

# **Goldsource Mines Inc.**

GXS-V: \$2.95

TARGET: **\$9.00** RECOMMENDATION: BUY RISK RATING: SPECULATIVE

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# Initiating coverage: Will Goldsource deliver a new thermal coal district in Saskatchewan?

(all figures in C\$, unless noted)

Price (10/1/2008)		\$2.95
Total return to target		205.1%
Shares O/S (mm)		19.3
Shares F/D (mm)		21.2
Market cap F/D (\$mm)	\$	62.4
Market value (\$mm)	\$	57.0
10-day Ave Daily Vol (K)		150.0
Debt (mm)		\$0.0
Cash (\$mm)		\$16.4
Fully-diluted cash (\$mm)		\$21.1
12-mo Burn-rate		\$10.0
Shareholders	~15% Man	agement

President	J. Scott Drever
Director	Steven B. Simpson
CFO	Graham C. Thody



#### **Company Profile**

Goldsource Mines Inc. (GXS) is a Canadian exploration company based in Vancouver. The company is focused on exploring a new thermal coal seam at its 100%-owned Border property in east central Saskatchewan, Canada.

# Investment thesis

Goldsource has discovered a new thermal coal deposit in Saskatchewan, Canada – will it outline a potential large +2 billion tonne quality thermal coal resource? Two discovery drill holes 1.6 kilometres apart returned a continuous flat lying coal seam with a thickness of +20 metres, the "Durango coal seam." The intersections are relatively shallow (80 metres in depth) and the coal is ranked as bituminous to sub-bituminous. Initial results suggest an average calorific value of 5140 kcal/kg and a range of 4500-5560 kcal/kg.

- **Size potential of 750 million tonnes of thermal coal** we estimate GXS has potentially documented approximately 750 million tonnes of thermal coal to date. Follow-up drilling in Q3/08 resulted in both significant continuous coal seam "hits" and "misses," proximate analysis is pending. The Durango seam has clear exploration potential; however, it is apparently more geologically complex, with likely local sub-basin controls.
- Will there be a market for Border project coal in North America? – GXS' Border coal project has a rail line that runs through a portion of the property. If GXS can define a large, consistent thermal coal deposit with high calorific values, there is high potential in our view that the coal will find its way to North American markets.
- The potential new coal basin hosting the Durango seam lies close to major infrastructure in mining-friendly Saskatchewan – Saskatchewan currently services the world's largest potash reserves and highest grade uranium deposits with roads, rail, power, labour and water readily available. The Border Property is road accessible and has an active CN rail line that crosses the property.
- Numerous catalysts moving forward: 1) analytical results pending for the July-August drill program that was designed to assess the coal quality and expand the potential size of the Durango seam; 2) large winter drill program to expand the deposit and increase confidence of potential resources; 3) inferred resource estimation is expected in Q2/09; and 4) further land acquisition is underway.
- We are initiating coverage of Goldsource with a BUY recommendation and a 12-month target price of \$9.00. Our valuation is based upon a NAV underpinned by our geological estimation of the Durango coal seam size and TEV/t comparative analysis of similar undeveloped thermal coal resources. We rate GXS as Speculative and believe it is suitable for risk-tolerant investors only.



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# Introduction

#### Company description

Goldsource Mines Inc. (GXS) is a Vancouver-based exploration company focused on coal exploration in Saskatchewan, Canada. In April, while testing diamond exploration targets, the company made a brand new coal discovery when it intersected the +20 metres thick "Durango coal seam." The Durango coal seam is located on GXS' 100%-owned Border Property in east central Saskatchewan; GXS subsequently acquired a large land position and currently has coal permits for 135,100 hectares. GXS has \$16.4 million in cash, 19.3 million shares issued and outstanding, and 21.1 million shares fully diluted.

### Our review

We met with Goldsource's CEO, Scott Drever, and with Engineering and Geological consultant, Eric Fier, in June 2008. We then conducted a Border project site visit at the beginning of August (during the drilling program).

# Exploration business model equals single asset, 100%-owned, belt focus

GXS is commodity, country and belt focused, with its 100%-owned Border project, a potential new coal belt in a virtually unexplored region in Saskatchewan, Canada (see January 10, 2008 exploration macro).

# Management – Coal experience highlighted (also see Appendix 2)

**Scott Drever** – President and Director – Mr. Drever has 35 years of international mining industry experience, 10 of those coal-related. Mr. Drever has worked with Anglo American assessing coal projects from the U.S. border north to the Yukon Territory. He also worked with Pan Ocean Oil (Alberta thermal coal project) and contributed to a feasibility study on a thermal coal project in Columbia.

**Eric Fier** – Principal consulting engineer/geologist and qualified person for Border project – Mr. Fier has 25 years of experience in 30 countries. Eric has five years experience with coal including: 1) Goodrich in Tumbler Ridge, British Columbia; 2) Decker Coal in the Powder River Basin, Montana; 3) contributed to a feasibility study on a coal mine in British Columbia; and 4) consulting with Snowden on a thermal coal project in Australia.

# Financial and capital structure – A snapshot

GXS is well funded to evaluate the Border coal discovery over the next 12-24 months, having raised gross proceeds of \$18 million in a private placement in June of 2008 at \$11.75 per share. GXS has 19.3 million shares issued/outstanding and 21.2 million fully diluted.

#### Synoptic valuation and recommendation

Our base case NAV for GXS is \$187.1 million (\$8.80/share). We derive our valuation based on comparative TEV analysis based on other underdeveloped *in situ* thermal coal assets. We recommend GXS as a BUY with a 12-month



target price of \$9.00 per share. GXS is Speculative and suitable for risk-tolerant investors only.

# Key asset – Border Property

# Background

#### Location

Exhibit 1 provides the location of GXS' 100%-owned Border Coal Property located near the Saskatchewan-Manitoba Border, Canada.



Exhibit 1: Border project location in east central Saskatchewan

Source: National Resource Canada, Goldsource Mines Inc., Annotated by Genuity Capital Markets (inset of property location and SaskPower baseload thermal stations)

#### Access and infrastructure

The Border project is transected by a CN rail line and a major roadway. A 230 kV power line is located 70 kilometres north of the property. Border is approximately 50 kilometres north of the town of Hudson Bay (population of 2000), which offers an airport capable of handling Boeing 737's (Exhibit 1 & 2).



Exhibit 2: 2a) View of Hudson Bay (looking south); 2b) gravel "highway" to Border project from Hudson Bay; and 2c) Border property staging area with railway intersect with road



Source: Genuity Capital Markets

# Land position and royalties

GXS holds a 100% interest in 135,100 hectares in the Durango discovery area. Because the property lies within crown land in Saskatchewan, any coal production would be subject to a 15% mine-mouth gross royalty payment. In addition, the Border property is subject to a 2% NSR royalty to Minera Pacific; 1% of the royalty may be bought out for \$2 million. Minera Pacific is a private company owned by Eric Fier and Barney Magnusson.



### Existing coal mines in Saskatchewan

Coal mines in southern Saskatchewan currently mine lignite, a low quality coal that supplies government owned power plants (see Appendix 1, Exhibit 18). The lignite is mined by Sherritt (S-T; \$5.47, Not Rated) who, at 12 billion tonnes, holds the largest thermal coal resources in Canada (see Appendix 3, Exhibit 17).

### History and discovery – Border coal project

There has not been any previous work on the Border property prior to GXS' 2006 airborne magnetic and electromagnetic (EM) surveys.

In April 2008, while drilling geophysical anomalies for diamonds, GXS intersected approximately 23 metres of black coal. Two discovery drill holes, 1600 metres apart, documented a flat lying coal seam that ranks from high volatile bituminous B to sub-bituminous C coal (see Appendix 1, Exhibit 14).

#### Regional geological setting

The coal within the Border property is believed to be part of the Manville/Swan River Group of sediments (Exhibit 3). This Cretaceous age basin overlies older Devonian limestones.





Source: Goldsource Mines Inc.



### Local Geological Setting

As shown in the cross section provided in Exhibit 4, the following flat lying sequence of overburden and sedimentary rocks have been intersected in holes 3 and 6 (descending order):

- Glacial till, approximately 30 metres thick (yellow).
- Mudstone unit, approximately 40 metres thick (brown).
- Glauconitic sandstone "marker bed" approximately 5-10 metres thick (green).
- Coal seam, averaging 23 metres thickness of continuous coal (black).
- Coal, sandstone, +/-siltstone layer approximately 5-10 metres thick (grey dashes).
- Sandstone unit, approximately 40 metres thick (pink).
- Devonian limestone is the final unit intersected (mauve).

*Exhibit 4: Cross section of the Durango coal seam discovery (looking north)* 



Note: OVB = overburden; glacial till, MS/SLT = cretaceous mudstone and siltstone, SS/CS = sandstone, SLT/CS = siltstone, LMS = Devonian limestone; Drill holes are 1.64 km apart.

Source: Goldsource Mines website as annotated by Genuity Capital Markets (highlighted coal and glauconitic "marker unit")



### Follow-up drilling

The Border project drill program in July and August 2008 consisted of nine drill holes, including two offset holes that were re-drilled near the initial discovery holes (Exhibit 5). The remaining seven holes, driven by geophysical anomalies, were designed to document the Durango coal seam potential continuity to the north, south and west, and for an initial inferred resource estimate.

Two large step out drill holes intersected 23.2 metres (hole 2, 3 kilometres NW) and 36.8 metres (hole 5, 4.5 kilometres NNW) of continuous coal approximately 80 metres below surface. The two offset holes replicated visual results from the discovery holes (50 to 100 metre step-outs). Four holes "missed" and did not intercept any significant coal; hole 9 intersected a 6.7 metre thick coal seam at a depth of 45 metres. Management attributes the "misses" to an undulating erosional surface that may have locally controlled the formation of sub-basins where coal was deposited.

Exhibit 5: Border Coal Discovery drill hole plan showing our geological estimate of potential coal resource areas



Source: Goldsource Mines Inc., annotated by Genuity Capital Markets



#### Border's current potential size

In reviewing the drill results to date, we believe potential immediately to the south of the discovery holes is limited by hole 1. Potential farther south and to the west is apparently limited by holes 7 and 8 (Exhibit 5). Given these early constraints, we estimated the size of the potential coal resource using four scenarios:

- Scenario 1: Two discovery holes (3A and 6) with 800 metre radius polygons.
- Scenario 2: Two discovery holes plus holes 5 and 2 all with 800 metre radius polygons.
- **Scenario 3:** Two discovery holes (800 metre radius polygons) and holes 5 and 2 with 1600 metre radius polygons.
- Scenario 4: Two discovery holes plus holes 5 & 2 all with 1600m radius polygons (note holes 3A and 6 are constrained to the south)

A specific gravity of 1.3 was assumed and the continuous coal seam thickness for each intersection was used. Potential coal resource scenarios of 150 million tonnes to 1.1 billion tonnes are shown in Exhibit 6.

# *Exhibit 6: Our potential Border coal resource estimates based on 2008 drilling*



#### Durango coal quality – Early proximate analysis

It is very early in the documentation and analysis of the Durango coal seam, with only two holes with proximate analysis reported. In addition, the two discovery hole cores (holes 3 and 6) were contaminated due to moisture exposure and improper drilling techniques (particularly in hole 6).

Proximate analysis of the Durango coal seam calorific values (CV) and sulphur content to date are provided in Exhibit 7. We have also provided benchmark quality metrics for thermal seaborne and domestic end market coal (Exhibit 7).



Based on our site visit, we expect the higher sulphur assays in the Durango seam are related to pyrite nodules we observed. Pending further analysis, this type of pyrite might be amendable to being selectively mined or washedout in a wash plant in order to lower the sulphur content to less than 1% sulphur. Ash content has not been reported by GXS to date.

Exhibit 7 shows our estimates of potential Durango coal parameters, (results to date) and those for optimal seaborne or domestic coal products. Thermal coal is a bulk commodity used in power generation that is priced on its physical characteristics; coal quality (CV and consistency) determines whether or not the coal is a saleable product. Thermal coal fire plants and thermal coal buyers look for a quality, consistent and secure supply of coal.

### Exhibit 7: Metrics for thermal coal quality

Quality metrics of	Seaborne coal	*Thermal coal	Durango d	liscovery
thermal coal		domestic	hol	es
(as received basis)		(CND and US)	Range	Average
Calorific Value (kcal/kg)	> 6000	> 4800	4500 - 5560	5140
Sulfur content (%)	< 1	< 1	0.25 - 3.84	~1.5%
Ash Content (%)	< 15	< 15	N/A	N/A
Moisture Content (%)	< 15	< 30	N/A	N/A

\* Lignite excluded, N/A – no data available

Source: Genuity Capital Markets estimates and Goldsource Mines Inc.

Coal rank for the two Durango discovery holes is sub-bituminous (47%) to bituminous (53%) (see Appendix 1). Utilizing proper coal exploration drilling techniques and Norwest consulting QA/QC protocols for the offset holes and other holes, it is expected that coal sampled from now on will be accurately ranked.

We have also portrayed the Durango seam proximate analysis CV results in Exhibit 8. GXS' "high range" CV is attractive and may potentially be achieved via a wash plant depending on the Durango seam coal washing curves (see Appendix 1 for discussion). Also, GXS' CV range on a moist, mineral-free basis would likely return higher values than on an 'as received' (AR) basis.





### Exhibit 8: Thermal coal CV as shown by deposit or ASTM standard

measurements and are only used above to show the generally paralleled increase in CV rank.

Source: Genuity Capital Markets, Energy Information Administration, Goldsource Mines Inc., globalCOAL, ASTM Standards



# Potential markets for GXS Border coal

One of the critical aspects in evaluating a new thermal coal discovery is to assess whether there is a potential end market user for the product. Based on proximity to markets, coal quality/resource size, security of supply and cost to the end-user, various markets may become opportunities.

Long-term pricing of thermal coal is expected to stabilize and remain well above historical figures, which is beneficial to a greenfields exploration project. Exhibit 9 displays long-term pricing projection figures for thermal coal.

Exhibit 9: Thermal coal price forecast (US\$/tonne FOB, nominal)



Source: Genuity Capital Markets, Wood Mackenzie Coal Conference presentation, September 8, 2008

GXS' Durango coal seam has an active rail line capable of bulk transport running through the property – a major asset. It is also located in politically stable Saskatchewan. However, Saskatchewan is generally land-locked from the international seaborne markets, being 1800 kilometres from Vancouver's port.

At this time, we view Saskatchewan as the highest potential end-user market where the coal could be used for electricity generation via power plants (Appendix 3). Other domestic markets include Ontario, as the Province has deferred plans of closing its thermal base load coal-fired power plant generating facilities; currently Ontario imports a portion of its coal from the U.S.

The U.S. relies on coal to produce 49% of the consumed electricity within the country. Utilizing the rail networks, Goldsource may be able to transport



its coal south to power plants in the central-north U.S. Again, quality of GXS' coal in terms of CV and consistency will determine the value and the ability to access the U.S. markets.

Although less likely, GXS may also have the option to send the coal by rail, 650 kilometres to Churchill, Manitoba, on a seasonal basis where it would have the ability to reach international markets. Other possible ports include Vancouver (approximately 1800 kilometres) and Thunder Bay (approximately 750 kilometres). At this time we believe an Asia "seabourne" option is an optimistic scenario that relies on very high quality thermal coal being documented.



# **Risks and sensitivities**

GXS has a raw coal discovery in its early exploration phase, where a single drill hole can imply significant value creation or destruction. Exhibit 10 provides a synopsis of the Border project risks and sensitivities.

<b>Risks and sensitivities</b>	Implication	Mitigation
Marketing coal product - securing an end user	A long-term buyer would be needed to purchase the coal and make the project viable; the location also limits certain market options	High quality thermal coal will potentially attract buyers and overcome transportation hurdles; this will depend on analytical results
<b>Quality of coal</b> - (Appendix 1)	CV of 4800 Kcal/kg = ~US\$12.40/t versus ~US\$137/t for high quality 6000 Kcal/Kg thermal coal (see Exhibit 7 for source) Deleterious elements such as As and Hg have not been reported	Wash plant may upgrade CV's by 10-25% by reducing ash content and also decrease sulphur
Discontinuity of the Durango coal seam	Given that a number of holes to the south and west have "missed," we view the potential coal corridor to contain sub- basins. A large basin would provide cheaper bulk mining methods in comparison to scattered sub basins	Geophysical signature may be fine-tuned to determine sub-basin axis or to detect larger basins
New environmental protocols	Coal fire plant closures throughout Canada and replacements with alternative energy	Saskatchewan is a world- leader in clean coal technology and is largely dependent on coal for the production of electricity (See Appendix 3)
High transportation costs	Inland location of the Border property means a long rail trip to port (~1800km to Vancouver, ~750km to Thunder Bay, ~650km to Churchill), therefore, a lower potential for seaborne coal product market	Focus on North American mid Canada/US customers high quality consistent coal
Permitting issues (Exploration)	Exploration permits within Saskatchewan and Manitoba could potentially delay exploration drilling	Proper management and communication with Provincial Governments

# Exhibit 10: Key Risks and sensitivities of the Border coal project

Source: Genuity Capital Markets estimates, Goldsource Mines Inc.



# Go-forward catalysts - Next 12 months

- 1) Summer 2008 drill program proximate and ultimate analysis results (October-November 2008) "coal quality" results will be important for the off-set holes to establish accurate CV's versus the initial 5140 kcal/kg average CV, and also for the large step-out holes to the northwest (holes 5 and 2) that have returned thick continuous coal seam intersections. Ultimate analysis will provide results indicating contents other associated elements (i.e., As, Cl, Hg, P, N) within the coal that may impact its value.
- 2) Winter drill campaign (mid Q4/08 to early Q2/09) we expect GXS to drill 50+ holes as part of a grid drilling program to expand the Durango seam and to deliver an indicated resource estimation. This program has the potential of discovering new coal seams within the Border property.
- 3) Inferred resource estimation (Q2/09) the summer drill program, along with some initial infill holes in the winter campaign, should provide sufficient data for an inferred resource estimate. Our estimate is a potential for approximately 750 million tonnes of coal.
- **4)** Further land acquisitions within the potential "coal corridor" – we expect GXS to continue acquiring coal exploration permits throughout this new potential coal district. GXS has first mover status and in-house expertise to determine new opportunities in Saskatchewan and Manitoba.



# Valuation and recommendation

GXS has made a raw thermal coal discovery with limited information on coal quality or geometry. As such, it is very difficult to value GXS until proximate and ultimate analysis is completed and additional holes are drilled. We also highlight the fact the global peer group of undeveloped thermal coal companies is very small, so our comparative analysis is on a 'best efforts' basis and we will work to further underpin it going forward.

# Methods and assumptions

To value Goldsource we mainly used comparative analysis of other public companies with undeveloped thermal coal resources. Exhibits 11 and 12 show our methods and assumptions.

# **Comparative analysis**

New potential thermal coal basins in North America are rare. Our peer group of thermal coal exploration companies with undeveloped resources is provided in Exhibit 11. Our base and optimistic case is an average of the peer group, while our conservative is based upon Waratah, Santoy and CIC.

Our conservative scenario includes companies that have similar attributes to GXS' Border project, with early stage coal projects and varying infrastructure related challenges. These companies currently trade at a TEV of \$0.03/t. Our base and optimistic cases include what the market is paying for relatively advanced thermal coal projects – our base and optimistic case is an TEV \$0.22/t.

We believe GXS is leveraged to the base case higher valuation, given that its location is in the politically secure jurisdiction of Saskatchewan and it has access to an active rail line "asset" on the property. However, we acknowledge that markets will be more limited without clear access to the Asian seabourne coal market. Price weakness in our base case scenario further supports this usage, as three months ago it was a TEV of approximately \$0.50/t.

Exhibit 11: Comparative coal projects total enterprise value per proven, probable, measured	I,
indicated and inferred resource	

Company name & country	re Price 25, 2008)	Shares outstanding (mm)	TEV	2P	M&I	Resource Inferred	e (mmt) 2P+M+I+I	TEV/2	P+M+I+I
QGX Ltd. (Mongolia)	\$ 4.98	49.59	\$ 243.36	-	253	11	264	\$	0.92
Cline Mining Corp. (CND/US)	\$ 0.73	84.80	\$ 59.63	55	441	57	553	\$	0.11
Waratah Coal Inc. (AUS)	\$ 1.39	56.36	\$ 29.65	-	-	4355	4355	\$	0.01
Santoy Resources Ltd. (CND)	\$ 0.14	92.74	\$ 0.94			89	89	\$	0.01
CIC Energy Corp. (Botswana)	\$ 3.55	53.77	\$ 72.10	-	1149	73	1222	\$	0.06
							Median	\$	0.06
							Base - Average	\$	0.22
							Conservative	\$	0.03
						GCM est.			
Goldsource Mines Inc	\$ 3.99	19.31	\$ 52.85	-	-	750	750	\$	0.07

Source: Genuity Capital Markets, QGX Limited (QGX-T; \$4.98; Not Rated), Cline Mining Corporation (CMK-T; \$0.60; Not Rated), Waratah Coal Inc. (WCI-T; \$1.30; Not Rated), Santoy Resources (SAN-V; \$0.125; Not Rated), CIC Mining Corp. (ELC-T; \$3.20; Not Rated)



# **Overall corporate NAV**

In Exhibit 12 we provide our conservative, base and optimistic case scenarios for GXS' overall corporate NAV. For all scenarios we have assumed a minimum of 120 million tonnes of potential coal resource. Our base case estimation values GXS using scenario three (Exhibit 6), with an additional 630 million tonnes of coal beyond our conservative scenario (750 million tonnes total). The conservative case relies on holes with confirmed proximate analysis based on scenario 1 (120 million tonnes). The optimistic case is based upon our estimation in scenario four (1.12 billion tonnes).

Our NAV does not account for any future expansion of the resource in the proposed winter drill program. The NAV does include, in our base and optimistic scenarios, a land position value which we based on the TEV of junior companies applying to explore coal in the region. Many junior explorers have not published the specific hectares of permitted areas due to lack of approvals and suggestions from the government of Saskatchewan. Therefore, we used the average enterprise value of \$10.4 million in our base case as it relates to the following companies: Wescan Goldfields (WGF-V: \$0.26, Not Rated), Bitterroot Resources Ltd. (BTT-V: \$0.225, Not Rated), North American Gem Inc (NAG-V: \$0.13, Not Rated), Noble Metal Group Inc. (NMG-V: \$0.125, Not Rated) and Santoy Resources Ltd. (SAN-V: \$0.125, Not Rated). We double this value to \$20.8 million in our optimistic scenario to reflect GXS' first mover status.

	Conservative 120 mmt		Bas 750 i		Optimi 1120 r	
Overall corporate NAV	\$mm	\$ /Share	\$mm	\$ /Share	\$mm	\$ /Share
Comparative analysis						
Durango Seam (120 Mt @ \$0.03, \$0.22 & \$0.22)	3.6	0.17	26.4	1.24	26.4	1.24
Added resource potential (0, 630 & 990 Mt @ \$0.22)	0.0	0.00	138.6	6.52	217.8	10.25
Land EV comparables						0.00
Attributable land positions	0.0	0.00	10.4	0.49	20.8	0.98
Project Subtotal	3.6	0.17	175.4	8.25	265.0	12.47
Cash and short term investments	20.7	0.97	20.7	0.97	20.7	0.97
Cash via exercise of warrants and options*	0.0	0.00	3.1	0.14	3.1	0.14
Corporate Adjustments (12mo)	-10.0	-0.47	-12.0	-0.56	-14.0	-0.66
Net corporate Asset Value	14.3	0.67	187.1	8.80	274.7	12.92

#### Exhibit 12: Goldsource NAV scenarios

\*All in-the-money warrants & options exercised in base and optimistic case

Source: Genuity Capital Markets estimates

We use our base case of NAV of \$187.1 million to value GXS at this time (\$8.80/share). The price outlook for thermal coal is reasonably strong and a new 100%-owned +750 million tonne potential thermal coal resource with a railhead will garner value in our view. We will monitor the upcoming drill results carefully and adjust our valuation accordingly.



# Recommendation

We recommend Goldsource as BUY with a 12-month target price of \$9.00 per share. Our valuation is underpinned by our estimations on the potential size of the Border project's coal resources using our geological rational. GXS is rated Speculative and suitable for risk-tolerant investors only.



# Appendix 1 – Thermal Coal background

In this appendix we have provided some background on thermal coal as it relates to GXS.

In Exhibit 13 we provide benchmark coal proximate analysis for international thermal coal. An ASTM D388 table is provided, outlining GXS' coal classification range in Exhibit 14. Exhibit 15 provides comparative metrics, including CV values of thermal coal for Border coal, south Saskatchewan lignites and the Powder River Basin. A very rough potential operating cost range for a GXS hypothetical mining scenario is estimated in Exhibit 16.

# Thermal coal market bench mark quality synopsis

Thermal coal is typically benchmarked at a CV of 6000 kcal/kg. The table in Exhibit 13 displays the standardized coal with predefined quality specifications for trading at Puerto Bolivar (Colombia); RBCT (South Africa); Newcastle (Australia); and Amsterdam, Rotterdam, Antwerp (Europe).

#### Exhibit 13: Benchmark thermal coal

For Shipments originating from:	RB	AUS	COL	POL	RUSS		
Calorific Value (kcal/kg NCV)	6,000	6,000	6,000	6,000	6,000		
Total Moisture % Max. (AR)	12	15	14	14	14		
Volatile Matter % min (AR)	22	24 - 35	31 - 37	26 - 35	26 - 35		
Ash % max (AR)	15	15	11	15	15		
Sulphur % Max. (AR)	1	0.75	0.85	1	0.75		
Nominal Topsize mm	50	50	50	50	50		
IDT min (degrees celsius)	1,250	1,250	1,250	1,150	1,250		
Calcium Oxide in ash % max. (dry basis)	12	7	N/A	N/A	N/A		
Note: NCV = net calorific value; $AR$ = as received basis; IDT = Initial deformation temp.							

Source: globalCOAL

Although 6000 kcal/kg may be the benchmark, many thermal coal fire plants look for a "consistent product" from their supplier and use lower CV coals. New coal mines have the advantage of utilizing new technologies to keep coal product properties within a tight range for their purchaser, for example ash content can be kept within a  $\pm$ -2% range.

#### Border coal

Utilizing the ASTM ranking results from the recent initial two discovery holes, we see the range of GXS coal (Exhibit 14). ASTM D388 coal standard is based on a moist, mineral-matter free basis. However, we only have initial results for the Durango seam and the classification ranking may change.



Exhibit 14: GXS coal & Benchmark "6000" range outlined on ASTM D388 standards



Source: Genuity Capital Markets estimates, ASTM standards and Goldsource Mines Inc.

The potential size and flat-lying geometry of the Durango seam in our view are similar to the coal in the Powder River basin and to the southwestern Saskatchewan lignite deposits (see Exhibit 15). GXS' coal, however, from initial proximate analysis does contain an average sulphur content of 1.5%, which is much higher than the Powder River Basin. We note, a large thermal coal deposit of this type may be able to utilize selective mining to produce a consistent product by removing ash and sulphur seams.

#### Exhibit 15: Comparison of GXS, Powder River Basin and southwest Saskatchewan Lignite

	Heating val (kcal/kg)	Coal Seam Thickness (m)	Sulphur Content (%)	Overburden Avg. Thickness (m)	Resource (Bt)
GXS - Border	4514-5529	22.6-36.8	1.5	73	?
Powder River Basin	4400-5280	18-24	< 1	60	2.2
SW Saskatchewan Lignites	2534-3610	5-9	< 1	35	5.1

Source: Goldsource Mines Inc., Peabody, Government of Saskatchewan, Genuity Capital Markets

If the Durango coal seam continues to report values in the range of the April, 2008 proximate analysis, we assume a coal washing plant would be required to reduce sulphur and ash contents. Our rough cash cost estimates and implied operating margin are shown in Exhibit 16.



Exhibit 16: Our mine gate cash cost estimates based on washing to	
produce a high-grade thermal coal for shipping to multiple markets	

	Cost per tonne
	(\$US)
Mining cost	\$1.00 to 2.00
Overburden removal	\$5.00 to 10.00
Coal washing	\$5.00 to 8.00
Royalties	\$7.00 to 7.50
S,G&A	\$1.00 to 2.00
Cash cost per tonne	\$20.00 to 29.50

Note: The above royalty at \$7.00 to \$7.50 is based on the average price of 2007 imported steam coal from the U.S. to Canada at U.S. \$44.78 per tonne.

Source: U.S Energy Information Administration and Genuity Capital Markets estimates



# Appendix 2 – Management and directors

# J. Scott Drever, President & Director

Mr. Drever has 35 years of international experience in mineral exploration and development and mining operations. Mr. Drever has served as an executive officer and director of a number of public companies listed on the TSX and the TSX Venture Exchange, including the Dome Mines Group, Placer Dome Ltd., and Blackdome Mining Corporation. Mr. Drever has extensive experience with international mining corporations in corporate management, strategic planning and corporate development

# Eric Fier, CPG, P Eng., QP for Border project, Principal Consultant

Mr. Fier, CPG, P.Eng has 25 years of experience in over 30 countries. Eric has five years experience with coal; Goodrich in Tumbler Ridge, Decker Coal in the Powder River Basin, and consulting with Snowden on a coal project in Australia.

### Steven B. Simpson, CPA, Director

Mr. Simpson has been an Australian certified practicing accountant (CPA) since 1977. He is also a Chartered Secretary and member of the Institute of Directors. He is a Commerce graduate from the University of New South Wales and is a former partner of Price Waterhouse in both the Australian and Asian markets. Mr. Simpson is a principal of Triton Advisory Group, mergers and 23 acquisitions, fixed income trading, asset management and corporate advisory group located in Singapore.

# Graham C. Thody, CA, BComm, - Chief Financial Officer & Director

Mr. Thody is a member of the British Columbia Institute of Chartered Accountants, as well as the Canadian Institute of Chartered Accountants. Mr. Thody has also served as a Director and Executive Member of the Lions Gate Hospital Foundation, as well as the Chair of their Finance Committee. He was a Partner of Nemeth Thody Anderson, Chartered Accountants of Vancouver BC from 1979-2007. His practice focused on audits of reporting companies, participation in the Initial Public Offering Process, corporate mergers and acquisitions, as well as domestic and international tax matters.

#### Bernard Poznanski, Corporate Secretary

Mr. Poznanski is one of the founding partners of Koffman Kalef, a law firm specialized in business law, and is currently the head of that firm's securities group. Mr. Poznanski acts for a wide variety of companies listed on the TSX, the TSX Venture Exchange, the American Stock Exchange and NASDAQ. He has particular expertise in dealing with mining and technology companies and handling companies with international projects.

#### **Donald Berkey, Director**

Donald Berkey joined Richardson Securities of Canada in 1969 where he worked for 11 years. He then moved to Canaccord Capital as a stockbroker specializing in the underwriting of junior mining ventures. He retired in 1995 as Vice President, Sales.



# **Tinus Maree, Director**

Mr. Maree has over 20 years of experience in international finance both as a lawyer specializing in mergers and acquisitions and as an investment banker. He has served on the boards of private and public companies in South Africa and Canada. Most recently, Mr. Maree was a founder, director and the Chief Executive Officer of Rusaf Gold Limited, a successful mineral exploration company with gold assets in Russia and Tanzania that was acquired by Great Basin Gold Limited during the first quarter of 2008.

Source: Goldsource Mines Inc.



# Appendix 3 – Saskatchewan thermal coal synopsis

# Executive summary

	This is to provide an overview of Saskatchewan's current coal resources that are used to generate power in the province. Saskatchewan produces approximately 1650 of its 3655 MW of power from coal fire power plant generation. Currently the lignite coal used in the power generation by government-owned SaskPower is mined by Sherritt. Over the next three decades, SaskPower is poised to decide whether to refurbish or replace nearly all of its generating fleet (natural gas or coal fire power generating facilities). Given the large amount of potential closures within SaskPower, we believe alternative coal with competitive advantages such as higher calorific values, and "clean coal" potential could offer attractive solutions to SaskPower's supply shortfall.
Background	
	Coal has been mined Saskatchewan since 1857, primarily from the Ravenscrag Formation, which contains extensive lignite coal deposits. Coal is regarded as cheap energy, at roughly \$0.04 per kW-hour. Coal produced in Saskatchewan is lignite, which is low quality based on its low calorific values; however, the lignite is also low in sulphur content. Measured economic resources of lignite in southern Saskatchewan are currently 1.3 billion tonnes (depths less then 35 metres), but can be up to 5.1 billion tonnes, including indicated, inferred and speculative resource categories.
	Coal in Saskatchewan is consumed by mine-mouth electricity generating facilities (90% consumed in-province), which generate about 47% of Saskatchewan's electricity. Three lignite coal mines are operated in the province by Sherritt, with the product being sent to SaskPower coal-power generating facilities. Sherritt and SaskPower do not have any new plants or mines planned for construction in Saskatchewan.
	Sherritt acquired the Royal Utilities Income Fund in 2008, which owned the largest thermal coal producer in Canada (Prairie Mines and Royalty Ltd.).
Sherritt – Coal assets	
	Sherritt International Corporation is a diversified natural resource company that produces nickel, cobalt, thermal coal, oil and gas, and electricity (Exhibit 17). The three operating mines in the Province collectively produced approximately 10.3 million tonnes of lignite coal in 2007. It has been estimated by SaskPower that Saskatchewan has a 300-year supply of lignite.
	<b>The Boundary Dam Mine</b> is located approximately five kilometres south of Estevan, Saskatchewan and is dedicated to SaskPower's Boundary Dam and Shand generating stations. Mining operations commenced at Boundary Dam in 1973, and in 1998 it combined operations with two adjacent mines which had been operating since 1957 and 1960. Production in 2007 was 5.9 million tonnes.
	<b>The Poplar River Mine</b> is located approximately 200 kilometres southwest of Regina, Saskatchewan and is dedicated to SaskPower's Poplar River



generating station. Operations commenced in 1978. Production in 2007 was 3.4 million tonnes.

**The Bienfait Mine** is located approximately 15 kilometres east of Estevan, Saskatchewan. Sherritt owns and operates a char plant at Bienfait. Char is a key ingredient used in the manufacture of charcoal briquettes. Operations at Bienfait commenced in 1905. Production in 2007 was 1 million tonnes.

Exhibit 17: Sherritt Canadian operations



Canadian Operations

Source: Sherritt, Genuity Capital Markets

# Royalties

Royalties within the province of Saskatchewan are calculated as a percentage of the gross mine mouth value of coal produced per reporting period (quarterly). The royalty payment for coal in the province is 15% of the mine mouth value (gross sale value less transportation cost). A 7% tax payment on the mine mouth value of the coal occurs if the coal is produced by a freehold mineral rights owner. A Saskatchewan Resource Credit is also applied, which credits the producers 1% of the gross value of the coal to offset royalty or tax obligations (Note that the Border project is also subject to a 2% royalty in favour of Minera Pacific; 1% can be purchased for \$2 million).



#### SaskPower

SaskPower is a government owned corporation, which operates 16 electricity generating facilities (three coal fired), with an installed capacity of 3056 net megawatts (MW) as of December, 31, 2005 (Exhibit 18). It has purchase agreements with the Meridian Cogeneration Station, Cory Cogeneration Station, and SunBridge Wind Power Project. The map in Exhibit 18 displays SaskPowers' current electrical grid and associated power generating facilities.

#### Exhibit 18: SaskPower electrical grid

#### Generation



Source: SaskPower, Genuity Capital Markets

#### Coal fire stations

**Shand** is located near Estevan, Saskatchewan, has a generating capacity of 279 MW and was commissioned in 1992.



**The Boundary Dam** is located near Estevan and has a generating capacity of 813 MW, since commissioning in 1959. Its capacity was increased in 1959, 1970, 1973 and 1978.

**The Poplar River** is located near Coronach, Saskatchewan, and has a generating capacity of 572 MW.

#### SaskPower projections

SaskPower is projecting a gap in its demand for and production of electricity (Exhibit 19). Currently, long-term strategies include clean coal and nuclear.



Exhibit 19: SaskPower power supply projections

Source: SaskPower

#### Breakdown of closures

As shown above in Exhibit 19, SaskPower needs to make decisions regarding the refurbishment or replacement of nearly all of its operating fleet. The gray diamonds on Exhibit 19 denote the decision point in time on whether to continue operating facilities. In chronological order with potential power loss from facility (refer to figure 2): **1)** Success (30 MW); **2)** Queen Elizabeth (63 MW); **3)** Boundary Dam, Queen Elizabeth, (62 & 95 MW); **4)** Boundary Dam (139 MW); **5)** Boundary Dam, Landis, Meadow Lake (200, 79 & 44 MW); **6)** Boundary Dam (139 MW); and **7)** Boundary Dam (273 MW).

#### Saskatchewan options

SaskPower currently generates 28 % of its electrical power from renewable sources and intends to maintain a balanced portfolio of assets. A 2007 breakdown included: Wind 3.0%, Hydroelectric 21.0%, purchased or



imported 14.0%, Natural gas 15% and coal, 47%. Looking forward, some projects being considered include:

- Clean coal fired project \$1.4 billion government-industry partnership to essentially rebuild the Boundary Dam power generating facility. Plans are to have it operational in 2015, with a 100 MW capacity. The federal government has committed \$240 million, with SaskPower expected to fund the balance.
- Nuclear Bruce Power is doing a feasibility study examining options for Saskatchewan to meet its growing electricity needs, including building two 1000 MW nuclear reactors.
- Upgrading of Poplar river station \$140 million upgrade to increase output, reliability and efficiency.

### Canadian picture

### Highlights:

- Over the next 25 years, Canada is expected to replace 18,000 MW of coal-fired generation and expand capacity by 40,000 MW.
- During the second quarter of 2006, the Ontario Government put "on hold" its plans to close all Ontario coal-fired plants (Nominal unit capacity of 6550 MW).
- Average price of thermal steam coal imports from the U.S. in 2007 was US\$40.63 per short ton (15.1 million tons).

#### Case for marketing coal in Saskatchewan

Given the large amount of potential closures within SaskPower and the obvious investigation into new sources of energy, we feel that there is an opportunity to market new coal within Saskatchewan. Provided Saskatchewan implements a new clean coal facility at Boundary dam and installs nuclear generating facilities, there is still a potential power shortfall, not to mention the lengthy timeframe to install such facilities. Saskatchewan may have 300 years of lignite, which offers a constant cheap supply, but we believe new coal with competitive advantages such as higher calorific values could offer alternative solutions to SaskPowers' supply shortfall.

Some disadvantages Border coal may have within Saskatchewan are:

- It is located a long distance from the main base load areas of the province;
- A clean coal station would likely be built onto an existing station, rather than an entirely new base load plant in east-central Saskatchewan; and
- Clean coal power plants' proximity to oil fields can impact the placement of the station.



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Genuity Capital Markets has acted as an underwriter in a distribution for Goldsource Mines Inc. in the last 12 months.

A portion of the travel expenses for a recent trip to the Border property were paid for by Goldsource Mines Inc.

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I, Michael Gray, hereby certify that the views expressed in this report accurately reflect my personal views about the subject securities or issuers. I also certify that I have not, am not, and will not receive, directly or indirectly, compensation in exchange for expressing the specific recommendations or views in this report.

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