

724 East Sarcee Street, Kamloops, BC Canada V2H 1E7 Ph: (250) 372-1600 ext 111 TF: 1-800-667-0336 Fax: (250) 372-3777 sgurney@absorbentproductsltd.com • www.absorbentproductsltd.com

February 21, 2013

Diane Howe, M.A.Sc.P.Geo., Deputy Chief Inspector of Mines, Reclamation and Permitting Ministry of Natural Resource Operations P.O. Box 9320, Stn Prov. Govt 6th Floor, 1810 Blanchard Street Victoria, BC V8W 9N9

Dear Diane Howe:

Mine Permit Q-15-006, Annual Reclamation Report Absorbent Products Ltd. / Western Industrial Clay Products Ltd., Kamloops

On behalf of Absorbent Products Ltd., I enclose the year 2012 Annual Reclamation Report for the Red Lake Quarry. Mining development of the clay extraction and reclamation progress are shown for the Red Lake, West, North West Pits and Bepple pit in Mining Lease No. 310888 and DL 6385.

Please let us know if you have any questions.

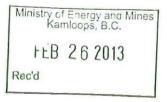
Sincerely,

ABSORBENT PRODUCTS LTD.

Steve Gurney Vice President

Attachment:

Cc: Bruce Hupman, P.Ag., Manager, Permitting. MNRO, Kamloops Peter Aylen, C.A., MBA., President, Absorbent Products Ltd. Dave Bowers, Mine Manager



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ANNUAL RECLAMATION REPORT

FOR YEAR 2012

MINE PERMIT Q-15-006

MINING LEASE # 310888

RED LAKE QUARRY

ABSORBENT PRODUCTS LTD.

Mine Manager:

Steve Gurney

1(250) 372-1600 ext 111

Author:

Peter B. Read,

Geotex Consultants Limited

January 28, 2013



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ANNUAL RECLAMATION REPORT FOR 2012.

RED LAKE QUARRY

Peter B. Read

January 28, 2013

1. INTRODUCTION

This report details mining and reclamation activities carried out at the Red Lake Quarry to November 22, 2012 and a five-year projection of anticipated mining and reclamation. The quarry was operated under Permit Q-15-006 issued to Western Industrial Clay Products Ltd., (WICPL) on November 30, 1992 with subsequent amendments in 1996, 2001 and 2003. On February 4, 2005, WICPL transferred ownership of the lease to Absorbent Products Ltd (APL). On November 30, 2012 this lease was extended an additional 10 years to November 30, 2022. With the payment of the annual lease fee, Mining Lease No. 310888 is good until November 30, 2013.

Mining Lease No. 310888 was extended to include the Bepple Pit and now comprises a total of 60.8 hectares (150 acres) divided into four mining areas, namely Main, West, Northwest and Bepple pits. In early 2006, APL purchased the 44.35 hectares of Crown land within Mining Lease 310888. Diatomaceous earth was extracted from the Northwest and Bepple pits during 2012. Reclamation work, consisting of backfilling from waste, medial leonardite and topsoil piles and recontouring of mined out areas and reseeding with an approved grass mixture, continued in 2012 in the West and Bepple pits.

2. LOCATION

The Red Lake Quarry is 41 km northwest of Kamloops at an elevation of approximately 1,300 metres (Figure 1). The first eight kilometres of road from APL's plant in Kamloops is paved with the remaining 33 km a publically maintained gravel road called the Criss Creek Forestry Access Road. APL has its processing and bagging plant, distribution warehouse, research laboratory and offices at 724 East Sarcee St in Kamloops. The quarrying and trucking of the raw diatomaceous earth to the Kamloop's plant is of a seasonal nature to avoid winter and load restriction conditions and usually operates seven to eight months of the year.

3. GEOLOGY OF THE RED LAKE QUARRY

At the Red Lake Quarry, the diatomaceous earth deposit consists of Upper and Basal layers of diatomaceous earth separated by a 1.0 to 1.5 m thick medial carbonaceous shale (leonardite) all locally overlying a basal carbonaceous shale (leonardite) up to 1.5 m thick. These sedimentary rocks comprise



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the Deadman River Formation of Miocene age, which unconformably overlies andesite to dacite flows of the Dewdrop Flats Formation of the Kamloops Group of mid-Eocene age. Here and there, such as in the Bepple Pit area, erosional remnants of a once extensive sheet of Miocene basalt flows of the Chasm Formation overlies the Miocene sedimentary succession. The Miocene sedimentary and volcanic sequences comprise the southern edge of the Chilcotin Group, which is widespread in central British Columbia. Quaternary soil, till and locally sand, silt and gravel form a 1.5 to 3.0 m thick cover over bedrock.

The Upper Diatomaceous Earth layer is up to 8 m thick in the Bepple Pit and overlies the Basal Diatomaceous Earth layer which averages 2 to 6 m in thickness but locally can attain 15 m. Because the density of the Upper DE is higher than the Basal DE, the two layers are blended in the quarry before trucking. Although the medial carbonaceous shale is rich in fulvic and humic acids, it is not presently marketable and instead is used along with topsoil to provide an excellent growing medium to enhance reclamation.

4. MINING PROGRAM

In 1982, DEM started quarrying in the Main Pit area (Figure 3). Because litigation tied up the Bepple Pit area, quarrying proceeded westward into the West Pit area (Figure 4) and eventually into the Northwest Pit (Figure 5) before access became available to the Bepple Pit area (Figure 6). In the Main Pit area, an area of only 0.92 hectares of Basal Diatomaceous Earth resource and 0.01 hectares of Upper Diatomaceous Earth resource remain (Figure 3). In West Pit, an area of only 0.33 hectares of Basal Diatomaceous Earth resource area of 7.66 hectares covers a potential resource of Basal and Upper diatomaceous earth (Figure 5). An area of 1.38 hectares presently produces Upper Diatomaceous Earth and an area of 0.74 hectares has been stripped ready to produce Upper and Basal diatomaceous Earth and an area of 0.42 hectares is currently producing Upper Diatomaceous Earth (Figure 6). The cleared area of 14.29 hectares has a resource potential for both Upper and Basal diatomaceous earth layers. All of this information is summarized in Table 1.

In 2012, the mining program concentrated on production from the Northwest and Bepple pits.

In the next five years, in the Main Pit:

- Removal of the Basal Diatomaceous Earth resource from an area of 0.92 hectares in the northeast corner of the pit area.
- Use of the waste and medial leonardite stockpiles at the south edge of the pit area.
- Repositioning of the haul road.
- This activity will complete the mining of the Main Pit and its reclamation.
- The north edge of the reclaimed are will be used for waste and topsoil piles from quarrying the southern portion of the Bepple Pit.

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MINING AREA (hectares)				nectares)			RECLAIN	IED AREA	(hectares)	
DISTURBANCE	Main Pit	West Pit	NW Pit	Bepple Pit	TOTALS	Main Pit	West Pit	NW Pit	Bepple Pit	TOTALS
Waste Pile	1.23	0.00	0.00	0.00	1.23	4.70	9.06	0.78	0.67	15.21
Topsoil Pile	0.73	0.00	0.01	0.06	0.79					
Tailings Ponds	0.00	0.00	0.00	0.00	0.00					
Plant Site	0.04	0.00	0.00	0.01	0.05					
Roads	toads 1.43 0.26 0.33 0.00 2.									
					GETATED /	AREA CLE	ARED OF TRE	ES		
Active Mining						Main Pit	West Pit	NW Pit	Bepple Pit	TOTALS
Stripped	0.00	0.00	0.74	0.00	0.74	0.49	0.00	7.66	14.29	22.44
Upper DE	0.01	0.00	1.38	0.42	1.81					
Medial Leonardite	0.56	0.00	0.10	0.78	1.44					
Basal DE	0.36	0.26	0.03	0.09	0.74					
Basal Leonardite	0.00	0.04	0.00	0.00	0.04					
Totals	0.93	0.30	2.25	1.29	4.77		NA	TURAL S	TATE	
						Main Pit	West Pit	NW Pit	Bepple Pit	TOTALS
Stockpiles					_	5.98	6.31	0.01	0.00	12.30
Upper DE	0.15	0.00	0.87	0.08	1.10					
Medial Leonardite	0.51	0.00	0.00	0.00	0.51					
Basal DE	0.15	0.07	0.09	0.00	0.31					
Totals	0.81	0.07	0.96	0.08	1.92					
TOTALS	5.17	0.63	3.55	1.44	10.78					

Table 1: Details of	Disturbed a	and Reclaimed	Areas as	of November	22, 2012
---------------------	-------------	---------------	----------	-------------	----------

In the West Pit:

- In the southern part of the pit, removal of the Basal Diatomaceous Earth resource underlying an area of 0.33 hectares.
- Repositioning of the haul road.
- This will complete the mining and reclamation of the West Pit.

In the Northwest Pit:

- Development of the Basal and Upper Diatomaceous Earth resources in the south half of the pit area.
- Placement of waste and topsoil piles on the basement high which separates Northwest Pit from Bepple Pit.

In Bepple Pit:

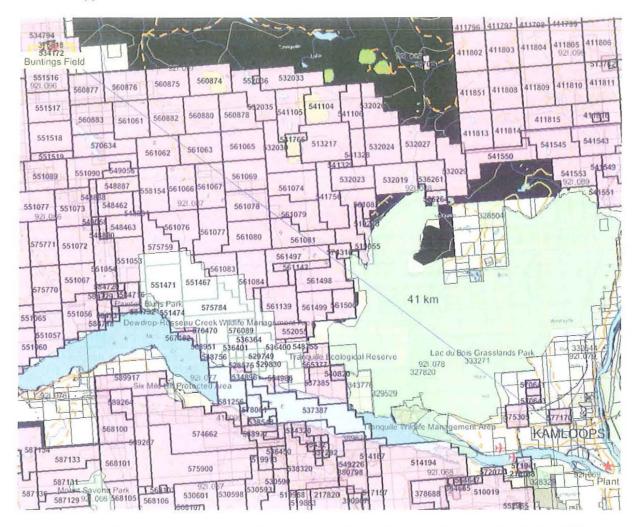
- North to northeastward progress of the working face in Upper and Basal diatomaceous earth payers
- Definition of the outlines of the Miocene basalt cap erosional remnant and a decision as to whether it should be removed.

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• Use of the topsoil and waste pile from the northern part of the Main Pit.



 Placement of topsoil and waste piles on the basement high which separates Northwest Pit from Bepple Pit.

Figure 1: Location map of the Red Lake Quarry which lies immediately west of Bunting's Field.

5. RECLAMATION PROGRAM

The past year's reclamation program was centred on the basement high which separates Northwest Pit from Bepple Pit and involved 1.12 hectares, in which the ground level was raised by backfilling with waste. The drainage ditches shown in the West Pit area were maintained. These ditches have water flow during spring runoff only. As the topsoil, waste and stockpiles of diatomaceous earth and leonhardite contain no acid-generating materials; neither the piles nor drainage waters from the quarry are subject to any special treatment. Table2 gives the pH results taken monthly for the last year and Table 3 gives the trace element analyses for the last four quarters taken on the Red Lake Diatomaceous Earth.

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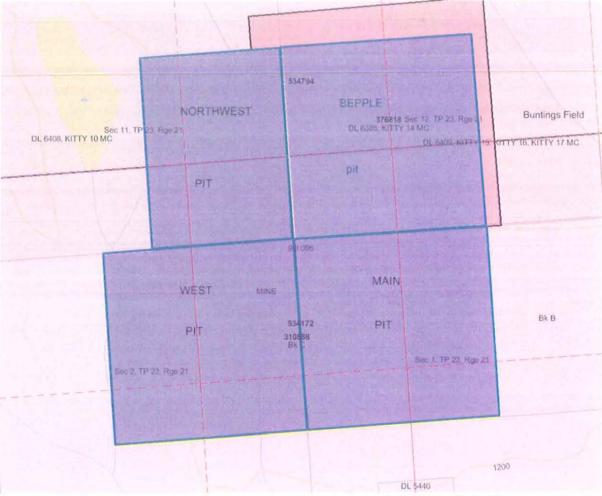


Figure 2: Map showing the location of the four pits comprising the Red Lake Quarry

Table 1 shows the total disturbed area for the Red Lake quarry broken down into the four pit areas. It is quantitatively accurate to 0.01 hectares, but cannot be compared to earlier Tables 1 in Beresford reclamation reports because the areas in these reports are "guesstimates" only and are not quantitatively correct. However, from next year forward, year-by-year changes will be accurate. In addition Table 1 shows the reclaimed area broken down into the pit areas. However, it cannot be compared to earlier tables by Beresford, which are grossly inaccurate. Never the less, from next year forward, year-by-year changes will be accurate.

Table 2: Monthly pH's of Red Lake Diatomaceous Earth (November 2011 to November 2012)

Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12
DE 4/18												
6.15	6.09	6.23	5.45	5.85	5.93	5.72	5.52	5.92	5.64	6.02	5.82	5.96

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Jan-12	Apr-12	Jul-12	Oct-12	Annual Average
Reg. DE	Reg. DE	Reg. DE	Reg. DE	2012
0.15	0.10	0.15	0.14	0.14
7.18	6.82	6.57	6.83	6.85
8.50	7.50	8.00		7.78
280				263
1.47				1.34
				0.20
				0.64
				0.20
				41.3
				13.6
		and the second se		44
		and the second se		2.29
		the second se		43.5
				3.29
				16.5
				0.11
				3.7
				0.13
				0.051
				0.46
				20.2
23.5	22.6			22.3
0.48	0.48	0.45	0.45	0.47
111	119	114	96	110
12.60	6.99	11.25	10.10	10.24
0.48	0.48	0.44	0.41	0.45
10.2	9.9	9.4	9.1	9.7
29.7	30.9	26.9	31.4	29.7
270	300	280	270	280
9.8	9.5	9.4	10.6	9.8
36.4	31.4	33.3	28.3	32.4
0.007	0.005	0.005	0.009	0.007
0.27	0.24	0.25	0.30	0.27
0.73	0.71	0.69	0.76	0.72
14.4	13.5	13.4	13.2	13.6
3	1	3	2	2
1.5	1.5	1.3	1.3	1.4
	122.5			115.3
			0.58	0.62
		0.07		0.08
				5.0
				0.364
			and the second data and the	0.43
				2.1
				110
				0.8
		18.7	20.7	19.7
19.6 83	19.6 82	74	78	79
	Jan-12 Reg. DE Reg. DE 0.15 7.18 8.50 280 1.47 0.22 0.66 0.21 41.5 14.5 14.5 14.5 43 2.35 43.2 3.44 18.2 0.14 0.055 0.50 19.6 23.5 0.48 111 12.60 0.48 10.2 29.7 270 9.8 36.4 0.007 0.27 0.73 14.4	Jan-12 Apr-12 Reg. DE Reg. DE 0.15 0.10 7.18 6.82 8.50 7.50 280 270 1.47 1.30 0.22 0.20 0.66 0.65 0.21 0.20 41.5 44.2 14.5 13.6 43 46 2.35 2.30 43.2 42.8 3.44 3.31 18.2 15.9 0.14 0.09 3.8 3.8 0.14 0.13 0.055 0.054 0.50 0.49 19.6 21.3 23.5 22.6 0.48 0.48 10.2 9.9 29.7 30.9 270 300 9.8 9.5 36.4 31.4 0.007 0.005 0.27 0.24 0.73 </td <td>Jan-12Apr-12Jul-12Reg. DEReg. DEReg. DE0.150.100.157.186.826.578.507.508.002802702501.471.301.330.220.200.180.660.650.640.210.200.1941.544.239.114.513.613.74346422.352.302.3143.242.842.53.443.313.2518.215.916.70.140.090.093.83.83.50.140.130.120.0550.0540.0460.500.490.4319.621.319.923.522.622.00.480.480.4410.29.99.429.730.926.92703002809.89.59.436.431.433.30.0070.0050.0050.270.240.250.730.710.6914.413.513.43131.51.51.3119.5122.5116.00.660.600.620.110.070.075.74.84.70.3790.3580.3520.460.420.402.42.0<t< td=""><td>Reg. DEReg. DEReg. DEReg. DE0.150.100.150.147.186.826.576.838.507.508.007.102802702502501.471.301.331.250.220.200.180.180.660.650.640.610.210.200.190.2041.544.239.140.314.513.613.712.6434642442.352.302.312.1943.242.842.545.53.443.313.253.1718.215.916.715.20.140.090.090.123.83.83.53.70.140.130.120.130.0550.0540.0460.0500.500.490.430.4319.621.319.920.123.522.622.020.90.480.480.440.4110.29.99.49.129.730.926.931.42703002802709.89.59.410.636.431.433.328.30.0070.0050.0050.0090.270.240.250.300.730.710.690.7614.413.513.413.2313<!--</td--></td></t<></td>	Jan-12Apr-12Jul-12Reg. DEReg. DEReg. DE0.150.100.157.186.826.578.507.508.002802702501.471.301.330.220.200.180.660.650.640.210.200.1941.544.239.114.513.613.74346422.352.302.3143.242.842.53.443.313.2518.215.916.70.140.090.093.83.83.50.140.130.120.0550.0540.0460.500.490.4319.621.319.923.522.622.00.480.480.4410.29.99.429.730.926.92703002809.89.59.436.431.433.30.0070.0050.0050.270.240.250.730.710.6914.413.513.43131.51.51.3119.5122.5116.00.660.600.620.110.070.075.74.84.70.3790.3580.3520.460.420.402.42.0 <t< td=""><td>Reg. DEReg. DEReg. DEReg. DE0.150.100.150.147.186.826.576.838.507.508.007.102802702502501.471.301.331.250.220.200.180.180.660.650.640.610.210.200.190.2041.544.239.140.314.513.613.712.6434642442.352.302.312.1943.242.842.545.53.443.313.253.1718.215.916.715.20.140.090.090.123.83.83.53.70.140.130.120.130.0550.0540.0460.0500.500.490.430.4319.621.319.920.123.522.622.020.90.480.480.440.4110.29.99.49.129.730.926.931.42703002802709.89.59.410.636.431.433.328.30.0070.0050.0050.0090.270.240.250.300.730.710.690.7614.413.513.413.2313<!--</td--></td></t<>	Reg. DEReg. DEReg. DEReg. DE0.150.100.150.147.186.826.576.838.507.508.007.102802702502501.471.301.331.250.220.200.180.180.660.650.640.610.210.200.190.2041.544.239.140.314.513.613.712.6434642442.352.302.312.1943.242.842.545.53.443.313.253.1718.215.916.715.20.140.090.090.123.83.83.53.70.140.130.120.130.0550.0540.0460.0500.500.490.430.4319.621.319.920.123.522.622.020.90.480.480.440.4110.29.99.49.129.730.926.931.42703002802709.89.59.410.636.431.433.328.30.0070.0050.0050.0090.270.240.250.300.730.710.690.7614.413.513.413.2313 </td

Table 3: 2012 Quarterly Composites and Annual Average of Red Lake Trace Element Analyses

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			RRRTT	TTTTT		BBBLL			- <u></u>	Reclaimed
			RRRRR			BBBLL			- H	Dreducing Llapar DE
		RRRR	RRWWW		RRRRR	BBBLL	LLLLCC		1 H	Producing Upper DE
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and a second second party	RRI		RWWWW				L L L L C C B B B L H H	and the second se		L Producing Mediar Leonard
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	RRI		H R R R R H H H H H		RHHHH		RCCNNN	NNNNN	N N	V Volcanic basement
	RRH		H H H H H		HHRRR		CCNNNN		N	Volcanie Bacement
	RRI				RRRRR		SSNNNN	NNNNN	N N	Volcanic pinnacle(s)
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			RRRRR		RRSSS		SSSSNN	NNNNNN	NN	Stockpile: Medial Leonard
			RRRRR				CCCCNN	NNNNN	NN	
			RRRRR		CCCCC	and the subscription of th	CWWWNN		VN	5180N Stockpile: Basal DE
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	NNR	NNNN	NNNNN	NNNNN	NNNN	NNNNN	NNNNN	N N N N N N	N N	
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Figure 3: Main Pit, November 22, 2012 at 1:2000-scale

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	Synopsis	MAIN	PIT
	5.98	i i	
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	4.70	i	
	0.01		
ardite	0.56	i	
	0.36	i	
ardite	0.00	t.	
	0.00		
	0.06	l.	
	0.15		
ardite	0.51		
	0.15		
	1.23		
	0.73		
	1.43		
	0.00		
	0.00		
	0.04		
Total	16.40	hectares	
BP1	653782mE	5645427mN	
BP2	653374mE	5645416mN	
BP4	653795mE	5645022mN	P.B. Read

	2970E 3020	3070E	3120E	31070E	3220E	3270E	3320E	3370E	Symbols	Synopsis	WEST PIT
	BP6	mM =0	15 23 1	LU 2017	1.0	0.00	1991	BP2	5420N		
10N	NNNNN	NNNNNRR	RRR	RRRRV	RRRRR	RRRRR	RRRRR	RH	Natural state	6.31	
	NNNNI	NNNRRRRR	RRRR	RRRRRR	RRRRR	RRRRR	RRRRR	RR			
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	NNNRI	RRRRRRV	RRR	RRRRRR	RRRRR	RRRRR	RRRRR	RR	5370N S Stripped	0.00	
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Figure 4: West Pit, November 22, 2012 at 1:2000-scale

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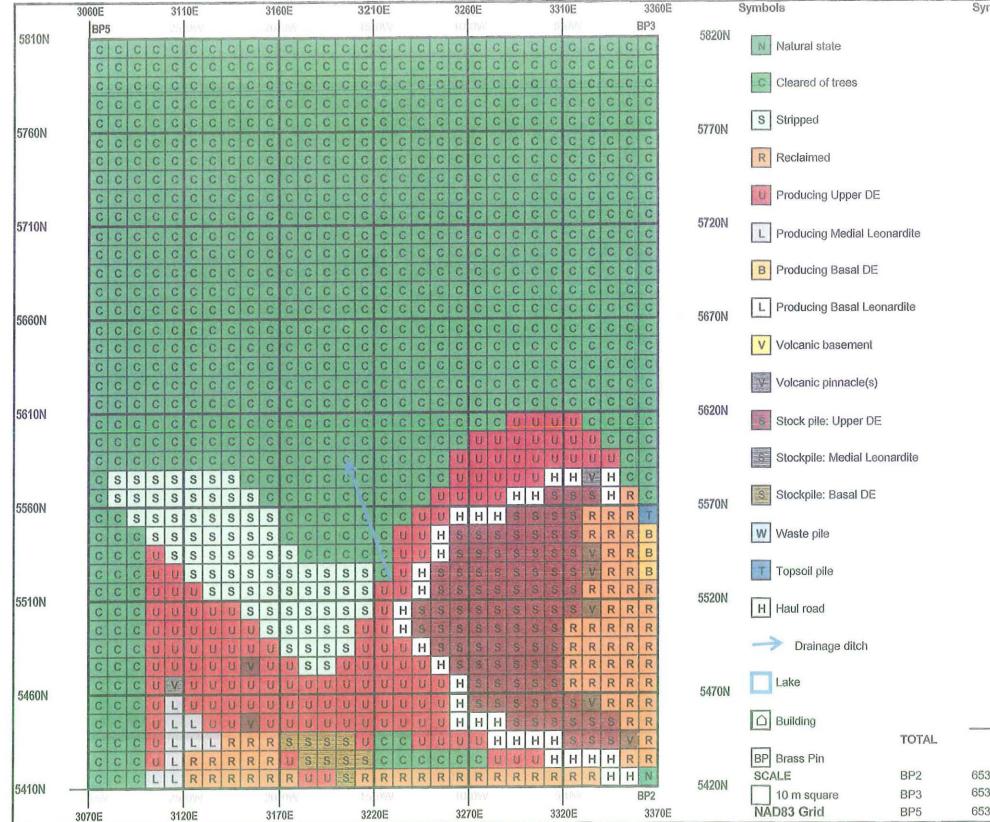


Figure 5: Northwest Pit, November 22, 2012

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	5645824mN
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JUOZITE	JUHJO IZININ F.D. Nedu

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	CCC	CCCCC	CCCC	CCCCC	CCCCC	CCCCC	CCCCC	CCCCCC	CCC	V Volcanic basement
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	CCC	CCCCC	CCCC	CCCCC	CCCCC	CCCCC	CCCCC	C C C C C C	CCC	Volcanic pinnacle(s)
5620N	CCC	CCCCC	CCCC	C C C C C	CCCCC	CCCCC	CCCCC	cccccc	CCC	5630N
302011	CCC	CCCCC	CCCC	CCCCC	cccc				CCC	Stock pile: Upper DE
	CCC	CCCCC	CCCCC		ccccc				CCC	
	CCC	CCCCC			ccccc				CCC	Stockpile: Medial leonardi
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5520N	RRB	VLLLL	LLUC	CCCCC	CCCCC	CCCCC	CCCCC	CCCCCC	CCC	H Haul road
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5470N	RRR	RRRLL	LUCC	C C C C C	CCCCC	CCCCC	CCCCC	CCCCCC	CCC	5480N Lake
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	3370E	3420E	3470E	3520E	3570E	3620E	3670E	3720E	3780E	NAD83 Grid B

Figure 6: Bepple Pit, November 22, 2012 at 1:2000-scale

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	Synopsis	BEPPLE	PIT
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	0.00)	
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TOTAL	16.40) hectares	
BP1	653782mE	5645427mN	
BP2		5645416mN	0.0.0
BP3	653362mE	5645824mN	P.B. Read

The reclamation program for the next five years will involve the following:

In the Main Pit:

- Reclamation of an area of 0.92 hectares underlain by Basal Diatomaceous Earth.
- Reclamation of the repositioned haul road involving an area of 0.50 hectares.
- Use of the northern portion of the reclaimed Main Pit for topsoil and waste pile derived from the northward progress of mining in Bepple Pit

In the West Pit:

- Reclamation of an area of 0.37 hectares underlain by Basal Diatomaceous Earth.
- Reclamation of an area of 0.25 hectares resulting from the repositioning of the haul road.

6. RECLAMATION LIABILITY COSTS

Sequenced mining and reclamation development plans were approved under Permit Q-15-006 in October 2000 and have been followed. Continuing reclamation has been carried out since commencement of backfill and grading in 2001. APL utilizes its own earth moving equipment to backfill and grade the mined out areas. The majority of the area requiring backfill and grading is included in the diatomaceous earth production costs if overburden is being moved as part of the mining process. When overburden is moved separately and piled or pushed onto the mined out areas from existing pile, then this cost is separated out as a direct reclamation cost. APL has allowed \$5,500 per hectare for the direct reclamation costs based on previous experience of actual costs at the quarry over the past 12 years. Based on the APL reclamation cost of \$5900/hectare, which includes grass seed (Table 5), and its distribution, and the amount of unreclaimed area of 10.78 hectares (Table 1), the current reclamation security bonding of \$70,000.00 is sufficient to cover the cost of reclaiming the present 10.78 hectares of disturbed land (Table 4).

7. ACID ROCK DRAINAGE POTENTIAL

The diatomaceous earth quarried by APL is non-acid generating with a pH that lies between 5.45 and 6.23 and averages 5.87 based on monthly results between November 2011 and November 2012. From the West pit, the ephemeral spring runoff is directed toward a small settling pond slightly east of the centre of the West Pit. From this pond a drainage ditch leads to the west where it is joined by a south-draining ditch from Northwest Pit and both drain to a naturally vegetated gully on the west side of West Pit.

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In the Northwest Pit:

- Continued reclamation of the southern part of the Northwest Pit as quarrying proceeds northward.
- The rate of reclamation will depend upon the northward rate of mining which will probably reach approximately 5650N in five years.

In Bepple Pit:

- Continued reclamation of the southwest corner of Bepple Pit as mining progresses northward to approximately 5530N in five years.
- The rate of reclamation will depend upon the rate of mining which will probably reach a depth of 15 m at the eastern end.



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Project Name: Red Lake Quarry Q-15-006 Reclamation Permit #: Disturbance Category: Master 1 10.78 Area to be reclaimed Additional Notes: **RECLAMATION PRESCRIPTIONS** Unit Cost Item TOTAL \$ Area A. Subtotal \$ \$/ha or km Site Preparation (ha) \$0 Recontouring (max. ht. of 10m) Surfacing Material Haul \$5,500 \$59,290 10.78 Spread \$0 Compact \$0 Ripping \$0 optional \$59,290 Subtotal \$ TOTAL\$ Appl. Cost Unit Cost Item Application No. of Kg. Area B. Subtotal \$ \$/ha (ha) Rate (kg/ha) \$/ha Revegetation \$2,156 \$200 \$200 10.78 Aerial Broadcast - application \$400 \$4,312 200 2156 10.78 Seed \$0 \$0 Fertilizer 0 \$6,468 \$0 \$0 Tractor - application \$0 \$0 0 Seed 0 \$0 \$0 Fertilizer \$0 Hydroseed \$0 \$0 Hydroseed - application \$0 \$0 Seed 0 \$0 \$0 0 Fertilizer 0 \$0 \$0 Mulch 0 \$0 \$0 Tackifier \$0 \$0 0 \$0 optional - application \$0 optional -material 1 0 SO \$0 \$0 0 optional - material 2 \$0 Appl. Rate Appl. Cost Unit Cost Item No. of Area Plants \$/stem \$/ha Subtotal \$ (stems/ha) Woody species Plant Installation (ha) SO \$0 0 \$0 \$0 Seedlings \$0 \$0 Fertilizer tablets 0 \$0 \$0 Plant protectors (installed) 0 \$0 \$0 optional - material 3 0 0 \$0 \$0 \$0 optional - material 4 \$6,468 TOTAL\$ Subtotal \$ Subtotal \$ Unit Cost Years Агеа Application No. of Kg. Appl. Cost Rate (kg/ha) \$/ha \$/ha per year Maintenance (ha) \$0 \$0 Aerial Broadcast - application \$0 0 \$0 Seed \$0 SO Fertilizer 0 \$0 \$0 \$0 Tractor - application \$0 \$0 0 Seed 0 \$0 \$0 Fertilizer \$0 Hydroseed \$0 \$0 Hydroseed - application \$0 \$0 0 Seed \$0 \$0 0 Fertilizer 0 \$0 \$0 Mulch 0 SO \$0 Tackifier \$0 \$0 \$0 0 optional - application \$0 \$0 optional - maint.material 0 \$0 \$0 0 optional - maint.material 2 \$0 \$0 \$65,758 Total Cost for Reclamation Prescriptions

Table 4: Summary Table of Reclamation Liability Costs

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PROVINCE OF BRITISH COLUMBIA MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

QUARRY PERMIT APPROVING WORK SYSTEM AND RECLAMATION PROGRAM

(Issued pursuant to Section 10 of the Mines Act R.S.B.C. 1996, C.293)

Permit: **Q-15-006**

Mine No.: 1500021

Issued to: Absorbent Products Ltd. 724 Sarcee ST. Kamloops BC V2H 1E7

for work located at the following property:

Red Lake Quarry

This approval and permit is subject to the appended conditions.

Issued this 23rd day of October in the year 2006.

F.W. Hermann, P. Eng. Chief Inspector of Mines

PREAMBLE

Notice of intention to commence work on a quarry, including a plan of the proposed work system and a program for the protection and reclamation of the surface of the land and watercourses affected by the work dated February 20, 2001, was filed with the District Inspector on February 21, 2001.

This permit contains the requirements of the Ministry of Energy, Mines and Petroleum Resources for reclamation. It is also compatible, to the extent possible, with the requirements of other provincial ministries for reclamation issues. The amount of security required by this permit, and the manner in which this security may be applied, will also reflect the requirements of those ministries. Nothing in this permit, however, limits the authority of other provincial ministries to set other conditions, or to act independently, under their respective permits and legislation.

Decisions made by staff of the Ministry of Energy, Mines and Petroleum Resources will be made in consultation with other ministries.

CONDITIONS

The Chief Inspector of Mines (Chief Inspector) hereby approves the work plan and the program for protection and reclamation of the land surface and watercourses subject to compliance with the following conditions:

- 1. <u>Reclamation Security</u>
 - (a) The owner, agent or manager (herein called the Permittee) shall maintain with the Minister of Finance securities in the amount of **Seventy Thousand** dollars (\$70,000). The security will be held by the Minister of Finance for the proper performance of the approved program and all the conditions of this permit in a manner satisfactory to the Chief Inspector.
 - (b) The Permittee shall conform to all forest tenure requirements of the Ministry of Forests. Should the Permittee not conform to these requirements then all or part of the security may be used to cover the costs of these requirements.
 - (c) The Permittee shall conform to all Ministry of Water, Land & Air Protection approval, licence and permit conditions, as well as requirements under the Wildlife Act. Should the Permittee not conform to these conditions, then all or part of the security may be used to fulfill these requirements.

2. Land Use

The surface of the land and watercourses shall be reclaimed to the following land use: *Return to Forest or Grazing Land.*.

3. <u>Productivity</u>

The level of land productivity to be achieved on reclaimed areas shall not be less than existed prior to mining on an average property basis unless the Permittee can provide evidence which demonstrates, to the satisfaction of the Chief Inspector, the impracticality of doing so.

4. <u>Revegetation</u>

Land shall be re-vegetated to a self-sustaining state using appropriate plant species.

5. <u>Use of Suitable Growth Medium</u>

- (a) On all lands to be revegetated, the growth medium shall satisfy land use, productivity, and water quality objectives. Topsoil and overburden (to rooting depth) shall be removed from operational areas prior to any disturbance of the land and stockpiled separately on the property for use in reclamation programs, unless the Permittee can provide evidence which demonstrates, to the satisfaction of the Chief Inspector, that reclamation objectives can otherwise be achieved.
- (b) No topsoil shall be removed from the property without the specific written permission of the District Inspector.

6. <u>Buffer Zones and Berms</u>

Buffer zones and/or berms shall be established between the mine and the property boundary unless exempted in writing by the District Inspector.

7. Treatment of Structures and Equipment

Prior to abandonment, and unless the Chief Inspector has made a ruling otherwise, such as heritage project consideration or industrial use,

- (a) all machinery, equipment and building superstructures shall be removed,
- (b) concrete foundations shall be covered and revegetated unless, because of demonstrated impracticality, they have been exempted by the Inspector, and
- (c) all scrap material shall be disposed of in a manner acceptable to the Inspector.

8. <u>Watercourses</u>

- (a) Watercourses shall be reclaimed to a condition that ensures
 - (1) long-term water quality is maintained to a standard acceptable to the Chief Inspector,
 - (2) drainage is restored either to original watercourses or to new watercourses which will sustain themselves without maintenance, and
 - (3) use and productivity objectives are achieved and the level of productivity shall not be less than existed prior to mining unless the Permittee can provide evidence which demonstrates, to the satisfaction of the Chief Inspector, the impracticality of doing so.
- (b) Water which flows from disturbed areas shall be collected and diverted into settling ponds.
- 9. <u>Roads</u>
 - (a) All roads shall be reclaimed in accordance with land use objectives unless permanent access is required to be maintained.

- (b) Individual roads will be exempted from the requirement for total reclamation under condition 9(a) if either:
 - (1) the Permittee can demonstrate that an agency of the Crown has explicitly accepted responsibility for the operation, maintenance and ultimate deactivation and abandonment of the road, or
 - (2) the Permittee can demonstrate that another private party has explicitly agreed to accept responsibility for the operation, maintenance and ultimate deactivation and abandonment of the road and has, in this regard, agreed to comply with all the terms and conditions, including bonding provisions, of this reclamation permit, and to comply with all other relevant provincial government (and federal government) regulatory requirements.

10. Disposal of Fuels and Toxic Chemicals

Fuels, chemicals or reagents which cannot be returned to the manufacturer/supplier are to be disposed of as directed by the Chief Inspector in compliance with municipal, regional, provincial and federal statutes.

11. Temporary Shutdown

If this quarry ceases operation for a period longer than one year the Permittee shall either continue to carry out the conditions of the permit or apply for an amendment setting out a revised program for approval by the Chief Inspector.

12. <u>Safety Provisions</u>

All safety and other provisions of the **Mines Act** shall be complied with to the satisfaction of the Chief Inspector.

13. Monitoring

The Permittee shall undertake monitoring programs, as required by the District Inspector, to demonstrate that reclamation objectives are being achieved.

14. <u>Alterations to the Program</u>

Substantial changes to the program must be submitted to the District Inspector for approval.

15. <u>Notice of Closure</u>

Pursuant to Part 10.6.1 of the Health, Safety and Reclamation Code for Mines in British Columbia, a Notice of Completion of Work shall be filed with the District Inspector not less than seven days prior to cessation of work.

16. Annual Report

Annual reports shall be submitted in a form and containing the information as and if required by the District Inspector.

17. <u>Site Stability</u>

- a) The inspector shall be advised in writing at the earliest opportunity of any unforeseen conditions that could adversely affect the extraction of materials, site stability, erosion control or the reclamation of the site.
- b) The stability of the slopes shall be maintained at all times and erosion shall be controlled at all times.
- c) The discovery of any significant subsurface flows of water, seeps, substantial amounts of fine textured, soils, silts and clays, as well as significant adverse geological conditions shall be reported to the inspector as soon as possible and work shall cease until the inspector advises otherwise.

SPECIAL CONDITIONS:

- 1. Progressive reclamation of the overall property shall continue and the total unreclaimed disturbance shall not exceed 70ha.
- 2. The permittee shall comply with the October 24, 2002 decisions by the Mediation and Arbitration Board and any further decisions imposed by the Supreme Court of British Columbia.

- 3. A Licence to Cut shall be obtained from the Kamloops Ministry of Forests District Office before any trees are removed.
- 4. Upon completion of mining, overburden and topsoil shall be spread and suitable seedlings planted.