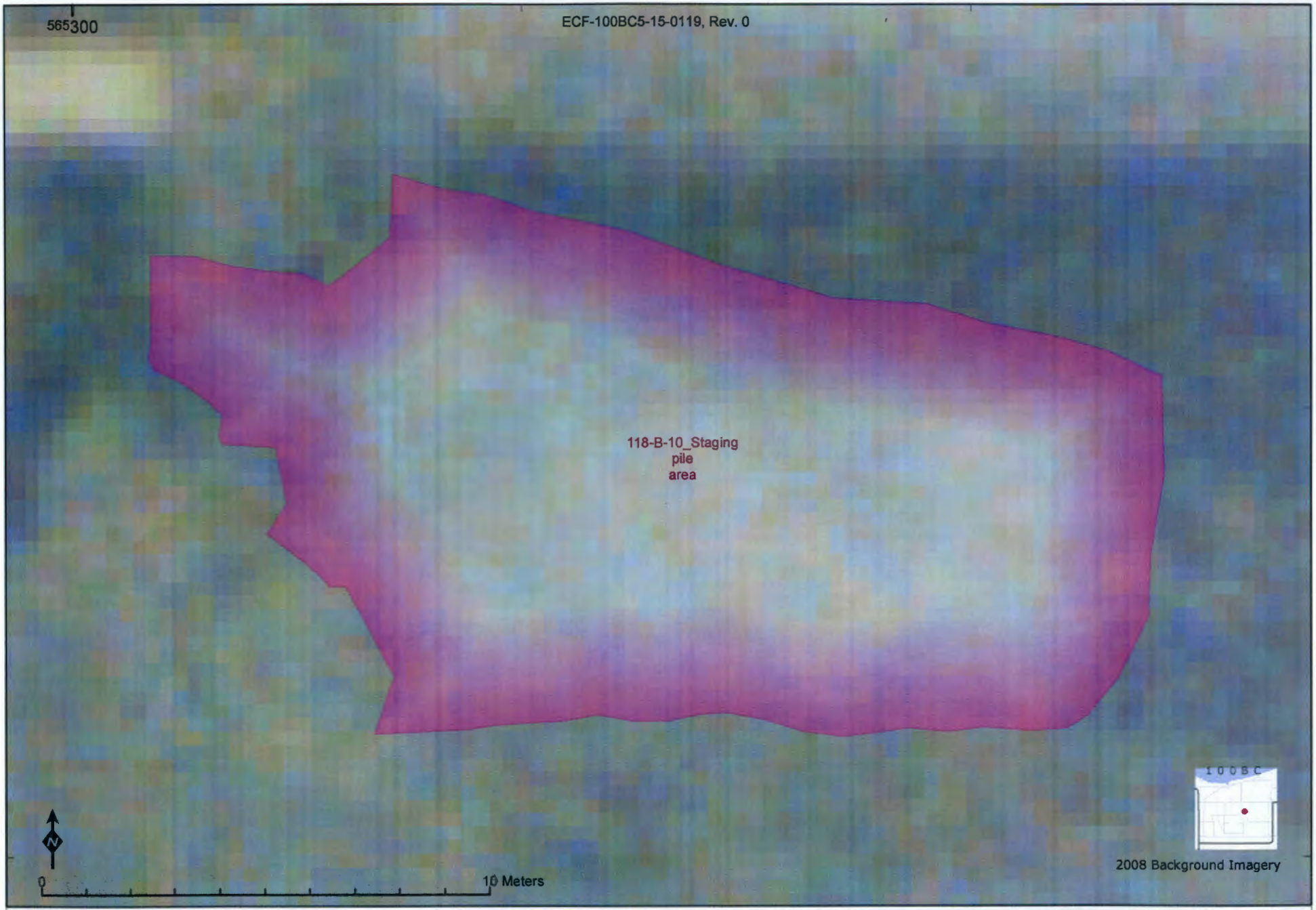
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-1_Staging pile area_Focused	**10.2**	172	**2.9**	0	113	1.5	3



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-10_Shallow	**5.7**	173	**8.6**	3	12	2.8	12



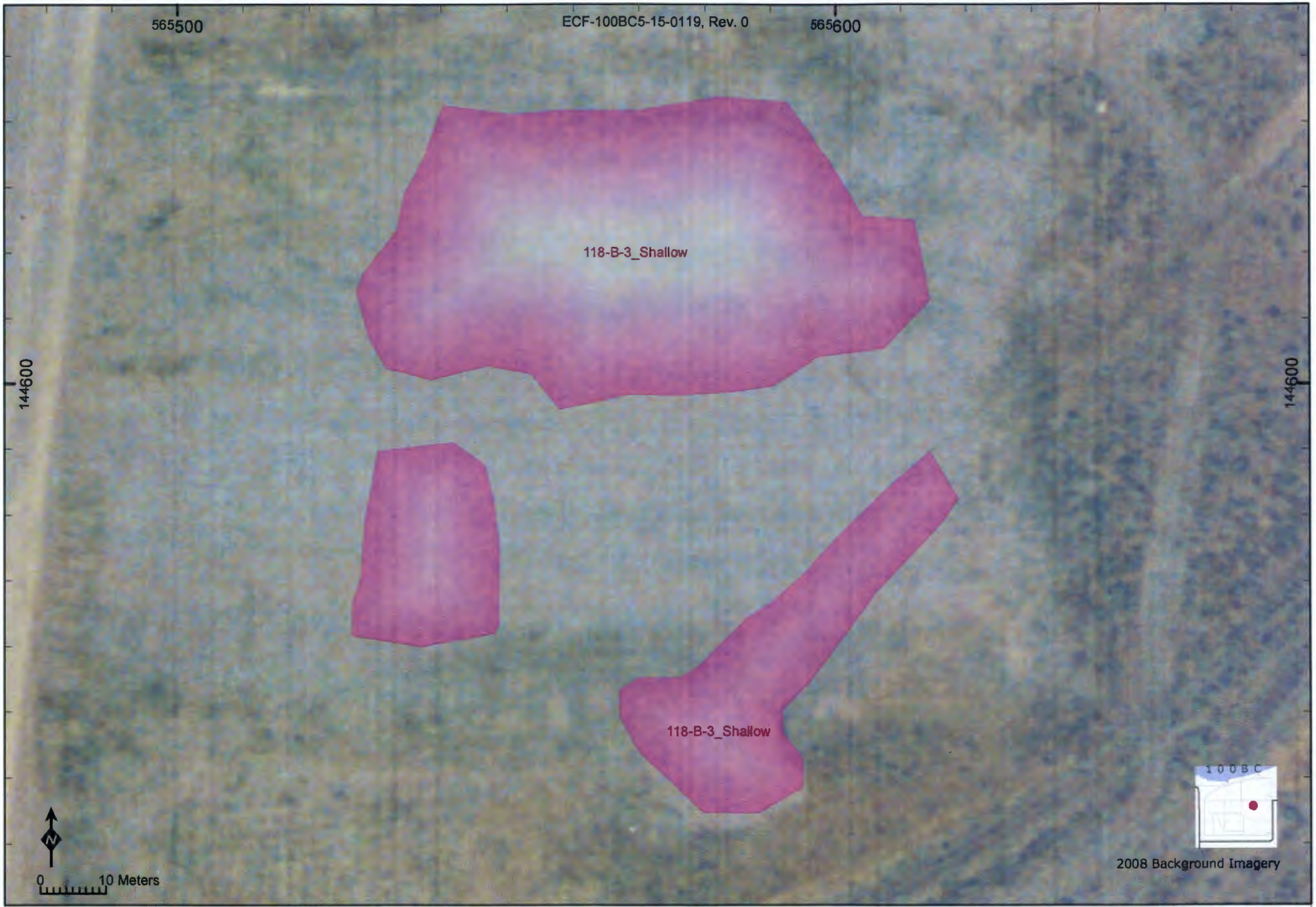
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-10_Shallow_Focused	**2.6**	174	**2.1**	0	10	1.1	2



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-10_Staging pile area	**7.9**	175	**8.3**	3	24	0.9	12

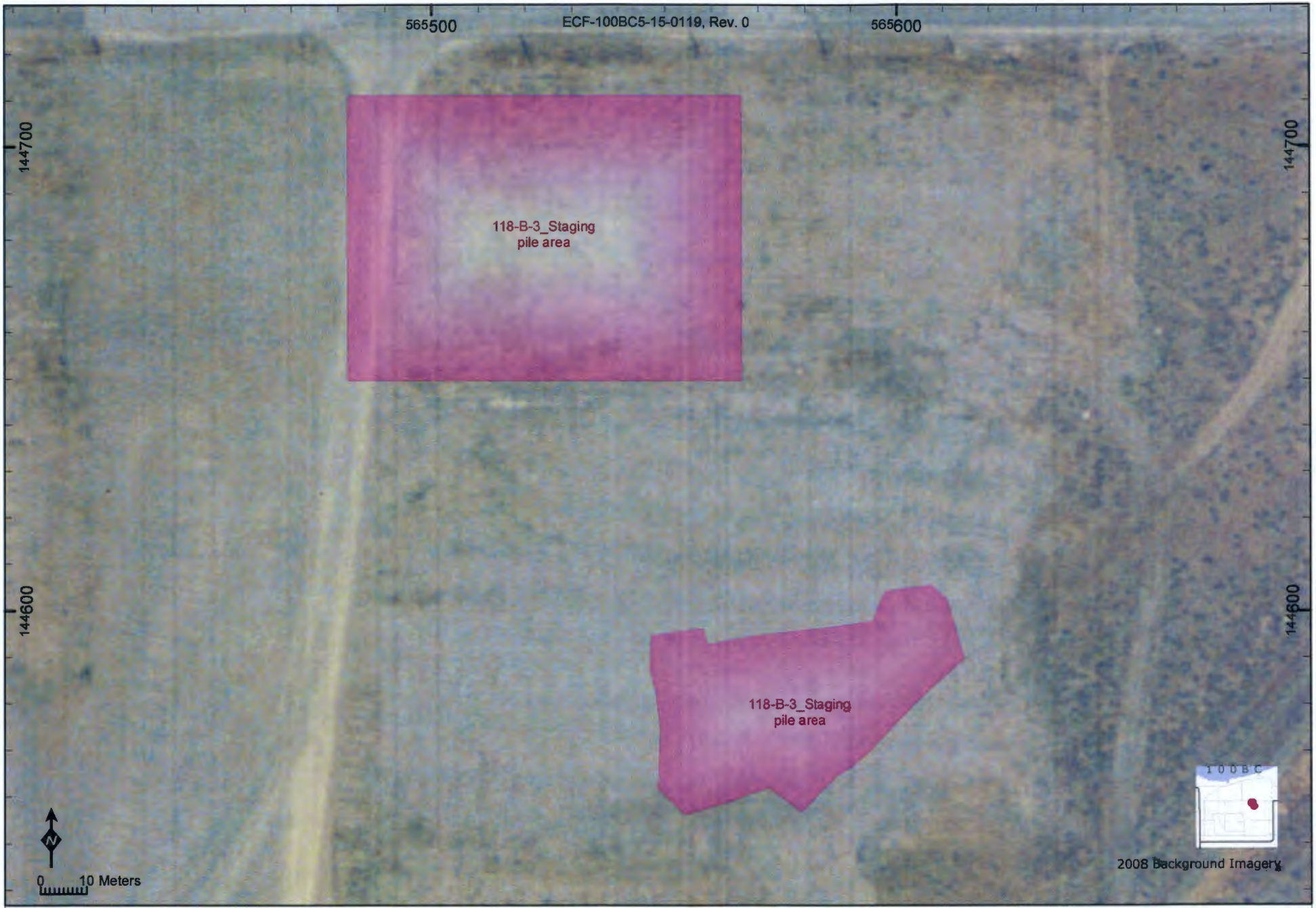
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-3_Overburden_2	**46.1**	176	**40.2**	8	166	2	45

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-3_Overburden_4	**38.3**	177	**76.8**	33	60	0.5	101

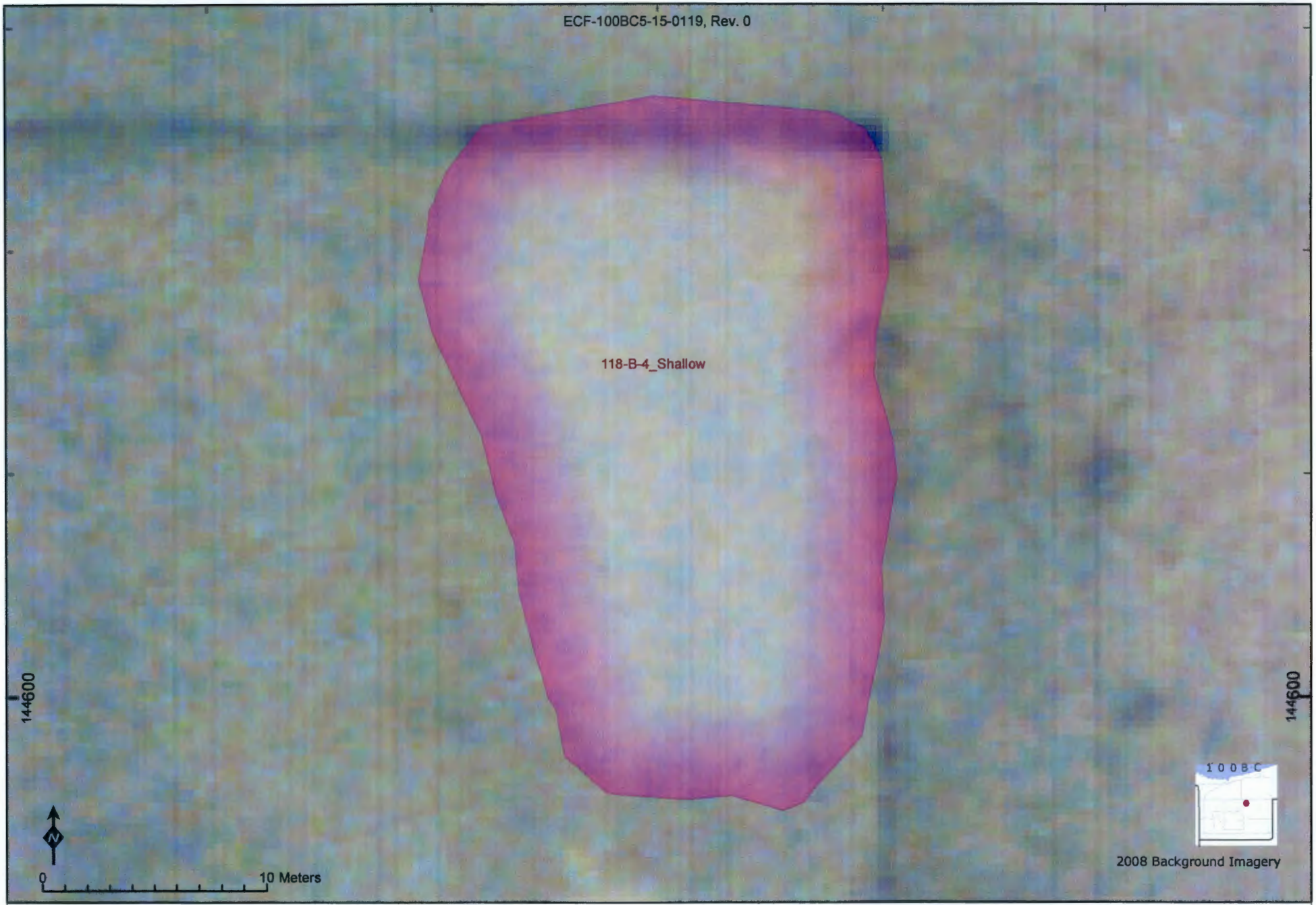


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-3_Shallow	**38.1**	178	**27.8**	13	164	1.5	46

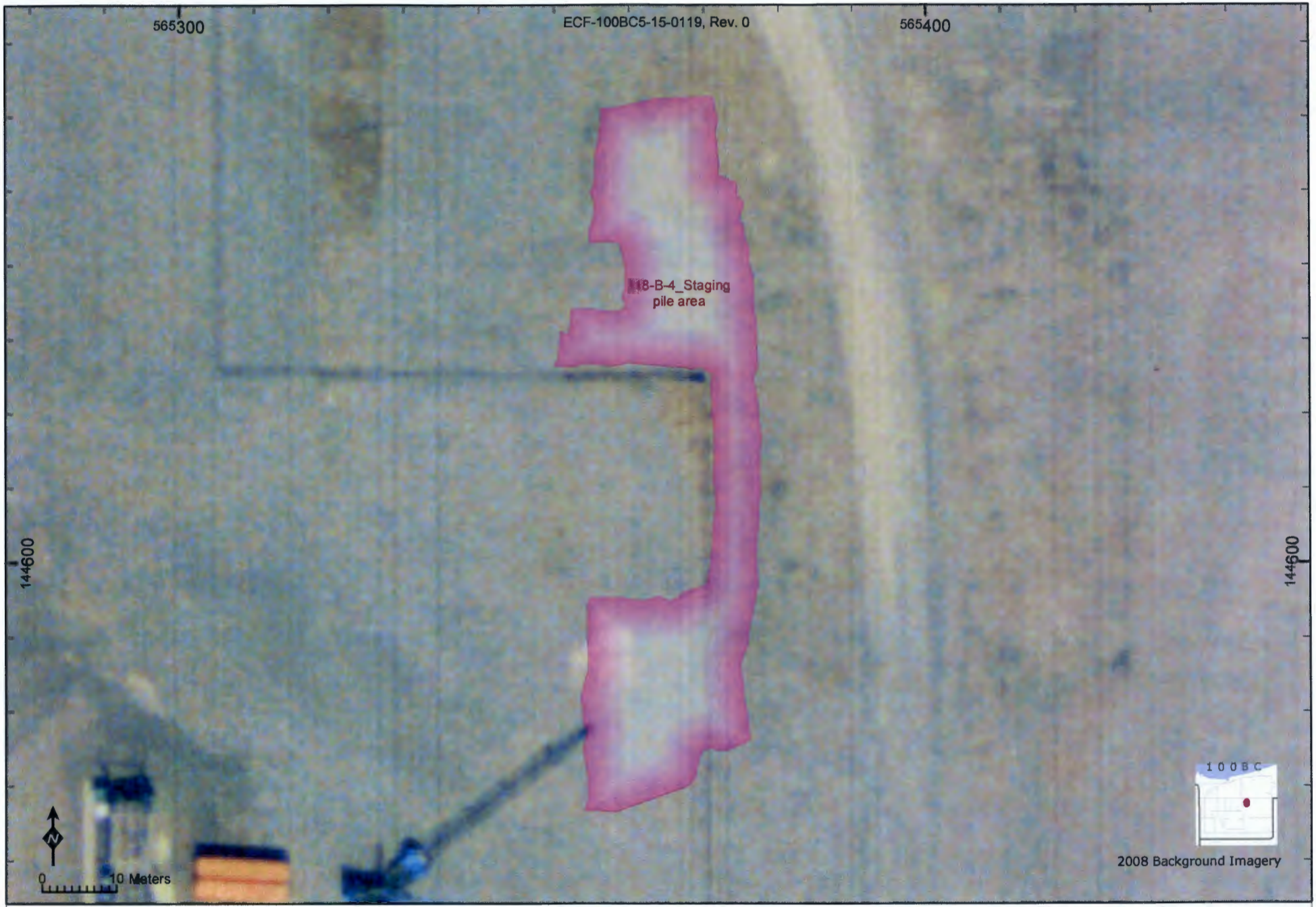
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-3_Shallow_Focused	**35.6**	179	**63.2**	30	63	2.2	92



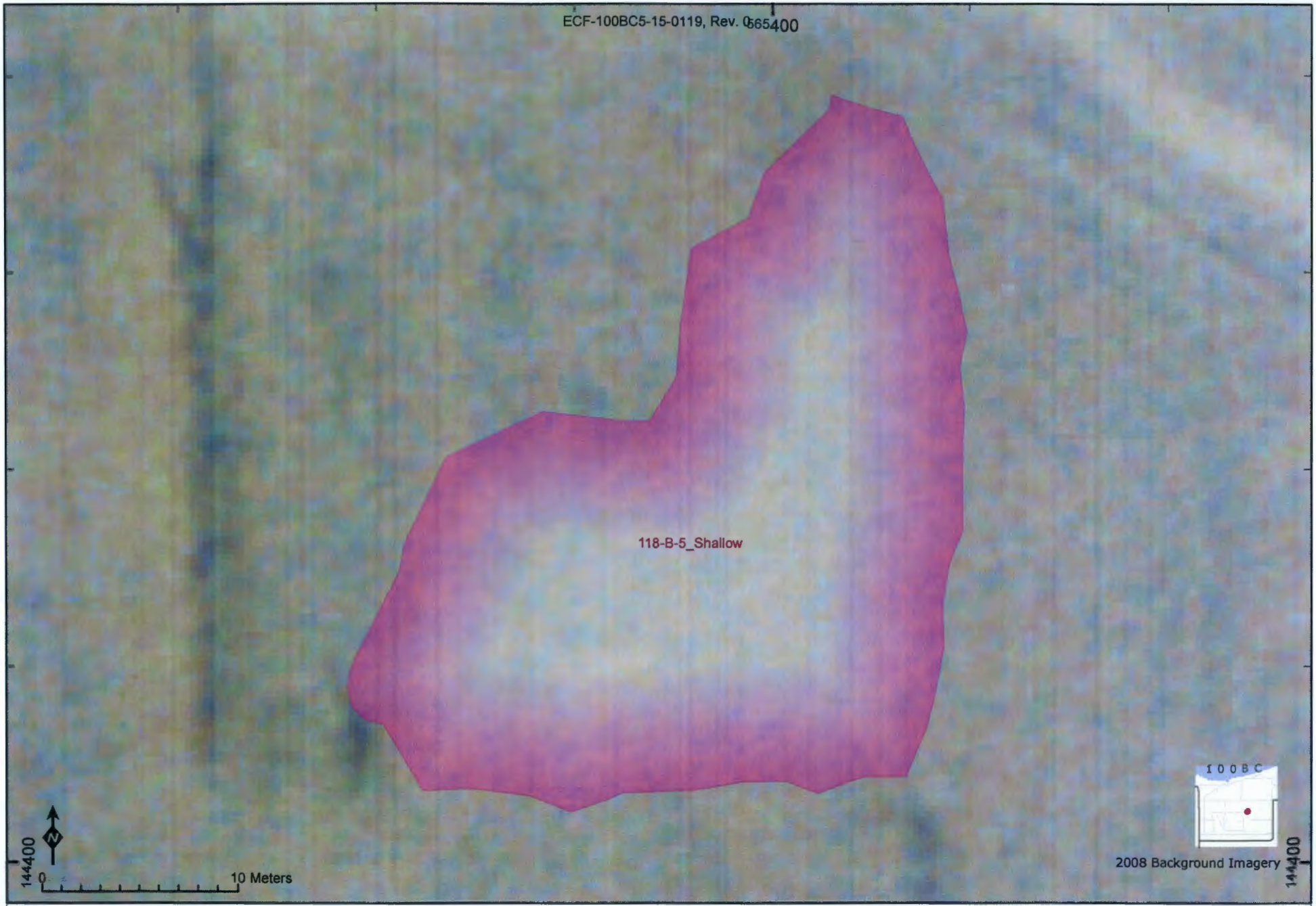
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-3_Staging pile area	**47.9**	180	**47.5**	17	153	1.1	61



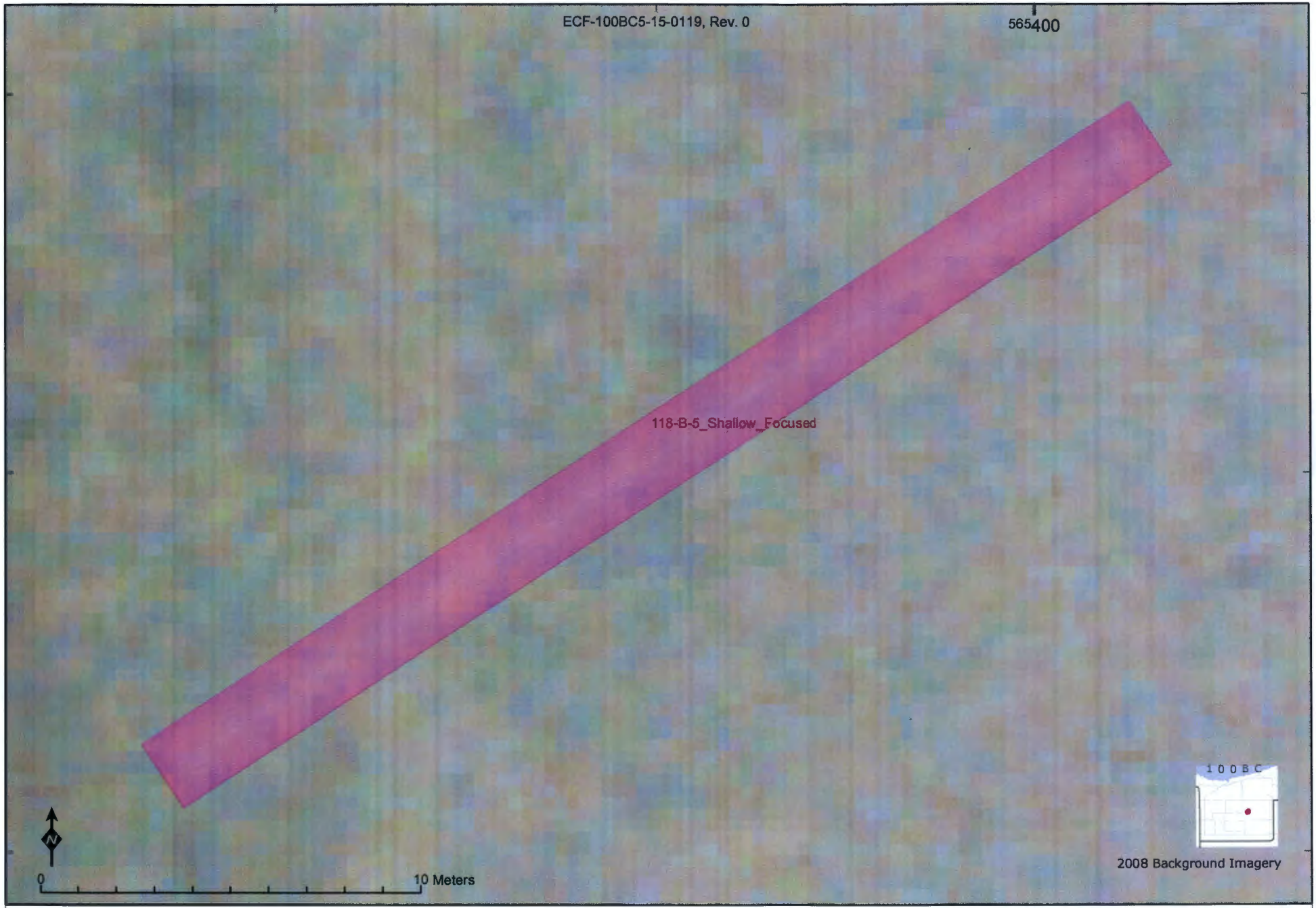
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-4_Shallow	**13**	181	**24.2**	10	22	5.2	31



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-4_Staging pile area	**21.2**	182	**23.5**	19	60	0.1	77

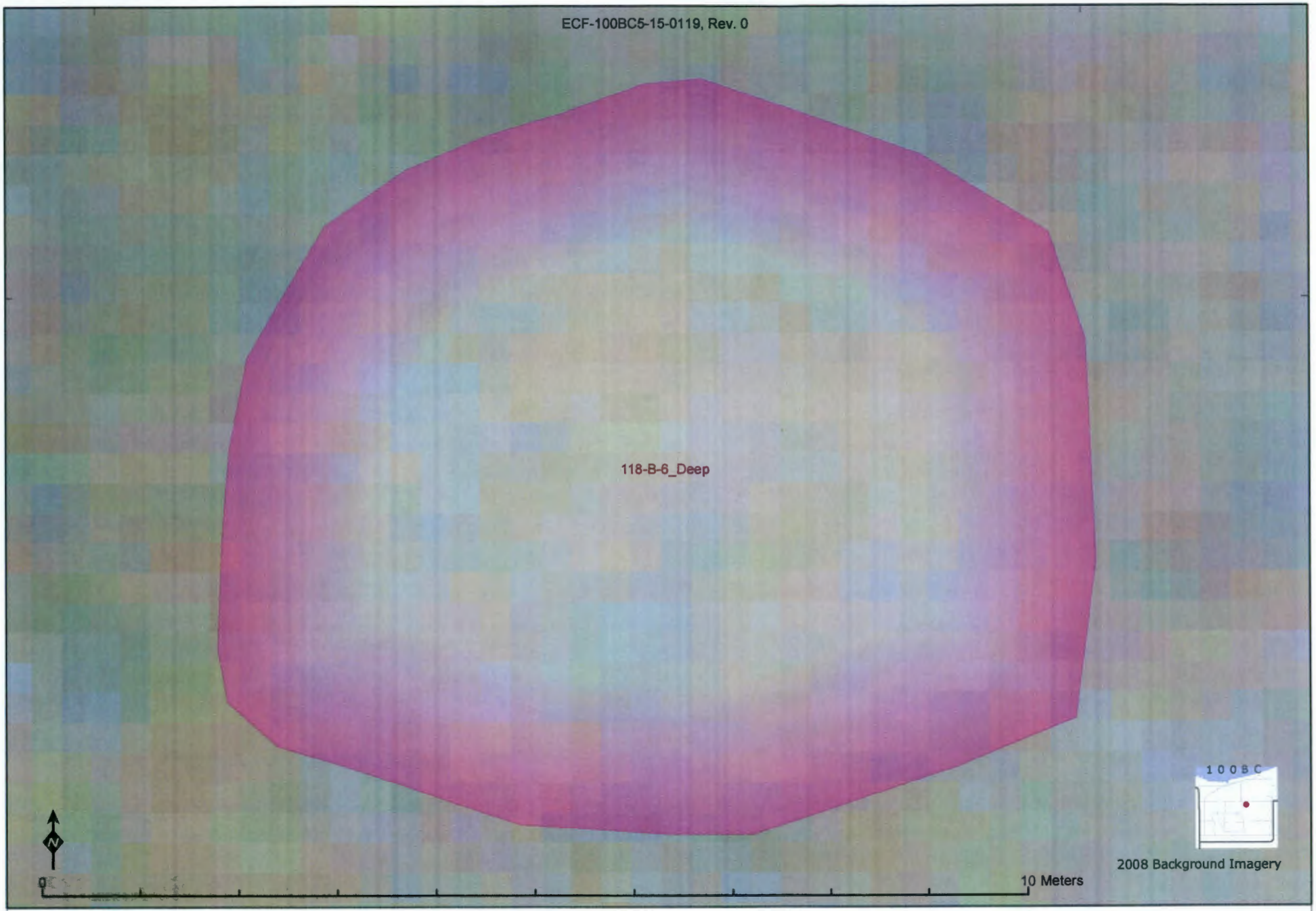


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-5_Shallow	**14.9**	183	**22.5**	9	31	3	35

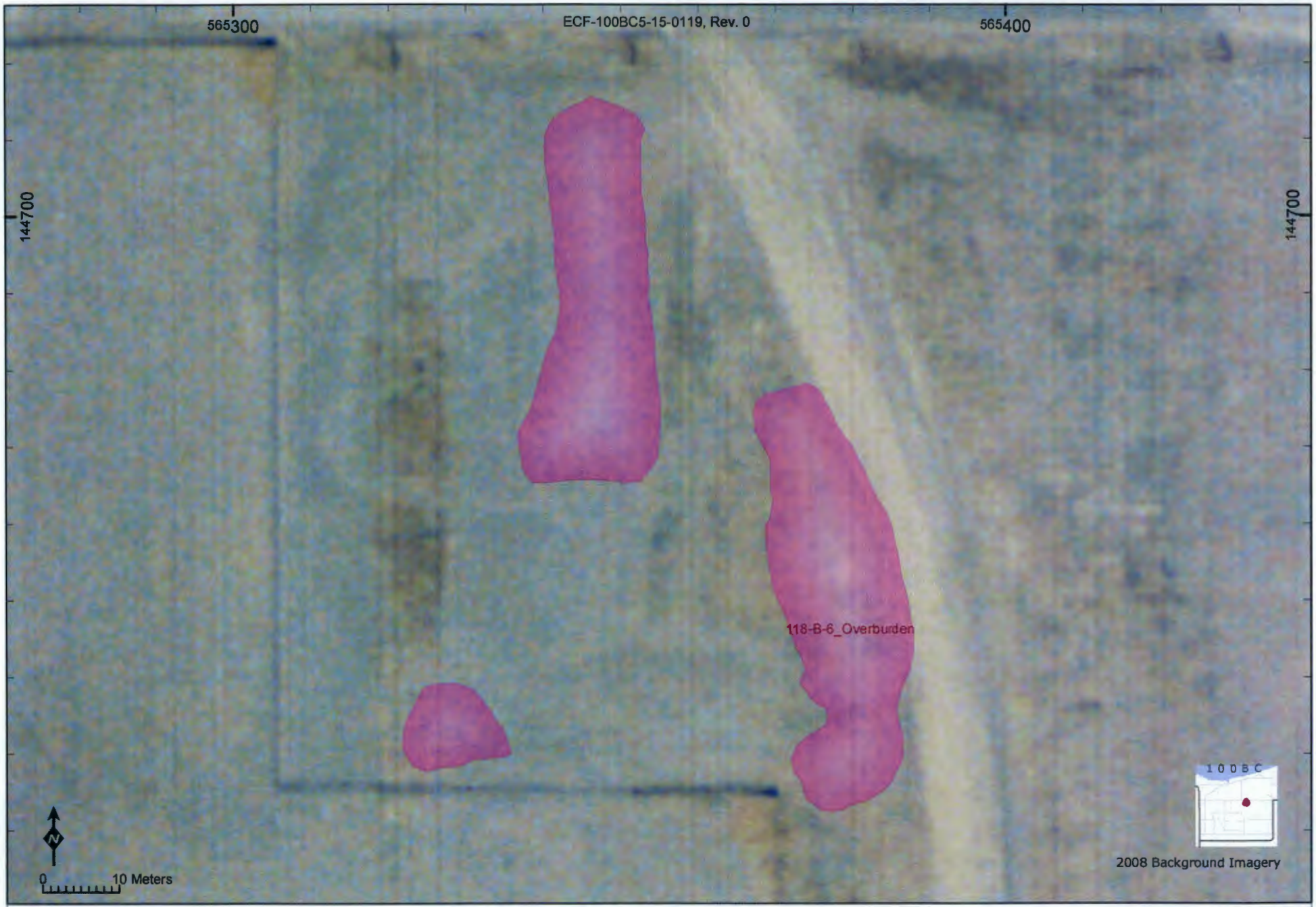


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-5_Shallow_Focused	**4.4**	184	**2.3**	0	27	1.2	2

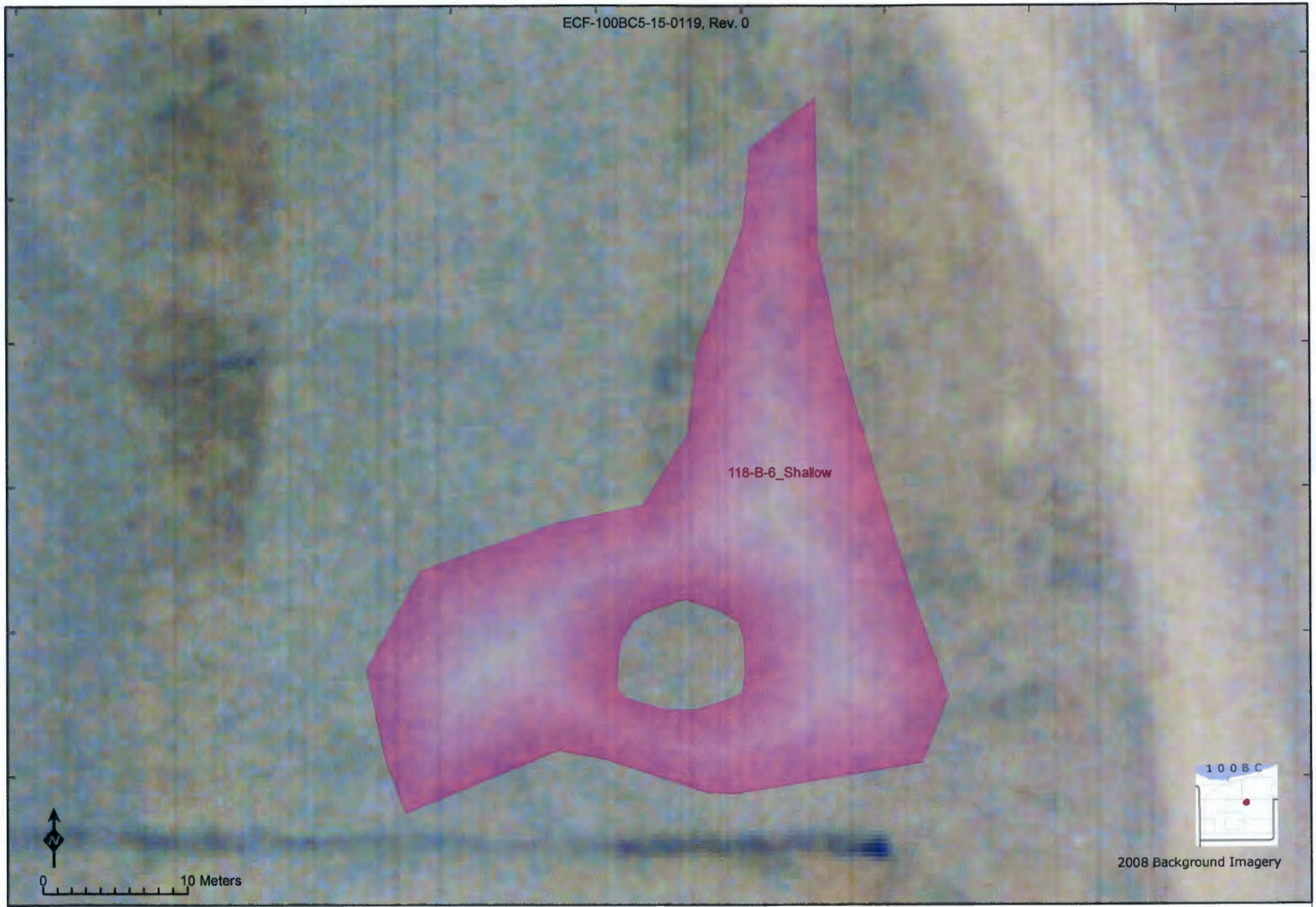
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-5_Staging pile area	**30.8**	185	**27.1**	17	110	1.8	64



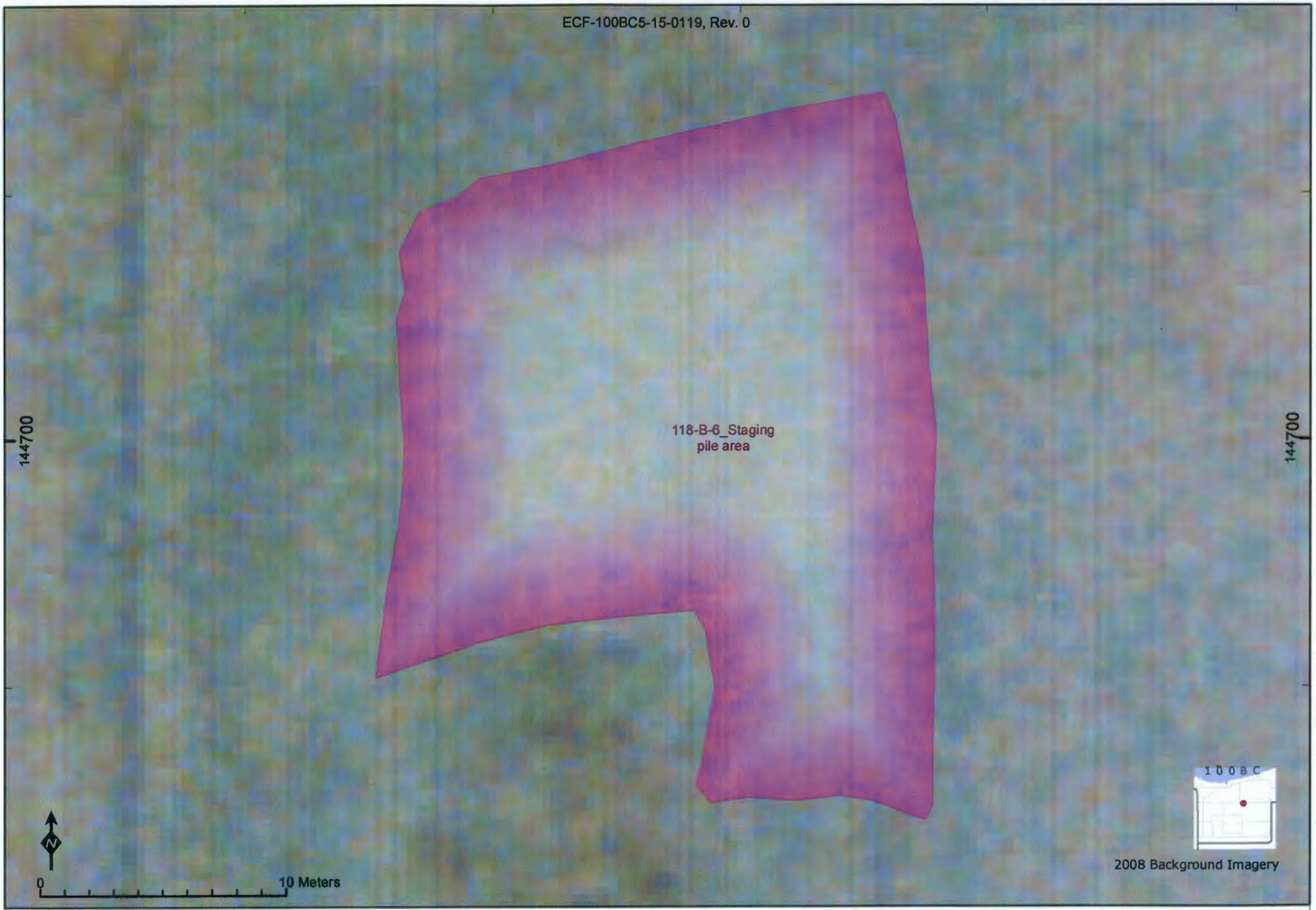
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-6_Deep	**4.2**	186	**6.2**	1	9	3.3	8



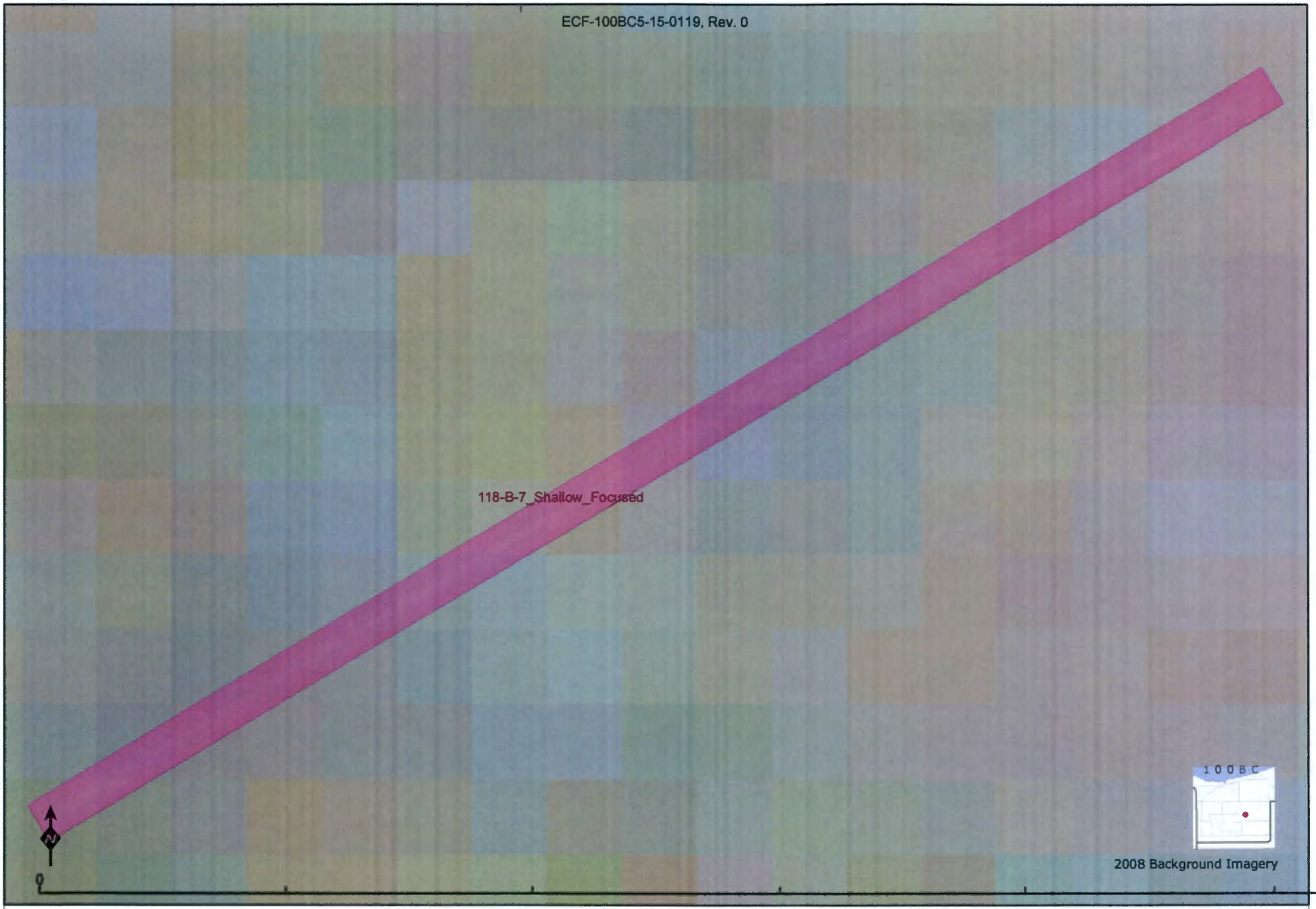
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-6_Overburden	**21.8**	187	**23.6**	18	63	0.3	52



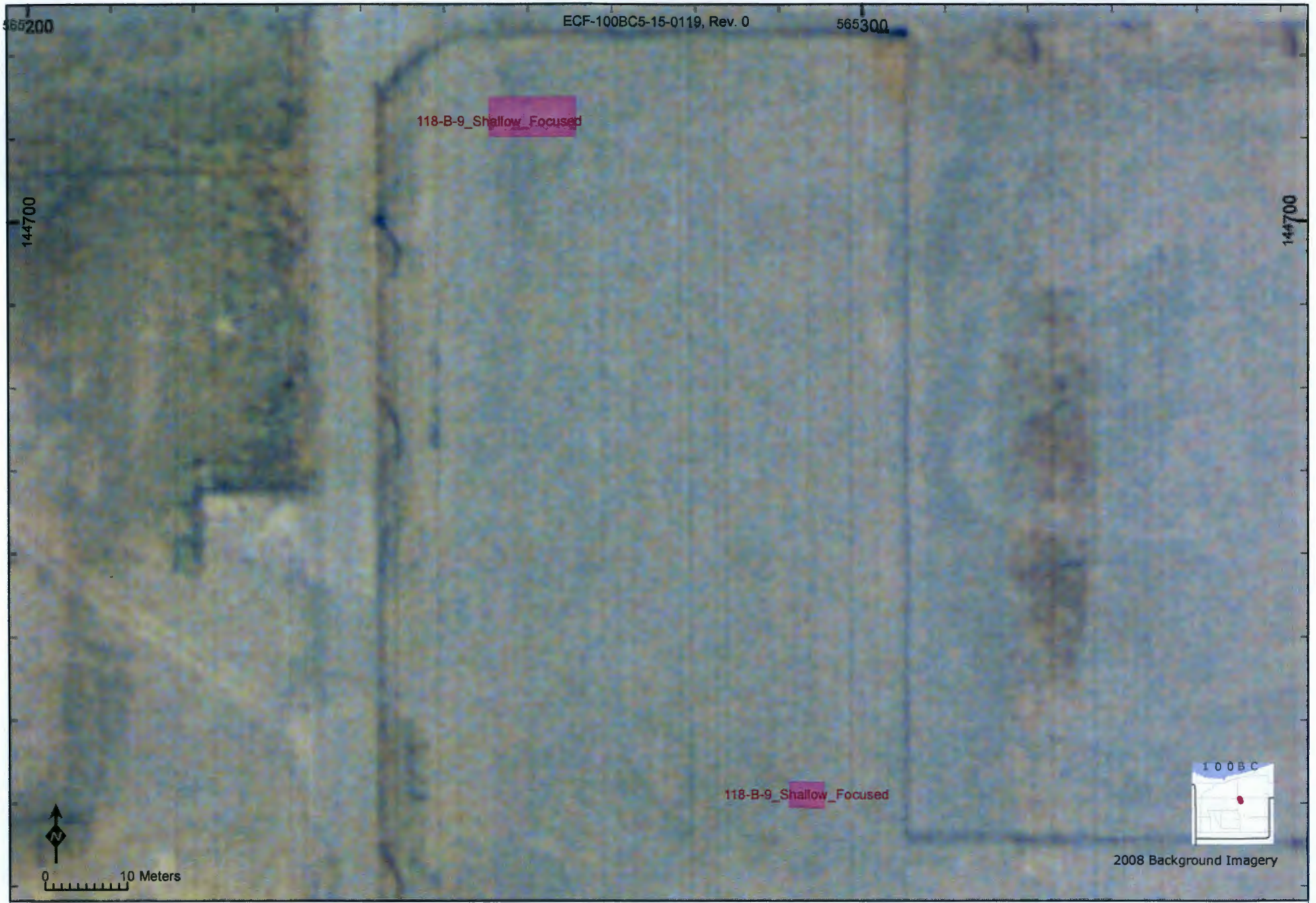
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-6_Shallow	**16.2**	188	**17**	12	49	1	47



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
118-B-6_Staging pile area	**12.4**	189	**21.8**	6	22	4.9	29



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-B-7_Shallow_Focused	**0.6**	190	**0.2**	0	5	0.2	0



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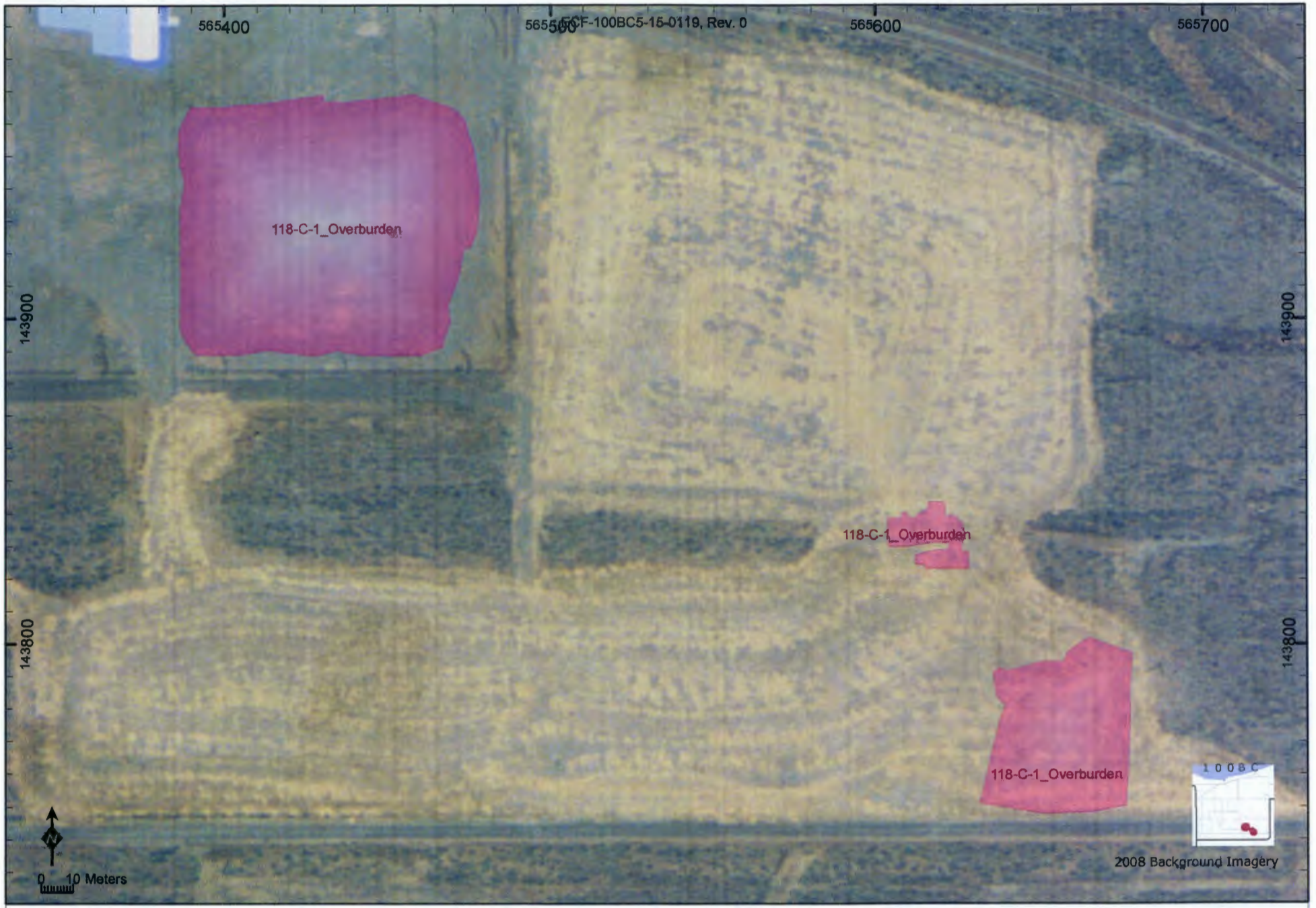
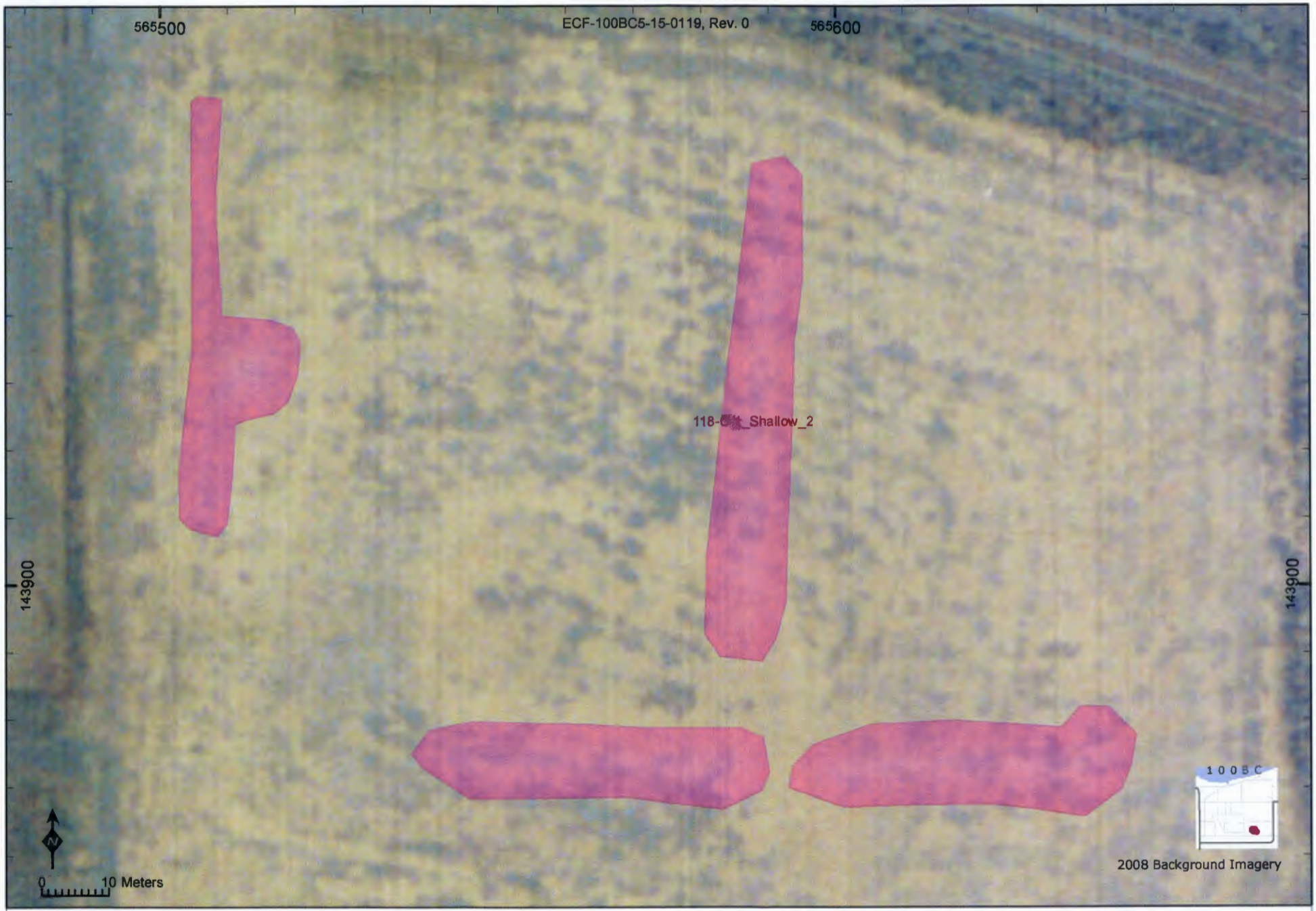
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
118-B-9_Shallow_Focused	**4.4**	191	**4.2**	1	14	3	5

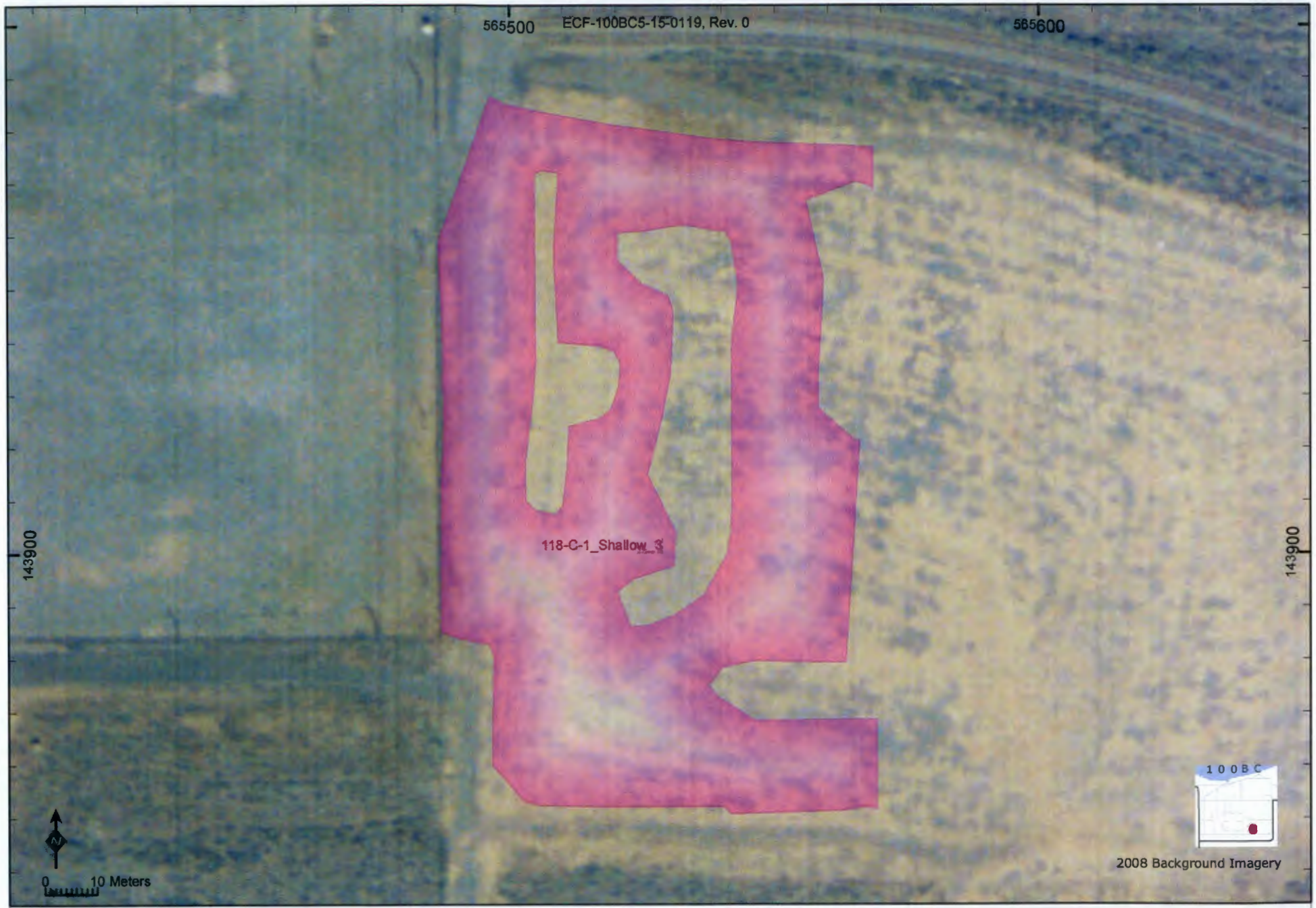


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-C-1_Overburden	**53.4**	192	**49.7**	29	180	1.6	80

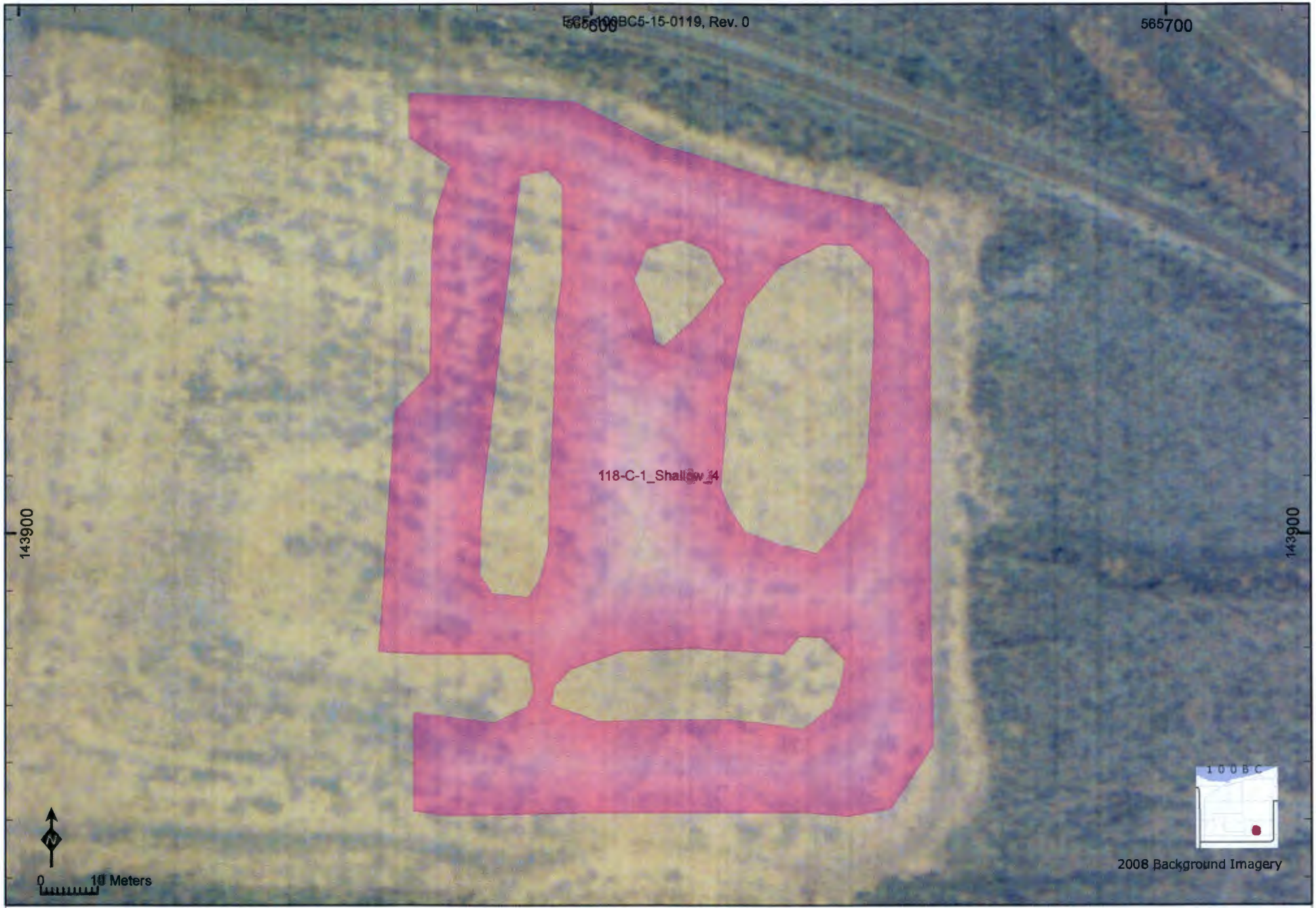
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-C-1_Shallow_1	**31**	193	**29.6**	22	102	0.1	73



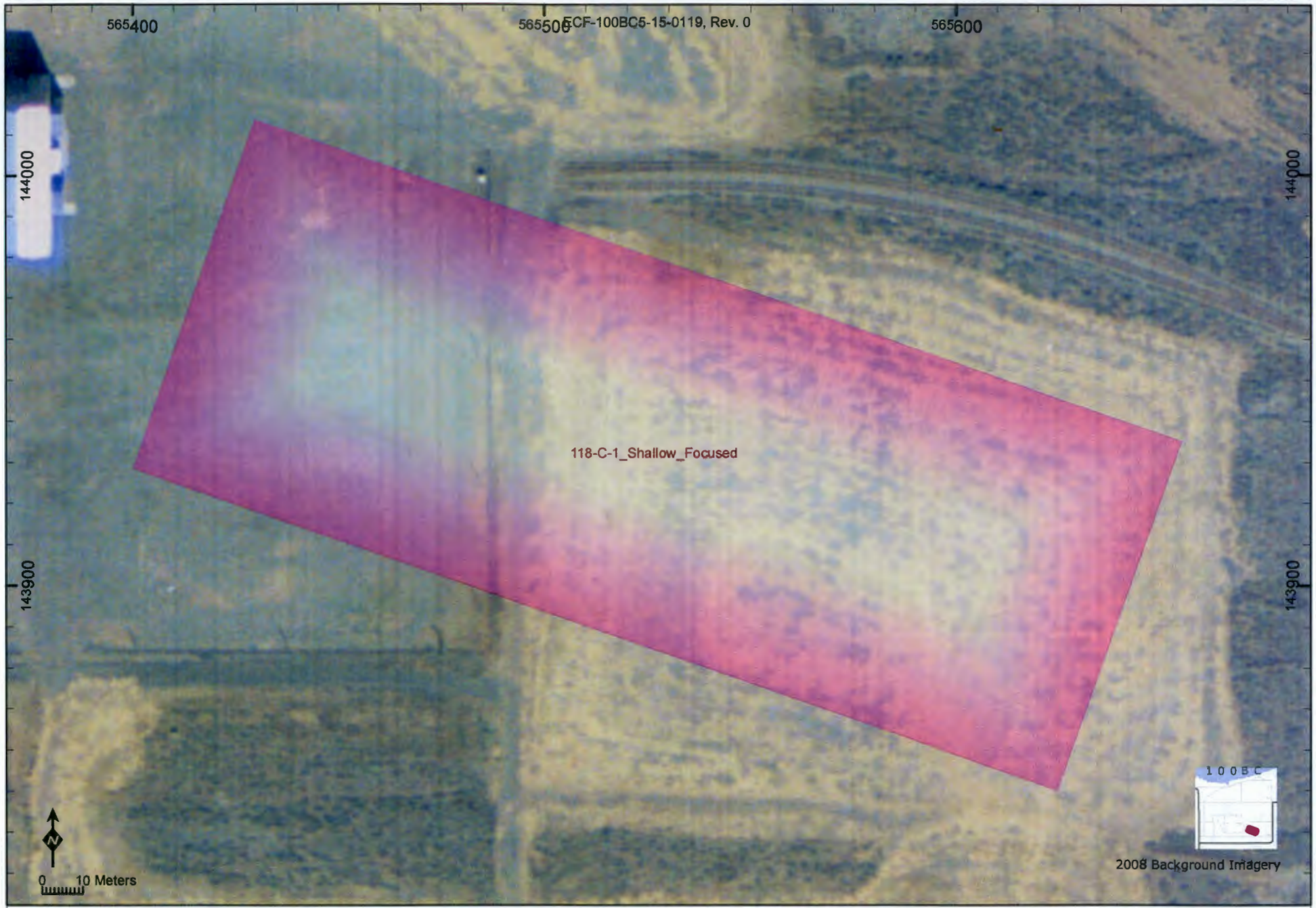
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-C-1_Shallow_2	**27.3**	194	**17.1**	17	137	0.1	74



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-C-1_Shallow_3	**49.1**	195	**41.6**	32	182	6.6	131

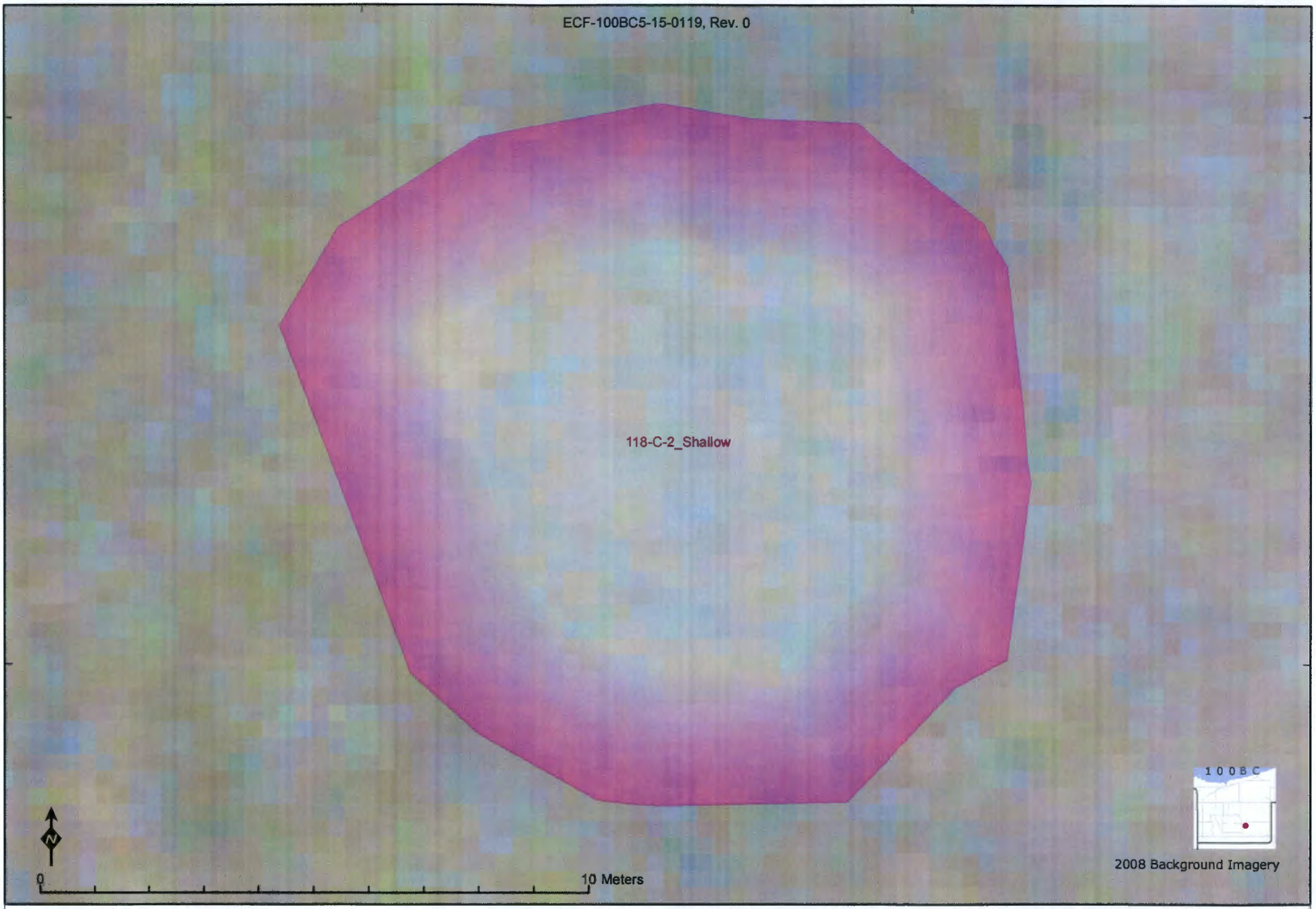


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-C-1_Shallow_4	**49.1**	196	**32.4**	28	234	2.1	106

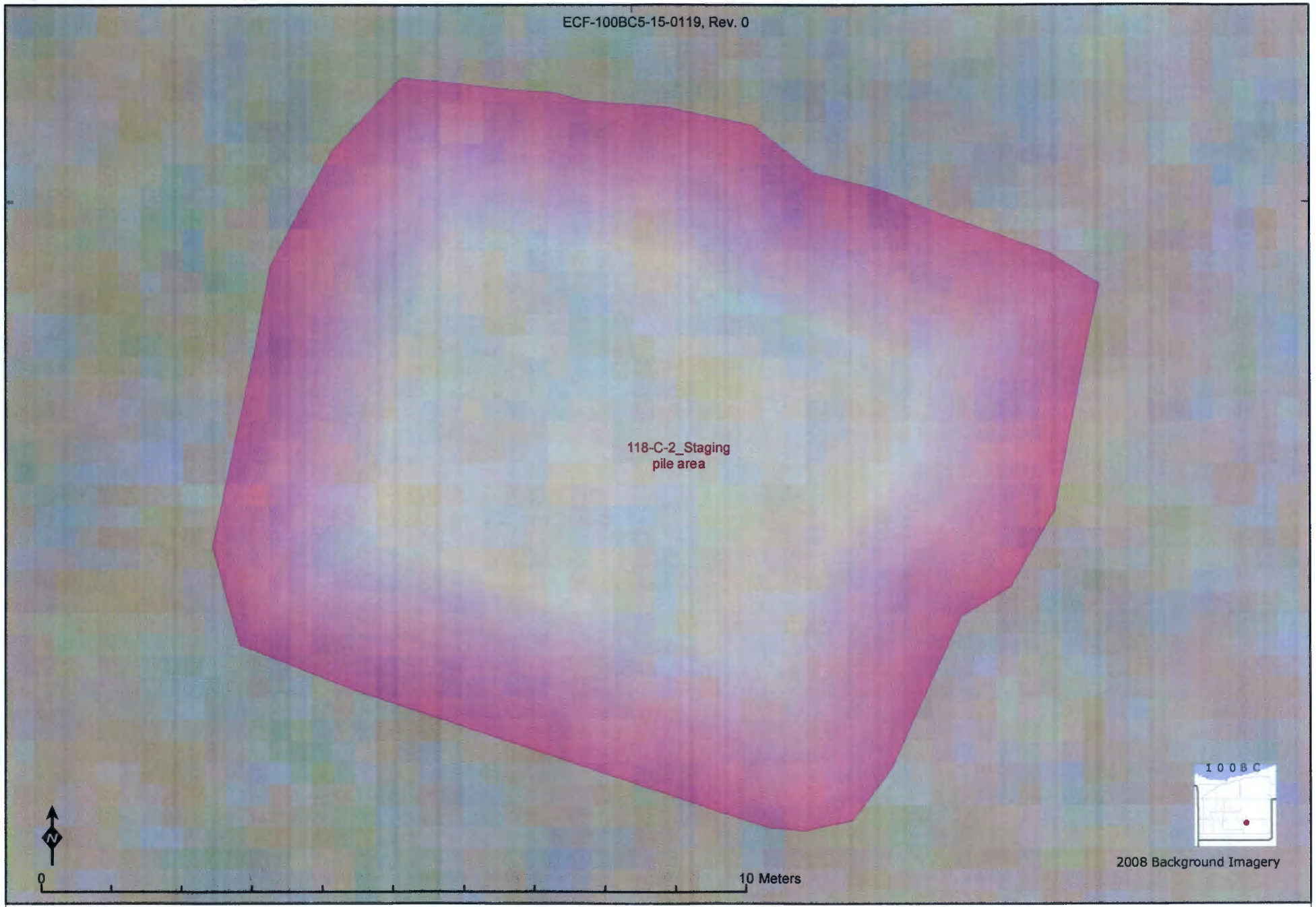


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-C-1_Shallow_Focused	**82.5**	197	**84.2**	24	254	0.5	95

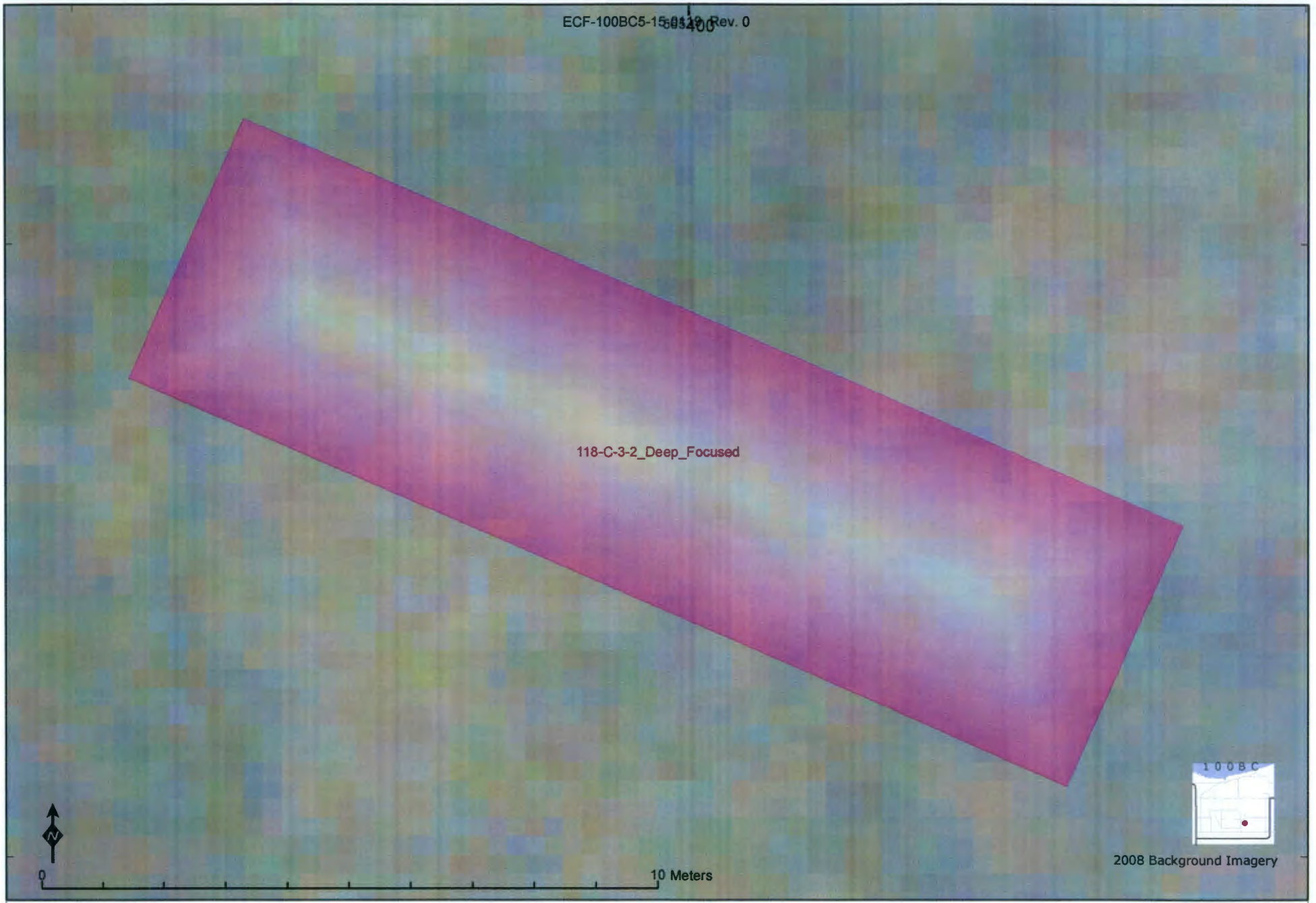
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-C-1_Staging Pile Area	**86**	198	**64.5**	19	360	7.3	135



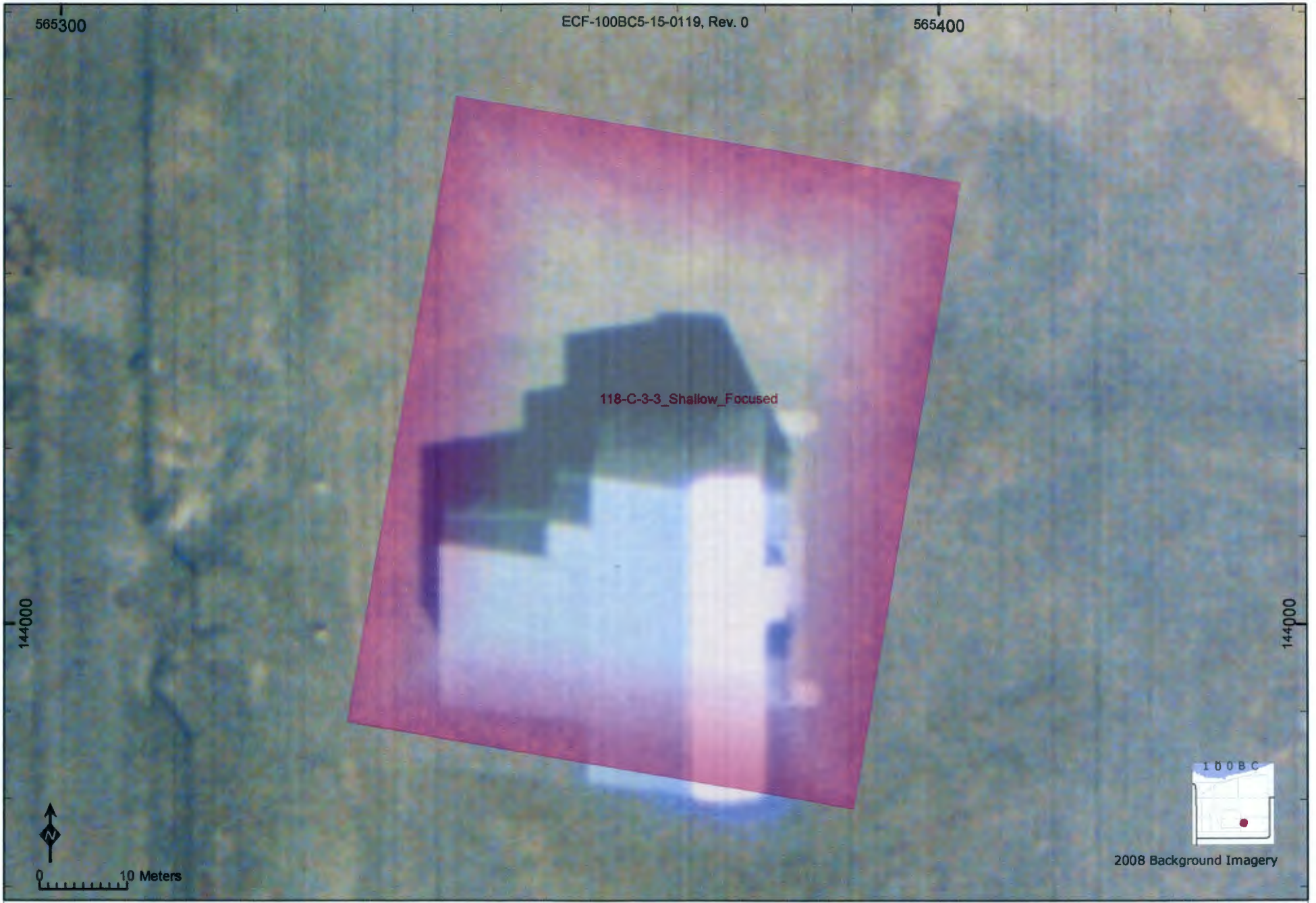
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
118-C-2_Shallow	**6.6**	199	**9.8**	4	14	2.2	13



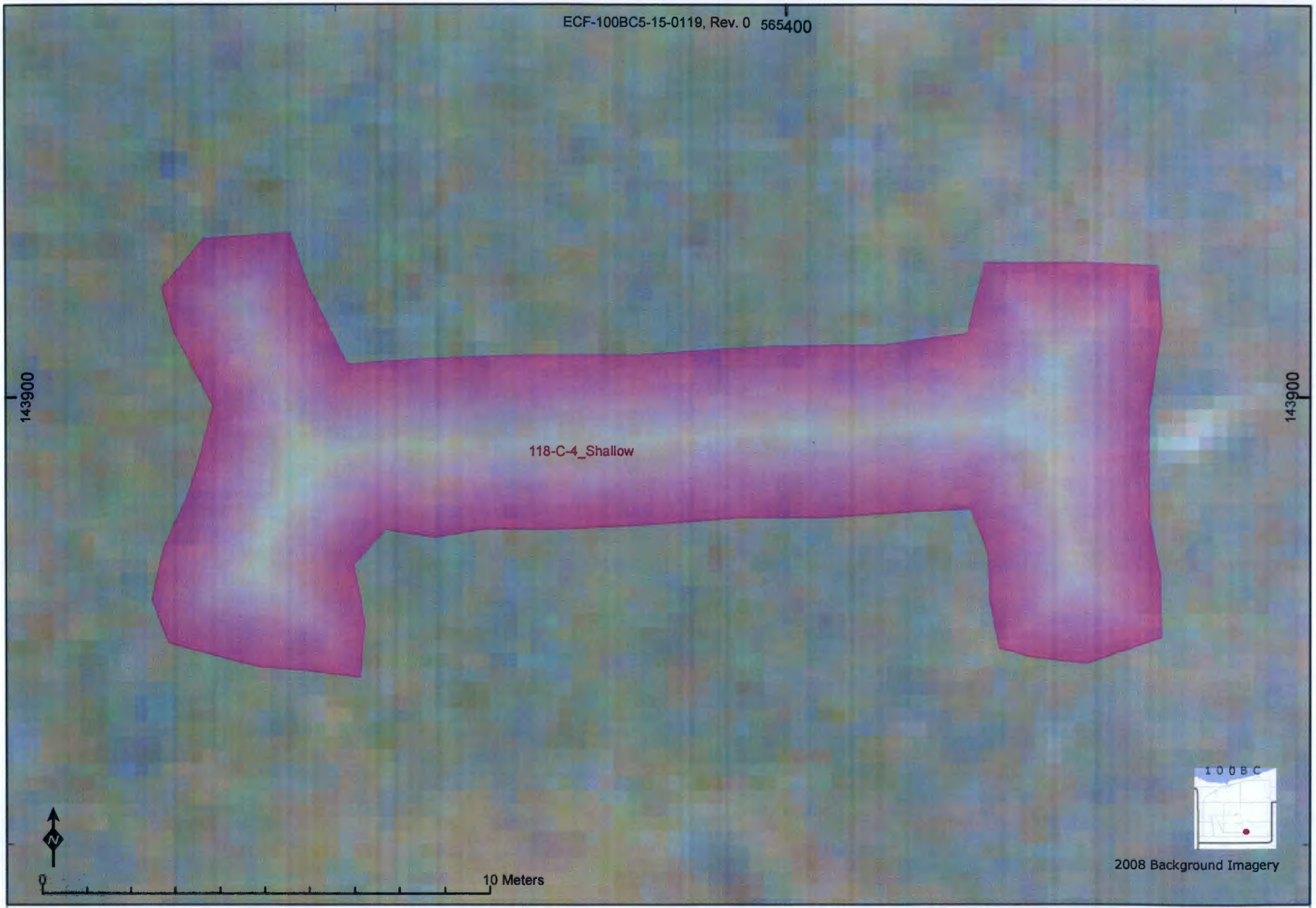
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
118-C-2_Staging pile area	**5.5**	200	**8**	2	12	3.6	10



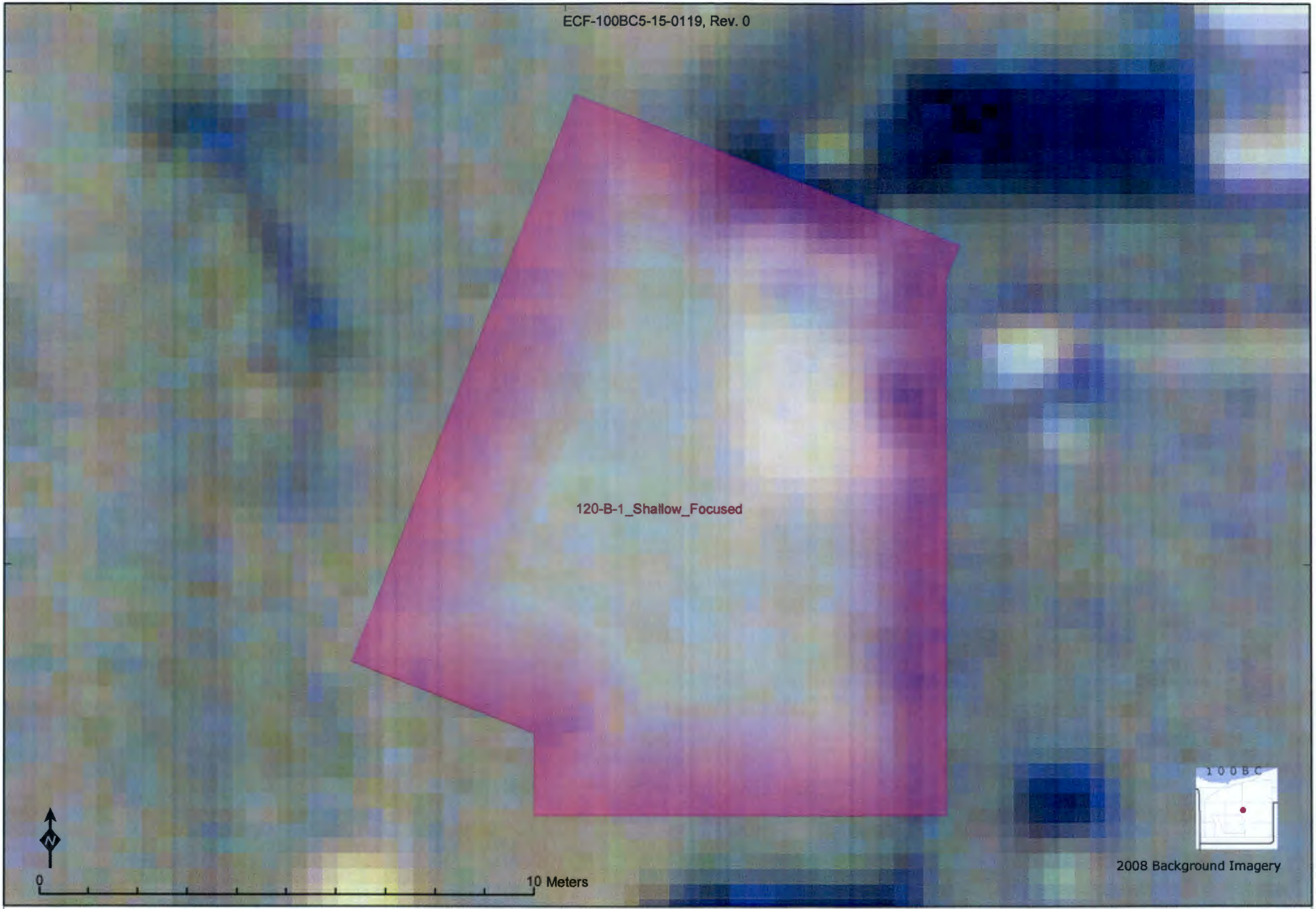
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-C-3-2_Deep_Focused	**4.9**	201	**4.3**	2	18	0	5



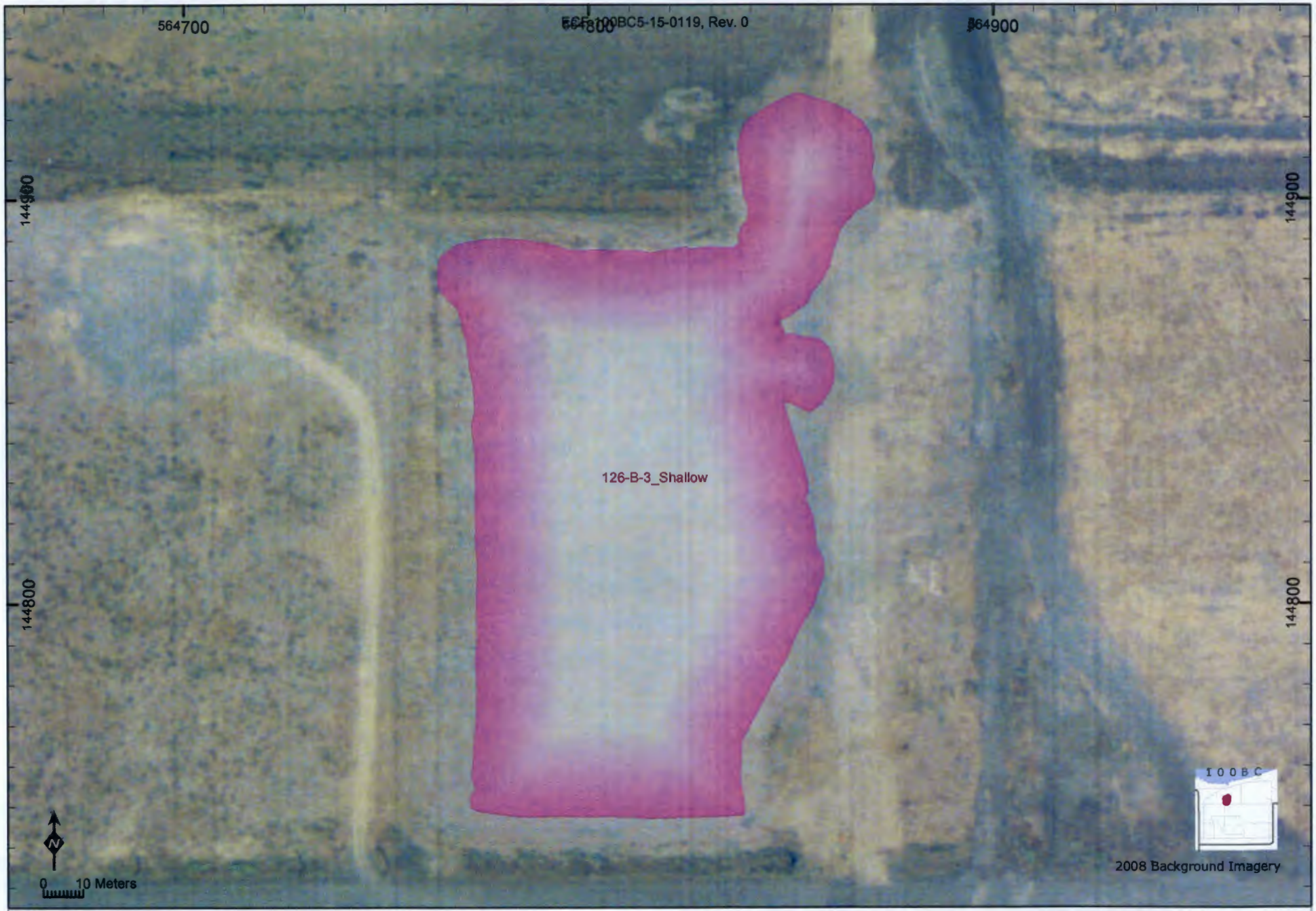
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-C-3-3_Shallow_Focused	**36.7**	202	**60.3**	22	70	1.7	74



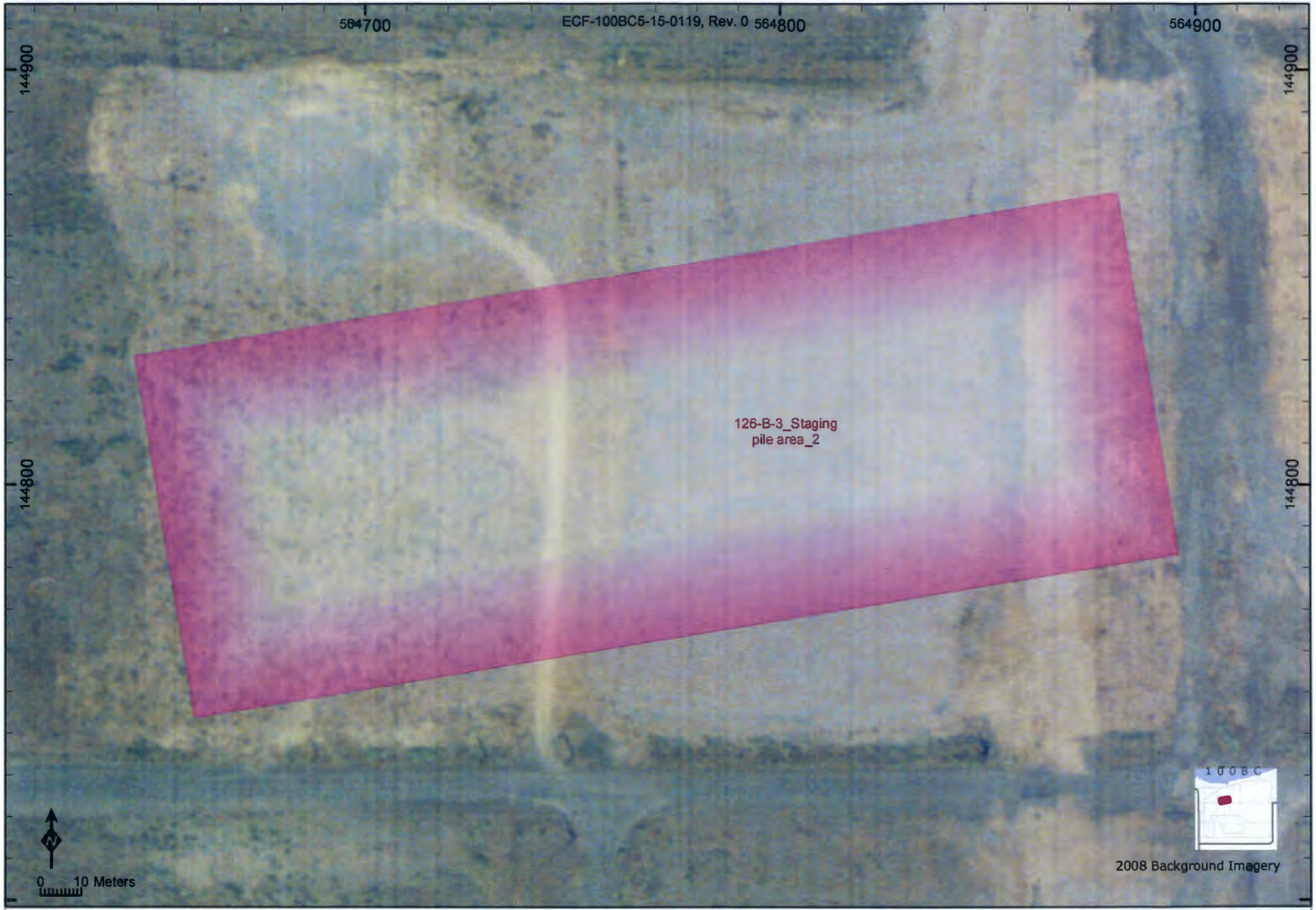
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
118-C-4_Shallow	**6.2**	203	**5.2**	2	24	0.8	10



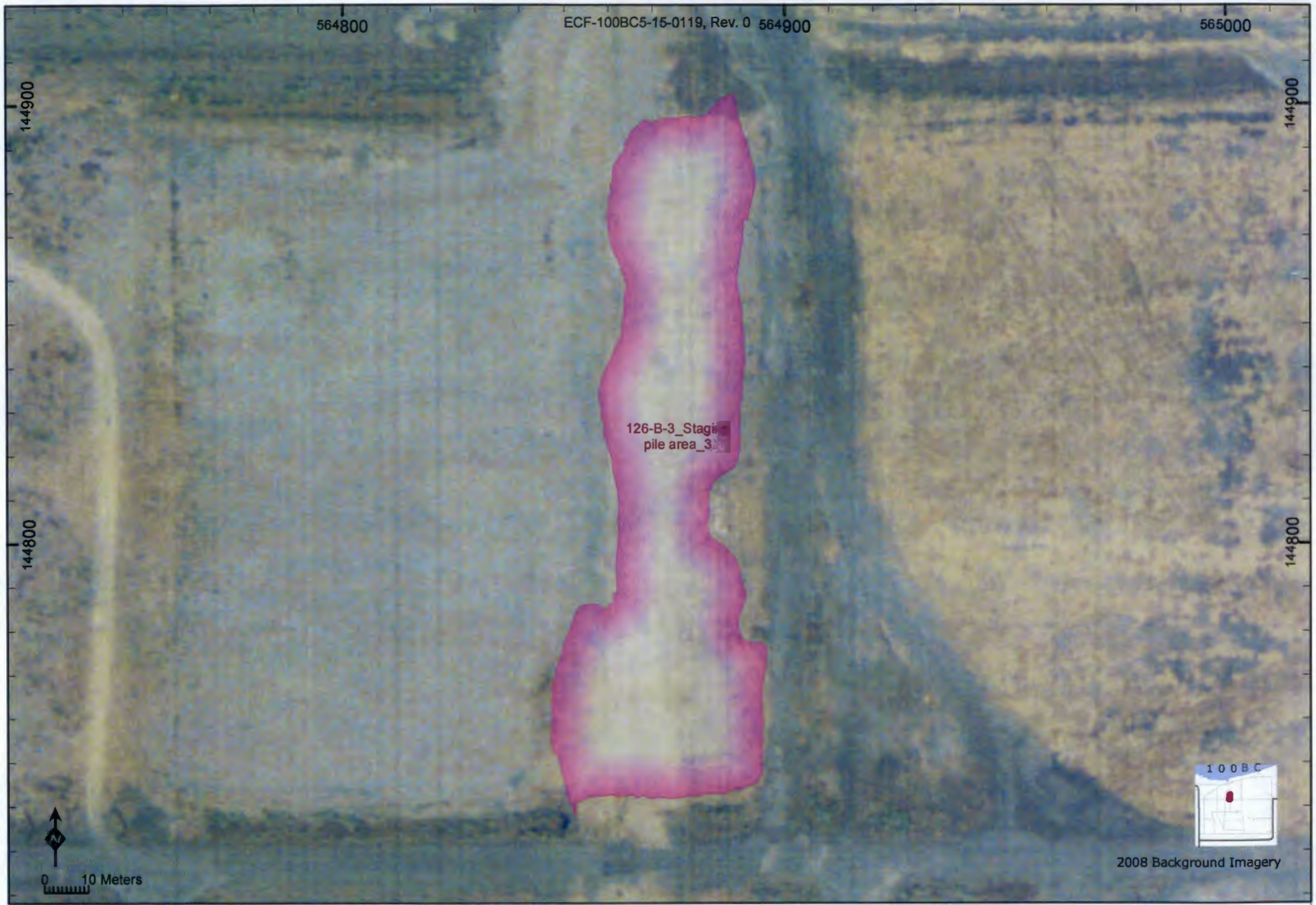
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
120-B-1_Shallow_Focused	**6.4**	204	**10.6**	4	12	0.9	14



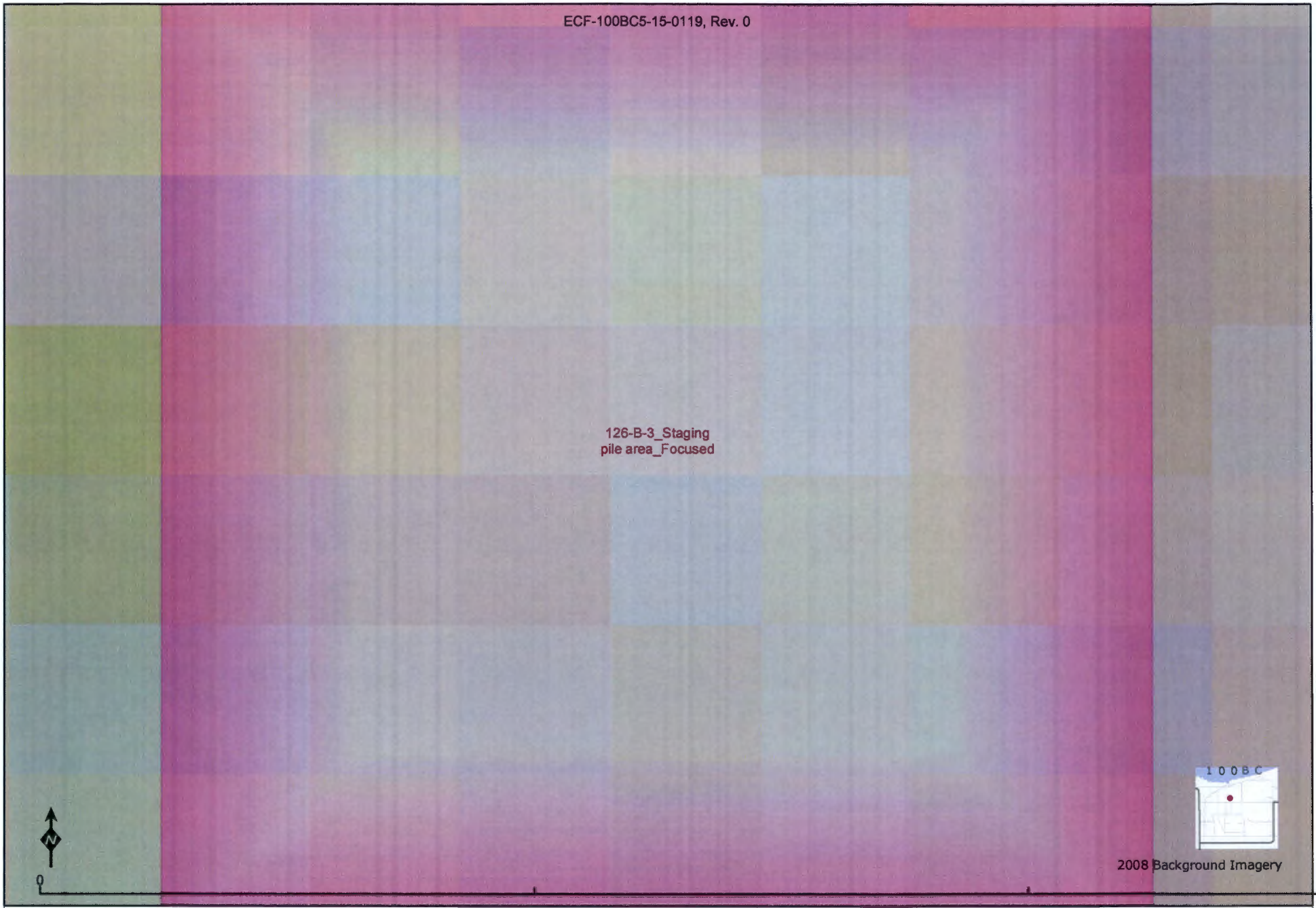
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
126-B-3_Shallow	**62.6**	205	**87.4**	59	141	0.2	150



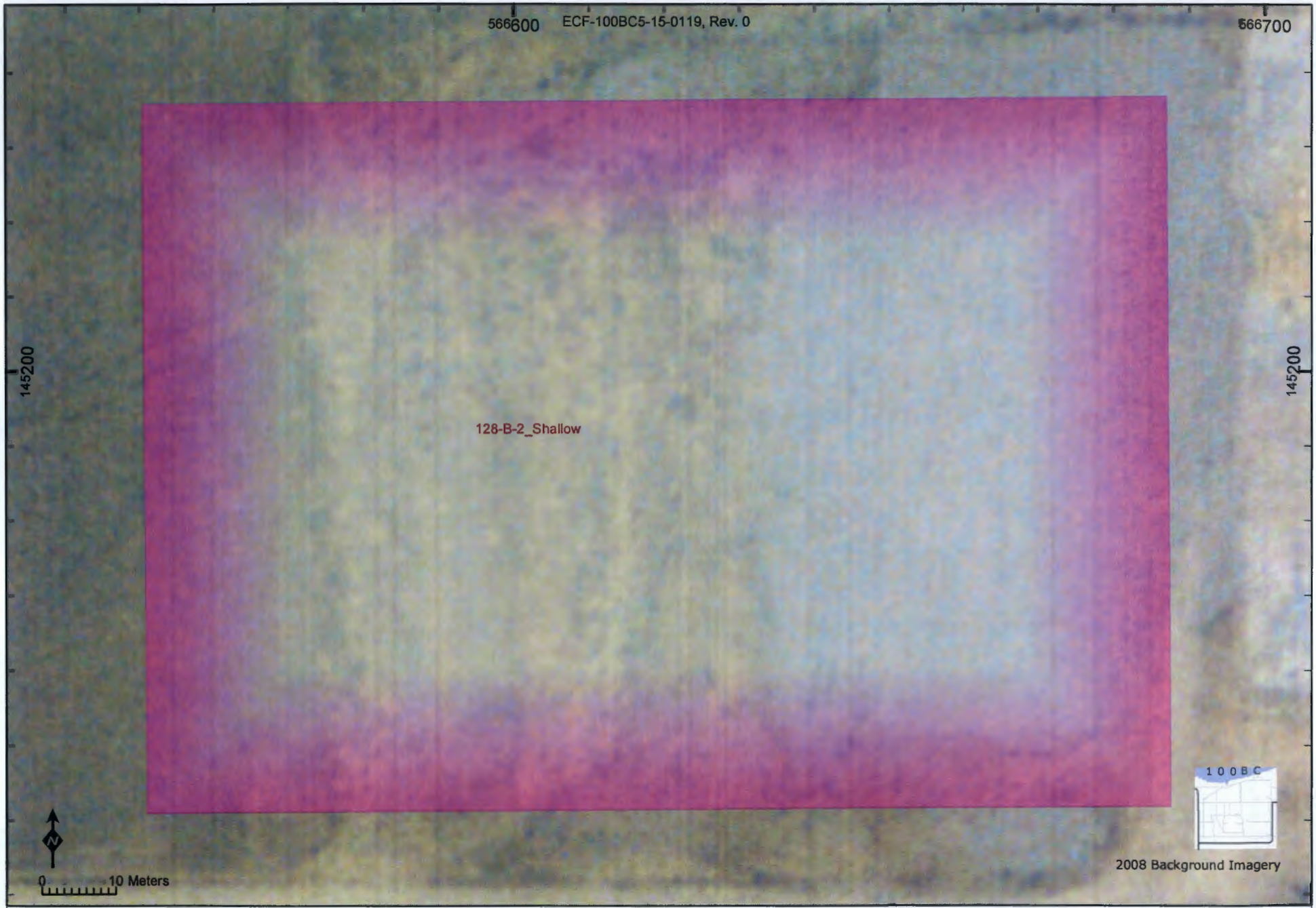
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
126-B-3_Staging pile area_2	**82.2**	206	**84.6**	17	251	3.5	90



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
126-B-3_Staging pile area_3	**40.2**	207	**67.8**	55	75	1.2	155

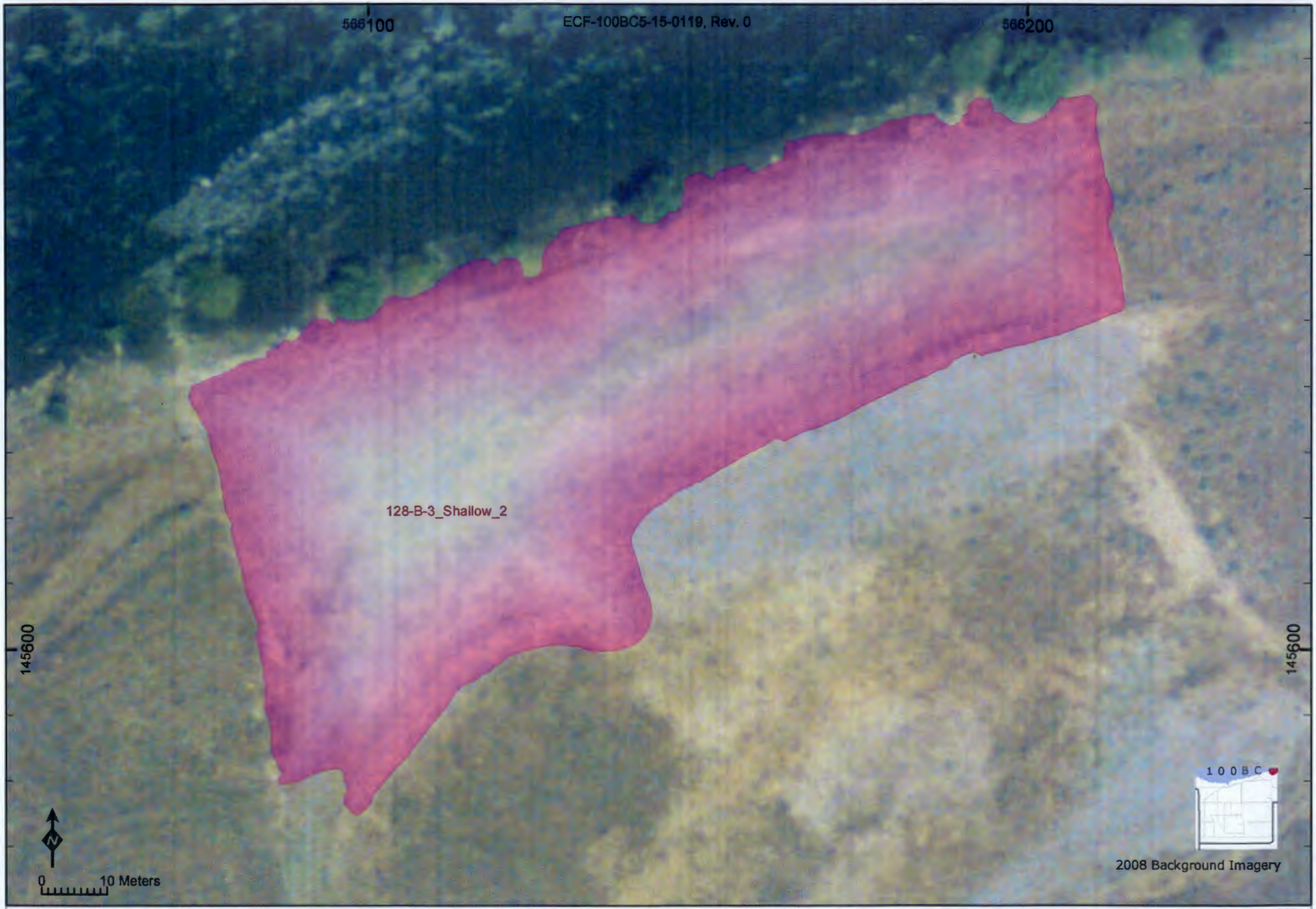


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
126-B-3_Staging pile area_Focused	**1.1**	208	**2**	0	3	2	2

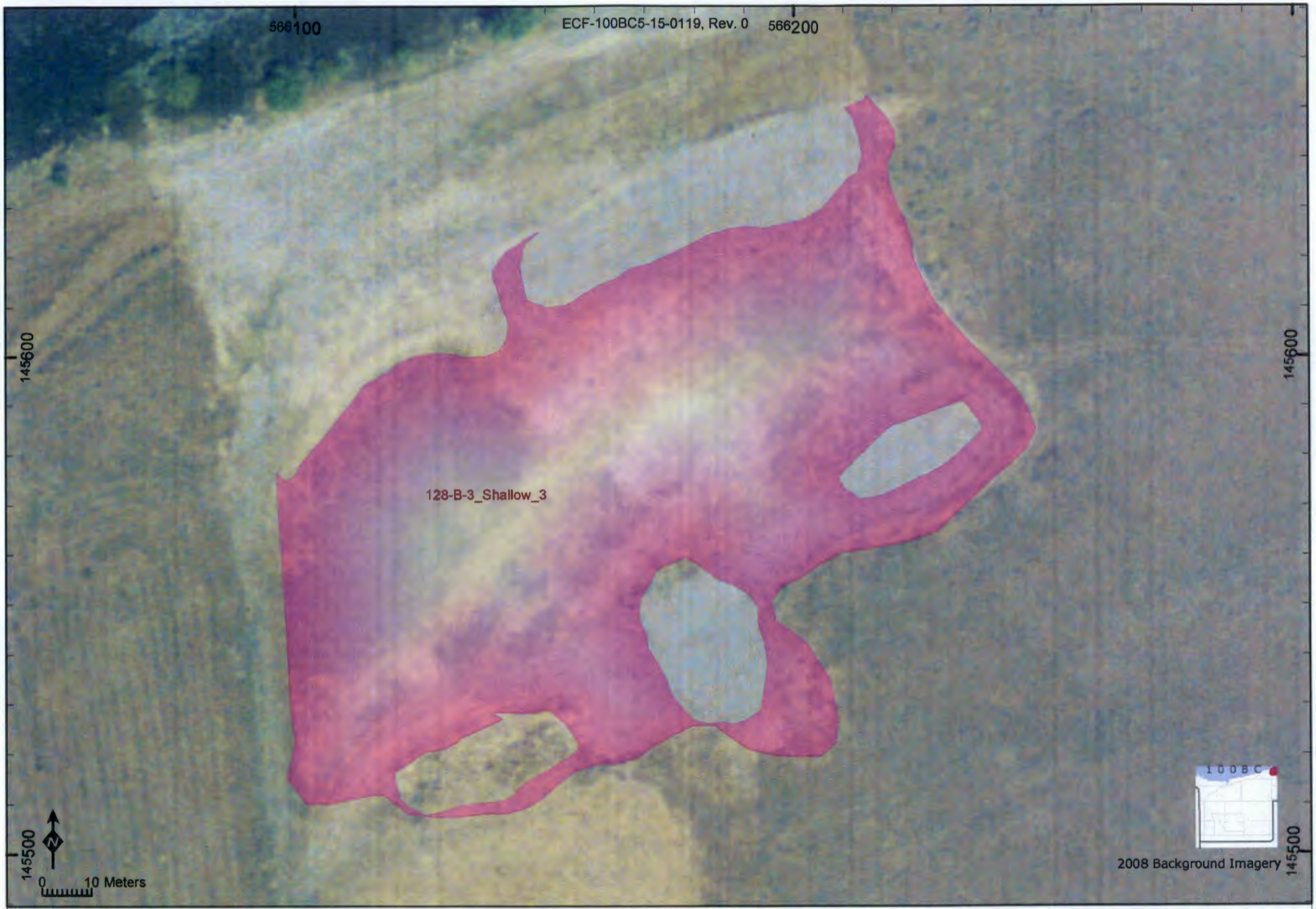


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
128-B-2_Shallow	**64.3**	209	**95**	1	137	87.8	95

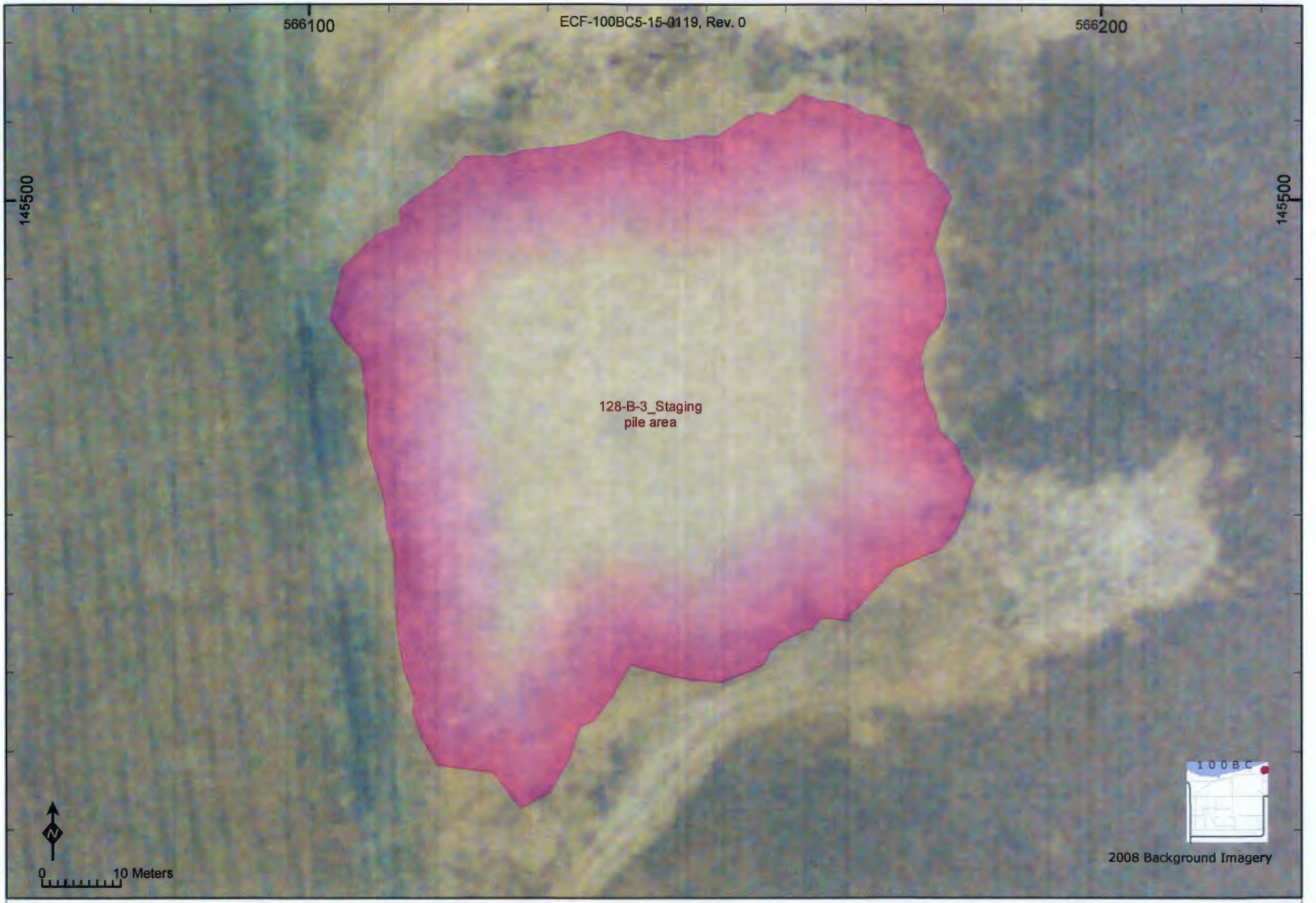
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
128-B-3_Shallow_1	**28.3**	210	**15.4**	6	163	0.2	32



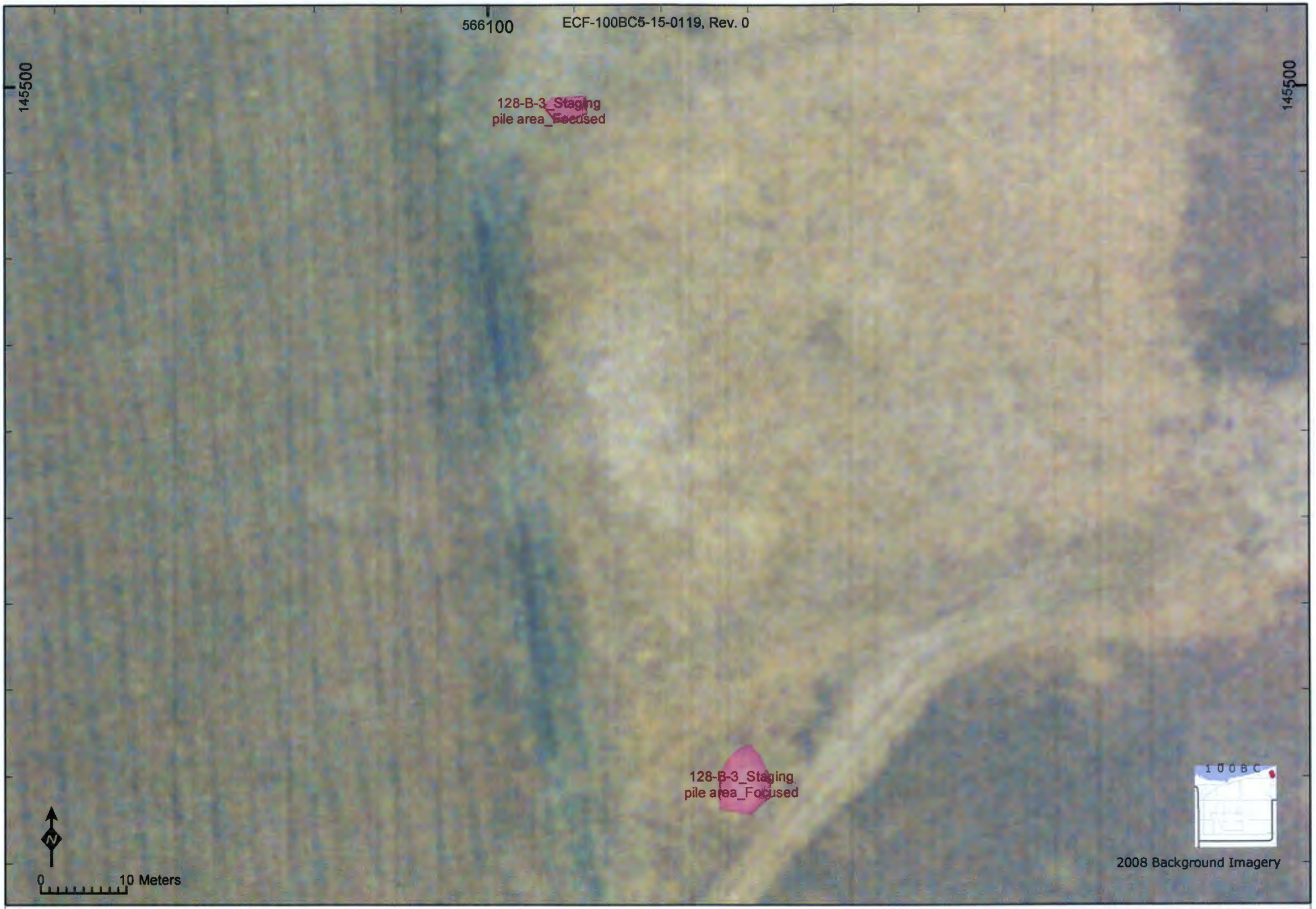
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
128-B-3_Shallow_2	**46.7**	211	**45.7**	19	150	0.2	75



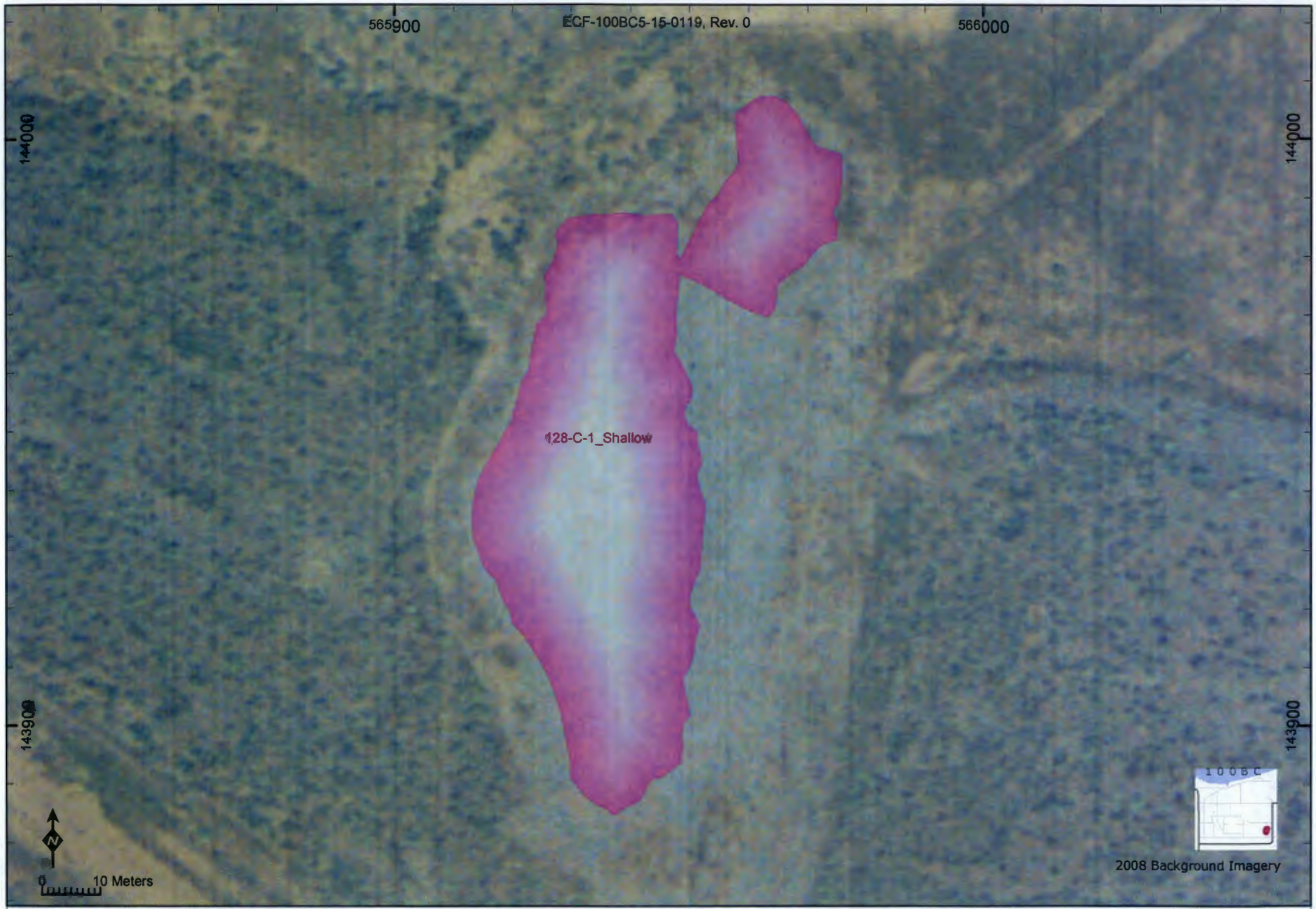
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
128-B-3_Shallow_3	**58.8**	212	**39.8**	34	273	0.1	106



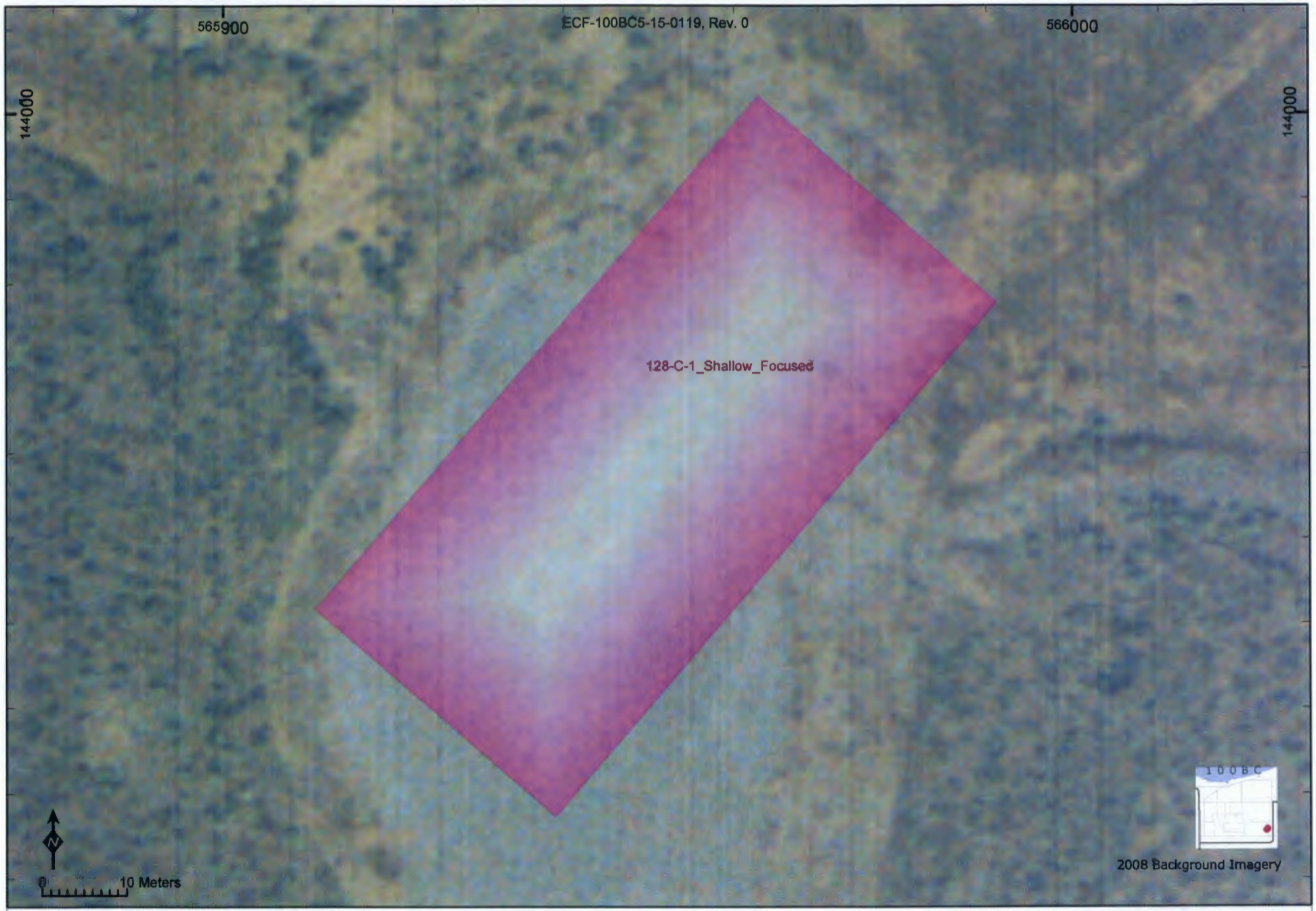
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
128-B-3_Staging pile area	**39.7**	213 **56.2**	25	88	2.2	83	



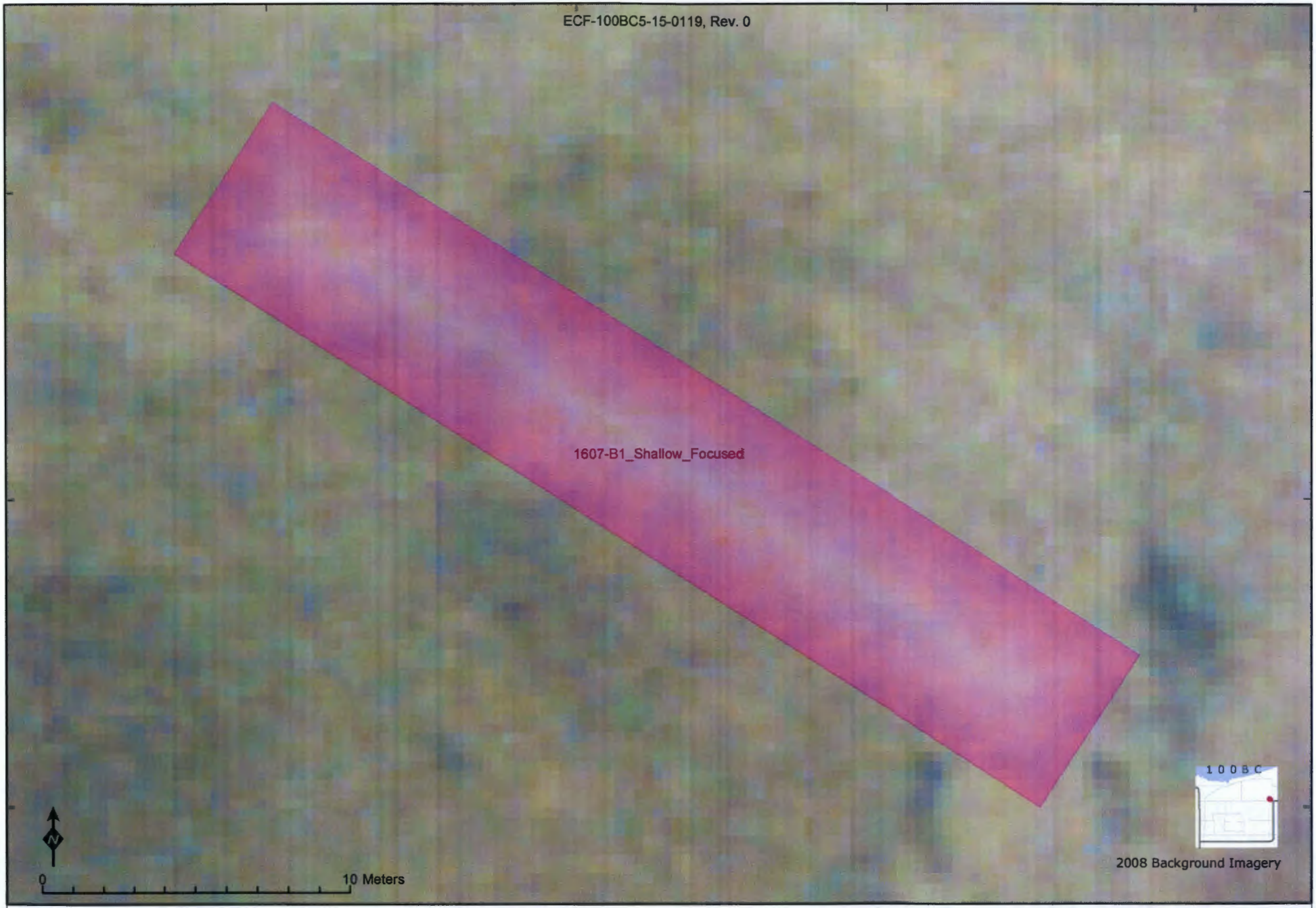
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
128-B-3_Staging pile area_Focused	**3.8**	214	**4.3**	2	11	1.5	8



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
128-C-1_Shallow	**32.5**	215	**45.4**	36	73	0.3	102

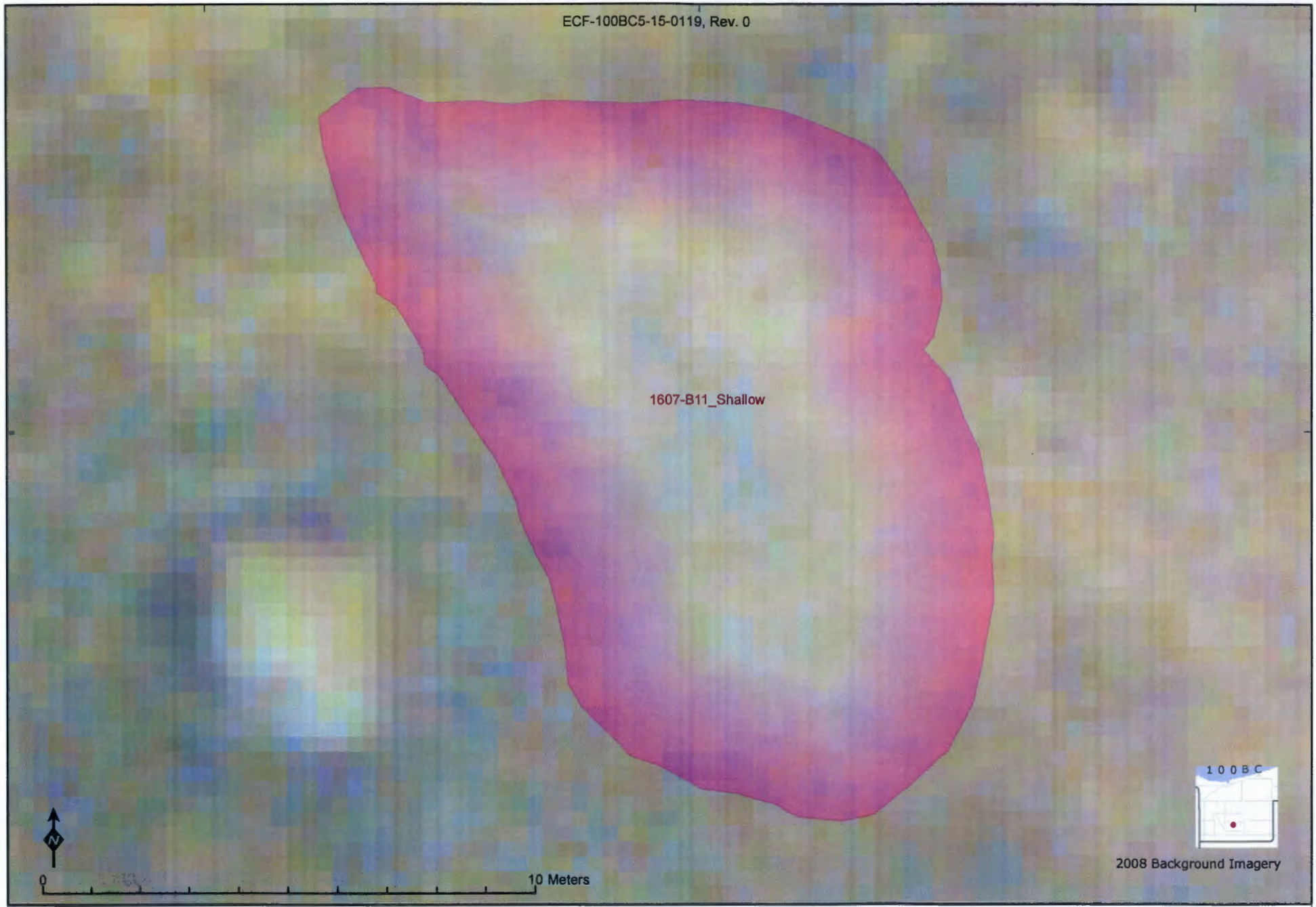


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
128-C-1_Shallow_Focused	**30.7**	216	**37**	19	80	0.5	57

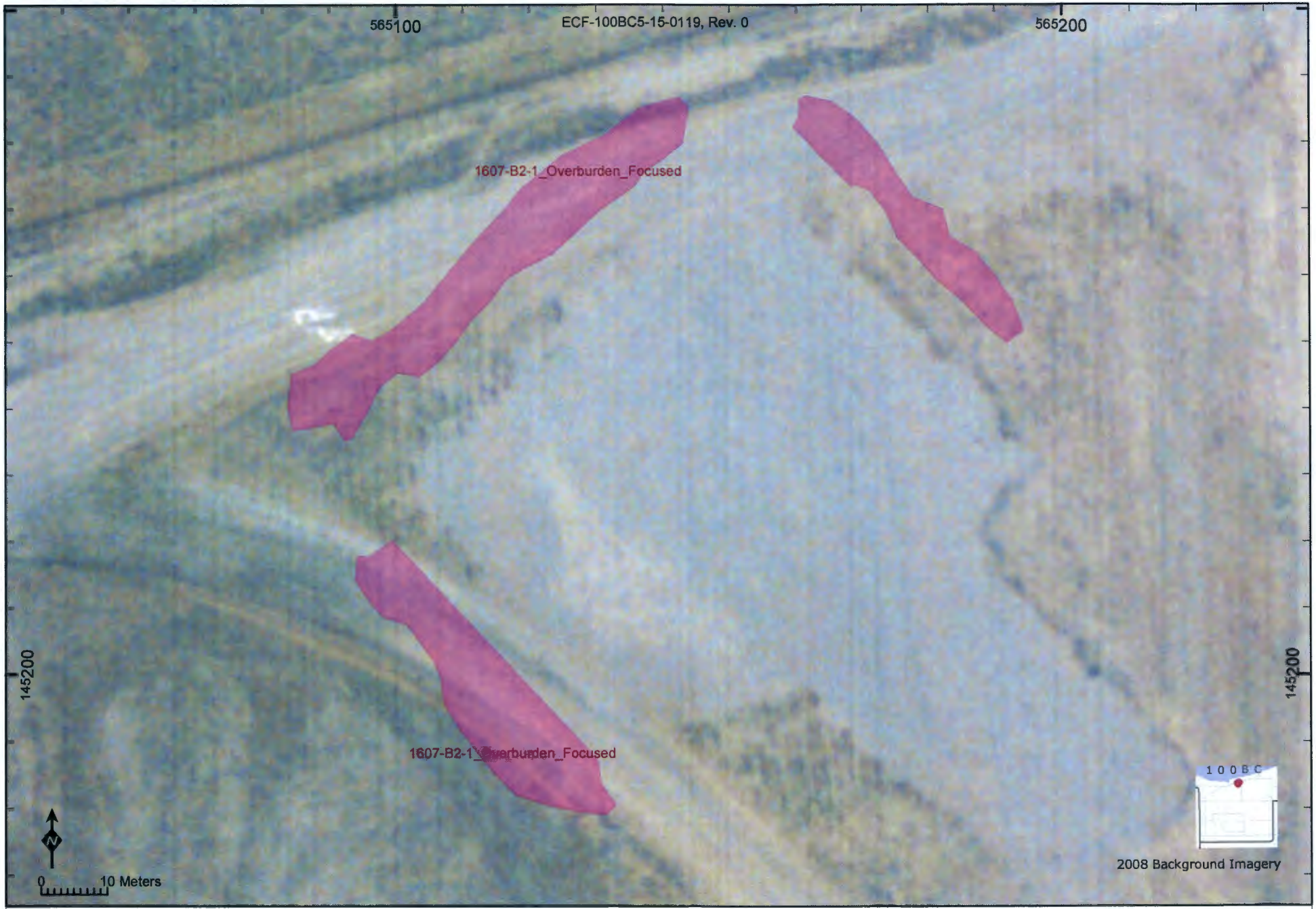


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
1607-B1_Shallow_Focused	**7.9**	217	**6.3**	2	31	0.4	7

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
1607-B10_Shallow	**7.5**	218	**14.6**	4	12	4.3	18



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
1607-B11_Shallow	**6.6**	219	**10.2**	4	13	3	14

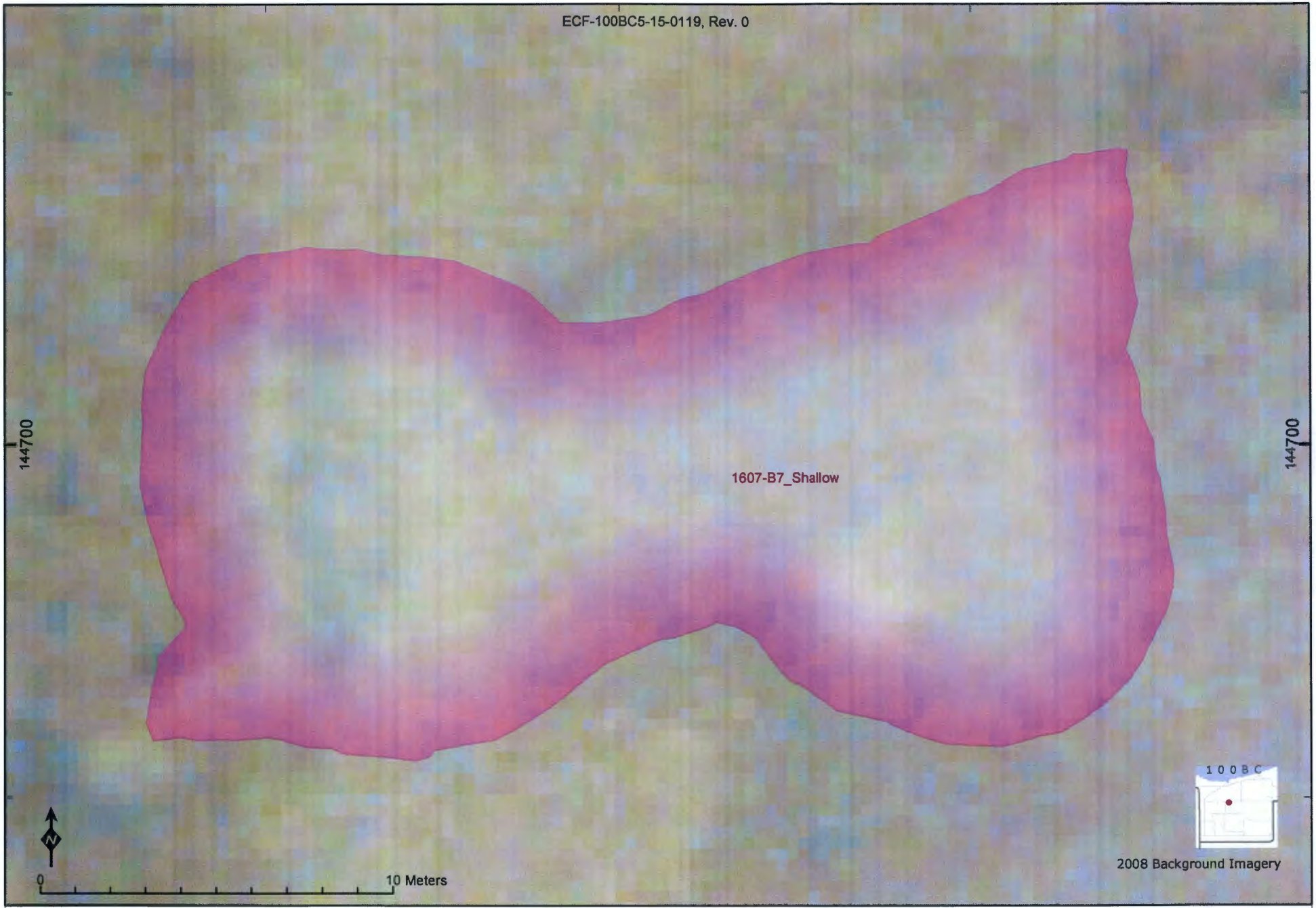


Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
1607-B2-1_Overburden_Focused	**21.3**	220	**10.6**	4	134	0.2	19

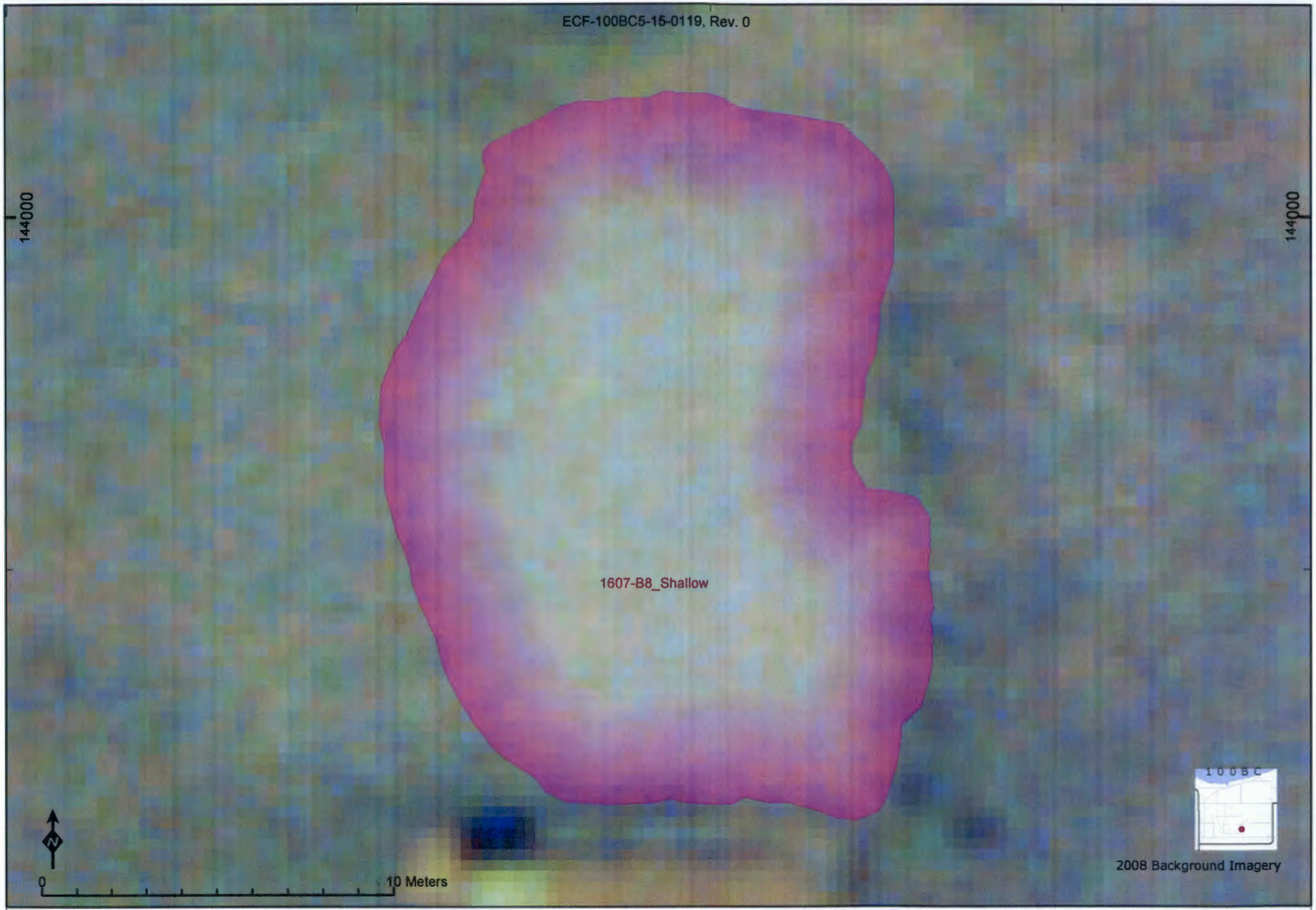
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)	
1607-B2-1_Shallow	**42.8**	221	**35.7**	27	161	0.1	77

Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
1607-B2-2_Overburden_Focused	**67.7**	222	**129.6**	67	111	0.2	200

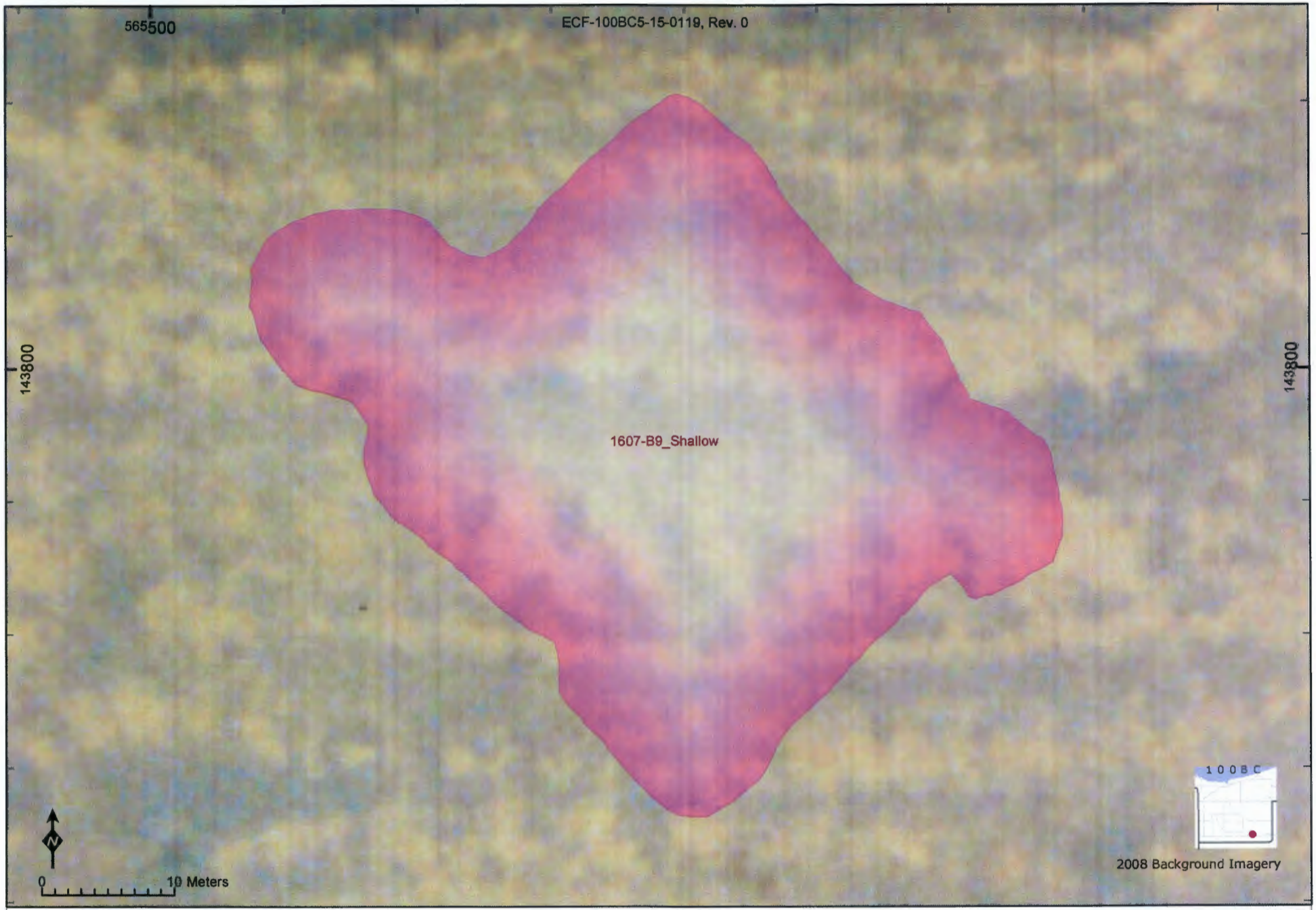
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
1607-B2-2_Shallow	**77.2**	223	**240.1**	135	78	10.8	444



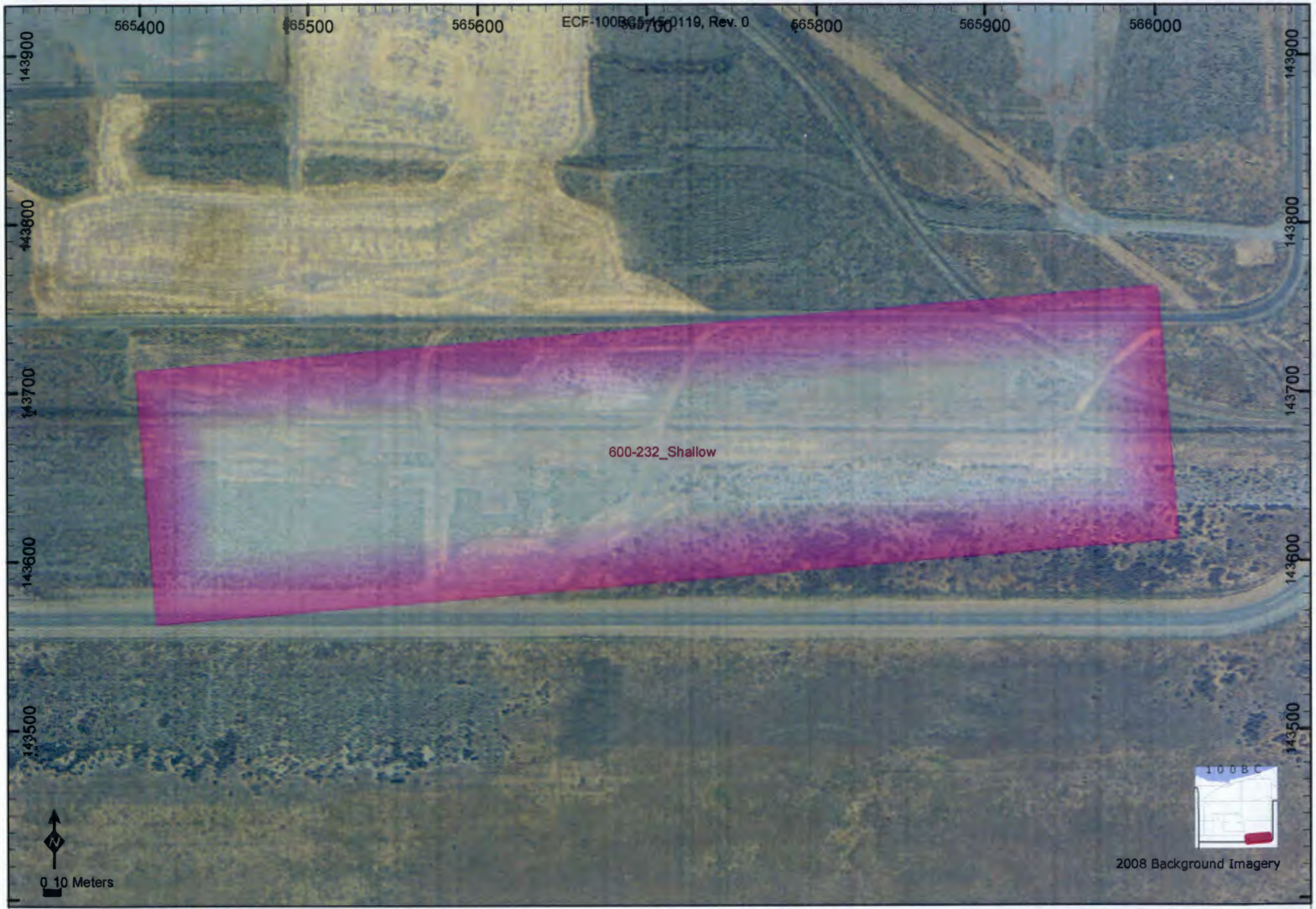
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
1607-B7_Shallow	**10.8**	224	**12.3**	3	30	2.4	16



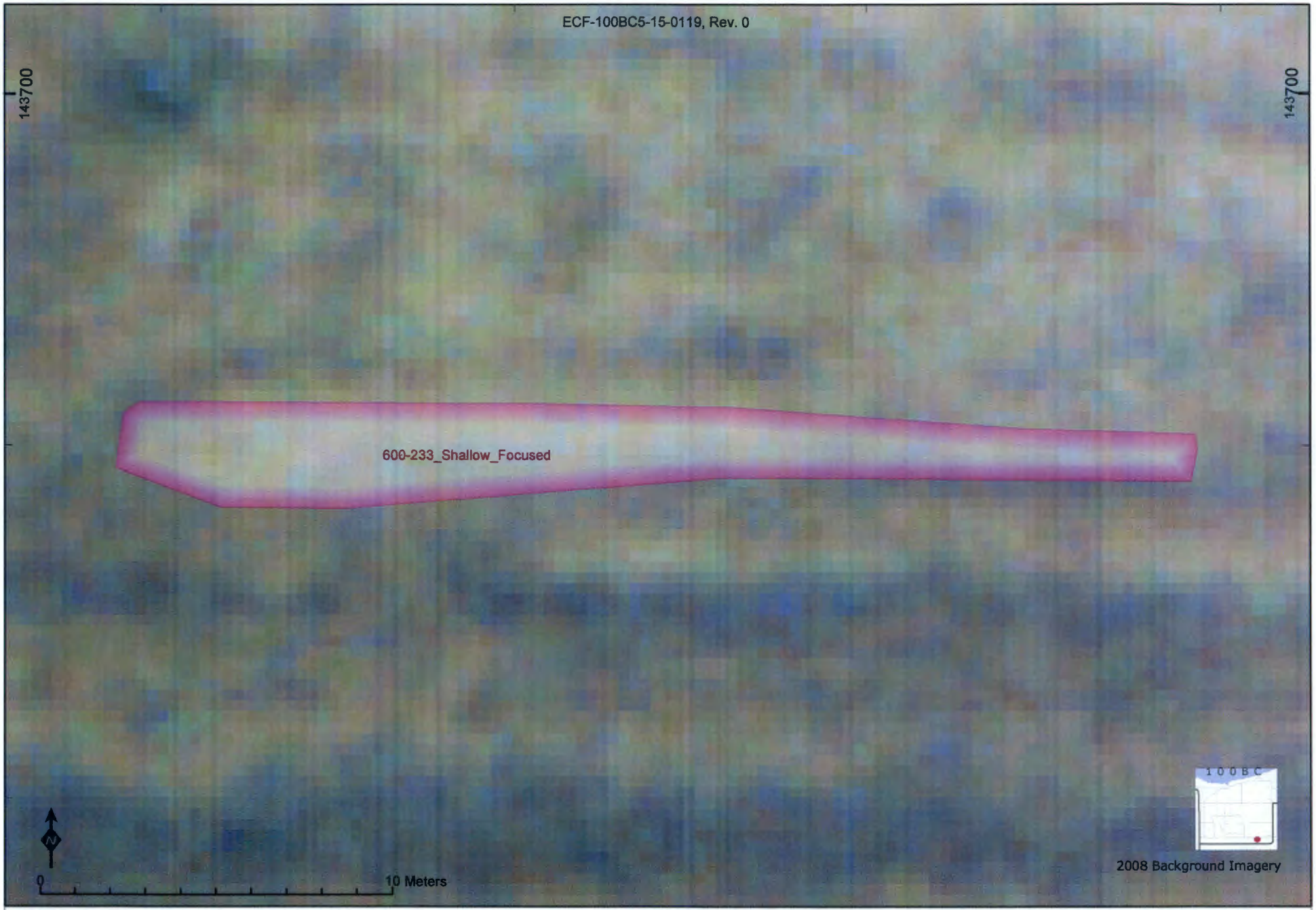
Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
1607-B8_Shallow	**9**	225	**14.3**	6	18	2.9	20



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
		Ave. Length (m)		Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
1607-B9_Shallow	**23.5**	226	**28**	15	62	1.2	54



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
600-232_Shallow	**170.4**	227	**147.8**	17	617	3	151



Representative Lineal Dimension (RLD) Methods for Decision Unit:	Equivalent Area of Circle Radius (m)	Intersected Flow Vectors Statistics					
			Ave. Length (m)	Std.Dev.	Count	Min.Len.(m)	Max.Len.(m)
600-233_Shallow_Focused	**4.6**	228	**2.1**	1	31	1.3	3

Subpart except §§ 250.23 (d), (e), (f), (g), (h) and 250.28.

NOTE.—If the generator sends the hazardous waste to an on-site treatment, storage, or disposal facility or an off-site treatment, storage, or disposal facility within the United States which the generator owns, the generator is also an operator of a treatment, storage, or disposal facility and shall comply with the requirements of Subpart D of this Part and shall obtain a permit from the Administrator for the operation of the facility pursuant to the requirements of Subpart E of this Part or shall comply with State requirements where the State has jurisdiction pursuant to Subpart F of this Part.

(2) Every generator must comply with Subpart D and Subpart E of this Part if the waste remains on-site for 90 days or longer.

(3) Any generator who ships his waste to a treatment, storage or disposal facility outside the jurisdiction of the United States must inform the foreign government having jurisdiction over the designated facility.

(4) Any person or Federal Agency who generates only household refuse or household septic tank pumpings is not required to comply with the requirements of this Subpart.

(5) Retailers, farmers and persons or Federal Agencies who produce and dispose of less than 100 kilograms per month of hazardous waste are specially regulated under § 250.29 of this regulation. In addition, special reporting requirements apply under § 250.23 to persons who assume a generator's responsibilities under this Subpart for waste oil.

§ 250.21 Definitions.

(a) When used in this Subpart, the following terms have the meanings given in the Act:

(1) "Administrator"—Section 1004(1)
(2) "Disposal"—Section 1004(3)
(3) "Federal Agency"—Section 1004(4)
(4) "Hazardous waste management"—Section 1004(7)
(5) "Person"—Section 1004(15)
(6) "Sludge"—Section 1004(26A)
(7) "Solid waste"—Section 1004(27)
(8) "Solid waste management"—Section 1004(28)
(9) "Solid waste management facility"—Section 1004(29)
(10) "State"—Section 1004(31)
(11) "Storage"—Section 1004(33)
(12) "Treatment"—Section 1004(34)

(b) Other terms used in this Subpart have the following meanings:

(1) "Act" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, Public Law 94-580.

(2) "Closing date" means the date which marks the end of a reporting quarter or reporting year.

(3) "Common code" means the unique code assigned by the Chemical Abstract Services to each EPA hazardous waste and to each DOT hazardous waste material listed in § 250.14 of Subpart A.

(4) "Delivery document" means a shipping paper, bill of lading, waybill, dangerous cargo manifest, or other shipping document, used in lieu of the original manifest, to fulfill the recordkeeping requirement of § 250.33 of Subpart C.

(5) "EPA" means the U.S. Environmental Protection Agency.

(6) "EPA Region" means the States and territories found in any one of the following ten regions:

Region I—Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.
Region II—New York, New Jersey, Commonwealth of Puerto Rico, and the U.S. Virgin Islands.
Region III—Pennsylvania, Delaware, Maryland, West Virginia, Virginia, and the District of Columbia.
Region IV—Kentucky, Tennessee, North Carolina, Mississippi, Alabama, Georgia, South Carolina, and Florida.
Region V—Minnesota, Wisconsin, Illinois, Michigan, Indiana, and Ohio.
Region VI—New Mexico, Oklahoma, Arkansas, Louisiana, and Texas.
Region VII—Nebraska, Kansas, Missouri, and Iowa.
Region VIII—Montana, Wyoming, North Dakota, South Dakota, Utah, and Colorado.
Region IX—California, Nevada, Arizona, Hawaii, Guam, American Samoa, Commonwealth of the Northern Mariana Islands.
Region X—Washington, Oregon, Idaho, and Alaska.

(7) "Farm" means a piece of land on which crops or animals are raised.

(8) "Farmer" means a person whose principal business is operating a farm.

(9) "Generator" means any person or Federal Agency whose act or process produces hazardous waste identified or listed under Subpart A; provided, however, that certain producers may or may not be generators depending on whether they meet the criteria specified in § 250.29 of this Subpart.

(10) "Hazardous waste" has the meaning given in Section 1004(5) of the Act as further defined and identified in Subpart A.

(11) "Household refuse" means trash or rubbish ordinarily produced by a family at their home.

(12) "Identification code" means the unique code assigned by EPA to each generator, transporter, an treatment, storage, or disposal facility, pursuant to regulations published in § 250.24 herein and Subpart G.

(13) "International shipment" means the transportation of hazardous waste between a generator located in the United States and a treatment, storage, or disposal facility located outside the jurisdiction of the United States.

(14) "Interregional shipment" means the transportation of hazardous waste between EPA regions.

(15) "Intraregional shipment" means the transportation of hazardous waste within an EPA Region.

(16) "Manifest" has the meaning given in Section 1004(12) of the Act as further defined and specified in § 250.22 herein.

(17) "Manifest document number" means the serially increasing number assigned to the manifest or delivery document by the generator for recordkeeping and reporting purposes.

(18) "On-site" means on the same or geographically contiguous property. Two or more pieces of property which are geographically contiguous and are divided by public or private right(s)-of-way are considered a single site.

(19) "Package" or "outside package" means a packaging plus its contents.

(20) "Packaging" means the assembly of one or more containers and any other components necessary to assure compliance with the minimum packaging requirements under 49 CFR 173, 178, and 179 and includes containers (other than freight containers or overpacks), portable tanks, cargo tanks, tank cars and multi-unit tank car tanks.

(21) "Permitted hazardous waste management facility" or "permitted facility" means a hazardous waste treatment, storage, or disposal facility that has received an EPA permit in accordance with the requirments of Subpart E of this Part or a permit from a State agency authorized in accordance with Subpart F of this Part.

(22) "Regional Administrator" means one of the Regional Administrators of the United States Environmental Protection Agency or his designee.

(23) "Reporting quarter" means the three (3) month time period covered by each quarterly report; the reporting quarters end on the last day of March, June, September, and December.

(24) "Reporting year" means the twelve month time period covered by each annual report; the reporting year ends on the last day of September.

(25) "Retailer" means a person engaged solely in the business of selling directly to the consumer.

(26) "Spill" means any unplanned release or discharge of a hazardous waste onto or into the air, land, or water.

(27) "Storage tank" means any manufactured nonportable covered device used for containing but not treating hazardous waste.

(28) "Triple rinsed" refers to containers which have been flushed three times, each time using a volume of diluent at least equal to ten percent of the containers capacity.

[6560-01-M]

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 250]

[FRL 1014.5]

HAZARDOUS WASTE GUIDELINES AND REGULATIONS

AGENCY: Environmental Protection Agency.

ACTION: Proposed rules.

SUMMARY: The Environmental Protection Agency (EPA) today issues proposed rules under Sections 3001, 3002, and 3004 of the Solid Waste Disposal Act as substantially amended by the Resource Conservation and Recovery Act of 1976 (Pub. L. 94-580 (Oct. 21, 1976)). These proposals respectively cover: (1) criteria for identifying and listing hazardous waste, identification methods, and a hazardous waste list; (2) standards applicable to generators of such waste for recordkeeping, labeling, containerizing, and using a transport manifest; and (3) performance standards for hazardous waste management facilities. In separate sections of today's FEDERAL REGISTER EPA explains in detail the proposals under Sections 3002 and 3004.

These proposals together with those already published pursuant to Section 3003, (April 28, 1978, 43 FR 18506-18512), Section 3006 (February 1, 1978, 43 FR 4366-4373), Section 3008 (August 4, 1978, 43 FR 34738-34747), and Section 3010 (July 11, 1978, 43 FR 29908-29918) and that of the Department of Transportation pursuant to the Hazardous Materials Transportation Act (May 25, 1978, 43 FR 22626-22634) along with Section 3005 regulations constitute the hazardous waste regulatory program under Subtitle C of the Act.

EPA has chosen to integrate its regulations pursuant to Section 3005 and Section 3006 of the Act with proposals under the National Pollutant Discharge Elimination System required by Section 402 of the Clean Water Act and the Underground Injection Control Program of the Safe Drinking Water Act. This integration of programs will appear soon as proposed rules under 40 CFR Parts 122, 123, 124 and 128.

In addition to the proposals announced today, EPA is publishing in today's FEDERAL REGISTER an Advance Notice of Proposed Rulemaking, that calls attention to suggested expansion of characteristics to be used in identifying hazardous waste under Subtitle C.

DATES: Comments are due March 16, 1979. Hearings: listed below.

ADDRESSES: Comments should be addressed to: John P. Lehman, Director, Hazardous Waste Management Division, Office of Solid Waste (WH-565), U.S. Environmental Protection Agency, Washington, D.C. 20460. Communications should identify the regulatory docket or notice number, such as "Section 3001", Section 3002", etc.

The official record for this rulemaking is available at: Room 2111D, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460, and is available for viewing from 9:00 a.m. to 4:00 p.m. Monday through Friday, excluding holidays.

Hearings: Five sets of consolidated public hearings on Section 3001-4 proposals are scheduled. The portion of the hearing devoted to Section 3003 will be held jointly with the Department of Transportation.

The schedule and location for the hearings are as follows:

February 7, 8, 9 (1979)—United Engineering Center, Main Auditorium, 345 East 47th Street, New York, N.Y.
February 14, 15, 16—Breckenridge Pavilion Hotel, One Broadway, St. Louis, Missouri 63102, 314-421-1776
February 20, 21, 22—Department of Commerce, Main Auditorium, 14th Street Entrance, Washington, D.C.
March 7, 8, 9—Holiday Inn-Airport. P.O. Box 38218, 4040 Quebec Street, Denver, Colorado 80216, 303-321-6666.
March 12, 13, 14—EPA Regional Office, Sixth Floor Conference Room, 215 Fremont Street, San Francisco, Calif.

A block of rooms has been reserved in St. Louis and Denver for attendees. Please make reservations directly with the hotel by requesting an EPA reserved room at least two weeks prior to the hearing.

An evening session will be held the second day of each hearing to accommodate those who cannot attend during the day. The evening session will cover all four proposed regulations.

The agenda below will generally be followed:

Day 1:
Registration—8:00-8:30 a.m.
Section 3001—8:30-5:00 p.m.
Day 2:
Continuing Registration—8:00-8:30 a.m.
Section 3002—8:30-12:30
Section 3003—2:00-5:00 p.m.
Section 3001-3004—7:00 p.m.
Day 3:
Continuing Registration—8:00-8:30 a.m.
Section 3004—8:30-5:00 p.m.

Anyone wishing to make an oral statement(s) at the hearing(s) should notify, in writing;

Mrs. Geraldine Wyer, Public Participation Officer, Office of Solid Waste (WH-562), U.S. E.P.A., 401 M Street SW., Washington, D.C. 20460.

Please indicate which hearing (location) and the specific regulation(s) that comment(s) will be directed to.

Oral or written comments may be submitted at the public hearings. Persons who wish to make oral presentations must restrict their presentations to ten minutes, and are encouraged to have written copies of their complete comments for inclusion in the official record.

FOR FURTHER INFORMATION CONTACT:

Hazardous Waste Management Division, Office of Solid Waste (WH-565), U.S. Environmental Protection Agency, Washington, D.C. 20460.

Section 3001—Mr. Alan Corson, 202-755-9187.

Section 3002—Mr. Harry Trask, 202-755-9187.

Section 3004—Mr. Timothy Fields, Jr., 202-755-9296.

SUPPLEMENTARY INFORMATION:

INTRODUCTION

The EPA is today proposing the core elements of a major regulatory program to manage and control the country's hazardous waste from generation to final disposal. The Congress directed this action in the Resource Conservation and Recovery Act of 1976 (RCRA), recognizing that disposal of hazardous waste is a crucial environmental and health problem which must be controlled.

In our proposal, we have outlined two sets of requirements: one which sets norms of conduct for Federal and State agencies in implementing the program and the second which sets minimum norms of conduct for those who generate, transport, treat, store, and dispose of hazardous waste.

These requirements, we believe, will close the circle of environmental control begun earlier with regulatory control of emissions and discharges of contaminants to air, water, and the oceans.

We do not underestimate the complexity and difficulty of our proposed regulations. Rather, they reflect the large amounts of hazardous waste generated and the complexity of the movement of hazardous waste in our diverse society. These regulations will affect a large number of industries. Other non-industrial sources of hazardous waste, such as laboratories and commerical pesticide applicators, as well as transporters of hazardous waste, will also be included. The Agency estimates that approximately 270,000 waste generating facilities and 10,000 transporters will be regulated, although only about 30,000 of that number will require treatment, storage, or disposal permits. Under this

(a) What should the size of the fund be?

(b) Should there be a maximum amount available for any one claim; if so, what amount?

(c) What amount should be charged per unit of waste disposed?

(d) How should the fund be administered?

(e) What are the alternatives to a Federally administered fund?

(f) Should the fund provide separate regulations for publicly owned and privately owned facilities?

Further, the Agency is considering, and solicits comments on additional closure and post-closure financial responsibility provisions designed to insure that adequate funds are available for closure and post-closure care. To that end, a system of periodic checks would be established. The closure and post-closure financial responsibility provisions would require the facility to biannually re-evaluate and revise the estimate of the amount of total and annual payments necessary to provide adequate financing for closure and post-closure care. A report of the re-evaluation and revision would be included in the annual report required to be submitted to the Regional Administrator. The evaluation and revision would be subject to the approval of the Regional Administrator. In addition, the provisions would require the owner/operator to certify in the annual report that he has made the required annual payments to the trust funds.

STANDARDS FOR STORAGE

The storage standards proposed in § 250.44 are intended to prevent the release of hazardous waste from storage areas into the environment. Section 1004(33) of RCRA defines "storage" as the containment of hazardous waste, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of hazardous waste. Section 1004(3) of RCRA defines "disposal" as

> the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

Because "storage" cannot constitute "disposal," the regulations for hazardous waste storage operations require that storage be conducted in such a manner that no discharge or release of any waste occurs.

An issue central in the storage standards is when storage begins. The Agency believes that it would be inappropriate to require generators to comply with Subpart D storage regulations the instant a waste is generated because they really are not storage facility operators. However, the Agency also recognizes that generators tend to accumulate considerable quantities of hazardous waste over extended periods of time. With prolonged storage, the Agency believes the generator does become a storage facility operator, with the attendant environmental risks, and should have to comply with the storage regulations.

The Agency has decided to allow generators a reasonable period of time to accumulate hazardous waste on-site (with the intent to ship off-site) within which time they will not be considered storage facility operators. Ninety days has been selected as this interim period, as EPA considers that the likelihood of discharge of waste to the environment occurring within 90 days is low. Accordingly, a storage facility is defined as any facility that stores hazardous waste, except a facility used by a generator to store his own hazardous waste on-site in DOT specification containers for less than 90 days for subsequent transport off-site.

In order to prevent the release of waste to the environment, the standards for storage (§ 240.44) include the requirement that storage tanks and containers be of sturdy and leakproof construction. The Occupational Safety and Health Administration (OSHA) has written explicit design specifications for tanks and containers used to store flammable and combustible liquids (29 CFR 1910, Subpart H, § 1910.106). EPA proposes to require that facility owners/operators store all of their hazardous waste in tanks and containers which meet the specifications in OSHA's regulations for flammable and combustible liquid containers. OSHA's specifications are designed to ensure that no discharge from containers meeting those specifications will occur. Subpart D standards go beyond OSHA specifications, however, by providing that storage tanks and containers must be constructed of materials which are compatible with the hazardous waste to be contained or must be protected by a liner compatible with the waste to be contained. Comments are requested on this proposal to adopt OSHA's specifications for storage containers.

STANDARDS FOR TREATMENT/DISPOSAL

Section 250.45 prohibits treatment or disposal of certain kinds of waste in landfills, surface impoundments, basins, or landfarms unless the owner/operator can demonstrate that such treatment or disposal will not exceed OSHA's permissible contaminant levels for any listed airborne contaminants (29 CFR § 1910.1000) above such non-point sources and that it will not contribute two or more airborne contaminants to the air in a manner which will cause a specified equation to exceed unity. EPA believes that this prohibition is justified because reactive, ignitable, and volatile waste pose special treatment and disposal problems. The Agency does not know of any way to ensure protection of human health and the environment without imposing this prohibition and attendant Note requirement. Comments on this approach are requested.

Air sampling at non-point sources (e.g., surface impoundments, landfills) is not required in these regulations. Sampling at a non-point source may be made a permit condition, however, in a situation such as this, where the owner/operator is authorized to deviate from a design and operating standard. Air sampling procedures for non-point sources are under development. A manual will be provided by EPA following promulgation of these rules to describe the procedures by which air sampling at non-point sources could be accomplished.

Incineration

The standards in § 250.45-1 apply to hazardous waste incinerators which are defined as combustion devices. One example of an incinerator is a rotary kiln. These regulations also apply to cement kilns, utility boilers, and any other devices which burn hazardous waste by combustion.

The Subpart D performance standards for the incineration of hazardous waste prescribe conditions for destruction of the waste introduced and for control of the resulting emissions. Thus, these proposed rules include specifications on residence time, combustion temperature, excess air, combustion efficiency, scrubber efficiency, and automatic feed cutoffs. Trial burns are required for incinerators burning waste of a type which has not previously been burned in similar incinerators. The results of trial burns must be submitted to the Regional Administrator. Additionally, an emission standard for particulates is given.

EPA sponsored a program to assess processes for destroying chemical waste in commercial scale incinerators, as well as programs to destroy chemical waste in experimental incineration units. EPA has concluded that thermal destruction as a method of treatment of primarily organic chemical waste is both technically feasible and environmentally sound.

The successful utilization of certain cement kilns for destruction of chlorinated organic waste is one of the more important results of EPA's program. Cement kilns use the halogen content of the waste to reduce alkalinity in the cement clinker while using the hydrocarbons as fuel. The BTU value of wate reduces the fuel otherwise required to produce cement. Com-