



Ministry of Energy and Mines  
BC Geological Survey

Assessment Report  
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: geochemical

TOTAL COST: 17,640.07

AUTHOR(S): Krzysztof Mastalerz

SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

YEAR OF WORK: 2012

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): SOW 5411414

PROPERTY NAME: Osilinka River

CLAIM NAME(S) (on which the work was done): 917699, 917689, 917729, 928830, 928839, 928840, 929089

work done at 928830, 928835, 928840

COMMODITIES SOUGHT: zinc, lead, silver

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 094C-029, -030, -031, -032, -033, -129, -130, -161

MINING DIVISION: Omineca

NTS/BCGS: 094C - 02

LATITUDE: 56 ° 09 '20 " LONGITUDE: 124 ° 53 '55 " (at centre of work)

OWNER(S):

1) Killdeer Minerals Inc (100%)

2)

MAILING ADDRESS:

325-744 West Hastings St.

Vancouver, BC V6C 1A5

OPERATOR(S) [who paid for the work]:

1) Killdeer Minerals inc

2)

MAILING ADDRESS:

same

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

carbonate rocks, siliciclastic sediments and meta-sediments; Upper Proterozoic through Devonian (possibly Permian?);

homocline, syncline, normal faults, thrust faults; recrystallization, weak metamorphism, low-temperature hydrothermal,

oxidation; sphalerite-galena minor barite, chalcopryrite, calcite, quartz, replacement type; small-scale showings of variable

attitude to unknown at depth

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 0072, 1654, 1944, 5937, 6485, 8324, 20456,

20576, 21914, 22362, 22613, 25495, 26826

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping			
Photo interpretation			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
Soil 50 (ICP)		928830, 928839, 928840	8640.07
Silt			
Rock 40 (ICP)		928830, 928839, 928840	7000.00
Other			
<b>DRILLING (total metres; number of holes, size)</b>			
Core			
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgical			
PROSPECTING (scale, area) 8 km <sup>2</sup>		928830, 928839, 928840	2000.00
<b>PREPARATORY / PHYSICAL</b>			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
<b>TOTAL COST:</b>			<b>17,640.07</b>

ASSESSMENT REPORT  
ON  
2012 GEOCHEMICAL ROCK AND SOIL SAMPLING PROGRAM,  
OSILINKA RIVER PROPERTY  
NORTH-CENTRAL BRITISH COLUMBIA

Claims involved: 917669, 917689, 917729, 928830, 928839, 928840 and 929089  
(Work conducted on: 928830, 928839 and 928840)

OMINECA MINING DIVISION

NTS 94C-02

BC Geological Survey  
Assessment Report  
33605

Approximate coordinates of the centre of the property:

Latitude: 56°09'20" N; Longitude: 124°53'55" W  
UTM: 6225000N, 382000E (NAD83, Zone 10)

Owner: Killdeer Minerals Inc., Vancouver

Operator: Killdeer Minerals Inc., Vancouver

[SOW 5411414]

By

Krzysztof Mastalerz, Ph.D., P.Geo.

Submitted: January 29<sup>th</sup>, 2013

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

33,605

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**ASSESSMENT REPORT ON  
2012 GEOCHEMICAL ROCK AND SOIL SAMPLING PROGRAM,  
OSILINKA RIVER PROPERTY  
NORTHERN-CENTRAL BRITISH COLUMBIA  
BCGS 094C-02**

## 1. INTRODUCTION

The Osilinka property encloses several showings of replacement type zinc-lead with minor silver (Pb-Zn+/-Ag) mineralization. The property is located in the Omineca Mining Division, in north-central British Columbia (Fig. 1) and consists of seven contiguous mineral claims (Fig. 2) located near the prominent bend of the Osilinka River, approximately 50 air kilometres from the central portion of Williston Lake and 43 air kilometres NNW of Germansen Landing. The property is owned by Killdeer Minerals Inc. of Vancouver since early November 2012.

### 1.1 Location and Access

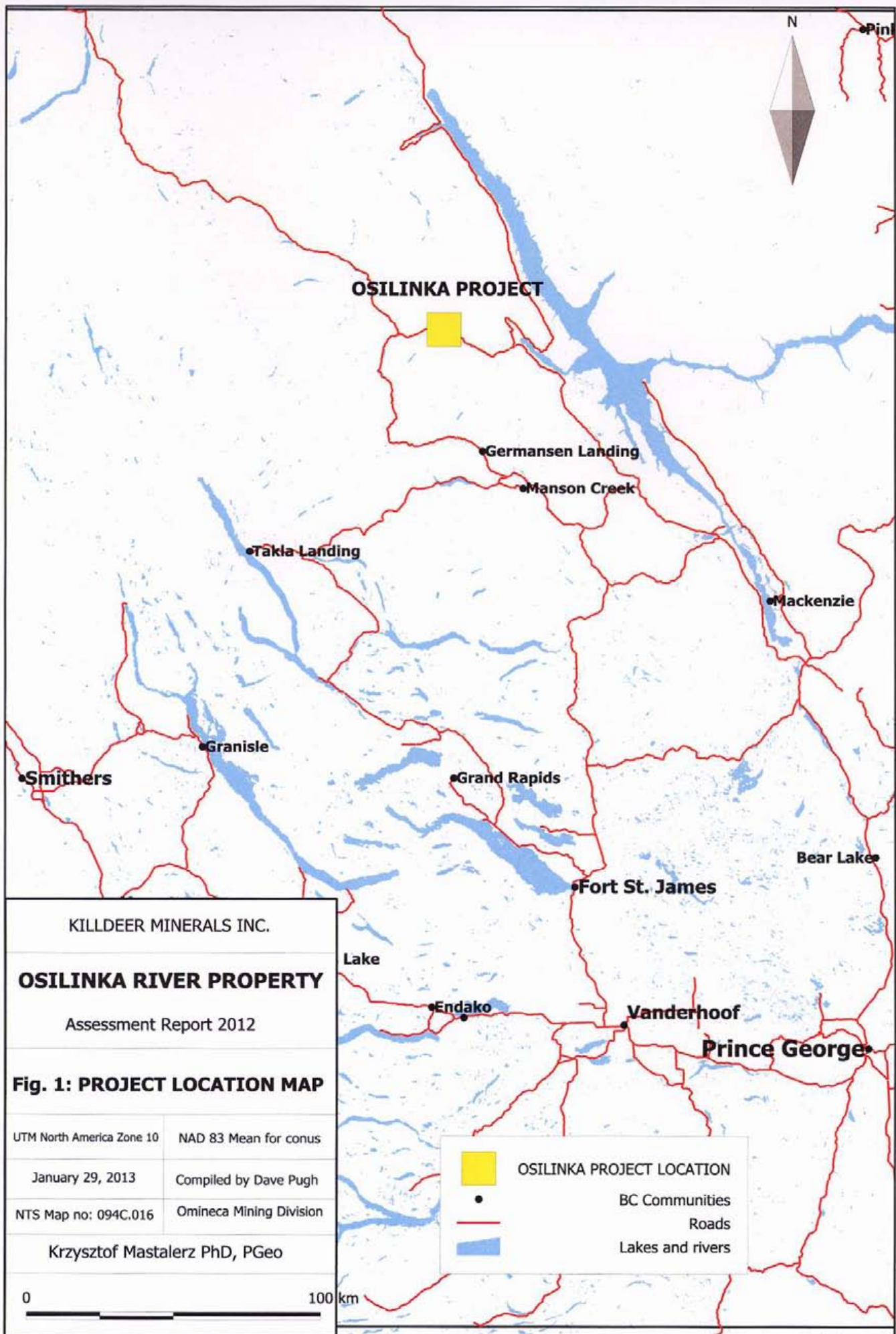
The Osilinka property is located at latitude 56° 09' 20" N and longitude 124° 53' 55" W, on the NTS map sheet 094C-02 in the Omineca Mining Division, north-central British Columbia (Fig. 1). The mineral tenures cover slopes of the steep hills on both sides of the Osilinka River (Fig. 2) which drains to Omineca River and Williston Lake. The property is approximately 1279 hectares in area (Table 1).

The property can be accessed by a system of gravel logging roads from either Mackenzie or Fort St. James, both approximately 6-8 hours travel time. The best access to the property is via the "Omineca Mining Road" from Germansen Landing and, after the Osilinka River crossing, along an exploration access road (recently logging road) on the northern to north-eastern side of the Osilinka River. The claims are accessible year-round except in heavy snow.

### 1.2 Physiography, Vegetation and Climate

Topography of the area is moderately diversified and includes moderately steep and steep slopes and flat-bottomed deeply incised valley of the Osilinka River. Elevations range from approximately 800-825 metres a.s.l. along the bottom of the Osilinka valley to approximately 1300-1400 metres a.s.l. along the rounded ridges on both sides of the valley. The terrain rises relatively steeply on both sides of the valley and slopes are partly covered with rocky rubble and scree. The area is wooded predominantly with balsam, spruce, pine and poplar in mixed stands and variable density from quite thick to relatively open. Underbrush becomes heavier in the lower portion of the slopes and along the bottom of the Osilinka valley.

Fig. 1. Osilinka River project - Location Map. (*next page*)



KILLDEER MINERALS INC.

**OSILINKA RIVER PROPERTY**





Assessment Report 2012

**Fig. 1: PROJECT LOCATION MAP**

UTM North America Zone 10	NAD 83 Mean for conus
January 29, 2013	Compiled by Dave Pugh
NTS Map no: 094C.016	Omineca Mining Division

Krzysztof Mastalerz PhD, PGeo

0 100 km

	OSILINKA PROJECT LOCATION
	BC Communities
	Roads
	Lakes and rivers

The area on higher elevations has been, most likely, modified to some extent by glacial processes. Float includes some sub-rounded pebble to cobble material of apparently exotic provenance.

Daily summer temperatures on the property average 20-30°C. Winter conditions are expected from the end of September to April with heavy snowfall and temperatures averaging -20°C to -30°C in January/February. The property receives moderate to relatively low amounts of precipitation during the summer season.

### 1.3 Property Definition and Claim Information

The Osilinka River property is located in the Omineca Mining Division and comprises seven mineral tenures totaling approximately 1279.43 hectares (Fig. 2). Basic claim information is listed in Table 1.

Table 1. Claim status of the Osilinka property, Omineca Mining Division; 094C-02.

Tenure	Claim Name	Owner	Issue Date	Good To Date*	Area (ha)
917669		Killdeer Minerals Inc. (100%)	2011/oct/18	2015/apr/01	72,10
917689		Killdeer Minerals Inc. (100%)	2011/oct/18	2015/apr/01	54,07
917729		Killdeer Minerals Inc. (100%)	2011/oct/18	2015/apr/01	162,26
928830	OSILINKA 1	Killdeer Minerals Inc. (100%)	2011/nov/10	2015/apr/01	450,35
928839	OSILINKA 2	Killdeer Minerals Inc. (100%)	2011/nov/10	2015/apr/01	288,34
928840	OSILINKA 3	Killdeer Minerals Inc. (100%)	2011/nov/10	2015/apr/01	18,03
929089	OSILINKA 4	Killdeer Minerals Inc. (100%)	2011/nov/14	2015/apr/01	234,32
<b>Total</b>					<b>1279,47</b>

All the above mineral tenures were transferred from Dave Pugh (122002) to Killdeer Minerals Inc. (230501) on Nov 2, 2012

\* The dates are contingent upon acceptance of this report

Work done by the Killdeer personnel in June 2012 was conducted on the claims 928830, 928839 and 928840. Expiry dates listed above are contingent upon acceptance of this assessment report, according to event 5411414 filed on October 18, 2012.

The minerals claims were originally staked by D. Pugh in 2011 and then transferred to Killdeer Minerals Inc. of Vancouver in November, 2012.

### 1.4 History of Exploration

The first documented work in mineral exploration/prospecting conducted in the nearest vicinity of the Osilinka River property is referred to in the 1930 Report of Minister of Mines on pages 152-153. The notice describes the Childhood Dream showing and summarizes results of trenching, sampling and assaying completed previously. 1952' Report of the Minister of Mines describes the same property, now owned by New Jersey Zinc Explorations Ltd., and brings concise information on geology near two adits which have been driven some time ago into the showing. Also E.F. Roots (1954) briefly described the Childhood Dream showing.

The first geological mapping in the area, on a 1:250,000 scale, was completed in late 1940's (Armstrong, 1949). In 1990, Ferri and Melville completed geological mapping in the area



immediately south of the property and introduced the lithostratigraphic subdivisions which have been applied to date. Also Gabrielse (1975) commented on the regional geology of the area.

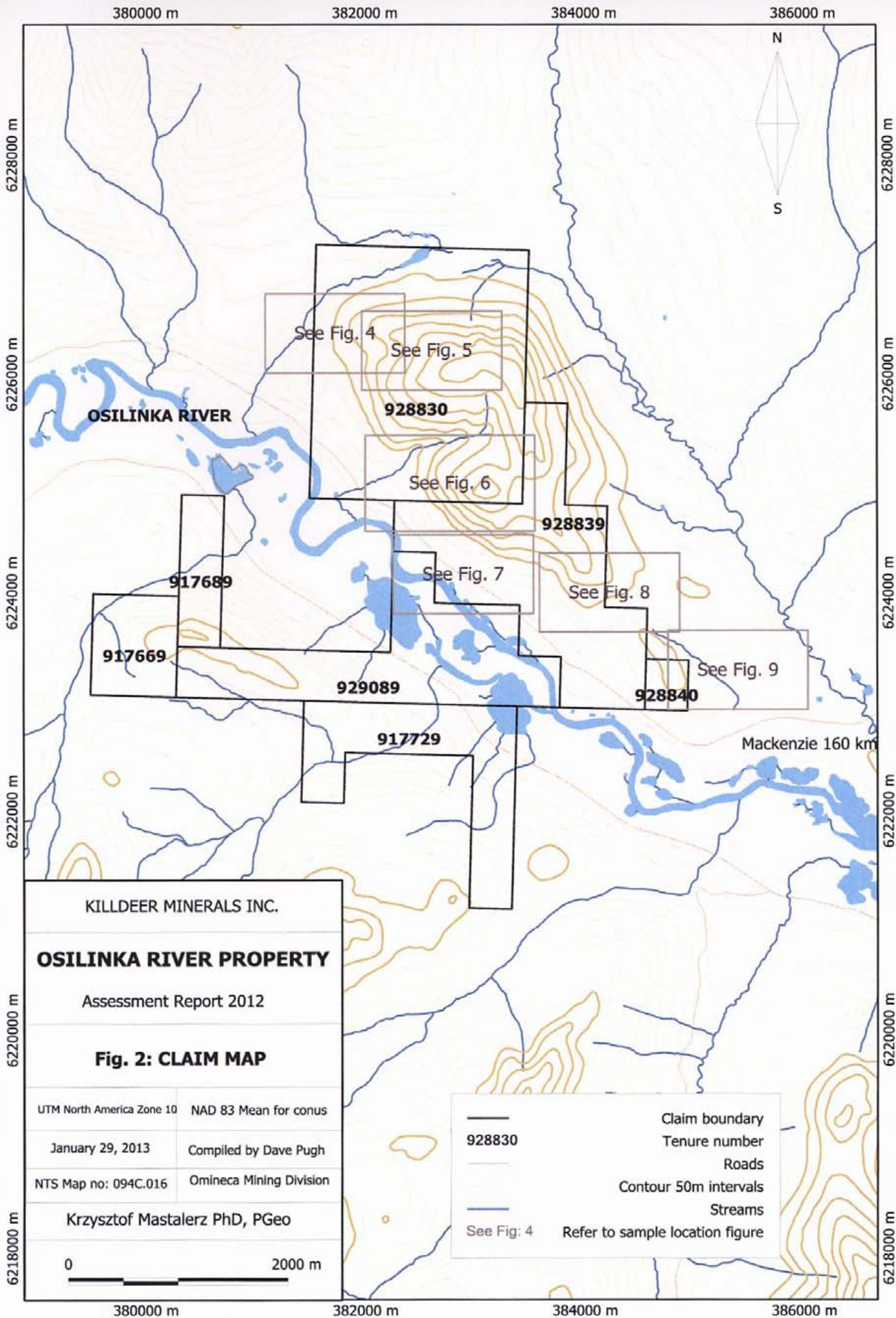
Barr and Warren (1951) described a few lead-zinc-silver replacement mineralization showings which occur in the Omineca River valley area, some 25 miles north of Germansen Landing as early as 1951. The authors identified the individual mineral occurrences with the specified names as to, apparently, the showings were known already for some time earlier. Unfortunately, their assessment report does not refer precisely enough to any earlier exploration work.

Jenkins (1980) provided information that the Alfie group of mineral claims was located on the southern side of the Osilinka River by Ernest and Gordon Davies and, subsequently, was optioned to Northwestern Explorations Limited in 1951. The low- to moderate-grade zinc, lead with minor silver mineralization was identified on the property by trenching. Placer Development Ltd. conducted geochemical and geophysical exploration programs on the property from 1966 through 1968 (Ainsworth, 1968). Borovic (1976, 1977) completed some additional mapping and expanded soil geochemistry coverage for the property (Donna claims). Placer continued geochemistry survey and mapping on the property also during the next seasons (Jenkins, 1980).

Halleran (1989) and then Halleran and Halleran (1990) provided reports of additional geological, geochemical and ground geophysical investigations conducted on the Osprey claims located along the southwestern slopes of the Osilinka valley. In the early 1990's, Cominco brought about an additional significant exploration effort to the area which was covered with extensive soil geochemistry and airborne geophysical grids (Noakes, 1991; Klein, 1992; Pauwels, 1992).

In 2000, Cross Lake Minerals Ltd. staked the End Lake property just west of the northwestern tip of the present-day Osilinka River property and sampled/mapped the Childhood Dream showing (Miller-Tait, 2002). In 2002, the same company completed two diamond drill holes to test for the extension of the sulphide mineralization encountered on the Childhood Dream showing and tested previously by the underground adits. The drill program was also designed to test further stratigraphy of the host carbonate rock succession for the base metal mineralization (Miller-Tait, 2002).

Fig. 2. Osilinka River property - Claim Map (*next page*)



### 1.5. Summary of 2012 Rock and Soil Sampling Program

In late June 2012 Killdeer Minerals' David Pugh and Krzysztof Mastalerz conducted prospecting, a limited rock and soil sampling program, as well as structural-stratigraphic observations on the northeastern part of the Osilinka River property. The work was carried on minerals claims 928830, 928839 and 928840. Observations were also conducted in close vicinity of these claims just outside of their northwestern and southeastern boundaries.

During the program, 40 rock (grab and local float) and 50 soil samples were collected in the northeastern part of the property (Appendix 1). The sampling program was designed to verify existence of the known soil anomalies and search for mineralization in bedrock. The program resulted in several significantly elevated values of silver and base metals encountered in bedrock and/or in float which was believed to represent local material. However, the intensity of this mineralization appears to be significantly subdued by leaching and oxidation processes. The results prove an existence of localized soil anomalies with strongly elevated values of zinc, lead and silver and significantly elevated background levels, which was documented previously on the area by the extensive soil grid completed by Cominco (Noakes 1991, Pauwels, 1992).

The program also resulted in discovery of a new showing of copper mineralization in bedrock in the easternmost part of the property.

## 2. TECHNICAL DATA AND INTERPRETATION

### 2.1 Regional Geology

The Osilinka property is located within the north-northwestern tip of the Slide Mountain Terrane and along its boundaries with the Cassiar Terrane of the Omineca Belt in the north-central British Columbia. The predominant part of the area is underlain by the Cambrian-to-Permian succession of carbonate rocks with minor siliciclastics of the Slide Mountain Terrane (Gabrielse, 1975). This succession overlies unconformably the Proterozoic metasedimentary units (predominantly fine-grained) with minor re-crystallized carbonate rocks of the Ingenika Group, Cassiar Terrane, to the north and east (Fig. 3). The Cambrian-Permian units are locally intruded by diorite/gabbro bodies of uncertain age.

The lithostratigraphic nomenclature introduced by Ferri and Melville (1990) for the area includes the following end members, in stratigraphic order from older to younger (Fig. 3):

- Swannell Formation (Ingenika Group, Upper Proterozoic) includes moderately diversified metasedimentary rocks: argillite, greywacke, conglomerates, turbidites;
- Espee Formation (Ingenika Group, Upper Proterozoic) with limestone, marble and other calcareous metasedimentary rocks;
- Stelkuz Formation (Ingenika Group, Upper Proterozoic) is characterized by predominant fine-grained metasedimentary rocks;
- Mt. Brown Formation (Atan Group, Lower Cambrian) includes predominantly slightly metamorphosed meta-sediments (phyllite, siltstone, greywacke and minor quartzite);
- Mt. Kison Formation (Atan Group) comprises recrystallized, marbly, light-coloured limestone locally with Archeocyathid fossils;
- Razorback Group (Cambro-Ordovician) consists of thinly bedded argillites, shales and argillaceous dolomites and limestones;
- Echo Lake Group (Ordovician-Lower Devonian) comprises predominantly dolomites and limestones with minor argillites and argillitic limestones with graptolites found near the base of this unit;
- Otter Lakes Group (Middle Devonian) – includes predominantly carbonate sedimentary rocks, mostly limestone and marble;
- Big Creek Group (Upper Devonian-Permian?) consists of fine-grained siliciclastic sedimentary rocks and
- Nina Creek Group (Mississippian to Permian?) comprises marine sedimentary and volcanogenic rocks.

The lithostratigraphic end-members named above are tentative equivalents of the stratigraphic units used further north: from the Lower Cambrian Atan Group (Boya and Rosella Formations) to the Devonian Earn (shales) and McDame (carbonate rocks) Groups (Nelson and Bradford, 1986, 1987; Rees, 1998; Robertson and Belanger, 2002; Nelson 2005; Nelson and Colpron, 2007; Mastalerz, 2009). The Razorback Group corresponds to the Road River and Ketchika Groups which are also better defined in the northernmost British Columbia and Yukon Territory. The flat-bottom, 1-2 kilometres wide valley of the Osilinka River is obviously filled up with the loose Quaternary sediments.

The predominant strike of the strata in the area is north-northwesterly with gentle to moderate dips toward the centre of the large-scale, complex, NNW-SSE elongated synclinal form. Mellville (1989) describes this area as being situated within the broad, apparently complex, southwest-dipping

homocline. It is accompanied by secondary folds with their axes plunging gently toward WNW (Ferri & Mellville 1990, Pawlies, 1992). The large-scale syncline is cut by numerous prominent faults which strike NW-SE, slightly obliquely to the axis of the main syncline, and by a series of northeasterly trending normal faults. Late deformation of the rock units is at least partly responsible for the very common brecciation of the carbonate rocks. Some discontinuities are interpreted in terms of thrust faults (Fig. 3).

The regional geology in Fig. 3 is reproduced here from the website of the B.C. Ministry of Energy and Mines (Massey et al., 2005).

## 2.2 Property Geology

The Osilinka property occupies few outcrop belts of variable lithostratigraphic end-member of the Cambrian-Devonian succession which is exposed on the northeastern limb of the large-scale synclinal form which was described in the previous chapter. The oldest rock units known on the property, which comprise metasediments and dolomitic limestones, belong to the Lower Cambrian Atan Group. They occur under relative thin overburden along the northeastern edges of the property (Fig. 3). The recrystallized meta-sediments of the Mt Brown Quartzite unit can be observed within the old trenches located few hundred metres off the easternmost mineral tenure of the property. Both main lithological end-members of the Atan Group display moderate, but distinct, effects of recrystallization, fracturing, while limestone commonly shows significant brecciation. The strata are gently folded but they generally dip gently toward SW.

The thick bedded carbonate rocks of the upper Atan Group are conformably (?) overlain by the relatively thin succession of the thinly bedded fine-grained metasediments and carbonates of the Cambro-Ordovician Razorback Group (Fig. 3). According the Massey et al. (2005), two narrow belts of this stratigraphic unit are exposed in the eastern and western parts of the property (Fig. 3). The western belt is interpreted as an effect of repetition due to thrust faulting toward northwest.

The predominant part of the Osilinka property is underlain by the pale-gray, thick bedded to massive, commonly brecciated limestones and dolomites of the Ordovician-Lower Devonian Echo Lake Group (Fig. 3). Stratification and other primary sedimentary features of these rocks are strongly obliterated by very common, almost pervasive brecciation, as well as the advanced recrystallization and some replacement features. The rocks were described (Monger and Patterson, 1974; Jenkins, 1980; Noakes, 1991) to be interbedded locally with dark-gray, sometimes graptolitic, fine-grained sediments. However these latter, undoubtedly recessive units were not observed on the property during the last exploration program due to significant talus scree which covers the slopes of the northeastern parts of the property.

The westernmost tip of the property is interpreted to be underlain by the Middle Devonian carbonate rocks (limestone and marble) of the Otter Lake Group (Fig. 3). Northwestern to west-northwestern structural dips have been reported from this part of the property.

Fig. 3. Regional Geology Map.

376000 m 378000 m 380000 m 382000 m 384000 m 386000 m

6230000 m

6228000 m

6226000 m

6224000 m

6222000 m

6220000 m

6218000 m

6216000 m

6214000 m

6230000 m

6228000 m

6226000 m

6224000 m

6222000 m

6220000 m

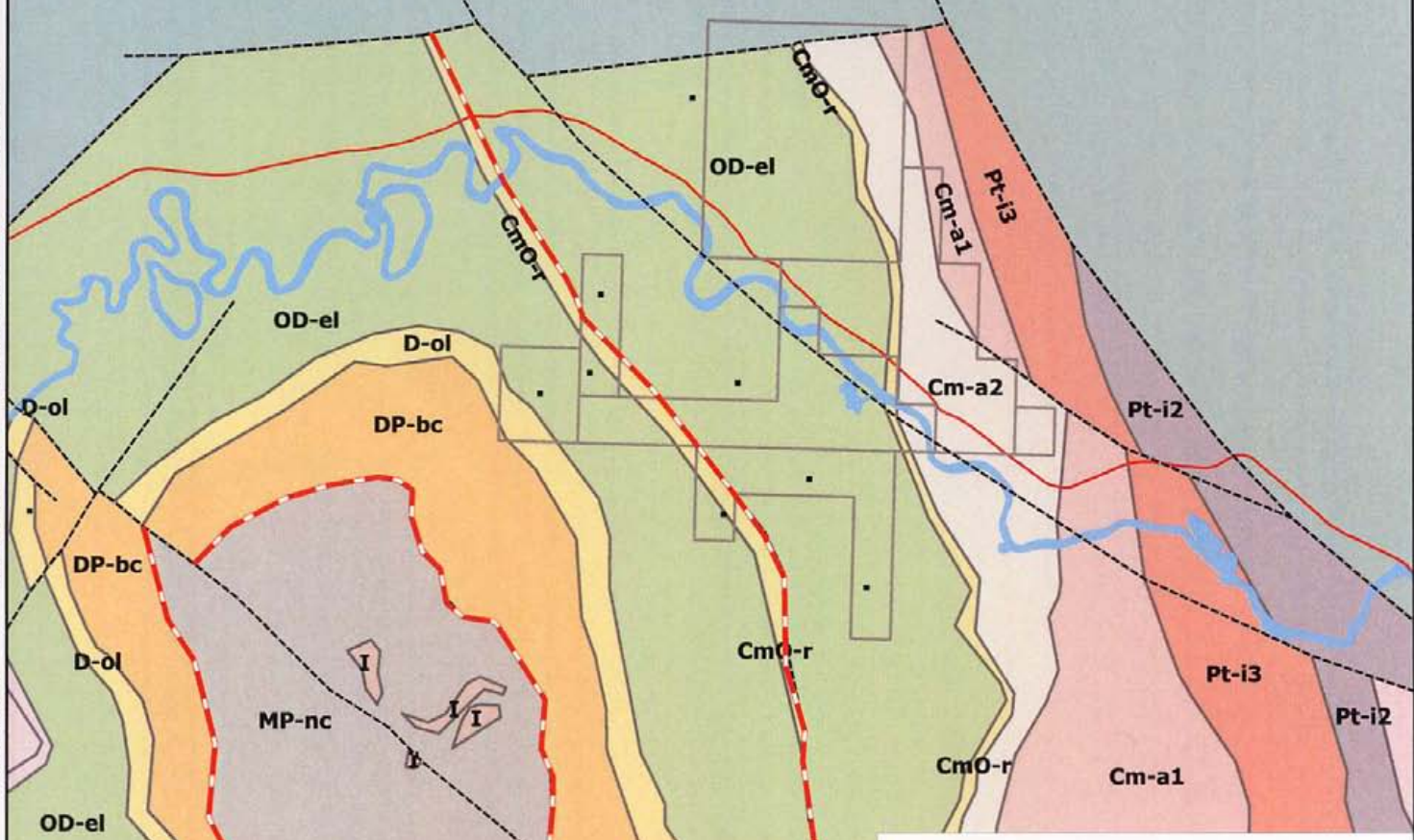
6218000 m

6216000 m

6214000 m



**OSILINKA RIVER PROPERTY**



**LEGEND**

- I Intrusive rocks; diorite, gabbro
- MP-nc Nina Creek Group
- DP-bc Big Creek Group
- D-ol Otter Lakes Group
- OD-el Echo Lake Group
- CmO-r Razorback Group
- Cm-a2 Atan Group-Mt Kison Limestone
- Cm-a1 Atan Group-Mt Brown Quartzite
- Pt-i3 Ingenika Group-Stelkuz Fm
- Pt-i2 Ingenika Group-Espee Fm
- Pt-i1 Ingenika Group-Swannell Fm
- Claim boundary
- Rivers
- Roads
- Fault lines
- Thrust faults
- Minfile occurrence

KILLDEER MINERALS INC.

**OSILINKA RIVER PROPERTY**

Assessment Report 2012

**Fig. 3: GEOLOGY MAP**

UTM North America Zone 10	NAD 83 Mean for conus
January 29, 2013	Compiled by Dave Pugh
NTS Map no: 094C.016	Omineca Mining Division

Krzysztof Mastalerz PhD, PGeo



376000 m 378000 m 380000 m 382000 m 384000 m 386000 m

More detailed structural features of the rock formations which underlie the Osilinka property are relatively poorly known due to limited exposure and lack of systematic geological mapping. The northeastern part of the property, which was surveyed during the Killdeer 2012 reconnaissance program, is characterized by relatively strong development of talus scree and common deep oxidation of the mineral showing. Stratigraphic relationships and structural features are significantly obliterated by very common and strong brecciation of the carbonate rocks.

### 2.3 Mineralization types

Eight Minfile mineral showings which are listed on the BC MapPlace website (<http://webmap.em.gov.bc.ca/mapplace/minpot/begs.cfm>) occur within the boundaries of the Osilinka property or within their near proximities. Most of these showings are hosted by brecciated, fractured and/or faulted carbonate rocks (predominantly coarse crystalline marble and limestone) of the Middle Ordovician-Early Devonian Echo Lake Group. The ore minerals are represented by disseminations to semi-massive replacement of pyrite with minor disseminations of galena and sphalerite. Siderite and/or ankerite, and minor barite commonly accompany base-metal sulfides. Mineral showings are interpreted as replacement bodies and are associated with the zones of brecciation, fracturing and/or faulting. The mentioned mineral showings are listed in the table below:

Table 2. Mineral Showings in the area of the Osilinka River property.

Minfile Code	Name	Character	Ore Minerals	Remarks
094C 029	Childhood Dream	rpl, bx, flt, sh	Py, Ga, Sph	Two exploration adits, two drill tests
094C 030	Davis (Alfie)	rpl, bx, flt	Sph, Ga, Ba	
094C 031	Molly (Alfie)	rpl, dis, bx, vn	Sph, Ba, Ga, Qtz	Locally bodies conformable to bedding
094C 032	Gwynn	rpl, bx	Ga, Ba, Qtz	
094C 033	Gordon	rpl	Sph, Ga, Py, Ba	
094C 129	Osprey	bx, rpl, vn	Zn-rich dolospar	
094C 130	Thrust	bx	Sph, Cpy	
094C 161	Upper Osprey	bx, vn, mas	Py, Cpy, Sph, Ga, Bo	Partly related to younger intrusive rocks

**Abbreviations:**

*rpl* - replacement, *bx* - breccia, *flt* - fault, *sh* - shear, *vn* - veins, *dis* - disseminations, *mas* - massive  
*Py* - pyrite, *Sph* - sphalerite, *Ga* - galena, *Ba* - barite, *Cpy* - chalcopyrite, *Bo* - bornite, *Qtz* - quartz

Copper mineralization reported from some mineral showings (Table 2) originated, most likely, due to precipitation from hydrothermal solutions related to the late intrusive bodies encountered in the southwestern part of the property (Fig. 3). It is represented by chalcopyrite and subordinate bornite. The fracture infilling copper mineralization was also found near the easternmost portion of the property during the 2012 reconnaissance sampling program. It is mostly represented by encrustations of malachite with relics of chalcopyrite (Appendix 1).

The sulfide replacements enriched in lead-zinc and minor silver encountered during this program are all characterized by very strong oxidation. The primary sulfide minerals are completely or almost completely decomposed, leached and replaced by a mixture of iron (and subordinate manganese) oxides which form locally thick crust forms on the slopes.

Carbonate-quartz veins were reported to accompany the lead-zinc mineralization within some of the mineral showings (Table 2). There also occur some zones of incipient silicification and/or quartz-calcite replacements associated with strong brecciation of the carbonate host rocks.

#### 2.4. Rock and Soil Sampling Program

In June 2012 Killdeer Minerals' personnel conducted a reconnaissance rock and soil sampling program on the northeastern part of the Osilinka property. The program was designed to:

- verify some historical soil sampling results (Pauwels, 1992)
- encounter new evidence of sulfide and/or oxide mineralization in bedrock.

During the program 40 rock samples (mostly grab samples; Appendix 1) were collected in the northeastern part of the property (Figs. 4 through 9). Soil samples (50 samples), were collected predominantly from the areas known from previously established significant soil anomalies (Pauwels, 1992).

The program resulted in several significantly elevated values of silver, zinc and lead encountered in bedrock and/or in float which was believed to represent local material. However, the intensity of this mineralization appears to be significantly subdued by leaching and oxidation. The results also prove existence of localized soil anomalies with strongly elevated values of zinc, lead and silver, which was documented previously on the area by the extensive soil grid by Cominco (Noakes, 1991, Pauwels, 1992).

The complete set of sample descriptions and corresponding analytical geochemical results from the sampling program are presented in Appendices 1 and 2, respectively. Appendix 1 also provides UTM coordinates of the sample locations. Sample locations are also shown on the maps (Figs. 4 - 9). Analytical procedures applied to rock samples are described in Appendix 2. The most significant results of the 2012 rock and soil sampling are shown in the table below:

The most significant results of 2011 rock sampling program can be summarized as follow:

1. Samples ORS 5 and ORS 20 have returned highly elevated concentrations of silver, lead and zinc (Table 3). High concentrations of silver (ORS 5 returned > 100 ppm Ag) and base metals in these samples were evidenced by the visible mineralization of galena and sphalerite in the sampled material. The combination of base-metals and silver is additionally accompanied by strongly elevated values of mercury, antimony and significantly elevated copper.
2. Sample OS 622 returned strongly elevated concentrations of lead and slightly elevated silver. The mineralization is related to strong concentrations of Fe (+/-Mn) oxides along fractures and brecciation of the host rock material, both features regarded as typical signs of the mineralization styles quoted from the area.



Table 3. Most significant results of 2012 rock and soil sampling program (for sample locations see Appendix 1 and Figs. 4 – 9, complete analytical results – Appendix 2).

Sample ID	Sample Type	Zn	Pb	Ag	Other Elevated Elements	
		1F-15	1F-15	1F-15		
		ppm	ppm	ppb		
ORS 5	Rock	1104	>10000	>100000	Sb, Cu, Hg	
ORS 20	Rock	9771	3195	3009	Cu, Hg	
OS 654A	Rock	1564	2875	1370	Hg	
OS 654B	Rock	231	2987	4238	Hg	
SS 15	Soil	>10000	4632	8629	Fe, Hg	
SS 28	Soil	4154	446	1186	Fe, Hg	
SS 29	Soil	>10000	>10000	19352	Cd, Sb, Fe, Hg	
OS 650C	Soil	434	967	247		
OS 654C	Soil	2987	3624	3601	Fe > 40%, Mn, Sb, Hg	
		1D-01	1D-01	1D-01		
		ppm	ppm	ppm		
OS 619A	Rock	1995	266	< 0.3		
OS 622	Rock	16	5073	0.6		
OS 635B	Rock				Cu - 887 ppm	
OS 638C	Rock	533	529	1.1		
SS 04	Soil	4683	>10000	78.8	Fe	
SS 05	Soil	>10000	1991	2.9	Cd, Hg	
SS 18	Soil	>10000	7874	15.1	Cd, Hg	
SS 19	Soil	2416	2525	3.4		
SS 45	Soil	367	1556	0.8		
SS 49	Soil	1363	1826	< 0.3	Mn, Fe	

3. Samples OS 654A and OS 654B were collected from the very strongly oxidized zones which are interpreted as represent the superficial, strongly weathered and leached parts of the mineralization in bedrock. The moderate but very strongly elevated concentrations of zinc, lead and silver encountered in both samples prove a potential of unaltered zone to carry significantly higher concentrations of all these metals. This conclusion is supported by the soil sample OS 654C which was taken near these goethite-limonite oxidation zones in bedrock and shows yet higher concentrations of all these metals.
4. The soil sample SS 04 returned 78.8 ppm silver and strongly elevated concentrations of base metals. Such high concentration of silver (and base metals) evidences the very high capacity of atmospheric agencies in leaching and degradation of the primary mineralization zones.
5. Several soil samples returned significantly elevated concentrations of base metals and some of them – very high concentrations – which prove the significantly anomalous geochemistry of the area and seem to evidence proximity of soils to the primary unaltered mineralization.

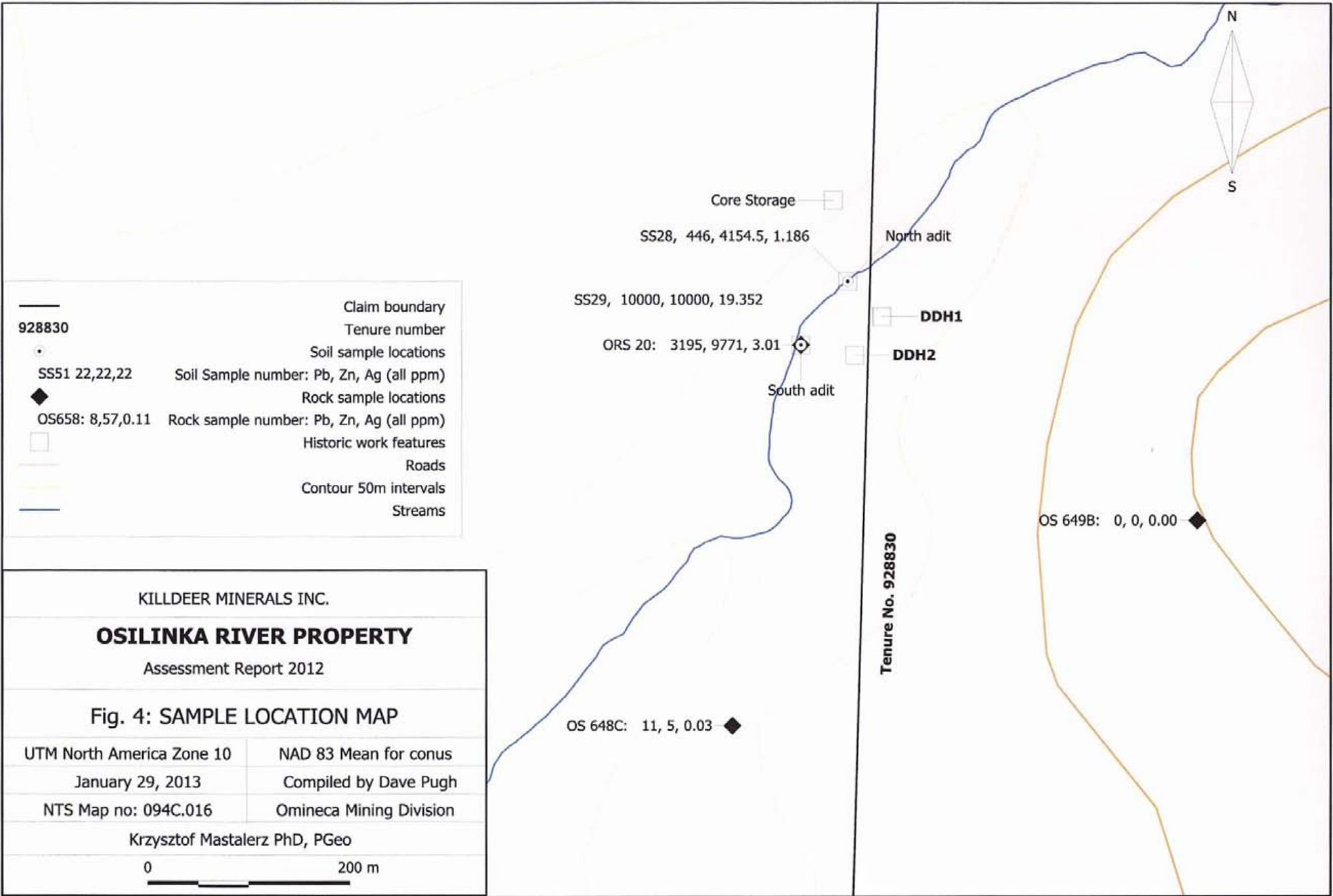
Figs. 4 through 9. (following pages) Sample Location Maps 1 : 5,000. For locations of individual sample maps in the area of the property see Fig. 2, sample coordinates – Appendix 1, complete laboratory results – Appendix 2.

381000 m

381500 m

6226500 m

6226500 m



928830

- Claim boundary
- 928830 Tenure number
- Soil sample locations
- SS51 22,22,22 Soil Sample number: Pb, Zn, Ag (all ppm)
- ◆ Rock sample locations
- OS658: 8,57,0.11 Rock sample number: Pb, Zn, Ag (all ppm)
- Historic work features
- Roads
- Contour 50m intervals
- Streams

KILLDEER MINERALS INC.

### OSILINKA RIVER PROPERTY

Assessment Report 2012

#### Fig. 4: SAMPLE LOCATION MAP

UTM North America Zone 10	NAD 83 Mean for conus
January 29, 2013	Compiled by Dave Pugh
NTS Map no: 094C.016	Omineca Mining Division

Krzysztof Mastalerz PhD, PGeo

0 200 m



381000 m

381500 m

Core Storage

SS28, 446, 4154.5, 1.186

North adit

SS29, 10000, 10000, 19.352

DDH1

DDH2

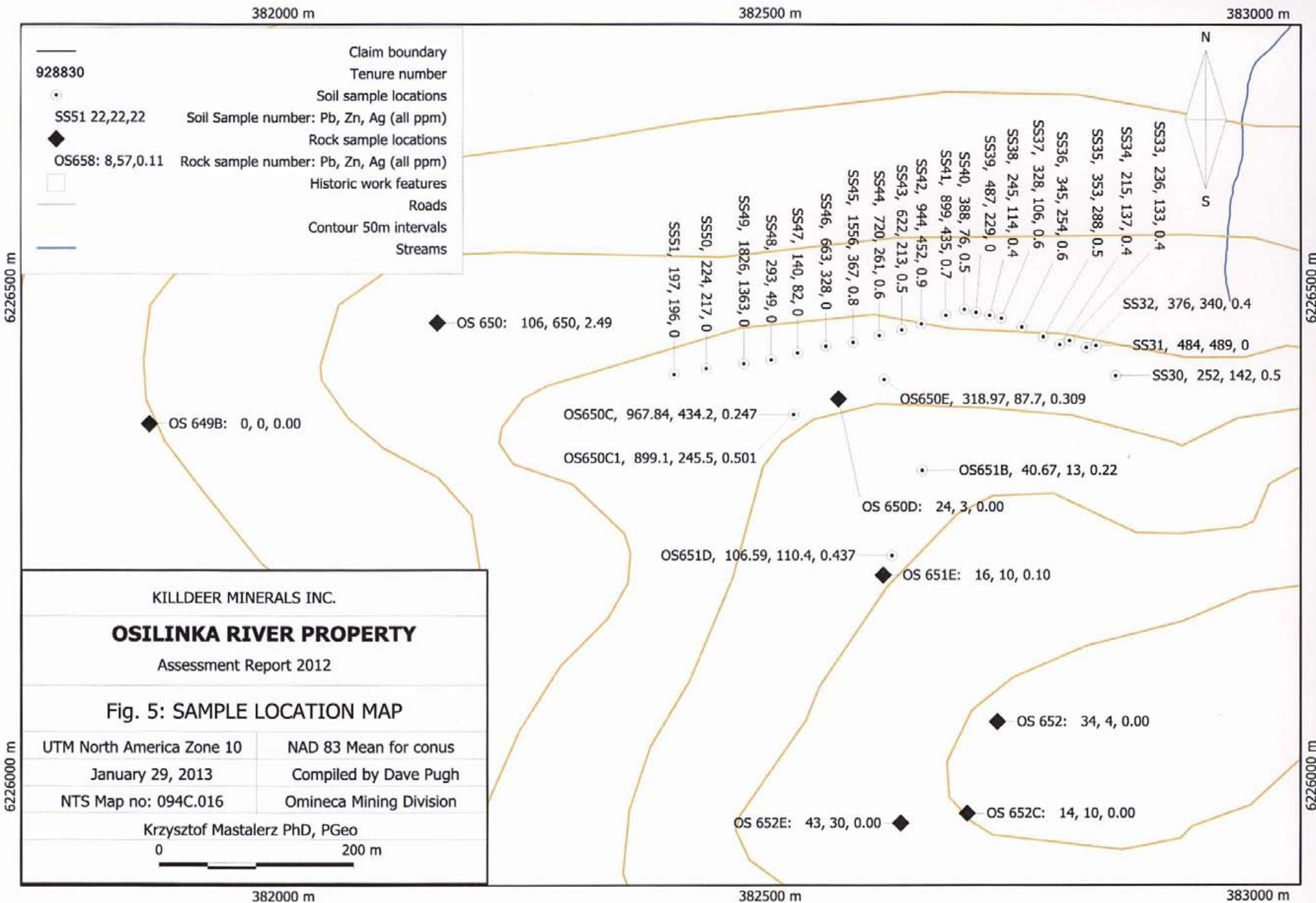
ORS 20: 3195, 9771, 3.01

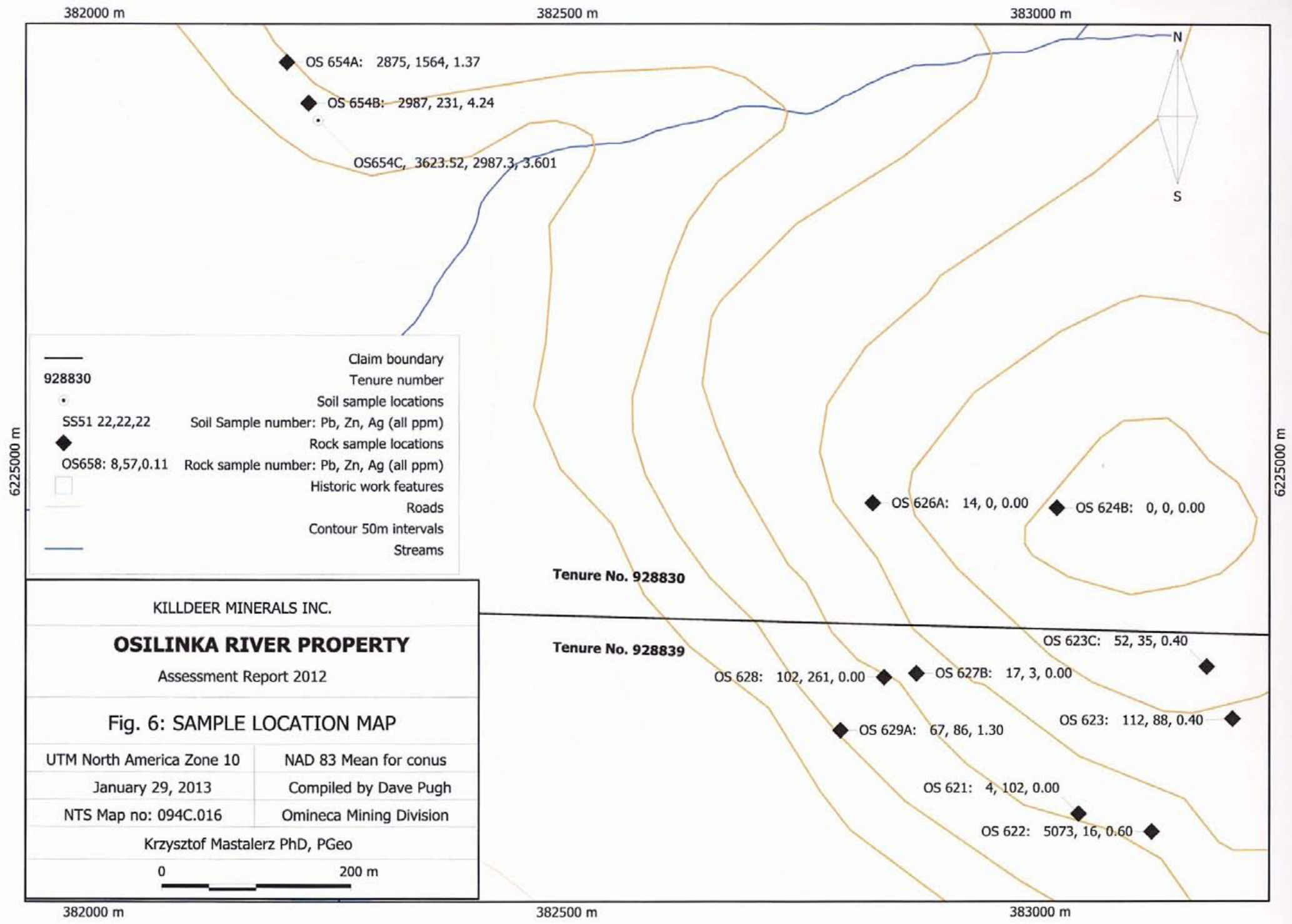
South adit

OS 649B: 0, 0, 0.00

OS 648C: 11, 5, 0.03

Tenure No. 928830





382000 m

382500 m

383000 m

6225000 m

6225000 m

	Claim boundary
928830	Tenure number
	Soil sample locations
SS51 22,22,22	Soil Sample number: Pb, Zn, Ag (all ppm)
	Rock sample locations
OS658: 8,57,0.11	Rock sample number: Pb, Zn, Ag (all ppm)
	Historic work features
	Roads
	Contour 50m intervals
	Streams

KILLDEER MINERALS INC.	
<b>OSILINKA RIVER PROPERTY</b>	
Assessment Report 2012	
<b>Fig. 6: SAMPLE LOCATION MAP</b>	
UTM North America Zone 10	NAD 83 Mean for conus
January 29, 2013	Compiled by Dave Pugh
NTS Map no: 094C.016	Omineca Mining Division
Krzysztof Mastalerz PhD, PGeo	

382000 m

382500 m

383000 m

OS 654A: 2875, 1564, 1.37

OS 654B: 2987, 231, 4.24

OS654C: 3623.52, 2987.3, 3.601

OS 626A: 14, 0, 0.00

OS 624B: 0, 0, 0.00

Tenure No. 928830

Tenure No. 928839

OS 628: 102, 261, 0.00

OS 627B: 17, 3, 0.00

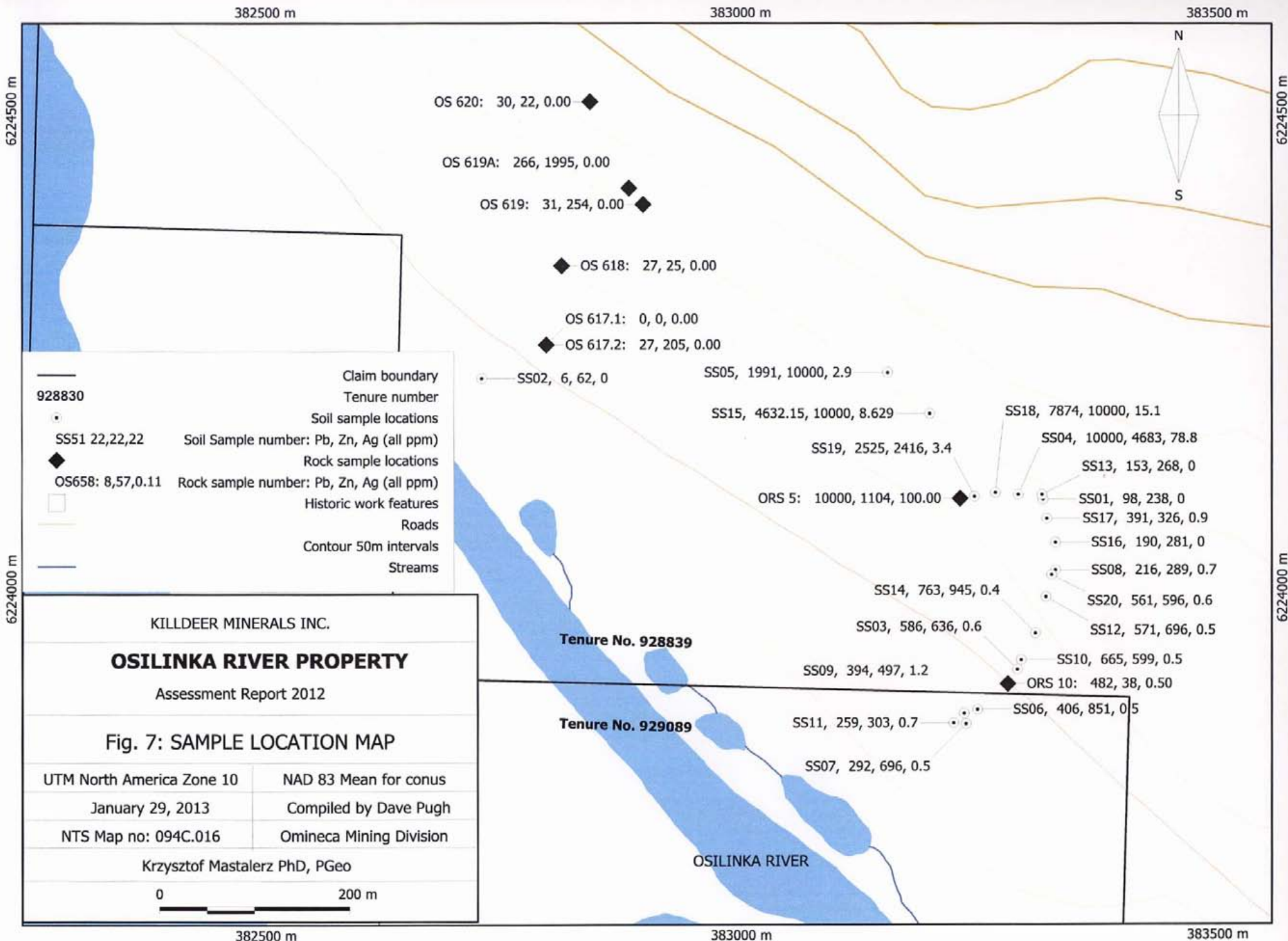
OS 623C: 52, 35, 0.40

OS 629A: 67, 86, 1.30

OS 623: 112, 88, 0.40

OS 621: 4, 102, 0.00

OS 622: 5073, 16, 0.60



384000 m

384500 m



6224000 m

6224000 m

384000 m

384500 m

	Claim boundary
<b>928830</b>	Tenure number
	Soil sample locations
SS51 22,22,22	Soil Sample number: Pb, Zn, Ag (all ppm)
	Rock sample locations
OS658: 8,57,0.11	Rock sample number: Pb, Zn, Ag (all ppm)
	Historic work features
	Roads
	Contour 50m intervals
	Streams

◆ OS 638E: 56, 12, 0.00

◆ OS 638C: 529, 533, 1.10

Tenure No. 928839

KILLDEER MINERALS INC.

### OSILINKA RIVER PROPERTY

Assessment Report 2012

#### Fig. 8: SAMPLE LOCATION MAP

UTM North America Zone 10

NAD 83 Mean for conus

January 29, 2013

Compiled by Dave Pugh

NTS Map no: 094C.016

Omineca Mining Division

Krzysztof Mastalerz PhD, PGeo



385000 m

385500 m

6223500 m

6223500 m



◆ OS 636A: 5, 6, 0.01

◆ OS 635: 20, 64, 0.00

OS 635B: 23, 0, 0.00 ◆

◆ OS 635A: 11, 18, 0.00

OS 635B1: 14, 16, 0.01

OS 634B: 8, 13, 0.00 ◆

- Claim boundary
- 928830 Tenure number
- Soil sample locations
- SS51 22,22,22 Soil Sample number: Pb, Zn, Ag (all ppm)
- ◆ Rock sample locations
- OS658: 8,57,0.11 Rock sample number: Pb, Zn, Ag (all ppm)
- Historic work features
- Roads
- Contour 50m intervals
- Streams

KILLDEER MINERALS INC.

### OSILINKA RIVER PROPERTY

Assessment Report 2012

#### Fig. 9: SAMPLE LOCATION MAP

UTM North America Zone 10

NAD 83 Mean for conus

January 29, 2013

Compiled by Dave Pugh

NTS Map no: 094C.016

Omineca Mining Division

Krzysztof Mastalerz PhD, PGeo

0 200 m

385000 m

385500 m

6223000 m

6223000 m

### 3.0 CONCLUSIONS and RECOMMENDATIONS

The Killdeer 2012 reconnaissance rock and soil sampling program was limited to the northeastern part of the Osilinka River property. The program prove that the Osilinka River property hosts interesting but complex low-to-moderate grade argentiferous mineralization of lead and zinc, and may locally host mineral accumulations of economic potential. Further exploration is warranted and should be directed toward delineation of the best potential settings where to search for the higher-grade, primary, un-oxidized mineralization similar in style to the Silvertip/Midway argentiferous deposit of lead-zinc.

The Osilinka River property is located in a stratigraphic-structural belt known for numerous occurrences of the argentiferous lead-zinc mineralization. In the area and within the limits of the same tectonic belt there occur several distinct mineral showings which are recorded in the Minfile systems of British Columbia and Yukon Territory. The known mineral occurrences on the property and within its near vicinities belong to three main styles of mineralization: 1) fault controlled bodies and fracture infillings, 2) irregular bodies related to strongly brecciated carbonate rocks as replacements and breccia infillings and/or matrix (most likely also fault/fracture controlled) and 3) concordant zones of manto-style replacement mineralization. Pyrite, sphalerite, galena and barite are reported as the most common ore minerals, locally with minor chalcopyrite and bornite.

The rock formations examined during the 2012 reconnaissance program are represented by relatively monotonous carbonate formations (predominantly slightly recrystallized dolostones and limestones) and by meta-siliciclastic rocks, which belong to the Cambrian Atan and Ordovician-Lower Devonian Echo Lake Groups. However, the stratigraphic position of several elements of the succession seem to be rather poorly constrained due to advanced rock brecciation, alteration, obliteration of its primary sedimentary features and limited outcrop. The rock formations display diversified effects of low-grade metamorphism, alteration and tectonic deformation including common strong fracturing and brecciation. Several irregular bodies of intrusive magmatic rocks of unknown age occur southwest and south of the property (Fig. 3).

The sulfide occurrences described previously from the property and its vicinity apparently form a complex mineralization system. However, most mineral showings are strongly modified in the oxidation zone and the primary ore-minerals have been partly to almost completely dissolved/replaced, and goethite-limonite pseudomorphs and other new minerals were formed. The most common mineralization occurs in association with intervals of strong fracturing, faulting and brecciation. Within the oxidation zones abundant limonite, goethite and hematite predominate, locally with relics of pyrite, sphalerite and galena. Hydrozincite locally stains exposed to air rock surfaces and along fractures.

By analogy to some other areas located within the same structural domain and which have been affected by similar style of mineralization (Rees, 1998; Robertson and Belanger, 2002; Mastalerz 2009), it is concluded that the mineralization observed on the Osilinka River property resulted from the fracture-controlled propagation of low-temperature hydrothermal (possibly also mixed with meteoric) fluids laden with Zn-Pb solutions. The feeder parts of this plumbing system were, most likely, focused along the most prominent local faults. Further, the solutions were channelized along other pre-existing discontinuities, including intrastratal surfaces, zones of brecciation and karst-related caverns.



The 2012 reconnaissance program has justified significant potential of the Osilinka River property to host a primary, unleached, argentiferous lead-zinc mineralization. Few new zones of the strongly oxidized zinc-lead mineralization (e.g. samples OS 654A and OS 654B) were encountered in the northern part of the property. The results of the soil sampling confirmed historically documented strongly elevated zinc and lead values (Pauwels, 1992) in this part of the property. There occurs abundant evidence of local development of small-scale, manto-style replacement bodies in the area of the property. Some features typical of areas surrounding the other lead-zinc deposit in similar tectonic settings, including mineralization focused along tectonic discontinuities, extensive brecciation of the host rock and similar mineralogy, have been documented at the property and in nearby areas. Similarly, the common evidence of the small-scale, lowered-grade oxide mineralization zones which resulted from leaching of base metals and silver, were identified in the surroundings of the primary, sulfide-rich Silvertip/Midway deposit (Rees 1998; Robertson and Belanger, 2002; Mastalerz, 2009).

Additionally, the 2012 exploration rock sampling program resulted in encountering the new showing of copper mineralization in the easternmost part of the property, which was not documented previously. The newly discovered copper mineralization (887 ppm Cu – sample OS 635B) occurs as strong malachite stains (with minor relics of chalcopyrite) along fractures within the meta-quartzite of the lower part of the Atan Group succession.

It is strongly recommended to conduct a complementary prospecting and rock sampling program on the southwestern part of the property. It is prerequisite that the program is accompanied by more detailed structural observations, measurements and some rigorous mapping as to development of a clear idea about the style of mineralization, its relationship to structural and/or stratigraphic features and economic potential of the entire property. A targeted VLF survey might be helpful in delineation of mineralized fracture zones and massive and/or semi-massive sulfide-oxide lenses, and it should complement the exploration program. Few carefully selected traverses of MMI soil geochemistry should aid in more precise delineation of mineralization zones in conditions of limited exposure and/or deeper overburden. The exploration effort should be directed toward the elaboration of a satisfactory model in search for the higher-grade, primary, un-oxidized mineralization similar in style to the Silvertip/Midway argentiferous lead-zinc deposit.

A limited microscope study is recommended to aid in clear definition of individual rock formations, alteration patterns and their relationship to mineralization, as well as a succession of events which lead to localized accumulations of base metals.

The Childhood Dream showing located just beyond the north-western tip of the property should be revisited, cleaned and carefully mapped. The results of the drilling program conducted on the End Lake property (Miller-Tait, 2002) indicate that some significant structural elements of the primary mineralization system dip partly eastwards toward the northern part of the Osilinka River property. Detailed structural interpretation of this area could be one of the milestones in proper geological modeling of the entire area and to indicate potential geological setting for the larger-scale, economically significant mineralization.

#### 4.0 REFERENCES

- Ainsworth, B., 1968. Work on the Donna Group, BCMM Assessment Report 1654.
- Barr, D.A. and Warren, H.V., 1951. Geological Report – Gordon and Davies Group 25 Miles North of Germansen Landing, Omineca Mining Division. BCMM Assessment Report 0072.
- Borovic, I. 1976. Geological report on the Donna Claims. BCMM Assessment Report 5937.
- Borovic, I. 1977. A Report on the Geochemical Survey of the Alfie 1-4 Claims. BCMM Assessment Report 6485.
- Ferri, F. and Melville, D.M., 1990. Geology between Nina Lake and Osilinka River, North-central British Columbia – M.E.M.P.R; Geological Fieldwork 1989; Paper 1990-1; pages 101-114.
- Halleran, W., 1989. Geology and Geochemistry of the Osprey 1-4 Claims. BCMM Assessment Report 19440.
- Halleran, W., 1989. Geological Report on the Osprey 6 & 7 Claims. BCMM Assessment Report 20456.
- Halleran, W. and Halleran, A.A.D., 1990. Geological and Geophysical Assessment Report on the Osprey 1-4 Claims. BCMM Assessment Report 20576.
- Jenkins, D.M., 1980. Report on the Geochemical Survey and Geological mapping of Portions of the Alfie 1-4 Claims. BCMM Assessment Report 8324.
- Massey, N.W.D., MacIntyre, D.G., Desjardins, P.J and Cooney, R.T., 2005. Digital Geology Map of British Columbia, geo-File 2005-1; <http://wcbmap.em.gov.bc.ca/mapplace/minpot/bcgs.cfm> (MapPlace, 2013).
- Mastalerz, K., 2009. Geological Report on the Wildcat Property, Southern Yukon Territory (105B/01). Killdeer Minerals Inc.
- Mellville, D.M., 1989. Carbonate-hosted Lead-Zinc Occurrences in the Germansen Landing and End Lake Areas (94C/2, 93N/15). BC Geol. Fieldwork – Exploration in British Columbia, pages 193-196.
- Miller-Tait, J., 2002. Diamond Drilling Project on the End Lake Property – CD Mineral Claim, Omineca Mining Division. BCMM Assessment report 26826.
- Monger, J.W.H. and Patterson, I.A., 1974. Upper Paleozoic and lower Mesozoic Rocks of the Omineca Mountains. Report of Activities, Geol. Surv. Canada, Paper 74-1A.
- Nelson, J.L., 2005. Polymetallic Mantos Ag-Pb-Zn. BC Geological Survey Branch, Mineral Deposit Profile J01, modified for Yukon by A. Fonseca and Bradshaw, YGS Open File 2005-5.

- Nelson, J.L. and Bradford, J.A., 1986. Geology of the Area Around the Midway Deposit, Northern British Columbia. B.C. M.E.M.P.R.; Geological Fieldwork 1986, Paper 1986-1, Pages 323-338.
- Nelson, J.L. and J.A. Bradford, 1987. Geology of the Midway area, northern British Columbia (1040/16); BC Ministry of Energy, Mines and Petroleum resources, Open File 1987-5.
- Nelson, J. and Colpron, M., 2007. Tectonics and metallogeny of the British Columbia, Yukon and Alaskan Cordillera, 1.8 Ga to the present. In: Goodfellow, W.D. (ed.): Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods. Geol. Assoc. Canada, Mineral Deposits Division, Spec. Publ. No. 5, p.755-791.
- Noakes, S.B., 1991. Osprey Property Assessment Report – 1991 Field Work. BCMM Assessment Report 21914.
- Klein, J., 1992. Report on the 1991 Airborne Geophysical Survey on the Par Property, Omineca MD, B.C. BCMM Assessment Report 22362.
- Pauwels, A.M., 1992. Assessment Report Geochemical Sampling Osilinka 4, Osilinka 5,6,8, Dream 1-4 Mineral Claims. BCMM Assessment Report 22613.
- Rees, C., 1998. 1997 Summary Report: Geological Mapping, Seismic Surveying and Diamond Drilling (Silvertip Mining Corporation, Imperial Metals Corporation); Volumes 1 through 4. April 9, 1998. Assessment Report 25495.
- Robertson, S. and M. Belanger, 2002. Technical Report – Review of the Silvertip property, Northern British Columbia (for Imperial metals Corp.) October 2002.
- Roots, E.F., 1954. Geology and Mineral deposits of the Aiken Lake Map Area B.C. Geol. Soc. Canada Memoir 274.

Respectfully submitted,

Krzysztof Mastalerz

## 5.0 WORK COST STATEMENT

Item	Cost (\$CAD)
Field Personnel – June 20 to July 01, 2011:	
Geologist (K. Mastalerz) 5 days @ \$750.00 per day	3750
Prospector (D. Pugh) 10 days @ \$450.00 per day	4500
Others:	
Car rental 1 (10 days @ \$50 per day)	500
Car rental 2 (5 days @ \$49.90 per day)	499.5
Rental Trailer + ATV (10 days @ \$100 per day)	1000
Travel - Air	399.90
Fuel	847.25
Accommodation	525
Repairs	386.98
Field Supplies	57.6
Food and Meals	427.21
Laboratory work	1896.63
Report Writing	2250
Report Drafting	600
<b>Total cost</b>	<b>17,640.07</b>

Note 1: SOW 5411414 from October 18<sup>th</sup>, 2012 requires modification.

## 6.0 CERTIFICATE OF PROFESSIONAL QUALIFICATIONS

I, Krzysztof Mastalerz, do hereby certify that:

1. I am a geologist with an office at 2005 Bow Drive, Coquitlam, B.C.
2. I am a graduate of the University of Wrocław, Poland, (M.Sc. in Geology in 1981, Ph.D. in 1990).
3. I am a Professional Geoscientist registered with the APEG of the province of British Columbia as a member, # 31243.
4. I have continually practiced my profession since graduation in 1981 as an academic teacher (University of Wrocław, A. Mickiewicz University of Poznań) through 1997, a research associate for the State Geological Survey of Poland (1993-1995), and independent consulting geologist in Canada and Peru since 1994.
5. This report is based upon field work carried on the Osilinka River property, north of Germansen Landing, B.C., in June-July, 2012.
6. I have, personally, conducted and/or supervised part of the field work done on the property in 2012.
7. Interpretations and conclusions presented in this report are based on my field observations, analytical results and on previously published and archive literature available for the area.

Dated at Vancouver, BC, this 29<sup>th</sup> day of January, 2013.

Krzysztof Mastalerz

## APPENDICES

### APPENDIX 1 – Rock and Soil Sample Locations and Descriptions

## APPENDIX 1 – Rock and Soil Sample Locations and Descriptions

Sample ID	UTM Coordinates		Sample Type	Sample description
	NAD83, Zone10			
	East [m]	North [m]		
ORS 10	383280	6223900	FT	Strongly oxidized, heavy float, rusted throughout.
ORS 20	381471	6226534	GB	Pyritic (50%) carbonate breccia from Childhood Dream showing lower vein
ORS 5	383230	6224094	FT	Galena float with small amount of carbonate on surface
OS 617.1	382795	6224255	FT	Crudely layered, whitish-creamy limestone/marble; thin laminae of iron oxides, ankerite; tr Sph
OS 617.2	382795	6224255	FT	White limestone/marble breccia, matrix slightly enriched in iron oxides and ankerite?; tr Sph
OS 618	382811	6224338	FT	Rusty limestone/marble breccia, enriched in iron oxides and ankerite?
OS 619	382897	6224402	GB	Rusty limestone/marble breccia; several very thin subparallel zones (at 145/85deg) enriched in iron oxides and ankerite?
OS 619.A	382882	6224419	GB	Rusty limestone/marble breccia enriched in iron oxides and ankerite?, brecciation irregular, patchy
OS 620	382841	6224509	GB	Coarse-crystalline limestone/marble breccia, incipient cleavage; rusty ankerite/siderite?
OS 621	383040	6224630	GB	Grayish-to-white marble/limestone, layered, with pods/patches of rusty ankerite/iron oxides
OS 622	383117	6224611	GB	Grayish-to-white marble/limestone, rusty iron oxides-rich fractures fills, locally brecciated
OS 623	383202	6224730	GB	Grayish limestone/marble breccia
OS 623.C	383175	6224785	GB	Grayish limestone/marble, locally brecciated, rusty fracture fills
OS 624.B	383017	6224952	GB	Almost black, slightly rusty (iron oxides/carbonates) limestone/marble, whitish specs
OS 626	382823	6224957	GB	Grayish to white limestone/marble, locally brecciated; fractures filled with oxides; tr Ga, Sph?
OS 627.B	382869	6224778	GB	Grayish limestone/marble breccia, locally fractured limestone, relics of primary layering
OS 628	382835	6224774	GB	Grayish limestone/marble breccia, locally only fractured limestone; tr Ga, Sph? along fractures
OS 629.A	382789	6224718	FT	Rusty, weathered limestone/marble, slightly fractured
OS 634.B	385833	6223156	GB	Interbedded, slightly metamorphosed marbly limestone and limy shale
OS 635	385415	6223439	GB	Slightly calcareous, locally rusty, micaceous slate; fractured; iron oxides along fractures
OS 635.A	385280	6223402	GB	Grayish slates/schists and coarser-crystalline meta-sediments, arcose to graywacke; layered
OS 635.B	385242	6223396	GB	Grayish meta-subgraywacke to almost pure quartzite, crudely layered, fractured; malachite encrustations and specs of chalcopryrite along fractures,
OS 635.B1	385242	6223396	GB	Grayish meta-subgraywacke to almost pure quartzite, crudely layered, fractured; malachite encrustations and specs of chalcopryrite along fractures, tr hematite and oxidates sulphides
OS 636.A	385065	6223501	GB	Grayish meta-subgraywacke to slate; common limonite after Pyrite? along fractures
OS 638.C	384357	6224109	GB	Grayish to white marbly limestone, iron oxides along fractures

OS 638.E	384147	6224148	FT	Brownish, spotty limestone to limestone breccia, abundant hematite/limonite along fractures
OS 640	383287	6224950	FT	Gray to almost black limestone/marble, locally breccia with ankerite and tr shpalerite?
OS 641.A	383288	6224753	GB	Black to dark gray slaty shale with thin layers/laminae of limestone
OS 642	383290	6224670	GB	Whitish brecciated limestone, marbly
OS 648.C	381403	6226159	SC	Dark gray limestone/marble breccia, white carbonate veins
OS 649.B	381862	6226361	SC	Fine-crystalline limestone-to-marble, incipient tectonic breccia
OS 650	382158	6226464	SC	Gray limestone/marble breccia with some iron oxides and/or ankerite?
OS 650.D	382570	6226386	SC	Whitish, strongly weathered limestone/marble to breccia, spotty, iron oxides
OS 651.E	382616	6226206	SC	Grayish limestone/marble, weakly fractures with some iron oxides and/or ankerite?
OS 652	382733	6226056	GB	Whitish, laminated limestone with fine specs and thin laminae of dark gray limestone
OS 652.C	382702	6225962	SC	Limestone/marble breccia with white calcite veins and some ankerite? and Sph?
OS 652.E	382634	6225952	GB	Whitish limestone breccia with white calcite veins and some ankerite? along fractures
OS 654.A	382204	6225420	SC	Lensoidal, crudely layered whitish limestone with strongly limonitized encrustations along fractures
OS 654.B	382227	6225377	SC	Grayish to almost white, crudely layered limestone with some rusty-limonite encrustations along fractures
OS 658	364268	6204615	GB	Sandstone, conglomeratic, polymictic, brownish, abundant matrix with common limonite
		SOIL		
OS 650.C	382524	6226370	SL	Yellowish-to-brown soil, shallow (transition A/B horizon); 20 cm depth
OS 650.C1	382524	6226370	SL	Yellowish soil, with some granule-grade badrock(?) material - deeper B horizon; 35 cm depth
OS 650.E	382617	6226406	SL	Yellowish deeper B-horizon soil with some bedrock fragments - deeper B horizon; 25 cm depth
OS 651.B	382656	6226313	SL	Whitish deeper soil to almost regolith of limestone; 25 cm depth
OS 651.D	382625	6226226	SL	Brownish-gray, probably slope-creeped soil with some limestone fragments; 50 cm depth
OS 654.C	382237	6225359	SL	Dark brownish soil on subcropped limestone, common limonite encrustations; 20 cm depth
OS650C	382524	6226370	SL	
OS650C1	382524	6226370	SL	
OS650E	382617	6226406	SL	
OS651B	382656	6226313	SL	
OS651D	382625	6226226	SL	
OS654C	382237	6225359	SL	
SS01	383317	6224093	SL	
SS02	382727	6224220	SL	
SS03	383290	6223915	SL	
SS04	383291	6224098	SL	
SS05	383154	6224226	SL	
SS06	383248	6223873	SL	
SS07	383236	6223858	SL	
SS08	383330	6224019	SL	
SS09	383234	6223869	SL	
SS10	383294	6223925	SL	



SS11	383223	6223859	SL	
SS12	383320	6223991	SL	
SS13	383316	6224098	SL	
SS14	383309	6223953	SL	
SS15	383198	6224183	SL	
SS16	383330	6224048	SL	
SS17	383321	6224078	SL	
SS18	383267	6224100	SL	
SS19	383245	6224096	SL	
SS20	383326	6224014	SL	
SS28	381517	6226597	SL	
SS29	381471	6226534	SL	
SS30	382854	6226410	SL	
SS31	382834	6226441	SL	
SS32	382824	6226439	SL	
SS33	382807	6226446	SL	
SS34	382797	6226442	SL	
SS35	382780	6226450	SL	
SS36	382758	6226460	SL	
SS37	382737	6226469	SL	
SS38	382725	6226472	SL	
SS39	382711	6226475	SL	
SS40	382699	6226478	SL	
SS41	382680	6226472	SL	
SS42	382655	6226463	SL	
SS43	382635	6226457	SL	
SS44	382612	6226451	SL	
SS45	382585	6226444	SL	
SS46	382557	6226440	SL	
SS47	382528	6226433	SL	
SS48	382501	6226428	SL	
SS49	382473	6226422	SL	
SS50	382434	6226417	SL	
SS51	382401	6226411	SL	

**Abbreviations:**

*Sample type: G - grab, SC - subcrop grab, FT - float, SL - soil*

## APPENDICES

### APPENDIX 2 – Rock and Soil Sample Analyses – Certified Results



Acme Analytical Laboratories (Vancouver) Ltd.  
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**Client:** Killdeer Minerals Inc.  
325 - 744 West Hastings Street  
Vancouver BC V6C 1A5 Canada

Submitted By: Dave Pugh  
Receiving Lab: Canada-Vancouver  
Received: October 18, 2012  
Report Date: November 06, 2012  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN12004940.1

### CLIENT JOB INFORMATION

Project: OSILINKA  
Shipment ID:  
P.O. Number  
Number of Samples: 12

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	12	Crush, split and pulverize 250 g rock to 200 mesh			VAN
1F05	12	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	15	Completed	VAN

### SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage  
STOR-RJT Store After 90 days Invoice for Storage

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Killdeer Minerals Inc.  
325 - 744 West Hastings Street  
Vancouver BC V6C 1A5  
Canada

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Project: OSILINKA  
Report Date: November 06, 2012

Page: 2 of 2

Part: 1 of 1

**CERTIFICATE OF ANALYSIS**

**VAN12004940.1**

Method	WGHT	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	
G1	Prep Blank	<0.01	0.10	2.24	5.37	46.2	19	3.6	4.0	539	1.81	<0.1	1.2	1.7	3.7	47.8	0.01	<0.02	0.07	35	0.38
G1	Prep Blank	<0.01	0.10	1.80	2.63	50.0	10	3.7	4.1	573	1.95	0.1	1.3	1.5	4.4	52.8	<0.01	<0.02	0.08	36	0.43
ORS 5	Rock	0.61	0.15	43.84	>10000	1104	>100000	0.3	0.2	59	0.19	152.1	1.3	2.5	<0.1	23.9	14.46	1059	0.07	<2	2.81
ORS 10	Rock	0.99	2.29	11.10	481.6	37.7	497	39.9	3.8	26	23.20	11.9	1.7	0.8	6.3	0.02	0.53	0.13	27	0.05	
ORS 20	Rock	0.91	0.58	88.35	3195	9771	3009	12.5	1.6	269	25.59	94.8	0.4	0.6	<0.1	7.3	36.45	37.21	0.05	3	4.07
OS 835B1	Rock	0.70	0.09	1.02	13.87	15.8	11	4.4	1.7	198	1.36	3.2	0.1	2.2	1.8	4.2	0.03	0.13	0.06	7	0.21
OS 636A	Rock	0.59	0.12	1.65	5.21	6.3	8	9.8	4.5	2032	6.99	7.5	<0.1	0.4	0.2	186.2	0.01	0.12	0.03	7	14.79
OS 640	Rock	0.67	0.10	2.02	139.0	93.5	212	0.5	0.3	408	0.82	3.7	0.8	<0.2	<0.1	40.2	0.50	1.13	<0.02	4	19.14
OS 848C	Rock	0.56	0.15	0.25	10.82	5.0	30	0.8	0.2	276	0.10	1.2	0.7	<0.2	<0.1	29.3	0.05	0.13	<0.02	<2	19.48
OS 650	Rock	0.52	0.05	2.38	105.9	650.0	2494	0.5	0.2	1213	1.06	4.7	0.6	<0.2	<0.1	70.2	2.40	0.89	<0.02	2	19.21
OS 651E	Rock	0.58	1.38	0.76	16.44	10.2	96	1.3	0.3	289	0.20	1.3	2.2	0.4	<0.1	26.7	0.02	0.22	<0.02	12	18.28
OS 654A	Rock	0.90	10.08	31.52	2875	1564	1370	10.7	0.5	165	33.96	90.4	8.7	1.4	0.2	0.8	2.24	25.67	0.05	111	0.19
OS 654B	Rock	0.88	8.70	13.16	2987	231.1	4238	2.6	0.5	172	28.54	34.9	7.8	0.8	0.1	3.8	0.53	22.57	<0.02	26	2.49
OS 658	Rock	1.01	0.54	54.78	7.89	56.5	107	34.9	14.1	884	4.28	31.0	0.2	1.5	0.7	22.6	0.19	0.29	0.04	140	3.16



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Project: OSILINKA  
 Report Date: November 06, 2012

Page: 2 of 2

Part: 2 of 1

**CERTIFICATE OF ANALYSIS**

**VAN12004940.1**

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Cs	Ge	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	ppm	
MDL	0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02	0.1	
G1	Prep Blank	0.077	7.4	9.3	0.58	232.2	0.096	2	0.90	0.055	0.48	<0.1	2.1	0.31	<0.02	<5	<0.1	<0.02	4.7	2.61	0.1
G1	Prep Blank	0.077	8.2	9.2	0.59	252.4	0.104	2	0.97	0.078	0.52	<0.1	2.3	0.35	<0.02	<5	<0.1	<0.02	5.1	3.13	0.1
ORS 5	Rock	0.001	<0.5	<0.5	1.69	30.8	<0.001	<1	<0.01	0.004	<0.01	<0.1	<0.1	7.79	7.50	4136	3.6	<0.02	0.2	<0.02	<0.1
ORS 10	Rock	0.022	9.4	10.8	0.02	294.6	0.001	2	0.48	0.008	0.13	<0.1	4.8	0.13	0.32	131	<0.1	<0.02	4.1	1.18	0.2
ORS 20	Rock	<0.001	<0.5	1.2	3.96	3.0	<0.001	<1	0.01	0.010	<0.01	<0.1	0.2	2.48	>10	833	1.3	<0.02	0.2	<0.02	0.6
OS 635B1	Rock	0.005	3.7	7.2	0.03	31.6	<0.001	<1	0.07	0.002	0.05	<0.1	0.4	0.05	0.07	20	<0.1	<0.02	0.2	0.06	<0.1
OS 636A	Rock	0.022	0.7	2.4	4.39	86.8	<0.001	1	0.03	0.006	0.03	<0.1	3.3	0.03	0.24	25	0.2	<0.02	<0.1	0.04	<0.1
OS 640	Rock	0.045	1.1	1.5	11.52	66.9	<0.001	<1	0.01	0.015	<0.01	<0.1	<0.1	<0.02	<0.02	67	0.2	<0.02	<0.1	<0.02	<0.1
OS 648C	Rock	0.002	1.4	1.3	12.74	16.2	<0.001	<1	0.01	0.018	<0.01	<0.1	<0.1	<0.02	<0.02	9	0.2	<0.02	<0.1	<0.02	<0.1
OS 650	Rock	0.017	1.0	1.2	12.12	50.4	<0.001	<1	0.01	0.024	<0.01	<0.1	<0.1	0.05	<0.02	851	<0.1	<0.02	0.1	<0.02	<0.1
OS 651E	Rock	0.014	0.9	0.9	11.71	14.3	<0.001	<1	0.02	0.021	<0.01	<0.1	<0.1	<0.02	<0.02	12	0.2	<0.02	<0.1	<0.02	<0.1
OS 654A	Rock	0.130	2.3	6.6	0.32	81.0	<0.001	<1	0.13	0.001	<0.01	0.1	0.9	0.29	<0.02	919	<0.1	<0.02	1.7	<0.02	0.6
OS 654B	Rock	0.095	0.9	6.1	1.48	52.7	<0.001	<1	0.06	0.004	<0.01	<0.1	0.9	0.22	<0.02	674	0.6	<0.02	0.4	0.02	0.5
OS 658	Rock	0.062	2.3	50.7	0.32	1037	<0.001	6	0.45	0.022	0.10	<0.1	18.6	0.06	0.04	62	0.2	0.04	1.1	0.62	<0.1



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Project: OSILINKA  
 Report Date: November 06, 2012

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Part: 3 of 1

**CERTIFICATE OF ANALYSIS**

**VAN12004940.1**

Method	Analyte	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
		Hf	Nb	Rb	Sr	Ta	Zr	Y	Ce	In	Re	Be	Li	Pd	Pt
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppb	
MDL		0.02	0.02	0.1	0.1	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	10	2
G1	Prep Blank	0.05	0.28	39.8	0.3	<0.05	0.7	3.87	15.0	0.02	<1	0.2	29.4	<10	<2
G1	Prep Blank	0.06	0.32	45.7	0.3	<0.05	0.9	4.48	16.9	<0.02	<1	0.2	29.1	<10	<2
ORS 5	Rock	<0.02	0.02	<0.1	0.2	<0.05	0.1	0.31	0.9	0.03	<1	<0.1	0.2	<10	<2
ORS 10	Rock	0.07	<0.02	4.8	0.1	<0.05	3.4	6.88	19.2	0.03	<1	1.5	1.7	<10	<2
ORS 20	Rock	<0.02	<0.02	<0.1	<0.1	<0.05	<0.1	0.46	0.5	<0.02	<1	<0.1	0.2	<10	<2
OS 635B1	Rock	0.03	<0.02	1.5	<0.1	<0.05	1.2	0.82	7.9	<0.02	<1	<0.1	0.3	<10	<2
OS 636A	Rock	<0.02	<0.02	0.8	<0.1	<0.05	0.5	16.38	4.4	0.14	<1	0.2	1.9	<10	<2
OS 640	Rock	<0.02	0.02	<0.1	<0.1	<0.05	0.2	1.47	2.3	<0.02	<1	<0.1	0.5	<10	<2
OS 648C	Rock	<0.02	0.03	<0.1	<0.1	<0.05	<0.1	1.04	2.0	<0.02	1	<0.1	1.4	<10	<2
OS 850	Rock	<0.02	0.02	<0.1	<0.1	<0.05	<0.1	0.61	1.4	0.03	<1	0.1	0.2	<10	<2
OS 851E	Rock	<0.02	0.02	<0.1	<0.1	<0.05	0.1	1.33	1.2	<0.02	<1	<0.1	0.6	<10	<2
OS 654A	Rock	<0.02	<0.02	0.3	<0.1	<0.05	0.8	3.41	2.7	<0.02	<1	0.2	0.3	<10	<2
OS 654B	Rock	<0.02	<0.02	0.5	0.1	<0.05	0.3	0.86	1.5	<0.02	<1	<0.1	0.3	<10	<2
OS 658	Rock	0.07	<0.02	3.8	<0.1	<0.05	3.8	10.01	6.0	0.04	<1	0.4	1.7	<10	<2

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Project: OSILINKA  
 Report Date: November 06, 2012

Page: 1 of 1

Part: 1 of 1

**QUALITY CONTROL REPORT**

**VAN12004940.1**

Method	WGHT	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15		
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca		
Unit	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%		
MDL	0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01		
<b>Pulp Duplicates</b>																						
OS 651E	Rock	0.58	1.38	0.76	16.44	10.2	96	1.3	0.3	289	0.20	1.3	2.2	0.4	<0.1	26.7	0.02	0.22	<0.02	12	18.28	
REP OS 651E	QC		1.48	0.84	17.68	12.5	94	1.5	0.3	309	0.22	1.5	2.4	0.3	<0.1	28.8	0.03	0.23	<0.02	13	18.72	
OS 658	Rock	1.01	0.54	54.78	7.89	56.5	107	34.9	14.1	884	4.28	31.0	0.2	1.5	0.7	22.6	0.19	0.29	0.04	140	3.16	
REP OS 658	QC		0.55	53.39	7.82	57.3	112	35.2	14.3	863	4.31	31.6	0.3	1.9	0.7	23.7	0.17	0.29	0.03	141	3.16	
<b>Reference Materials</b>																						
STD DS9	Standard		12.71	103.6	127.9	327.5	1963	40.0	7.6	604	2.35	25.5	2.6	118.6	5.8	71.0	2.34	5.11	6.76	41	0.75	
STD DS9	Standard		12.81	111.0	131.2	307.5	1829	41.5	7.6	576	2.36	26.8	2.9	114.8	6.7	77.5	2.35	5.87	7.32	40	0.67	
STD DS9 Expected			12.84	108	126	317	1830	40.3	7.6	575	2.33	25.5	2.69	118	6.38	69.6	2.4	4.94	6.32	40	0.7201	
BLK	Blank		<0.01	0.13	0.08	0.1	3	<0.1	<0.1	2	0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	0.01	
BLK	Blank		<0.01	<0.01	0.22	<0.1	3	<0.1	<0.1	<1	<0.01	0.3	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01	
<b>Prep Wash</b>																						
G1	Prep Blank		<0.01	0.10	2.24	5.37	46.2	19	3.6	4.0	539	1.81	<0.1	1.2	1.7	3.7	47.8	0.01	<0.02	0.07	35	0.38
G1	Prep Blank		<0.01	0.10	1.80	2.63	50.0	10	3.7	4.1	573	1.95	0.1	1.3	1.5	4.4	52.8	<0.01	<0.02	0.08	36	0.43

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Project: OSILINKA  
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Page: 1 of 1

Part: 2 of 1

**QUALITY CONTROL REPORT**

**VAN12004940.1**

Method		1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga	Cs	Ge
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	ppm
MDL		0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02	0.1
<b>Pulp Duplicates</b>																					
OS 651E	Rock	0.014	0.9	0.9	11.71	14.3	<0.001	<1	0.02	0.021	<0.01	<0.1	<0.1	<0.02	<0.02	12	0.2	<0.02	<0.1	<0.02	<0.1
REP OS 651E	QC	0.015	0.9	1.0	12.21	16.5	<0.001	<1	0.03	0.023	<0.01	<0.1	0.1	<0.02	<0.02	15	0.3	0.03	<0.1	<0.02	<0.1
OS 658	Rock	0.062	2.3	50.7	0.32	1037	<0.001	6	0.45	0.022	0.10	<0.1	18.6	0.06	0.04	62	0.2	0.04	1.1	0.62	<0.1
REP OS 658	QC	0.068	2.3	50.7	0.33	1073	<0.001	6	0.50	0.022	0.11	<0.1	19.5	0.05	0.04	70	0.3	0.03	1.1	0.64	<0.1
<b>Reference Materials</b>																					
STD DS9	Standard	0.086	12.9	117.0	0.64	305.0	0.102	3	0.97	0.083	0.41	3.0	2.7	5.55	0.16	235	5.5	5.35	5.0	2.52	<0.1
STD DS9	Standard	0.082	13.7	116.8	0.59	288.4	0.126	2	0.97	0.090	0.42	3.1	2.4	5.37	0.17	217	5.6	5.08	4.7	2.37	0.1
STD DS9 Expected		0.0819	13.3	121	0.6165	295	0.1108		0.9577	0.0853	0.395	2.89	2.5	5.3	0.1615	200	5.2	5.02	4.59	2.37	0.1
BLK	Blank	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1	<0.02	<0.1
BLK	Blank	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1	<0.02	<0.1
<b>Prep Wash</b>																					
G1	Prep Blank	0.077	7.4	9.3	0.58	232.2	0.096	2	0.90	0.055	0.48	<0.1	2.1	0.31	<0.02	<5	<0.1	<0.02	4.7	2.61	0.1
G1	Prep Blank	0.077	8.2	9.2	0.59	252.4	0.104	2	0.97	0.076	0.52	<0.1	2.3	0.35	<0.02	<5	<0.1	<0.02	5.1	3.13	0.1





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**Client:** Killdeer Minerals Inc.  
 325 - 744 West Hastings Street  
 Vancouver BC V6C 1A5 Canada

**Project:** OSILINKA  
**Report Date:** November 06, 2012

Page: 1 of 1

Part: 3 of 1

**QUALITY CONTROL REPORT**

**VAN12004940.1**

Method		1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte		Hf	Nb	Rb	Sn	Ta	Zr	Y	Ca	In	Re	Be	Li	Pd	
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	
MDL		0.02	0.02	0.1	0.1	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	10	
<b>Pulp Duplicates</b>															
OS 651E	Rock	<0.02	0.02	<0.1	<0.1	<0.05	0.1	1.33	1.2	<0.02	<1	<0.1	0.6	<10	<2
REP OS 651E	QC	<0.02	0.04	0.1	<0.1	<0.05	0.2	1.42	1.3	<0.02	<1	<0.1	0.6	<10	<2
OS 658	Rock	0.07	<0.02	3.8	<0.1	<0.05	3.8	10.01	6.0	0.04	<1	0.4	1.7	<10	<2
REP OS 658	QC	0.07	<0.02	4.0	<0.1	<0.05	3.6	9.99	6.0	0.05	<1	0.5	1.6	<10	2
<b>Reference Materials</b>															
STD DS9	Standard	0.10	1.47	35.0	5.7	<0.05	1.8	6.09	25.9	2.11	67	5.8	24.3	123	389
STD DS9	Standard	0.07	1.38	33.2	5.3	<0.05	2.1	5.89	25.6	2.16	54	5.4	25.1	112	350
STD DS9 Expected		0.08	1.33	33.8	6.4	0.004	2	5.97	25.4	2.2	61	5.4	25.2	120	350
BLK	Blank	<0.02	<0.02	<0.1	<0.1	<0.05	<0.1	<0.01	<0.1	<0.02	<1	<0.1	<0.1	<10	<2
BLK	Blank	<0.02	<0.02	<0.1	<0.1	<0.05	<0.1	<0.01	<0.1	<0.02	<1	<0.1	<0.1	<10	<2
<b>Prep Wash</b>															
G1	Prep Blank	0.05	0.28	39.8	0.3	<0.05	0.7	3.87	15.0	0.02	<1	0.2	29.4	<10	<2
G1	Prep Blank	0.06	0.32	45.1	0.3	<0.05	0.9	4.48	16.9	<0.02	<1	0.2	29.1	<10	<2



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Client: **Killdeer Minerals Inc.**  
325 - 744 West Hastings Street  
Vancouver BC V6C 1A5 Canada

Submitted By: Dave Pugh  
Receiving Lab: Canada-Vancouver  
Received: October 18, 2012  
Report Date: November 02, 2012  
Page: 1 of 2

**CERTIFICATE OF ANALYSIS**

**VAN12004941.1**

**CLIENT JOB INFORMATION**

Project: OSILINKA  
Shipment ID:  
P.O. Number  
Number of Samples: 9

**SAMPLE DISPOSAL**

STOR-PLP Store After 90 days Invoice for Storage  
STOR-RJT-SOIL Store Soil Reject - RJSV Charges Apply

**SAMPLE PREPARATION AND ANALYTICAL PROCEDURES**

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Dry at 60C	9	Dry at 60C			VAN
SS80	9	Dry at 60C sieve 100g to -80 mesh			VAN
RJSV	9	Saving all or part of Soil Reject			VAN
1F05	9	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	15	Completed	VAN

**ADDITIONAL COMMENTS**

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Killdeer Minerals Inc.  
325 - 744 West Hastings Street  
Vancouver BC V6C 1A5  
Canada

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Client: **Killdeer Minerals Inc.**  
 325 - 744 West Hastings Street  
 Vancouver BC V6C 1A5 Canada

Project: OSILINKA  
 Report Date: November 02, 2012

Page: 2 of 2

Part: 1 of 1

**CERTIFICATE OF ANALYSIS**

**VAN12004941.1**

Method	Analyte	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL	MDL
SS15	Soil	7.11	26.79	4632	>10000	8629	15.1	4.4	398	18.70	48.7	3.7	3.8	0.3	14.0	10.56	18.33	0.21	10	8.59	0.021
SS28	Soil	1.18	31.31	446.0	4154	1186	16.6	5.6	524	9.54	36.7	0.9	2.3	2.4	22.7	7.23	5.72	0.18	18	8.10	0.036
SS29	Soil	2.65	114.2	>10000	>10000	19352	13.0	4.0	514	18.44	176.2	2.0	2.6	1.4	15.9	58.48	76.85	0.12	14	7.61	0.038
OS650E	Soil	0.30	7.03	319.0	87.7	309	6.3	2.7	388	1.02	4.5	0.7	3.9	0.4	24.7	0.59	0.88	0.04	18	14.54	0.057
OS650C	Soil	0.73	25.61	967.8	434.2	247	18.2	7.2	1203	3.62	10.0	3.6	1.1	3.4	14.1	2.39	15.17	0.13	73	2.14	0.283
OS650C1	Soil	0.19	24.17	899.1	245.5	501	7.3	3.5	940	2.11	9.0	2.6	0.9	0.4	21.5	1.03	24.79	0.05	43	7.75	0.209
OS651B	Soil	<0.01	1.32	40.67	13.0	220	1.3	0.4	318	0.19	0.5	0.8	0.8	0.1	23.4	0.08	0.36	<0.02	6	17.18	0.060
OS651D	Soil	0.43	9.57	106.6	110.4	437	8.5	5.6	462	2.03	10.3	0.9	1.1	0.3	26.3	0.27	1.20	0.04	25	12.33	0.093
OS654C	Soil	11.42	39.99	3624	2987	3601	16.9	6.3	3314	>40	251.5	4.7	2.2	1.1	4.0	2.35	26.52	0.03	95	1.24	0.241



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Vancouver BC V6C 1A5 Canada

Project: OSILINKA  
Report Date: November 02, 2012

Page: 2 of 2

Part: 2 of 1

**CERTIFICATE OF ANALYSIS**

**VAN12004941.1**

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Cs	Ge	Hf	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	
MDL	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02	0.1	0.02	
SS15	Soil	4.2	3.0	5.34	1611	0.004	2	0.18	0.008	<0.01	<0.1	1.2	0.24	0.06	2755	1.3	0.03	0.9	0.07	0.4	<0.02
SS28	Soil	6.5	8.4	4.71	120.3	0.013	2	0.64	0.007	0.06	<0.1	1.6	1.98	1.26	991	0.2	<0.02	2.2	0.64	<0.1	<0.02
SS29	Soil	3.6	5.7	4.74	49.5	0.007	1	0.26	0.016	0.04	<0.1	1.7	7.04	3.21	22101	2.5	<0.02	6.7	0.37	2.3	0.03
OS650E	Soil	9.0	7.3	8.60	106.8	0.007	1	0.50	0.011	0.03	<0.1	1.1	0.08	<0.02	102	0.2	<0.02	1.1	0.35	<0.1	0.05
OS650C	Soil	15.5	26.8	1.32	309.6	0.028	3	1.98	0.005	0.05	0.2	3.5	0.19	<0.02	72	<0.1	<0.02	4.4	1.14	<0.1	0.04
OS650C1	Soil	7.7	11.5	4.56	151.0	0.012	1	0.84	0.007	0.02	0.1	1.2	0.17	0.02	143	0.1	<0.02	1.9	0.39	<0.1	<0.02
OS651B	Soil	2.9	2.0	10.10	9.7	0.001	<1	0.07	0.010	<0.01	<0.1	0.2	0.04	<0.02	30	<0.1	<0.02	0.2	<0.02	<0.1	<0.02
OS651D	Soil	5.3	9.9	7.33	133.7	0.010	2	0.70	0.012	0.03	<0.1	1.1	0.08	0.03	91	0.2	<0.02	1.4	0.28	<0.1	<0.02
OS654C	Soil	10.2	21.0	0.88	453.3	0.008	1	0.44	0.002	<0.01	1.1	2.0	1.18	<0.02	495	1.6	<0.02	2.0	0.07	0.3	0.03



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Project: OSILINKA  
Report Date: November 02, 2012

Page: 2 of 2

Part: 3 of 1

# CERTIFICATE OF ANALYSIS

VAN12004941.1

Method	Analyte	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
		Nb	Rb	Sn	Ta	Zr	Y	Ce	In	Re	Ba	Li	Pd	Pt
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppb	
MDL		0.02	0.1	0.1	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	2	
SS15	Soil	0.06	0.8	0.3	<0.05	0.2	3.84	7.7	0.06	<1	<0.1	1.2	<10	<2
SS28	Soil	0.27	6.4	0.2	<0.05	0.6	4.27	12.1	0.03	<1	0.3	7.4	<10	<2
SS29	Soil	0.12	2.8	1.0	<0.05	1.4	2.90	7.3	0.08	<1	0.1	3.2	<10	<2
OS650E	Soil	0.17	2.9	0.2	<0.05	0.9	7.81	15.5	0.03	2	0.3	2.9	<10	<2
OS650C	Soil	0.96	7.5	0.5	<0.05	1.4	10.20	39.4	0.03	<1	0.8	11.1	<10	<2
OS650C1	Soil	0.22	2.8	0.2	<0.05	0.4	6.71	13.8	0.02	2	0.2	4.1	<10	<2
OS651B	Soil	<0.02	0.2	<0.1	<0.05	0.3	5.30	5.3	<0.02	<1	0.1	0.5	<10	<2
OS651D	Soil	0.15	3.0	0.3	<0.05	0.3	4.98	9.5	<0.02	2	0.3	3.5	<10	<2
OS654C	Soil	0.17	1.0	<0.1	<0.05	1.7	6.93	22.8	<0.02	<1	0.4	0.7	<10	<2



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 Vancouver BC V6C 1A5 Canada

Project: OSILINKA  
 Report Date: November 02, 2012

Page: 1 of 1

Part: 1 of 1

**QUALITY CONTROL REPORT**

**VAN12004941.1**

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Gd	Sb	Bi	V	Ca	P	
Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001	
Pulp Duplicates																					
OS654C	Soil	11.42	39.99	3624	2987	3601	16.9	6.3	3314	>40	251.5	4.7	2.2	1.1	4.0	2.35	36.52	0.03	95	1.24	0.241
REP OS654C	QC	11.61	38.76	4010	3030	3737	16.7	5.7	3388	>40	257.8	5.0	4.6	1.2	4.4	2.53	40.07	0.03	97	1.27	0.245
Reference Materials																					
STD DS9	Standard	13.22	107.3	142.0	335.1	2092	39.1	7.9	601	2.51	27.9	2.9	166.5	7.0	79.7	2.66	5.99	6.87	41	0.75	0.083
STD DS9 Expected		12.84	108	126	317	1830	40.3	7.8	575	2.33	25.5	2.69	118	6.38	69.6	2.4	4.94	6.32	40	0.7201	0.0819
BLK	Blank	<0.01	<0.01	0.38	0.4	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01	<0.001



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 325 - 744 West Hastings Street  
 Vancouver BC V6C 1A5 Canada

Project: OSILINKA  
 Report Date: November 02, 2012

Page: 1 of 1

Part: 2 of 1

**QUALITY CONTROL REPORT**

**VAN12004941.1**

Method		1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Cs	Ge	Hf
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm
MDL		0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02	0.1	0.02
Pulp Duplicates																					
OS654C	Soil	10.2	21.0	0.88	453.3	0.008	1	0.44	0.002	<0.01	1.1	2.0	1.18	<0.02	495	1.6	<0.02	2.0	0.07	0.3	0.03
REP OS654C	QC	10.8	20.4	0.89	498.1	0.008	2	0.44	0.002	<0.01	1.2	2.1	1.32	<0.02	498	1.3	<0.02	2.2	0.09	0.2	0.05
Reference Materials																					
STD DS9	Standard	14.5	123.4	0.64	303.5	0.109	3	0.99	0.086	0.41	3.2	2.8	6.33	0.17	239	5.3	5.30	5.4	2.41	0.1	0.09
STD DS9 Expected		13.3	121	0.6165	295	0.1108		0.9577	0.0853	0.395	2.89	2.5	5.3	0.1615	200	5.2	5.02	4.59	2.37	0.1	0.08
BLK	Blank	<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1	<0.02	<0.1	<0.02



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**Client:** Killdeer Minerals Inc.  
325 - 744 West Hastings Street  
Vancouver BC V6C 1A5 Canada

**Project:** OSILINKA  
**Report Date:** November 02, 2012

Page: 1 of 1

Part: 3 of 1

QUALITY CONTROL REPORT

VAN12004941.1

Method	Analyte	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
		Nb	Rb	Sn	Ta	Zr	Y	Ce	In	Re	Se	Li	Pd	Pt
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppb
MDL		0.02	0.1	0.1	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	10	2
Pulp Duplicates														
OS654C	Soil	0.17	1.0	<0.1	<0.05	1.7	6.93	22.8	<0.02	<1	0.4	0.7	<10	<2
REP OS654C	QC	0.18	1.0	0.2	<0.05	1.7	7.31	24.5	<0.02	<1	0.4	0.7	<10	<2
Reference Materials														
STD DS9	Standard	1.49	37.3	6.2	<0.05	2.1	6.46	28.6	2.48	87	6.2	28.5	142	395
STD DS9 Expected		1.33	33.8	6.4	0.004	2	5.97	25.4	2.2	61	5.4	25.2	120	350
BLK	Blank	<0.02	<0.1	<0.1	<0.05	<0.1	<0.01	<0.1	<0.02	<1	<0.1	<0.1	<10	<2

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval, preliminary reports are unsigned and should be used for reference only.





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**Client:** Killdeer Minerals Inc.  
325 - 744 West Hastings Street  
Vancouver BC V6C 1A5 Canada

Submitted By: Dave Pugh  
Receiving Lab: Canada-Vancouver  
Received: October 18, 2012  
Report Date: November 02, 2012  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN12004942.1

### CLIENT JOB INFORMATION

Project: None Given  
Shipment ID:  
P.O. Number  
Number of Samples: 28

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	28	Crush, split and pulverize 250 g rock to 200 mesh			VAN
1D01	28	1:1:1 Aqua Regia digestion ICP-ES analysis	0.5	Completed	VAN

### SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage  
STOR-RJT Store After 90 days Invoice for Storage

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Killdeer Minerals Inc.  
325 - 744 West Hastings Street  
Vancouver BC V6C 1A5  
Canada

CC:



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Client: **Killdeer Minerals Inc.**  
325 - 744 West Hastings Street  
Vancouver BC V6C 1A5 Canada

Project: None Given  
Report Date: November 02, 2012

Page: 2 of 2

Part: 1 of 1

**CERTIFICATE OF ANALYSIS**

**VAN12004942.1**

Method	WGHT	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	
G1	Prep Blank	<0.01	<1	<1	<3	43	0.6	3	4	539	1.81	<2	<2	4	60	<0.5	<3	<3	33	0.55	0.075
G1	Prep Blank	<0.01	<1	<1	<3	43	0.7	3	4	532	1.82	<2	<2	4	57	<0.5	<3	<3	34	0.44	0.075
OS 617.1	Rock	0.72	<1	<1	<3	<1	<0.3	<1	<1	566	0.61	<2	<2	<2	38	<0.5	<3	<3	1	17.56	<0.001
OS 617.2	Rock	0.89	<1	11	27	205	<0.3	<1	<1	367	0.51	2	<2	<2	28	1.6	<3	<3	<1	18.92	0.001
OS 618	Rock	0.75	<1	<1	27	25	<0.3	<1	<1	455	0.63	<2	<2	<2	118	<0.5	<3	<3	2	17.67	0.003
OS 619	Rock	0.59	<1	1	31	254	<0.3	<1	<1	521	0.55	<2	<2	<2	34	2.1	<3	<3	2	18.52	0.016
OS 619A	Rock	0.69	<1	4	266	1995	<0.3	<1	<1	577	0.84	<2	<2	<2	45	11.6	<3	<3	1	18.34	0.018
OS 620	Rock	0.71	<1	<1	30	22	<0.3	<1	<1	289	0.36	<2	<2	<2	45	<0.5	<3	<3	2	19.13	0.015
OS 621	Rock	0.81	<1	<1	4	102	<0.3	<1	<1	595	0.75	4	<2	<2	32	<0.5	<3	<3	6	19.98	0.006
OS 622	Rock	0.53	<1	29	5073	16	0.6	<1	<1	429	1.55	11	<2	<2	38	<0.5	4	<3	4	19.50	0.061
OS 623	Rock	0.58	<1	<1	112	88	0.4	<1	<1	220	0.13	<2	<2	<2	23	0.7	<3	<3	2	19.52	<0.001
OS 623C	Rock	0.78	<1	<1	52	35	0.4	<1	<1	420	0.46	23	<2	<2	38	<0.5	<3	<3	3	18.90	0.002
OS 624B	Rock	0.67	<1	<1	<3	<1	<0.3	<1	<1	628	0.72	<2	<2	<2	81	<0.5	<3	<3	<1	18.85	<0.001
OS 626A	Rock	0.75	<1	3	14	<1	<0.3	<1	<1	419	0.87	4	<2	<2	17	<0.5	<3	<3	2	11.84	0.001
OS 627B	Rock	0.82	<1	<1	17	3	<0.3	<1	<1	788	1.01	<2	<2	<2	36	<0.5	<3	<3	2	19.72	0.004
OS 628	Rock	0.71	<1	3	102	201	<0.3	1	<1	629	1.60	5	<2	<2	23	<0.5	<3	<3	8	21.35	0.018
OS 629A	Rock	0.91	3	21	67	86	1.3	14	7	7	10.07	13	<2	<2	8	<0.5	9	<3	55	0.24	0.139
OS 634B	Rock	1.00	<1	<1	8	13	<0.3	5	4	318	0.38	<2	<2	<2	345	<0.5	<3	<3	2	27.91	0.009
OS 635	Rock	0.56	<1	22	20	64	<0.3	19	12	141	3.70	7	<2	9	21	<0.5	<3	<3	15	0.16	0.069
OS 635A	Rock	0.69	<1	4	11	18	<0.3	8	7	714	2.00	6	<2	7	23	<0.5	<3	<3	3	2.38	0.024
OS 635B	Rock	0.56	<1	887	23	<1	<0.3	2	1	144	0.51	<2	<2	2	4	<0.5	<3	<3	<1	0.26	0.005
OS 638C	Rock	0.72	<1	3	529	533	1.1	1	<1	276	0.81	3	<2	<2	56	1.4	<3	<3	2	21.58	0.005
OS 638E	Rock	0.62	<1	3	56	12	<0.3	<1	<1	993	1.04	3	<2	<2	47	<0.5	<3	<3	2	21.31	0.019
OS 641A	Rock	0.68	<1	<1	171	58	0.8	<1	<1	319	0.33	2	<2	<2	24	0.9	<3	<3	2	20.07	0.004
OS 642	Rock	0.70	<1	<1	37	68	<0.3	<1	<1	693	0.73	2	<2	<2	32	0.6	<3	<3	1	20.01	<0.001
OS 649B	Rock	0.61	<1	<1	<3	<1	<0.3	<1	<1	358	0.05	<2	<2	<2	32	<0.5	<3	<3	<1	19.99	<0.001
OS 650D	Rock	0.62	<1	<1	24	3	<0.3	<1	<1	149	0.04	<2	<2	<2	22	<0.5	<3	<3	1	19.80	0.038
OS 652	Rock	0.62	<1	<1	34	4	<0.3	<1	<1	195	0.05	<2	<2	<2	35	<0.5	<3	<3	3	19.81	0.066
OS 652C	Rock	0.54	<1	1	14	10	<0.3	<1	<1	289	0.37	<2	<2	<2	35	<0.5	<3	<3	8	14.39	0.361
OS 652E	Rock	0.56	<1	<1	43	30	<0.3	<1	<1	233	0.19	<2	<2	<2	35	<0.5	<3	<3	6	10.72	1.243

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 325 - 744 West Haslings Street  
 Vancouver BC V6C 1A5 Canada

Project: None Given  
 Report Date: November 02, 2012

Page: 2 of 2

Part: 2 of 1

**CERTIFICATE OF ANALYSIS**

**VAN12004942.1**

Method	Analyte	Unit	MDL	1D La	1D Cr	1D Mg	1D Ba	1D Ti	1D B	1D Al	1D Na	1D K	1D W	1D Tl	1D Hg	1D Ga	1D S	1D Sc
				ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm
				1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	5	1	5	0.05	5
G1	Prep Blank			7	8	0.62	229	0.113	<20	0.94	0.07	0.47	<2	<5	<1	<5	<0.05	<5
G1	Prep Blank			7	9	0.56	226	0.117	<20	0.91	0.08	0.46	<2	<5	<1	<5	<0.05	<5
OS 617.1	Rock			<1	<1	10.15	32	<0.001	<20	0.02	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
OS 617.2	Rock			2	<1	11.21	48	<0.001	<20	0.03	0.03	<0.01	<2	<5	<1	<5	<0.05	<5
OS 618	Rock			2	<1	9.90	2560	<0.001	<20	0.02	0.03	<0.01	<2	<5	<1	<5	<0.05	<5
OS 619	Rock			1	<1	10.80	226	<0.001	<20	0.02	0.03	<0.01	<2	<5	<1	<5	<0.05	<5
OS 619A	Rock			2	<1	10.84	473	<0.001	<20	0.02	0.03	<0.01	<2	<5	<1	<5	<0.05	<5
OS 620	Rock			1	<1	10.83	49	<0.001	<20	0.02	0.03	<0.01	<2	<5	<1	<5	<0.05	<5
OS 621	Rock			1	<1	10.08	55	<0.001	<20	0.03	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
OS 622	Rock			<1	2	10.29	64	<0.001	<20	0.02	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
OS 623	Rock			2	<1	11.49	15	<0.001	<20	0.02	0.03	<0.01	<2	<5	<1	<5	<0.05	<5
OS 623C	Rock			<1	<1	7.54	51	<0.001	<20	0.03	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
OS 624B	Rock			1	<1	10.70	764	<0.001	<20	0.02	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
OS 626A	Rock			2	<1	6.70	19	<0.001	<20	<0.01	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
OS 627B	Rock			1	<1	10.21	60	<0.001	<20	0.02	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
OS 628	Rock			2	<1	9.34	98	<0.001	<20	0.02	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
OS 629A	Rock			9	21	0.14	560	0.002	<20	0.35	0.02	0.17	<2	<5	<1	<5	0.09	<5
OS 634B	Rock			5	2	0.75	12	<0.001	<20	0.08	0.02	0.04	<2	<5	<1	<5	<0.05	<5
OS 635	Rock			33	23	0.80	61	0.001	<20	1.75	<0.01	0.23	<2	<5	<1	6	<0.05	<5
OS 635A	Rock			11	4	0.16	36	<0.001	<20	0.10	<0.01	0.09	<2	<5	<1	<5	<0.05	<5
OS 635B	Rock			4	5	0.04	14	<0.001	<20	0.05	<0.01	0.05	<2	<5	<1	<5	<0.05	<5
OS 638C	Rock			1	1	10.24	1902	<0.001	<20	0.03	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
OS 638E	Rock			2	2	11.83	39	<0.001	<20	0.04	0.03	<0.01	<2	<5	<1	<5	<0.05	<5
OS 641A	Rock			3	1	12.93	12	<0.001	<20	0.03	0.03	<0.01	<2	<5	<1	<5	<0.05	<5
OS 642	Rock			2	<1	12.26	49	<0.001	<20	0.02	0.03	0.01	<2	<5	<1	<5	<0.05	<5
OS 649B	Rock			2	<1	12.77	8	<0.001	<20	0.03	0.03	0.02	<2	<5	<1	<5	<0.05	<5
OS 650D	Rock			2	<1	13.10	6	<0.001	<20	0.02	0.03	0.02	<2	<5	<1	<5	<0.05	<5
OS 652	Rock			1	1	11.47	13	<0.001	<20	0.03	0.03	<0.01	<2	<5	<1	<5	<0.05	<5
OS 652C	Rock			1	2	8.02	25	<0.001	<20	0.02	0.03	<0.01	<2	<5	<1	<5	<0.05	<5
OS 652E	Rock			2	6	5.11	16	<0.001	<20	0.07	0.02	<0.01	<2	<5	<1	<5	<0.05	<5

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Client: **Killdeer Minerals Inc.**  
 325 - 744 West Hastings Street  
 Vancouver BC V6C 1A5 Canada

Project: None Given  
 Report Date: November 02, 2012

Page: 1 of 1

Part: 1 of 1

**QUALITY CONTROL REPORT**

**VAN12004942.1**

Method	WGHT	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	
Pulp Duplicates																					
OS 638C	Rock	0.72	<1	3	529	533	1.1	1	<1	276	0.81	3	<2	<2	56	1.4	<3	<3	2	21.58	0.005
REP OS 638C	QC		<1	3	511	522	1.2	1	<1	275	0.77	2	<2	<2	54	1.4	<3	<3	2	20.88	0.005
Reference Materials																					
STD DS9	Standard		12	102	114	292	2.3	39	7	557	2.26	27	<2	5	70	2.3	4	5	39	0.71	0.081
STD OREAS45EA	Standard		3	670	16	27	0.3	371	51	381	24.66	4	<2	9	4	<0.5	<3	<3	293	<0.01	0.030
STD OREAS45EA Expected			1.78	709	14.3	30.6	0.311	357	52	400	22.65	11.4	0.053	10.7	4.05				295	0.032	0.029
STD DS9 Expected			12.84	108	126	317	1.83	40.3	7.6	575	2.33	25.5	0.118	6.38	69.6	2.4	4.94	6.32	40	0.7201	0.0819
BLK	Blank		<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<2	<1	<0.5	<3	<3	<1	<0.01	<0.001
Prep Wash																					
G1	Prep Blank	<0.01	<1	<1	<3	43	0.6	3	4	539	1.81	<2	<2	4	60	<0.5	<3	<3	33	0.55	0.075
G1	Prep Blank	<0.01	<1	<1	<3	43	0.7	3	4	532	1.82	<2	<2	4	57	<0.5	<3	<3	34	0.44	0.075



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 325 - 744 West Hastings Street  
 Vancouver BC V6C 1A5 Canada

**Project:** None Given  
**Report Date:** November 02, 2012

Page: 1 of 1

Part: 2 of 1

**QUALITY CONTROL REPORT**

**VAN12004942.1**

Method		1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	
Analyte		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Ga	S	
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	
MDL		1	1	0.01	1	0.001	20	0.01	0.01	0.01	2	5	1	5	0.05	
<b>Pulp Duplicates</b>																
OS 638C	Rock	1	1	10.24	1902	<0.001	<20	0.03	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
REP OS 638C	QC	1	1	10.01	1688	<0.001	<20	0.03	0.02	<0.01	<2	<5	<1	<5	<0.05	<5
<b>Reference Materials</b>																
STD DS9	Standard	11	114	0.62	321	0.106	<20	0.92	0.09	0.39	2	<5	<1	<5	0.14	<5
STD OREAS45EA	Standard	8	867	0.07	140	0.091	<20	3.14	0.03	0.05	<2	<5	<1	<5	<0.05	79
STD OREAS45EA Expected		8.19	849	0.095	148	0.106		3.32	0.027	0.053			0.34	11.7	0.044	78
STD DS9 Expected		13.3	121	0.6165	330	0.1108		0.9577	0.0853	0.395	2.89	5.3	0.2	4.59	0.1615	2.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<0.01	<2	<5	<1	<5	<0.05	<5
<b>Prep Wash</b>																
G1	Prep Blank	7	8	0.62	229	0.113	<20	0.94	0.07	0.47	<2	<5	<1	<5	<0.05	<5
G1	Prep Blank	7	9	0.56	226	0.117	<20	0.91	0.08	0.46	<2	<5	<1	<5	<0.05	<5



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Client: **Killdeer Minerals Inc.**  
325 - 744 West Hastings Street  
Vancouver BC V6C 1A5 Canada

Submitted By: Dave Pugh  
Receiving Lab: Canada-Vancouver  
Received: October 18, 2012  
Report Date: November 02, 2012  
Page: 1 of 3

**CERTIFICATE OF ANALYSIS**

**VAN12004943.1**

**CLIENT JOB INFORMATION**

Project: None Given  
Shipment ID:  
P.O. Number  
Number of Samples: 41

**SAMPLE DISPOSAL**

STOR-PLP Store After 90 days Invoice for Storage  
STOR-RJT-SOIL Store Soil Reject - RJSV Charges Apply

**SAMPLE PREPARATION AND ANALYTICAL PROCEDURES**

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Dry at 60C	41	Dry at 60C			VAN
SS80	41	Dry at 60C sieve 100g to -80 mesh			VAN
RJSV	41	Saving all or part of Soil Reject			VAN
1D01	41	1:1:1 Aqua Regia digestion ICP-ES analysis	0.5	Completed	VAN

**ADDITIONAL COMMENTS**

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Killdeer Minerals Inc.  
325 - 744 West Hastings Street  
Vancouver BC V6C 1A5  
Canada

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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 325 - 744 West Hastings Street  
 Vancouver BC V6C 1A5 Canada

Project: None Given  
 Report Date: November 02, 2012

Page: 2 of 3

Part: 1 of 1

**CERTIFICATE OF ANALYSIS**

**VAN12004943.1**

Method	Analyte	Unit	MDL	1D Mo	1D Cu	1D Pb	1D Zn	1D Ag	1D Ni	1D Co	1D Mn	1D Fe	1D As	1D Au	1D Th	1D Sr	1D Cd	1D Sb	1D Bi	1D V	1D Ca	1D P	1D La
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
				1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1
SS01	Soil			2	35	98	238	<0.3	77	42	866	4.43	<2	<2	8	16	<0.5	<3	<3	17	0.53	0.063	50
SS02	Soil			<1	42	6	62	<0.3	36	11	310	3.04	4	<2	<2	21	<0.5	<3	<3	92	0.37	0.069	6
SS03	Soil			2	27	586	636	0.6	57	33	863	5.12	6	<2	16	10	1.1	<3	<3	26	1.11	0.049	78
SS04	Soil			4	82	>10000	4683	78.8	35	12	560	10.52	140	6	7	14	8.0	89	<3	23	1.61	0.171	17
SS05	Soil			3	67	1991	>10000	2.9	22	8	981	9.21	27	<2	<2	21	23.8	13	<3	23	9.02	0.064	6
SS06	Soil			2	15	406	851	0.5	38	23	595	5.79	5	<2	10	7	1.1	<3	<3	32	0.20	0.064	27
SS07	Soil			2	15	292	696	0.5	31	20	941	5.01	6	<2	8	7	1.3	<3	<3	31	0.22	0.062	27
SS08	Soil			2	14	216	289	0.7	35	18	789	3.66	5	<2	7	7	<0.5	<3	<3	22	0.19	0.037	23
SS09	Soil			2	27	394	497	1.2	38	20	1202	5.25	6	<2	11	8	1.4	4	<3	27	1.89	0.069	27
SS10	Soil			2	24	665	599	0.5	54	28	799	5.39	7	<2	17	7	0.8	3	<3	31	0.21	0.050	49
SS11	Soil			1	13	259	303	0.7	25	16	830	3.76	5	<2	8	11	0.9	<3	<3	21	3.64	0.048	50
SS12	Soil			2	15	571	696	0.5	28	23	2091	5.22	7	<2	3	9	1.3	5	<3	45	0.47	0.062	14
SS13	Soil			2	27	153	268	<0.3	52	31	752	5.02	4	<2	12	11	<0.5	<3	<3	23	0.21	0.058	43
SS14	Soil			3	10	763	945	0.4	26	16	1561	5.81	7	<2	6	8	1.6	<3	<3	57	0.43	0.057	16
SS16	Soil			1	14	190	281	<0.3	40	25	1696	3.33	<2	<2	8	18	<0.5	<3	<3	24	0.45	0.041	29
SS17	Soil			<1	28	391	326	0.9	23	9	687	2.46	8	<2	<2	27	1.1	<3	<3	27	10.25	0.083	9
SS18	Soil			1	35	7874	>10000	15.1	18	7	1060	6.48	68	<2	<2	23	31.0	19	<3	17	11.49	0.083	7
SS19	Soil			2	27	2525	2416	3.4	27	11	1066	4.17	17	<2	<2	19	4.4	4	4	41	6.68	0.085	16
SS20	Soil			2	13	561	596	0.6	28	22	2577	4.77	6	<2	4	9	1.1	<3	<3	37	0.71	0.055	18
SS30	Soil			<1	10	252	142	0.5	13	5	420	1.80	6	<2	<2	25	1.1	<3	<3	26	11.28	0.053	7
SS31	Soil			1	11	484	489	<0.3	24	12	455	3.92	9	<2	3	12	1.8	<3	<3	64	2.75	0.037	14
SS32	Soil			1	10	376	340	0.4	18	8	964	3.72	7	<2	<2	12	1.4	<3	<3	66	2.39	0.043	16
SS33	Soil			<1	3	236	133	0.4	4	2	365	0.70	6	<2	<2	29	0.9	<3	<3	8	15.22	0.030	3
SS34	Soil			<1	7	215	137	0.4	9	4	382	1.21	7	<2	<2	28	0.8	<3	<3	14	13.76	0.042	5
SS35	Soil			<1	7	353	288	0.5	10	4	690	2.01	6	<2	<2	21	1.3	<3	<3	33	10.66	0.054	10
SS36	Soil			<1	6	345	254	0.6	7	3	743	1.27	6	<2	<2	27	1.2	<3	<3	16	14.95	0.056	7
SS37	Soil			<1	8	328	106	0.6	10	4	442	1.20	4	<2	<2	26	0.9	<3	<3	17	12.97	0.063	7
SS38	Soil			<1	7	245	114	0.4	8	3	351	1.08	5	<2	<2	29	0.6	<3	<3	16	13.81	0.048	5
SS39	Soil			<1	5	487	229	<0.3	11	5	426	3.08	6	<2	<2	10	1.1	<3	<3	61	2.92	0.043	10
SS40	Soil			<1	4	388	76	0.5	4	2	389	0.87	4	<2	<2	28	0.8	<3	<3	12	14.14	0.087	5

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**CERTIFICATE OF ANALYSIS**

**VAN12004943.1**

Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	
Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Ga	S	Se	
Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	
MDL	1	0.01	1	0.001	20	0.01	0.01	0.01	2	5	1	5	0.05	5	
SS01	Soil	34	0.62	165	0.002	<20	1.94	0.01	0.12	<2	<5	<1	<5	<0.05	<5
SS02	Soil	41	0.50	178	0.054	<20	1.00	0.01	0.06	<2	<5	<1	<5	<0.05	<5
SS03	Soil	38	1.22	211	0.007	<20	2.11	0.01	0.07	<2	<5	<1	<5	<0.05	<5
SS04	Soil	22	0.88	181	0.006	<20	1.20	0.02	0.08	2	<5	<1	<5	0.12	<5
SS05	Soil	13	5.67	1332	0.015	<20	0.93	0.02	0.05	13	<5	4	7	0.06	<5
SS06	Soil	37	0.66	295	0.006	<20	2.18	0.01	0.07	<2	<5	<1	<5	<0.05	<5
SS07	Soil	32	0.56	241	0.005	<20	1.82	0.01	0.08	<2	<5	<1	6	<0.05	<5
SS08	Soil	30	0.61	185	0.006	<20	1.63	0.01	0.07	<2	<5	<1	<5	<0.05	<5
SS09	Soil	35	1.66	209	0.005	<20	2.29	0.01	0.05	<2	<5	<1	6	<0.05	<5
SS10	Soil	34	0.68	201	0.007	<20	2.17	<0.01	0.06	<2	<5	<1	<5	<0.05	<5
SS11	Soil	26	2.53	175	0.004	<20	1.41	0.01	0.06	<2	<5	<1	<5	<0.05	<5
SS12	Soil	28	0.44	518	0.013	<20	1.63	0.01	0.08	<2	<5	<1	<5	<0.05	<5
SS13	Soil	38	0.73	246	0.003	<20	2.40	0.01	0.09	<2	6	<1	<5	<0.05	<5
SS14	Soil	33	0.49	376	0.010	<20	1.95	0.01	0.06	<2	<5	<1	<5	<0.05	<5
SS16	Soil	28	0.52	327	0.005	<20	1.70	0.01	0.08	<2	<5	<1	5	<0.05	<5
SS17	Soil	17	6.21	246	0.009	<20	1.04	0.02	0.06	<2	<5	<1	6	<0.05	<5
SS18	Soil	9	7.10	149	0.007	<20	0.66	0.02	0.03	13	<5	1	11	0.24	<5
SS19	Soil	23	4.20	251	0.016	<20	1.29	0.02	0.07	2	<5	<1	12	<0.05	<5
SS20	Soil	27	0.66	455	0.007	<20	1.73	0.01	0.07	<2	<5	<1	6	<0.05	<5
SS30	Soil	13	7.02	107	0.009	<20	0.83	0.02	0.05	<2	<5	<1	<5	<0.05	<5
SS31	Soil	34	1.89	170	0.024	<20	2.42	0.02	0.05	<2	<5	<1	5	<0.05	<5
SS32	Soil	30	1.46	188	0.028	<20	2.08	0.02	0.04	<2	<5	<1	5	<0.05	<5
SS33	Soil	3	9.88	36	0.003	<20	0.26	0.02	0.02	<2	<5	<1	<5	<0.05	<5
SS34	Soil	8	8.79	62	0.006	<20	0.48	0.02	0.03	<2	<5	<1	<5	<0.05	<5
SS35	Soil	14	6.48	107	0.011	<20	1.07	0.02	0.03	<2	<5	<1	<5	<0.05	<5
SS36	Soil	8	9.70	49	0.005	<20	0.60	0.02	0.02	<2	<5	<1	<5	<0.05	<5
SS37	Soil	8	8.22	94	0.007	<20	0.58	0.02	0.03	<2	6	<1	<5	<0.05	<5
SS38	Soil	6	8.92	78	0.008	<20	0.45	0.02	0.04	<2	<5	<1	<5	<0.05	<5
SS39	Soil	22	1.78	90	0.015	<20	1.50	0.01	0.03	<2	<5	<1	<5	<0.05	<5
SS40	Soil	6	8.97	53	0.002	<20	0.38	0.02	0.02	<2	<5	<1	<5	<0.05	<5

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**CERTIFICATE OF ANALYSIS**

**VAN12004943.1**

Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
MDL	1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1	
SS41	Soil	<1	8	899	435	0.7	14	6	940	3.84	8	<2	<2	12	2.7	<3	<3	61	3.93	0.082	11
SS42	Soil	1	13	944	452	0.9	12	5	939	2.69	9	<2	<2	22	2.2	<3	<3	39	9.66	0.191	11
SS43	Soil	<1	11	622	213	0.5	14	6	1112	2.38	8	<2	<2	25	1.4	<3	<3	39	9.39	0.121	11
SS44	Soil	1	9	720	261	0.6	12	5	1034	2.70	8	<2	<2	21	1.3	5	<3	43	8.58	0.183	14
SS45	Soil	1	11	1556	367	0.8	13	6	753	3.48	11	<2	<2	19	1.4	<3	<3	51	6.27	0.305	18
SS46	Soil	<1	10	663	328	<0.3	16	6	917	3.07	5	<2	<2	16	1.9	<3	<3	55	6.21	0.120	13
SS47	Soil	<1	11	140	82	<0.3	12	5	840	1.67	3	<2	<2	21	1.0	<3	<3	24	9.95	0.070	7
SS48	Soil	<1	1	293	49	<0.3	1	<1	562	0.55	<2	<2	<2	63	1.2	<3	<3	10	16.08	0.045	2
SS49	Soil	<1	7	1826	1363	<0.3	13	6	2997	4.51	7	<2	<2	32	4.2	<3	<3	68	4.32	1.485	12
SS50	Soil	<1	11	224	217	<0.3	13	5	558	2.13	7	<2	<2	23	0.8	<3	<3	34	8.01	0.142	8
SS51	Soil	<1	12	197	196	<0.3	18	7	836	2.96	6	<2	<2	18	1.1	<3	<3	56	4.46	0.210	18



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**CERTIFICATE OF ANALYSIS**

**VAN12004943.1**

Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	
Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Ga	S	Sc	
Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	
MDL	1	0.01	1	0.001	20	0.01	0.01	0.01	2	5	1	5	0.05	5	
SS41	Soil	26	2.32	81	0.022	<20	1.94	0.02	0.02	<2	6	<1	<5	<0.05	<5
SS42	Soil	17	5.68	131	0.008	<20	1.24	0.02	0.03	<2	6	<1	6	<0.05	<5
SS43	Soil	19	5.63	72	0.011	<20	1.28	0.02	0.02	<2	7	<1	<5	<0.05	<5
SS44	Soil	19	4.99	73	0.014	<20	1.51	0.02	0.03	<2	<5	1	7	<0.05	<5
SS45	Soil	24	3.58	106	0.016	<20	1.82	0.02	0.04	<2	<5	<1	11	<0.05	<5
SS46	Soil	25	3.93	88	0.025	<20	2.00	0.02	0.02	<2	<5	<1	7	<0.05	<5
SS47	Soil	14	6.36	47	0.017	<20	0.98	0.02	0.02	<2	<5	<1	<5	<0.05	<5
SS48	Soil	3	9.73	39	0.002	<20	0.21	0.01	<0.01	<2	<5	<1	<5	<0.05	<5
SS49	Soil	29	1.23	292	0.040	<20	2.16	0.01	0.03	<2	<5	<1	8	<0.05	<5
SS50	Soil	15	4.75	198	0.013	<20	1.18	0.02	0.06	<2	<5	<1	<5	<0.05	<5
SS51	Soil	26	2.84	160	0.022	<20	1.81	0.02	0.04	<2	<5	<1	6	<0.05	<5



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**QUALITY CONTROL REPORT**

**VAN12004943.1**

Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
MDL	1	1	3	1	0.3	1	1	2	0.01	2	2	2	1	0.5	3	3	1	0.01	0.001	1	
<b>Pulp Duplicates</b>																					
SS18	Soil	1	35	7874	>10000	15.1	18	7	1060	6.48	68	<2	<2	23	31.0	19	<3	17	11.49	0.083	7
REP SS18	QC	2	35	7734	>10000	15.1	18	7	1065	6.55	69	<2	<2	23	30.9	18	<3	16	11.59	0.083	7
<b>Reference Materials</b>																					
STD DS9	Standard	12	104	116	309	1.9	41	6	574	2.34	24	<2	5	66	2.3	6	<3	40	0.68	0.083	11
STD DS9	Standard	12	106	123	332	2.1	39	7	575	2.39	28	<2	4	72	2.5	4	6	40	0.72	0.081	11
STD OREAS45EA	Standard	2	687	28	31	0.8	373	56	397	23.40	3	<2	8	4	<0.5	5	<3	289	0.03	0.029	8
STD OREAS45EA	Standard	2	668	17	27	0.4	374	51	379	23.81	2	<2	8	4	1.2	<3	<3	297	0.03	0.029	8
STD DS9 Expected		12.84	108	126	317	1.83	40.3	7.6	575	2.33	25.5	0.118	6.38	69.6	2.4	4.94	6.32	40	0.7201	0.0819	13.3
STD OREAS45EA Expected		1.78	709	14.3	30.6	0.311	357	52	400	22.65	11.4	0.053	10.7	4.05				295	0.032	0.029	8.19
BLK	Blank	<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<2	<1	<0.5	<3	<3	<1	<0.01	<0.001	<1
BLK	Blank	<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<2	<2	<1	<0.5	<3	<3	<1	<0.01	<0.001	<1



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**QUALITY CONTROL REPORT**

**VAN12004943.1**

Method		1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	
Analyte		Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Ga	S	
Unit		ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	
MDL		1	0.01	1	0.001	20	0.01	0.01	0.01	2	5	1	5	0.05	
Pulp Duplicates															
SS18	Soil	9	7.10	149	0.007	<20	0.66	0.02	0.03	13	<5	1	11	0.24	<5
REP SS18	QC	10	7.14	148	0.007	<20	0.67	0.02	0.03	12	<5	1	11	0.25	<5
Reference Materials															
STD DS9	Standard	124	0.60	316	0.098	<20	0.90	0.08	0.40	3	<5	<1	<5	0.17	<5
STD DS9	Standard	118	0.63	330	0.109	<20	0.95	0.09	0.40	3	<5	<1	<5	0.17	<5
STD OREAS45EA	Standard	874	0.09	141	0.091	<20	3.12	0.03	0.05	<2	<5	<1	<5	<0.05	82
STD OREAS45EA	Standard	882	0.09	147	0.091	<20	3.09	0.03	0.05	<2	<5	<1	7	<0.05	80
STD DS9 Expected		121	0.6165	330	0.1108		0.9577	0.0853	0.395	2.89	5.3	0.2	4.59	0.1616	2.5
STD OREAS45EA Expected		849	0.095	148	0.106		3.32	0.027	0.053			0.34	11.7	0.044	78
BLK	Blank	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<0.01	<2	<5	<1	<5	<0.05	<5
BLK	Blank	<1	<0.01	<1	<0.001	<20	<0.01	<0.01	<0.01	<2	<5	<1	<5	<0.05	<5

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