MAR 20160013: SLAVE LAKE

A report on Sandstone exploration on the Slave Lake property near Slave Lake.

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1982337 ALBERTA LTD.

2016 EXPLORATION AND FIELDWORK WITHIN THE SLAVE LAKE METALLIC AND INDUSTRIAL MINERALS PERMIT, CENTRAL ALBERTA

PART B

Metallic and Industrial Minerals Permits:

9314070466

Geographic Coordinates:

52°18'18" N to 55°20'41" N
114°42'49" W to 114°44'44" W

NTS Sheets

83 O/7

Owner and Operator:	1982337 Alberta Ltd. 1400, 10303 Jasper Avenue Edmonton, Alberta T5J 3N6
Consultant:	Dahrouge Geological Consulting Ltd. 18, 10509 - 81 Avenue Edmonton, Alberta T6E 1X7
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Date Submitted:	September 16, 2016

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1. Summary

This Assessment Report summarizes exploration work conducted on July 25th 2016 by Dahrouge Geological Consulting Ltd. ("Dahrouge") on the Slave Lake Property ("the Property"), which consists of Metallic and Industrial Mineral permit 9314070466.

The 2016 program consisted of checking access, mapping and sampling of sand potentially favorable for hydraulic fracturing. A total of 6 samples were collected, two of which were sent for analysis.

2. Introduction

Dahrouge conducted exploration on the Slave Lake Property on behalf of 1982337 Alberta Ltd. ("1982337 Alberta"). Exploration was carried out on MAIM permit 9314070466, located approximately 5 km northeast of the town of Slave Lake, Alberta (Figure 3-1).

The objective of the 2016 exploration program was to carry out reconnaissance/access checks and map surficial geology; several samples of sand were collected to determine if they were favorable for use in hydraulic fracturing.

3. Geographic Setting & Access

3.1. Location, Access and Infrastructure

The centre of the Property is located at about 55°19'N, 114°43'W, approximately 5 km northeast of Slave Lake, AB, Canada. Slave Lake is located in the center of Alberta, roughly 200 km northwest of Edmonton, Alberta (Figure 3-1). The Property can be found on the southeast shore of Lesser Slave Lake, east of Highway 88, and north of Lesser Slave River.

The town of Slave Lake is located at the junction of Provincial Highways 2 and 88. Access to the Property from Slave Lake is via Highway 88, northbound, then east on Township road 731B and then northeast on an unnamed gravel road (Figure 3-2). Access within the Property is by 4 x 4 on a network of gravel roads.

Slave Lake, with a population of roughly 6,700 (2011 Census), is accessed from Edmonton by travelling north along Highway 44 for 200 km and then 60 km northwest on Highway 2. Slave Lake provides a wide variety of amenities including accommodation, fuel, supplies, an airport, and other necessary services. A rail line runs through the town and parallel to Highway 2.

3.2. Topography, Vegetation and Climate

The Property is located approximately 1 km east of Lesser Slave Lake and 1 km north of the Lesser Slave River in the Lesser Slave Lowland, a flat-lying and gently undulating area dominated by glacial lake deposits and till plains, which are largely peat-covered. The topography on the Property is fairly consistent and ranges from 577 to 583 m above sea level. Higher elevations on the Property are characterized by unconsolidated eolian sand dunes, while lower elevations (wetlands), are characterized by lacustrine deposits and bog peat.

Slave Lake exists in the Dry Mixedwood Subregion of the Alberta Boreal Forest. The area surrounding the Property is dominated by black spruce with common bogs of peat moss and Labrador tea. There are also some areas of fen, marsh grasses, larch and sedges.

The Slave Lake area has a humid continental climate. Summers are short and cool, with average daily temperatures ranging from 13°C to 15°C, and extreme highs of 33°C. Winters are long and cold, with average daily temperatures ranging from -12°C to -14°C, and extreme lows of -42°C. Average rainfall is about 385 mm, and average snowfall is about 146 cm.

Figure 3-1 Location of the Slave Lake Property

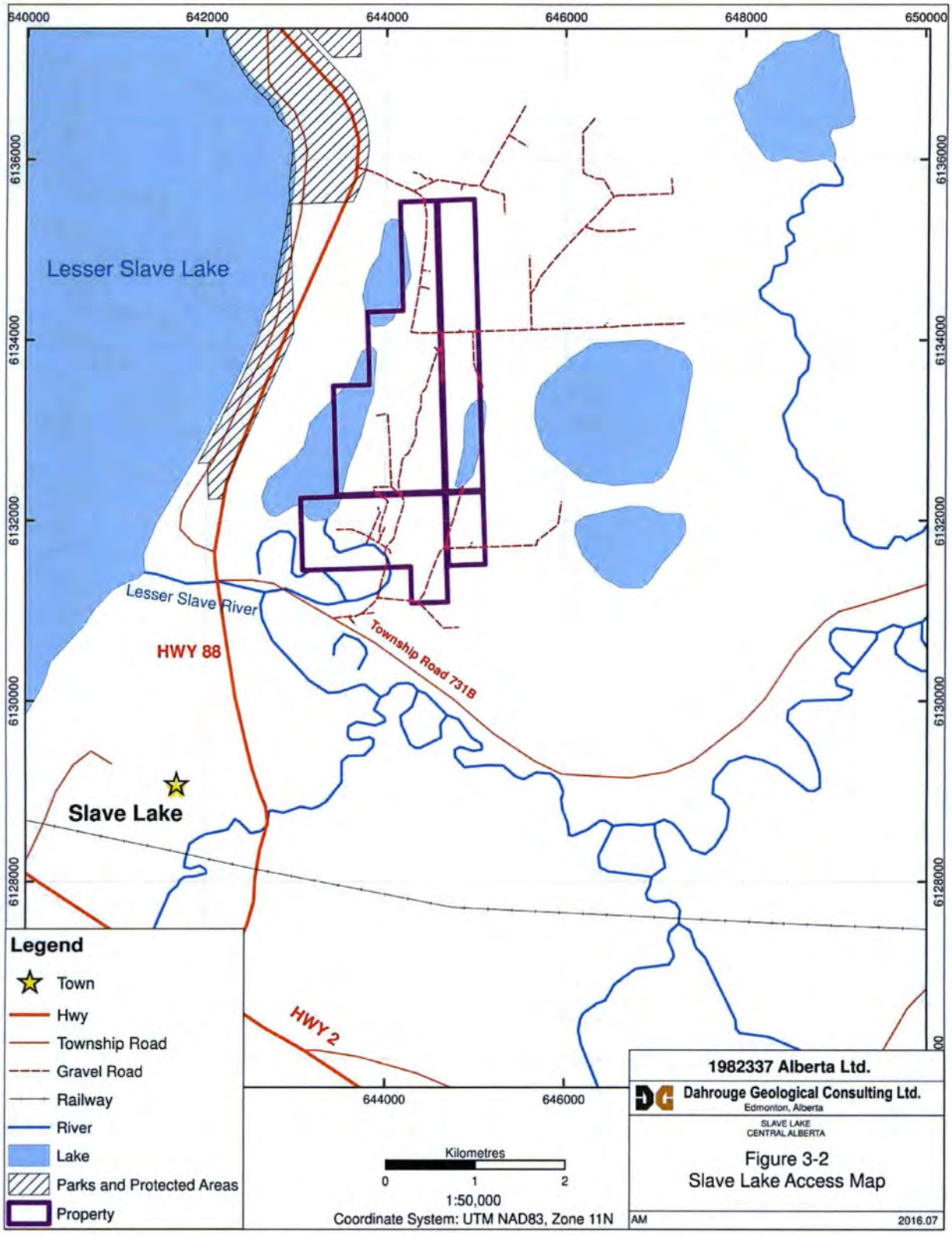


Figure 3-2 Slave Lake Property Access

4. PROPERTY & EXPENDITURES

4.1. PROPERTY

The Slave Lake Property consists of one MAIM permit (9314070466) with a current expiry date of July 28, 2016 (Figure 4-1). The permit was acquired by 1824455 Alberta Ltd. in July 2014. It was transferred to 1982337 Alberta Ltd. in July 2016, who now hold 100% ownership in the permit.

The Property lies within the Upper Athabasca Land-Use Framework, which ranges from the provincial border in the west to the eastern boundary of Athabasca County. The Property falls within Forest Management unit S17.

Based on the results of the 2016 exploration program and the expenditures accrued (Section 6), the entirety of MAIM permit 9314070466 will be retained (Table 4-1, Figure 4-1).

Table 4-1 Summary of Land to Release & Keep

MAIM	Township	Land to Retain	Area to Retain (ha)	Land to Release	Area to Release (ha)
9314070466	05-05-073	**8:** L8-16; **9:** L12-13 **16:** L4-5, L12-13; **17:** L1-3, L6-11, L15-16; **20:** L1-2, L8-9, L16; **21:** L4-5, L12-13;	560	-	0
		TOTAL:	**560**		**0**

4.2. EXPENDITURES

Expenditures for 2016 totaled $4,940 (including 10% administration cost) (Appendix 1). The entirety of the Slave Lake Property (MAIM Permit 9314070466) will be retained. Excess expenditures, totaling $2,140, are to be assigned to a future exploration period of the permit.

Table 4-2 Summary of Slave Lake Property Permit & Expenditures

MAIM Permit	Record Date	Original Size (ha)	Reduced Size (ha)	Amount Due per ha	Assigned Expenditures	Total Expenditures	Excess Expenditures	Term Expiry
9314070466	2014-07-28	560	-	$5.00	$2,800	$4,940	$2,140	2028-07-28
				TOTAL:	**$2,800**	**$4,940**	**$2,140**	

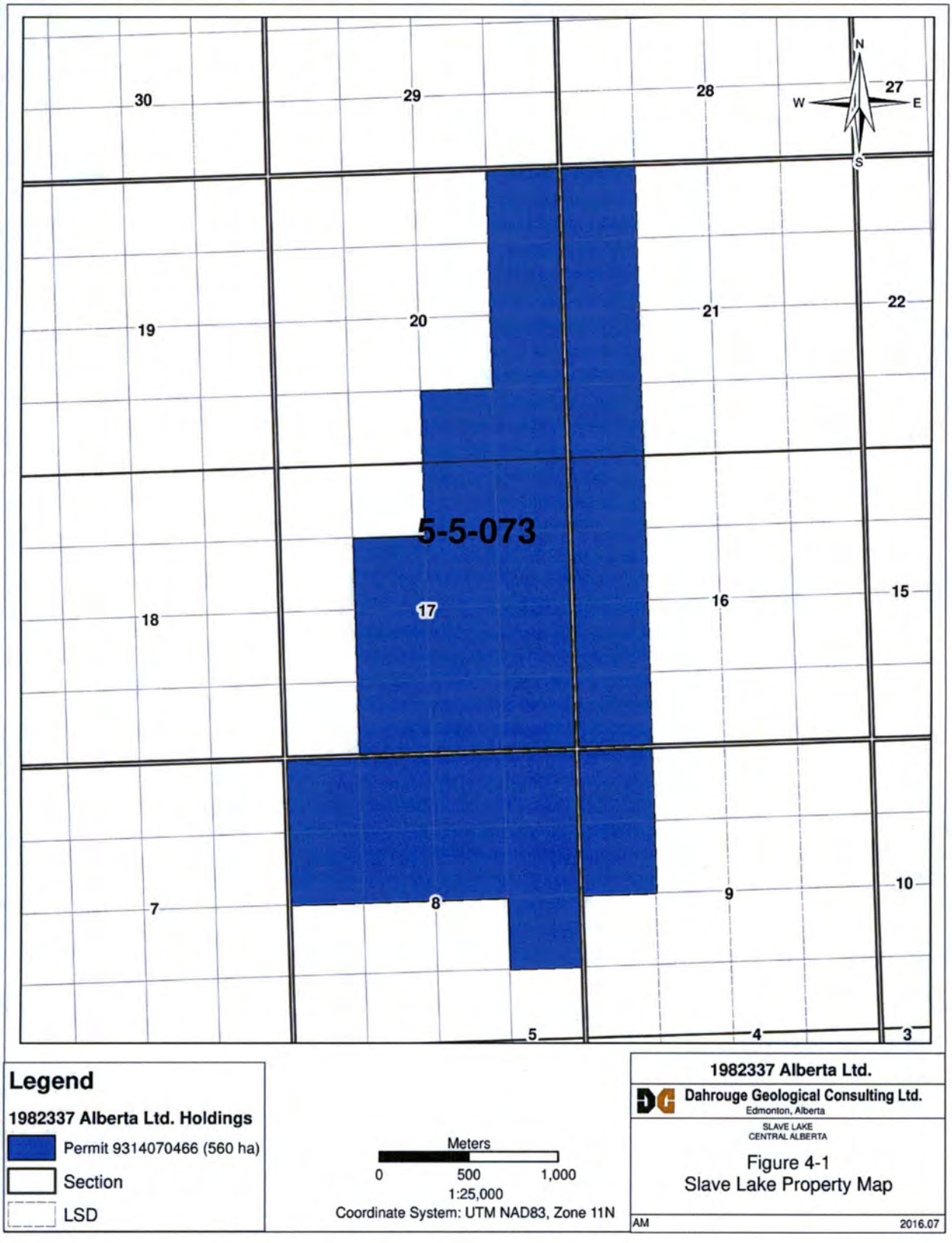


Figure 4-1 Slave Lake Property

5. GEOLOGICAL SETTING

5.1. BEDROCK GEOLOGY

Central Alberta is located in the central part of the Western Canada Sedimentary Basin, an eastward-thinning sedimentary wedge of undeformed Phanerozoic sediments overlying a Precambrian crystalline basement. The Slave Lake region is underlain by Cretaceous marine and non-marine sediments, which represent a series of transgressive and regressive cycles during the regression of the interior Pakowki Seaway (Pawley and Atkinson, 2012) (Figure 5-1). Middle to late Cretaceous strata in the Slave Lake region is represented by the marine shales of the Second White Speckled Shale and the Carlile and the Niobara formations of the Colorado/Alberta Group. These marine shales and sandstones make up the lowlands associated with and adjacent to Lesser Slave Lake. Conformably overlying this is the Lea Park Formation, which is comprised of dark grey marine shales. Overlying this, the non-marine Wapiti Formation consists of fluvial and lacustrine interbedded sandstone and siltstone with minor mudstone and coal (Dawson et. al, 1994). The lower Wapiti, which is predominantly grey feldspathic clayey sandstones and grey bentonitic mudstones, forms the uplands of Swan Hills and Pelican Mountains. Unconformably overlying this and forming the topographic highs of the mountains is 20 m of Oligocene unconsolidated fluvial gravels consisting of well-rounded quartz clasts (Pawley and Atkinson, 2012).

5.2. SURFICIAL GEOLOGY

The surficial geology in the Lesser Slave Lake region can be loosely broken into three different phases of deposition; preglacial, glacial and postglacial. Preglacial deposits in the area represent the development of an east-ward draining braided river system, which formed a basin-wide unconformity following the Laramide Orogeny (Pawley and Atkinson, 2012). These Paleogene to Neogene fluvial deposits are made up of well-rounded, medium- to large pebble-sized quartz clasts and are commonly found at the topographic highs in the area (Fenton et. al, 2013). The southward advance of the Laurentian Ice Sheet during late Wisconsin glaciation resulted in the widespread deposition of Pleistocene glacial till in most of Alberta. Stagnant-ice moraine landforms are the most common of the till material in the Slave Lake area (Fenton et. al, 2013). Subsequent to this, the deglaciation and northward retreat of the ice sheets resulted in glaciolacustrine and to a lesser extent glaciofluvial deposits in the Slave Lake area. Postglacial surficial units can be found in the form of Holocene eolian sand dunes/sheets and extensive deposits of organic material, such as bog peat and fen peat (Figure 5-2).

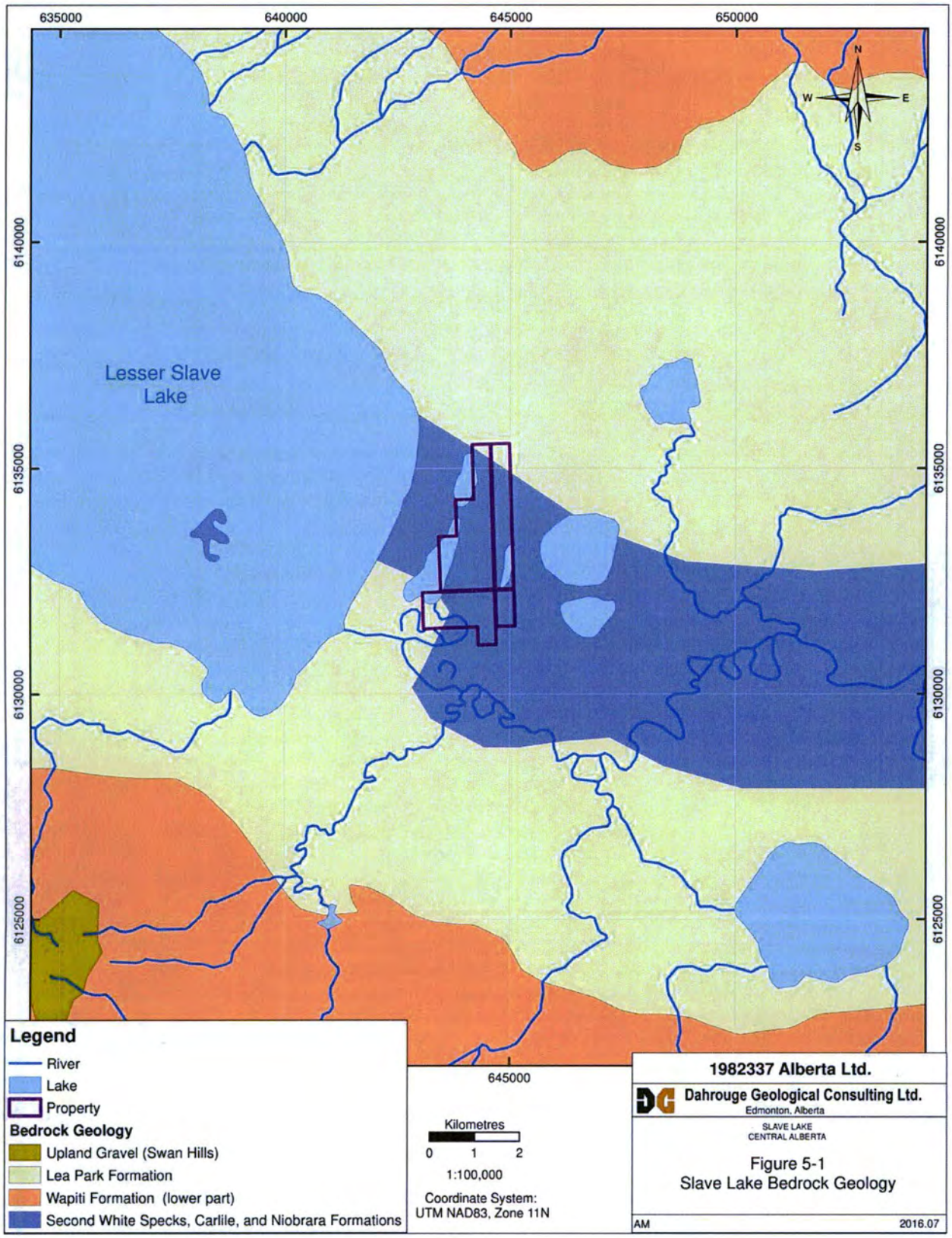


Figure 5-1 Slave Lake Bedrock Geology

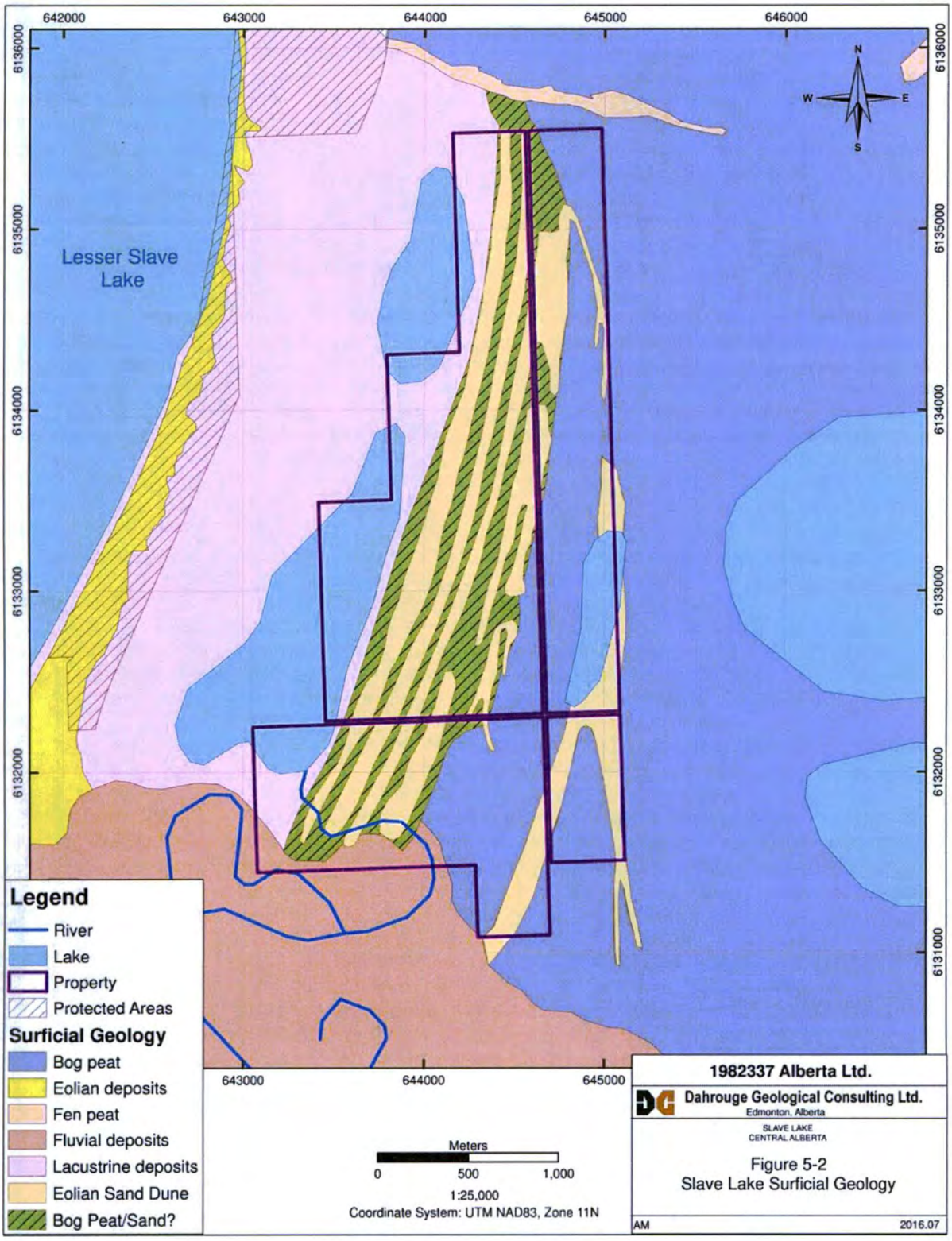


Figure 5-2 Slave Lake Surficial Geology

6. 2016 Exploration

On July 25th 2016, Dahrouge, on behalf of Alberta 1982337, conducted exploration on the Property including, access checking, surficial mapping, and the examination of silica sands (with the potential as a proppant) within the Slave Lake district of Alberta. The work was undertaken to determine the location, quality, extent, accessibility and economic potential of any deposits within the Property.

During prospecting and mapping, samples were taken, outcrops were investigated and surficial geological contacts were defined. Garmin GPSmap 64S instruments were used to record samples locations and to record access information. Compasses were set at a magnetic declination of 15.5° east. A total of 14 stations were recorded, which included the locations of 6 samples, information on surficial geological contacts, information on access and other pertinent details (Figure 6-1, Appendix 2). Six samples were collected at three separate locations using a hand auger (Appendix 3). Three vertical auger holes were completed, with total depths ranging from 2.65 to 3.05 m, and two samples were collected from each hole. Lithological information of each sample and geological observations were recorded and two of the samples were sent for analysis (Appendix 4). Photos were also taken at each sample station.

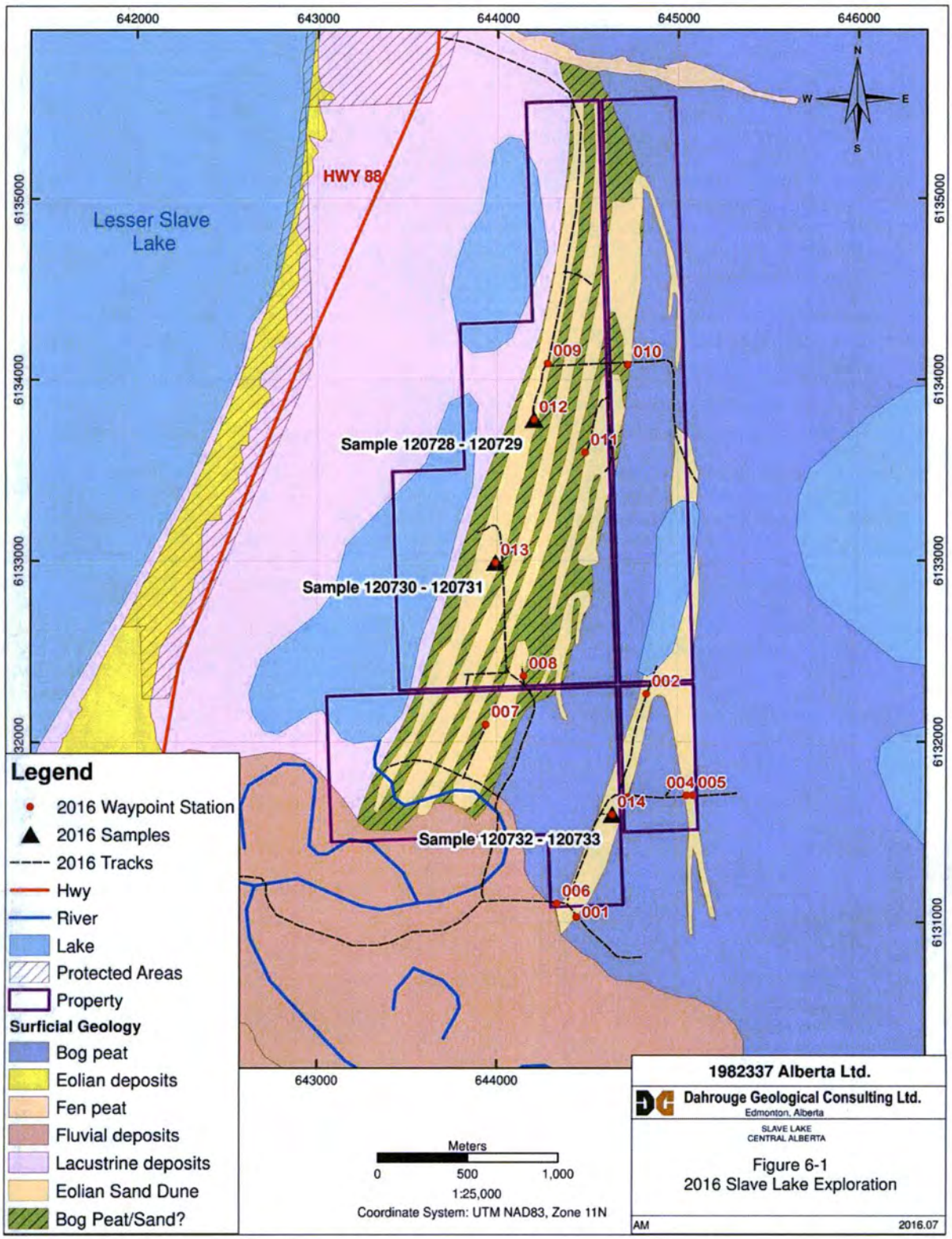


Figure 6-1 2016 Slave Lake Exploration

7. RESULTS

One day was spent mapping, sampling and checking property access. Mapping and sampling during the 2016 program primarily focused on the sand dunes that run roughly north-south throughout the Property. A total of six samples were collected from the sand dunes, from auger holes that varied from 2.65 to 3.05 m in depth. Two samples (120730 and 120731) from one auger hole were sent to Loring Labs Ltd., Calgary, Alberta, for whole-rock ICP analysis, sphericity and roundness test, and sieve fraction analysis. A photo of each sieve size from both samples was also taken (Appendix 5). In addition to this, the contacts between previously identified sand bodies and bog peat were re-defined. Access throughout the Property was found to be excellent, with most roads being 4-wheel drive accessible. Some roads show signs of being gated in the past, but were not closed at the time of the exploration work.

The sand samples were described in the field as being medium-grained, tan to rusty brown coloured, well-sorted, sub-rounded to rounded, with >80% quartz content. Whole-rock ICP analysis recorded both samples as having > 90% SiO_2, with approximately 4% Al_2O_3 and 1% Fe_2O_3. Sphericity for both samples was 0.8, while roundness values ranged from 0.5 to 0.6. The sieve fraction analysis from the 2 samples were broken into 5 mesh sizes in the following proportions; + 20 M (0%), 20 x 40 M (2 to 2.5%), 40 x 70 M (57.7 to 58.7%), 70 x 140 M (38.2 to 38.4%), - 140 M (0.9 to 1.5%). See Appendix 4 for a breakdown of results.

8. DISCUSSION & CONCLUSIONS

Sand exposures on the Slave Lake Property were examined and sampled northeast of the town of Slave Lake, within MAIM Permit 9314070466. A total of 6 samples, from three auger holes, were sampled and described in detail. Two of these samples were sent to Loring Labs Ltd, Calgary, Alberta. for analysis. Based on the samples collected and units mapped during the 2016 exploration program, the entirety of the MAIM Permit will be retained (Figure 4-1, Table 4-1).

Currently, access to the Property is excellent. The Property can be accessed from the north or south end, via a series of gravel roads which connect with Highway 88. Within the Property itself, there is a network of gravel roads which provide 4x4 or ATV access throughout the majority of the Property (Figure 6-1). Access throughout the remainder of the Property is possible by foot.

Surficial geology data for the Property was sourced from Pawley (2011). Most of the 2016 exploration was spent looking for outcrop and redefining the geological contacts between the sand and the adjacent bog peat. In most cases, the sand body thicknesses were discovered to be thinner than reported and less laterally continuous.

The physical properties of silica sand that determine its usefulness as a proppant for hydraulic fracturing are mineral composition, grain size, degree of sorting, grain roundness, grain sphericity, bulk crush resistance, acid solubility, and turbidity. Standards for fracking sands are dictated by the American Petroleum Institute API RP 56. Roundness and sphericity are important for governing porosity and permeability, which collectively affect the gas conductivity of the well. API RP 56 standards recommend a sphericity and roundness of 0.6 or greater. Loring Laboratories Ltd. recommends sphericity and roundness of 0.7 or greater for high-strength proppants. Both samples from the Slave Lake Property have a sphericity of 0.8, satisfying both API RP 56 and Loring Labs Ltd. recommendations. Sample 120731 has a roundness of 0.6 for the three dominant sieve mesh sizes (20 x 40 M, 40 x 70 M, 70 x 140 M) meeting the API RP 56 recommendations. Only the material from sample 120730 that falls within sieve mesh size 40 x 70 M meets API RP 56 recommendations, making up 58.70% of the total sample.

Further testing of the samples is possible to better determine if improvements can be made to both the sphericity and roundness and the whole-rock results. Attrition testing can improve sphericity and roundness, while a warm acid bath can decrease the level of impurities. In order to better determine the amount of non-quartz minerals present in the sand, it is subjected to an acid solubility test. Low acid solubility suggests a high concentration of acid resistant quartz. This involves heating the sand in a mixture of hydrochloric and hydrofluoric acid for 30 minutes. A maximum weight loss is dictated depending upon the sieve size (2% across all mesh sizes 40 x 70, and 3% for mesh sizes greater). Processing, such as washing, will often remove carbonates and feldspars, reducing the acid solubility.

Future exploration should expand on previously conducted work in the area, confirming or redefining past geological interpretations and determining the potential for quality hydraulic fracturing sand or other mineral deposits within the permit area. Further sampling to determine the extent and dimensions of the individual sand exposures should also be completed. In addition, the author recommends that the remaining four samples from the Property be sent to Loring Labs Ltd. for analysis. Classification of samples could be improved by implementing some acid solubility/attrition tests to improve sphericity and roundness and correct for impurities before proceeding with further analysis (crush test and turbidity).

9. REFERENCES

Dawson, F. M., Evans, C. G., Marsh, R. and Richardson, R. (1994). Chapter 24 - Uppermost Cretaceous and Tertiary Strata of the Western Canada Sedimentary Basin. In: Mossop G. and Shetsen I. (compilers), Geological Atlas of the Western Canada Sedimentary Basin, Canadian Society of Petroleum Geologists and Alberta Research Council, Calgary, p. 387-406.

Fenton, M.M., Waters, E.J.s Pawley, S.M., Atkinson, N., Utting, U.J., and McKay, K. (2013). Map 601 the First Surficial Geology Map of Alberta: Creation and Content. GeoConvention 2013; Integration, 2 p.

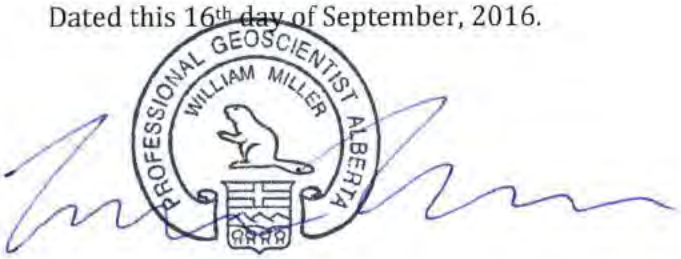
Pawley, S.M., (2011). Surficial Geology of the Lesser Slave Lake Area (NTS 83O/SE). Alberta Geological Survey, ERCB/AGS Map 553.

Pawley, S.M. and Atkinson, N. (2012). Surficial Geology and Quaternary History of the Southern Lesser Slave Lake Area, Alberta (NTS 83O/S). Energy Resources Conservation Board, ERCB/AGS Open File Report 2016-16, 33 p.

10. Statement of Qualifications

- I, William Miller, residing at [redacted] do hereby certify that:
- I am a geologist of Dahrouge Geological Consulting Ltd., Suite 18, 10509 - 81 Ave., Edmonton, Alberta, T6E 1X7.
- I am a 2009 graduate of the University of Alberta, Edmonton, Alberta with a B.Sc. in Geology.
- I have practiced my profession as a geologist continuously since 2009.
- I am a registered Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta, member M119457.
- I hereby consent to the copying or reproduction of this Assessment Report following the one-year confidentiality period.
- I am the author of the report entitled "2016 Exploration and Fieldwork within the Slave Lake Property Metallic and Industrial Minerals Permit, Central Alberta" and accept responsibility for the veracity of technical data and results.

Dated this 16th day of September, 2016.



William Miller, B.Sc., P.Geo.

APEGA
M119457

APPENDIX 1: COST STATEMENT FOR THE 2016 EXPLORATION WITHIN THE SLAVE LAKE MAIM PERMIT

a) **Personnel**		$ 2,914.85
b) **Food and Accommodation**		$ 110.00
c) **Transportation**		$ 222.51
d) **Instrument Rental**		$ 8.00
e) **Drilling**	n/a	$ -
f) **Analyses**		$ 1,050.00
g) **Other** (Software Rental, Data, Field maps, Courier & Shipping)		$ 185.55
Total		$ 4,490.91
Administration (10%)		$ 449.09
Total + Administration		**$ 4,940.00**

APPENDIX 2: 2016 MAPPING STATIONS DESCRIPTIONS

DATE COLLECTED	WAYPOINT ID	EASTING (UTM NAD83)	NORTHING (UTM NAD83)	ELEVATION	STATION TYPE	STATION DESCRIPTION
7/25/2016	001	644441.1	6131029.66	581.563	Surficial Geology contact	Sand/bog contact; eastern contact on western arm of sand body
7/25/2016	002	644827.48	6132263.73	581.13	Surficial Geology contact	Marked beginnig of apex of the sand body
7/25/2016	003	644724.97	6131695.26	580.596	Surficial Geology contact	Sand/bog contact; eastern contact on western arm of sand body, same sand body as wpt 001
7/25/2016	004	645051.77	6131703.75	581.023	Surficial Geology contact	Sand/bog contact; western edge of east arm, follows trees and power line, bearing of 360°
7/25/2016	005	645086.16	6131704.99	580.624	Surficial Geology contact	Sand/bog contact; eastern edge of east arm, same sand body as wpt 004, looks like it thickens northward
7/25/2016	006	644332.41	6131104.96	584.478	Surficial Geology contact	Sand/bog contact; western edge of west arm, same sand body as wpt 001; west margin appears to run northward parallel to the road
7/25/2016	007	643938.55	6132094.91	583.585	Geological Observation	Existing sand pit, full of water
7/25/2016	008	644147.36	6132362.89	580.826	Road Access Notes	Road access continues northward; walked to this point
7/25/2016	009	644278.77	6134089.44	586.122	Road Access Notes	Point where road diverges west; old road east of this point not accessible by 4 x 4, only by foot
7/25/2016	010	644721.37	6134083.32	582.859	Surficial Geology contact	Sand/bog contact; eastern edge of main sand body
7/25/2016	011	644486.06	6133596.6	581.584	Geological Observation	Two large sand dunes either side of this road, running roughly 010°. This road continues south to meet road at wpt 008.
7/25/2016	012	644200.79	6133778.84	585.663	Sample 120728 - 120729	See Appendix 3 for sample description
7/25/2016	013	643989.49	6132989.55	583.405	Sample 120730 - 120731	See Appendix 3 for sample description
7/25/2016	014	644637.83	6131597.74	580.673	Sample 120732 - 120733	See Appendix 3 for sample description

APPENDIX 3: 2016 SAMPLE DESCRIPTIONS

DATE COLLECTED	WAYPOINT ID	SAMPLE ID	EASTING (UTM NAD83)	NORTHING (UTM NAD83)	ELEVATION	SAMPLE DEPTH	SAMPLE TYPE	ROCKTYPE	SAMPLE DESCRIPTION
7/25/2016	012	120728	644200.79	6133778.84	585.663	0.15-1.57m	Hand auger	Sand	sub-rounded to rounded, medium grained, well-sorted unconsolidated sand. Tan colour. ~5% k-feldspar, 5-10% lithics, ~80% quartz. Sandy soil 0 - 0.15m
7/25/2016	012	120729	644200.79	6133778.84	585.663	1.57-3.05m	Hand auger	Sand	sub-rounded to rounded, medium grained, well-sorted unconsolidated sand. Tan colour. ~5% k-feldspar, 5-10% lithics, 80% quartz. Sandy soil 0 - 0.15m.
7/25/2016	013	120730	643989.49	6132989.55	583.405	0.15-1.77m	Hand auger	Sand	sub-rounded to rounded, medium grained, well-sorted unconsolidated sand. Tan to light brown. ~5% k-feldspar, 10% lithics, ~85% quartz. Sandy soil 0 - 0.15m.
7/25/2016	013	120731	643989.49	6132989.55	583.405	1.77-3.05m	Hand auger	Sand	sub-rounded to rounded, medium grained, well-sorted unconsolidated sand. Tan to light brown. ~5% k-feldspar, 10% lithics, ~85% quartz. Sandy soil 0 - 0.15m.
7/25/2016	014	120732	644637.83	6131597.74	580.673	0.05-1.45m	Hand auger	Sand	sub-rounded to rounded, medium grained, well-sorted unconsolidated sand. Rusty orange-brown. <5% k-feldspar, 5-10% lithics, >80% quartz. Sandy soil 0 - 0.05m.
7/25/2016	014	120733	644637.83	6131597.74	580.673	1.45-2.65m	Hand auger	Sand	sub-rounded to rounded, medium grained, well-sorted unconsolidated sand. Rusty orange-brown. <5% k-feldspar, 5-10% lithics, >80% quartz. Sandy soil 0 - 0.05m

LORING LABORATORIES (ALBERTA) LTD.
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TO: DAHROUGE GEOLOGICAL CONSULTING LTD.
Suite 18, 10509 - 81 Ave
Edmonton, AB
T6E 1X7
Attn: William Miller

FILE # : 6 0 1 2 6
DATE : August 15, 2016
REPORT BY : David Ko

Sample Type: Sand

SAMPLE ID	Weight in Kg As Received	After desliming	WET SIEVE ANALYSIS (wt in grams) + 20 M	20 x 40 M	40 X 70 M	70 X 140 M	-140 M
120730	9.07 Kg	8.67 Kg	0	20	584	382	9
		% by Weight	0.0	2.0	58.7	38.4	0.9

SAMPLE ID	Sphericity	Roundness
120730		
20 x 40 Mesh	0.8	0.5
40 x 70 Mesh	0.8	0.6
70 x 100 Mesh	0.8	0.5

Note: Approximately 9 Kg of samples was deslimed, dried and weighed and sieved to obtain +20 M, 20 x 40M, 40 x 70M and 70 x 140M and analyzed for Whole Rock, Roundness and sphericity test.
High strength proppants should have an average sphericity of 0.7 or greater and an average roundness of 0.7 or greater.

Samples received on: August 02, 2016

[redacted]
ASSAYER

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TO: DAHROUGE GEOLOGICAL CONSULTING LTD.
Suite 18, 10509 - 81 Ave
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T6E 1X7
Attn: William Miller

FILE # : 6 0 1 2 6
DATE : August 15, 2016
REPORT BY : David Ko

Sample Type: Sand

WET SIEVE ANALYSIS (wt in grams)

SAMPLE ID	Weight in Kg As Received	After desliming	+ 20 M	20 x 40 M	40 X 70 M	70 X 140 M	-140 M
120731	7.78 Kg	7.35 Kg	0	25	574	380	15
		% by Weight	0.0	2.5	57.7	38.2	1.5

SAMPLE ID	Sphericity	Roundness
120731		
20 x 40 Mesh	0.8	0.6
40 x 70 Mesh	0.8	0.6
70 x 100 Mesh	0.8	0.6

Note: Approximately 7.3 Kg of samples was deslimed, dried and weighed and sieved to obtain +20 M, 20 x 40M, 40 x 70M and 70 x 140M and analyzed for Whole Rock, Roundness and sphericity test.
High strength proppants should have an average sphericity of 0.7 or greater and an average roundness of 0.7 or greater.

Samples received on: August 02, 2016

[redacted]
ASSAYER

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T6E 1X7
Attn: William Miller

FILE: 6 0 1 2 6

DATE: August 22, 2016

Sample Type: Sand

WHOLEROCK ICP ANALYSIS

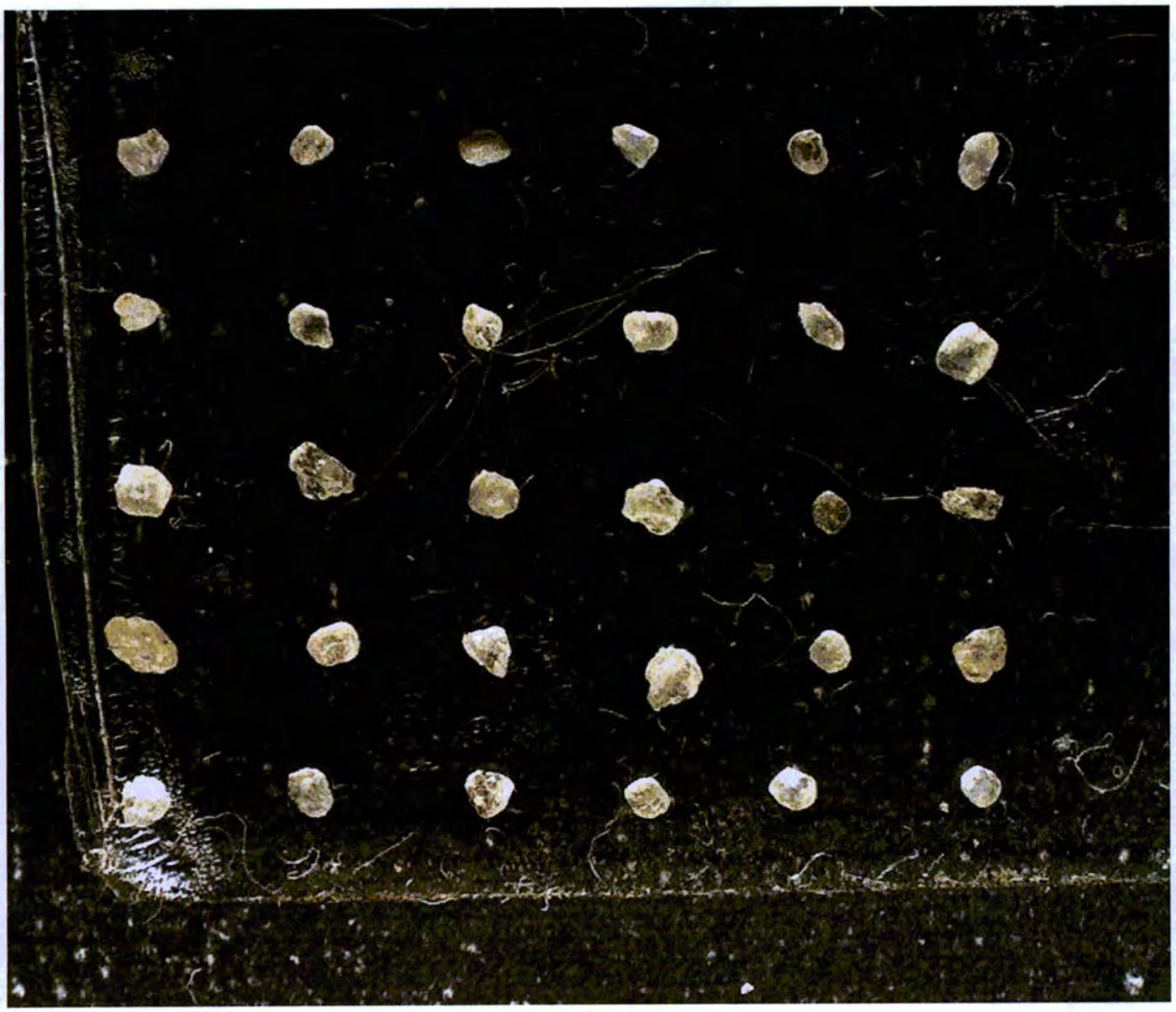
Sample I.D.	Al_2O_3 %	Ba ppm	CaO %	Cr ppm	Fe_2O_3 %	K_2O %	MgO %	MnO %	Na_2O %	Ni ppm	P_2O_5 %	SO_3 %	SiO_2 %	Sr ppm	TiO_2 %	V ppm	SUM %
120730	4.15	517	0.58	331	1.05	0.69	0.14	0.01	0.80	10	0.04	0.04	90.96	139	0.11	15	**98.46**
120731	4.27	520	0.59	294	0.96	0.74	0.13	0.01	0.84	8	0.04	0.04	90.36	142	0.10	15	**97.98**
Blank	<0.01	1	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.01	<1	<0.01	<1	

Sample received on August 02, 2016

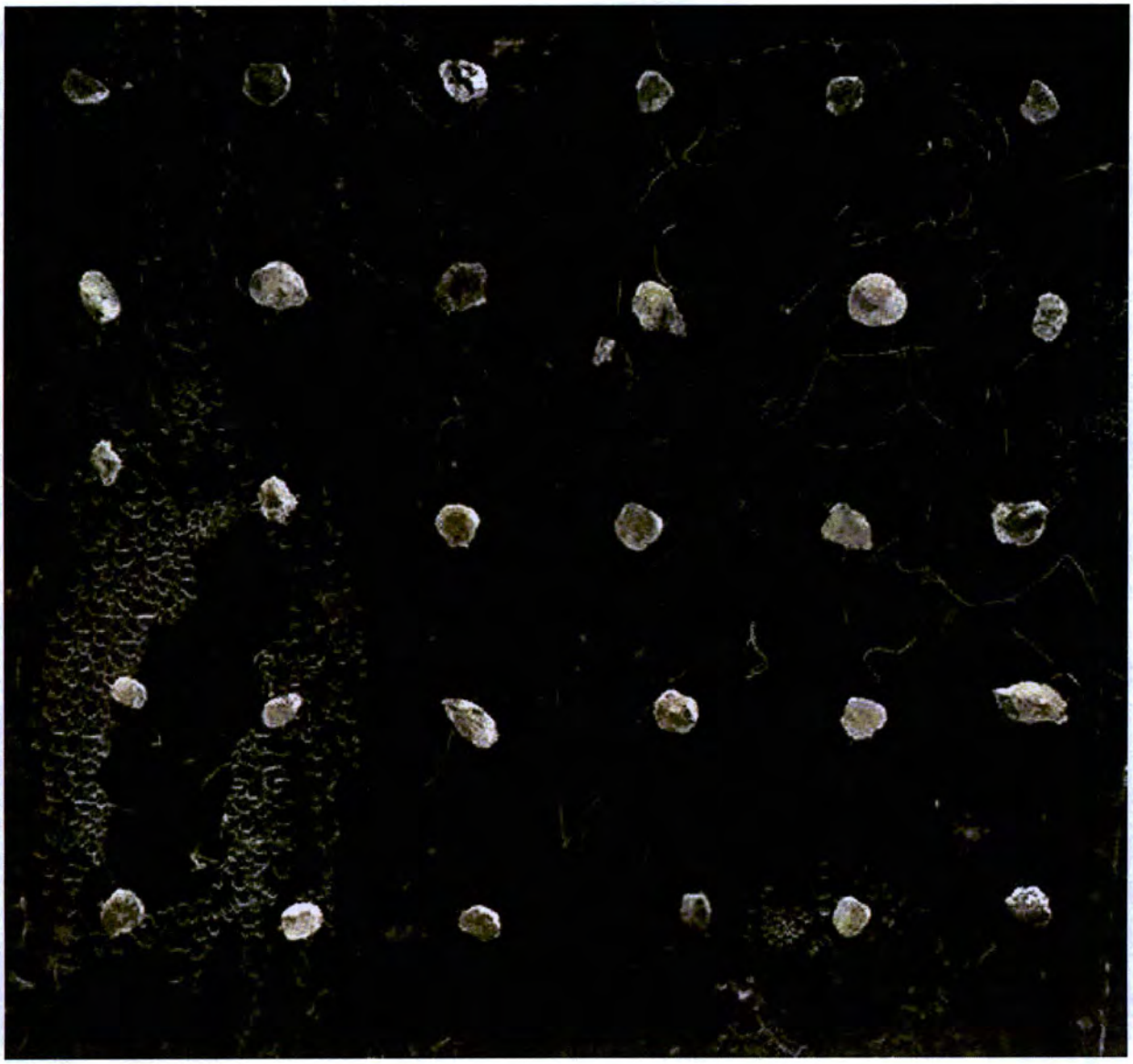
0.5 gm sample is total digested with multi acids and ICP finish.

Certified by: [redacted]

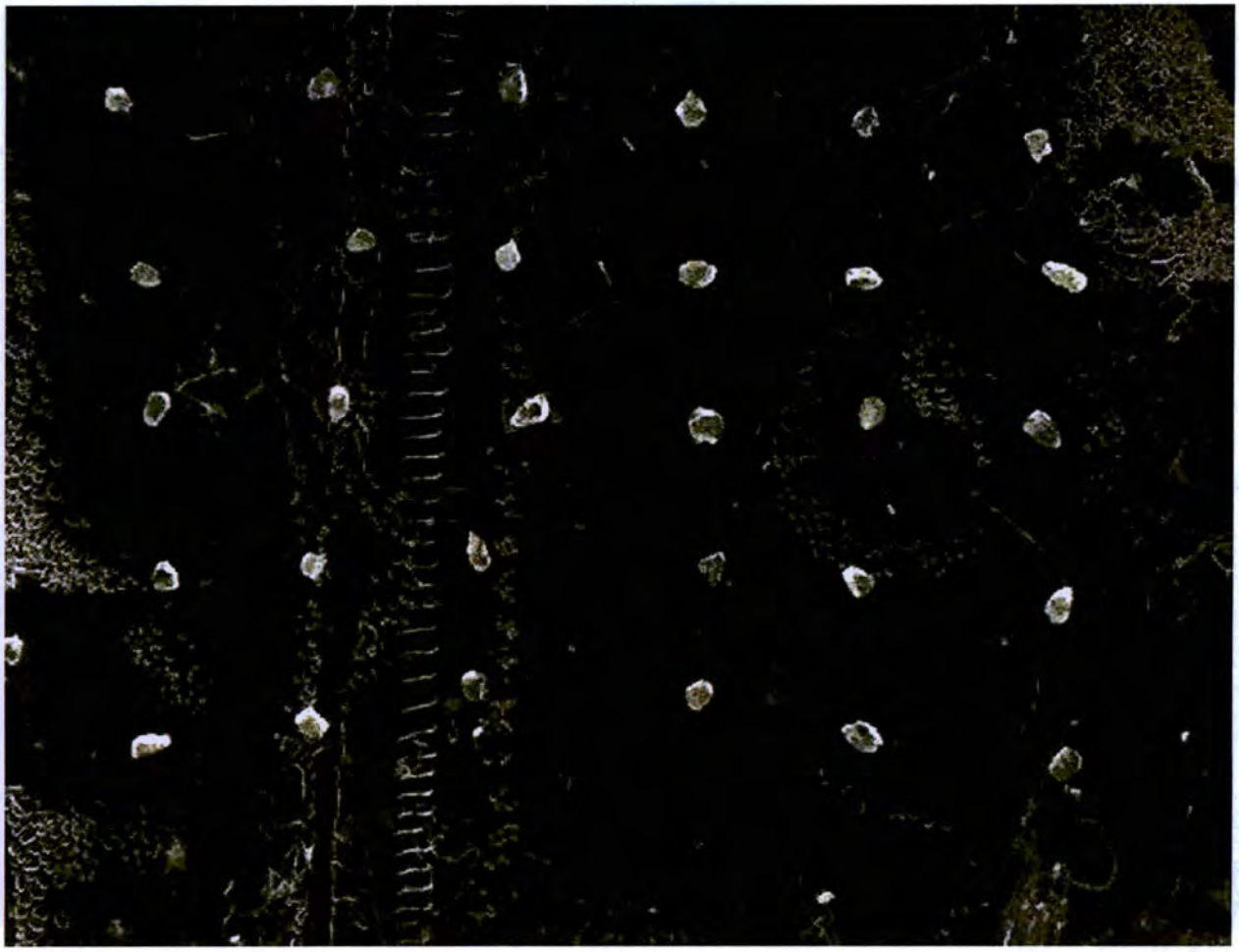
APPENDIX 5: SAMPLE PHOTOGRAPHS



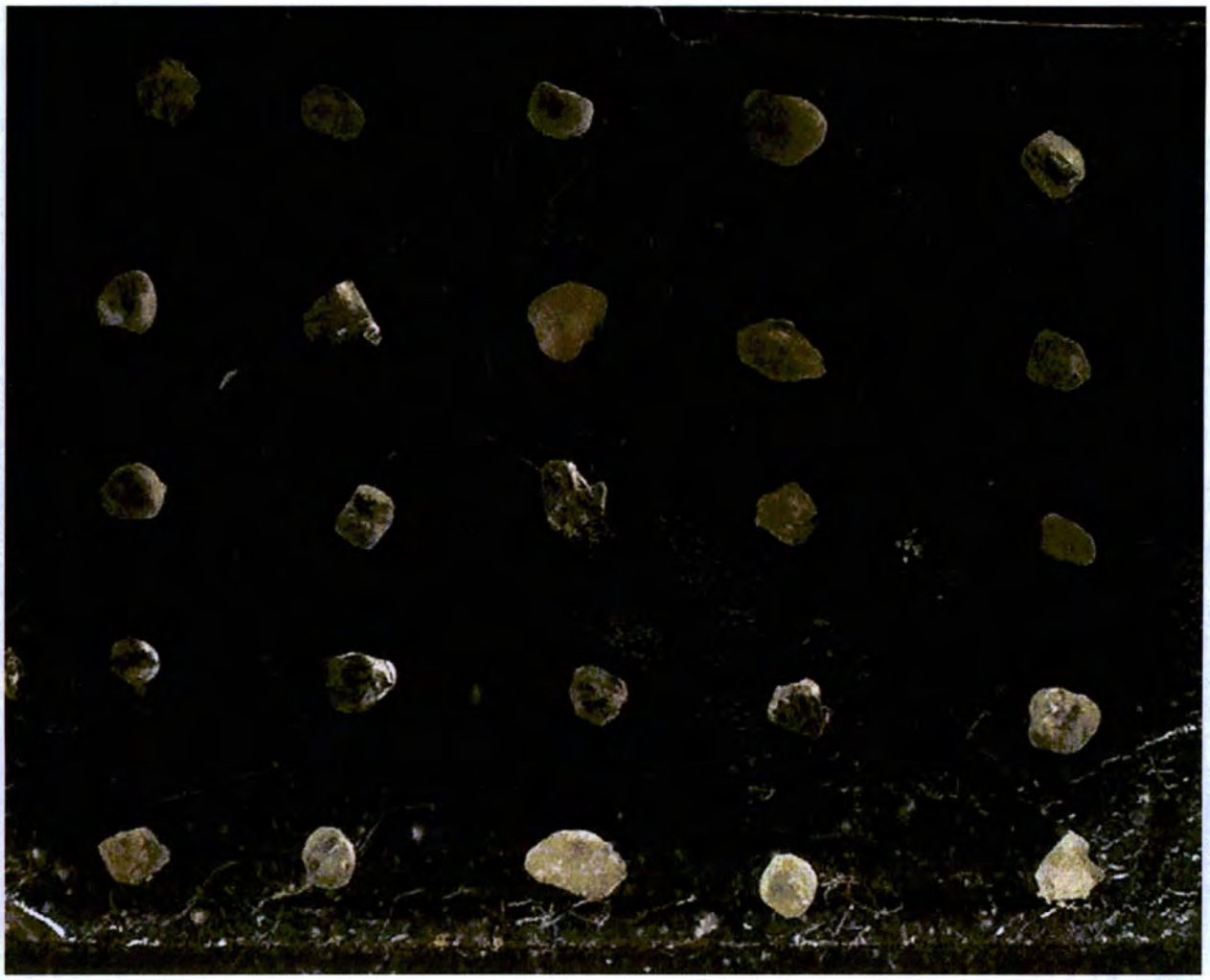
Sample 120730, Mesh size 20 X 40



Sample 120730, Mesh size 40 X 70



Sample 120730, Mesh size 70 X 140



Sample 120731, Mesh size 20 X 40

Sample 120731, Mesh size 40 X 70

Sample 120731, Mesh size 70 X 140