

Drill Program Coal Quality Results Indicate Premium Mid Volatile Coking Coal at Elan Project in southwestern Alberta, Canada

26.02.2015 | [Marketwired](#)

Highlights:

- **Coal quality in drill target area confirms Mid-Volatile Bituminous coal rank.**
- **Washability analysis shows a clean product: 9.0% ash, 0.60% sulphur and 7 FSI.**
- **No. 1 Seam ranges in thickness from 1m to 4m; No. 2 Seam from 5m to 15m; and No. 4 Seam zone consists of multiple coal plies up to 1m.**
- **Main No.2 coal seam horizon intersected along a 10 km strike length.**

CALGARY, ALBERTA--(Marketwired - Feb 26, 2015) - [Altitude Resources Inc. \("Altitude"\) \(TSX VENTURE:ALI\)](#) is pleased to announce that the Kuro and Elan Coking Coal Limited Partnership (the "Elan LP") has completed laboratory testing on coal samples obtained during the fall 2014 drill program on the Elan Project located in southwestern Alberta, Canada. The coal exploration program consisted of seven drill holes (4 core and 3 rotary) and seven trenches designed for specific coal quality analysis. Analysis from coal samples collected from outcrops during a June 2013 field program in the same area had shown the rank to be a mid-volatile coking coal.

The program targeted shallow open cut coal occurrences within the southern most area of the Elan Project, known as Grassy North. The drill target area is approximately 10 km in strike length and 5 km in width and was identified in the fall 2013 preliminary field assessment program carried out by Dahrouge Geological Consulting Ltd. ("Dahrouge") of Edmonton, Alberta. The Elan Project extend for 55 kms northward from Crowsnest Pass along strike in the Kootenay Group coal formation.

Commenting on the coal quality results Gene Wusaty, President and CEO said "The Elan drill program

successfully established the mid-volatile rank of the coal and delivered very favourable initial coal quality results. The Elan LP is now applying for permits for a much larger drill program later this year which will focus on resource definition and further coal quality work."

Commenting on the coal quality results, Kuro Non-Executive Director, Mr Gino D'Anna stated:

"The coal quality results from this drilling program have demonstrated the ability for Kuro to deliver a world-class mid-vol coking coal in a region with established infrastructure, proximity to rail and access to deep water ports. Our next priority is to continue with our exploration planning so that we are ready to drill again during the summer of 2015 and progress our economic studies."

To view the **ELAN LOCATION MAP**, please visit the following link:
http://media3.marketwire.com/docs/ELAN_LOCATION_MAP.pdf.

On November 20, 2014, Altitude, on behalf of Elan Coal Ltd., announced the completion of the Elan LP with Kuro Coal Elan Inc. ("Kuro") [an Australia-based coal exploration company]. Kuro has the opportunity to acquire up to a 70% interest in the Elan Project upon successful completion of, amongst other exploration requirements, a feasibility study. Assuming Kuro fulfills all requirements to earn its 70% interest under the Agreement, Altitude and Elan will retain an ownership equal to 12.5% and 17.5%, respectively. The 2014 drill program is part of the first milestone in the Elan LP that allows Kuro to earn an initial 20% interest in the Elan Project.

Altitude previously announced an initial NI 43-101 compliant Coal Resource estimate comprising of 62 million tonnes ("Mt") in the Measured and Indicated Mineral Resource categories and 85Mt in the Inferred Mineral Resource category. Dahrouge has identified a 726 Mt exploration target for the Elan property. The largest component of the exploration target tonnage is located in the Wildcat and Grassy North areas (see map below) in the southern area of the Elan property. The drill program targeted this specific area which extends for approximately 15 km northward along strike and is in close proximity to existing rail infrastructure.

To view the **ELAN LEASE OWNERSHIP MAP & DRILL TARGET AREA**, please visit the following link:
http://media3.marketwire.com/docs/ELAN_LEASE_OWNERSHIP_MAP.pdf.

SUMMARY OF QUALITY RESULTS

1. The results show that the coal underlying the project area is Mid-Volatile Bituminous Coking coal in rank.
2. The main No.2 Seam coal rank increases from RoMax 1.19 at the southern boundary of the property to RoMax 1.36 on Cat Mountain, 10 kilometers to the north.
3. Issues resulting from poor core recovery dictated that parameters below are to be regarded as indicative rather than definitive: Washability analysis of the raw coal samples shows a clean product in the 9.0% ash, 0.60% sulphur and 7 Free Swelling Index (FSI) can be produced at 1.50 separation gravity.
4. The clean coal displays an average fluidity value of 87 ddpm and positive dilatation.
5. The Ash Chemistry analysis shows low alkaline content for most samples.
6. The Phosphorous content of the coal is low, averaging 0.015 P in Coal.
7. Petrographic Analysis indicates a variable amount of Vitrinite content in the main No.2 Seam, ranging from 55% to a low of 28% in certain parts of the seam. The upper No.1 Seam has a much higher Vitrinite content.

The Grassy North property is at an initial stage of exploration and the current understanding of the coal seam stratigraphic distribution is based on historic coal-bed methane ("CBM") well intersections and field mapping, as well as the known stratigraphic sections in the Grassy Mountain open pit mine, adjacent to the south.

The 2014 program intersected what appears to be No.1 Seam located directly below the Cadomin conglomerate. This seam ranges in thickness from 1 m to 4 m and may be eroded by the overlying conglomerate in some places. The main No. 2 seam is located 20 m to 40m below the No. 1 Seam and ranges in thickness from 5 m to 15m. The lower No.4 Zone is typically 30 m below the No.2 Seam and consists of multiple coal plies up to 1m thick within rock parting material. For the purposes of this report, the

coal seams intersected are designated as the No1, No2 and No.4 based on their relative position.

It is apparent that the 1.50 sg separation gravity was optimum for producing a clean coal composite from the core material and all clean coal composites were created on this basis. The results are presented in the following sections of this report. The drill hole data has been organized in a north to south orientation to illustrate geographic trends in coal quality variation.

The majority of the data was obtained from the main No.2 Seam. There are only two occurrences each of the No.1 and No. 4 Seams and these are poor samples.

Raw and Clean Coal Proximate Analysis

The results show that all of the coal seams intersected are good quality Coking coals with typical clean FSI values of 7.0. The average clean coal ash at 1.50 separation gravity is 9.0% which is typical of western Canadian Coking coals. Sulphur values are low, ranging from 0.45% to 0.76% and are acceptable in the international market.

No.1 Seam

Drill Hole	Raw Coal		Clean Coal Composite @ 1.50 SG						
	ASH	FSI	Yield	Mois	ASH	VM	FC	Sul	FSI
DH GN 14-04	20.78	8.0	68.73	0.49	4.93	26.65	67.93	0.76	8.5
DH GN 14-06 RC	21	1.5	Oxidized Coal, LT 40						

No. 2 Seam

Drill Hole	Raw Coal		Clean Coal Composite @ 1.50 SG						
	ASH	FSI	Yield	Mois	ASH	VM	FC	Sul	FSI
DH GN 14-04	26.51	1.5	50.65	0.48	8.18	20.87	70.47	0.45	7.0
DH GN 14-01 upper	23.0	5.5	67.65	0.50	6.97	23.55	68.98	0.71	7.5
DH GN 14-01 lower	35.0	1.5	44.00	0.53	12.03	20.28	67.16	0.71	1.5
DH GN 14-02 upper	16.32	4.0	75.55	0.39	8.17	22.97	68.47	0.58	7.0
DH GN 14-02 lower	14.9	3.0	76.05	0.39	9.66	22.89	67.06	0.47	5.0
DH GN 14-06 RC upper	30.82	2.5	51.52	0.67	10.18	23.48	65.67	0.49	7.0
DH GN 14-06 RC lower	24.37	6.0	50.76	0.68	8.00	27.03	64.29	0.61	7.0

No.4 Seam

Drill Hole	Raw Coal		Clean Coal Composite @ 1.50 SG						
	ASH	FSI	Yield	Mois	ASH	VM	FC	Sul	FSI
DH GN 14-01	7.70	7.0	100	0.51	7.70	21.74	70.05		7.0
DH GN 14-03	52.82	1.0	Carbonaceous Shale, no wash						

Clean Coal Rheology

The plastic properties of the clean coal samples were measured by the Gieseler Fluidity test and Ruhr Dilatometer test. The tests were conducted on Seam 2 samples only. The small mass available from Seam 1 and Seam 2 samples deemed testing irrelevant. The results show a significant variation in Maximum Fluidity values which are likely related to the Vitrinite content of the coals. The average value is 87 for the first 5 samples shown in the following table which is not unusual for western Canadian coals.

All samples showed contraction and positive dilatation. In general these are good results which should be acceptable in coke making.

No.2 Seam

Drill Hole	GIESELER FLUIDITY					RUHR DILATATION				
	INITIAL	MAX.	SOLIDIFI-	RANGE	Max DDPM	SOFT TEMP	TMCONT.	TMDIL.	%CONT.	%DIL
DH GN 14-01 upper	416	452	486	70	186	377	443	474	17	37
DH GN 14-01 lower	437	452	480	43	1.9	391	484	-	19	-
DH GN 14-02 upper	421	454	482	61	68	379	453	478	18	18
DH GN 14-02 lower	431	464	495	64	25	373	454	481	20	-10
DH GN 14-06 RC upper	412	446	480	68	154	379	442	468	21	14
DH GN 14-06 RC lower	403	439	482	79	1098	365	428	464	23	81

Coal Ash Chemistry

The chemistry of coal ash plays a significant role in Coking coal evaluation, not only because it is the source of elements that could be regarded as contaminants in the steel making process (phosphorous), but also the high temperature reactions of these elements are linked to coke strength degradation in the blast furnace.

Acidic elements such as Alumina and Silicabehave as refractory material in the blast furnace while Basic elements such as Calcium, Potassium, Sodium and Magnesium tend to volatize and catalyze the breakdown of coke. In general, most western Canadian coals tend to be low in Basic elements which are desirable.

The Ash Chemistry results are summarized as follows:

No.2 Seam

Drill Hole	Ash Chemistry										
	Acid			Base						Base/Acid	
	SiO ₂	Al ₂ O ₃	TiO ₂	CaO	Fe ₂ O ₃	MgO	Na ₂ O	K ₂ O	P ₂ O ₅	SO ₃	Base/Acid
DH GN 14-01 upper	53.26	33.58	2.39	0.85	6.59	0.51	0.36	0.35	0.29	0.60	0.097
DH GN 14-01 lower	57.97	28.76	1.99	1.75	5.63	0.73	0.31	0.35	0.38	1.45	0.099
DH GN 14-02 upper	57.67	35.51	1.37	0.69	1.69	0.23	0.12	0.23	0.38	0.07	0.031
DH GN 14-02 lower	47.79	21.28	1.33	9.85	6.82	1.46	0.18	0.18	0.36	8.94	0.263
DH GN 14-06 RC upper	56.34	29.74	2.48	1.18	5.18	0.71	0.15	0.42	0.33	1.02	0.09
DH GN 14-06 RC lower	51.25	29.67	1.89	5.02	3.63	0.83	0.19	0.39	3.19	2.55	0.12

Coal Petrographic Composition and Predicted Stability

There is a definite rank increase in the No.2 seam progressing from RoMax of 1.19 in the south through to RoMax of 1.22 on the Fish Hook Trail to a RoMax of 1.36 on Cat Mountain. The No.1 seam has a RoMax value of 1.27 on Cat Mountain. The Reactives / Inert Maceral ratio in the No.2 seam is variable, with some samples showing an excellent 67/32 composition and high Stability.

The rank or degree of carbon maturation in any coal can be determined by the reflectance of Vitrinite coal Macerals to polarized light under a microscope (RoMax). Coals that have coking capability occur in the rank range from High Volatile to Low Volatile Bituminous with RoMax values ranging from 0.92 to 1.70. Most western Canadian coking coals are classified as Mid Volatile Bituminous in rank with RoMax values ranging from 1.10 to 1.35. The results are summarized as follows:

No.1 Seam

Drill Hole	Reactive Macerals				Inert Macerals						ASTM Stability	Rank Ro Max
	VITRINITE	LIPT	SEMI	TOTA REC	SEMI	FUSINITE	INERTO	MACR	MM	TOTAL INERTS		
DH GN 14-04	81.60		4.60	86.20	4.60	5.00	0.40	0.20	3.60	13.80	62.00	1.27

No.2 Seam

Drill Hole	Reactive Macerals				Inert Macerals						ASTM Stability	Rank
	VITRINITE	LIPT	SEMI	TOTAL REC	SEMI	FUSINITE	INERTO	MACR	MM	TOTAL INERTS		Ro Max
DH GN 14-04	53.30		14.50	67.80	14.70	10.70	1.70	0.60	4.50	32.20	59.00	1.36
DH GN 14-01 upper	52.20	0.40	14.80	67.40	15.00	10.60	2.50	0.60	3.90	32.60	57.00	1.21
DH GN 14-01 lower	28.40	0.40	25.40	54.20	25.40	9.90	3.50	0.40	6.60	45.80	41.00	1.24
DH GN 14-02 upper	40.10		18.30	58.40	18.50	13.70	4.40	0.40	4.60	41.60	46.00	1.21
DH GN 14-02 lower	37.70	0.40	19.50	57.60	19.70	13.20	4.00	0.20	5.30	41.40	45.00	1.22
DH GN 14-06 RC upper	36.60	0.90	21.90	59.40	22.10	10.40	2.30	0.20	5.60	40.60	46.00	1.19
DH GN 14-06 RC lower	45.50	0.80	19.70	66.00	19.90	8.00	1.50	0.20	4.40	34.00	52.00	1.07

The Elan coal properties extend for 55 kms northward from Crowsnest Pass along strike in the Kootenay Group coal formation. Five different areas of interest with surface mineable potential have been identified from historic exploration work carried out by companies including CONSOL, Devon Canada, Granby Mining, CanPac Minerals, and Canadian Hunter dating back to the 1940's. More than 10 coal seams have been identified on the properties with thicknesses ranging from 3 to 10m. The property can be accessed by driving north from Crowsnest Pass on secondary roads. The Elan property has access to nearby rail and port infrastructure with spare capacity.

Gene Wusaty, President and CEO of Altitude, a qualified person as defined by National Instrument 43-101, supervised the preparation of the technical information in this release.

About Altitude Resources

[Altitude Resources Inc.](#) is a Canadian coking coal company focused on developing its Palisades Coal Project located northwest of Hinton, Alberta, the Elan Project through its participation in the Elan LP, and the Altitude North Project near Grande Cache, Alberta. All the projects are located in close proximity to rail which has capacity to provide transport of coal to deep-water ports on the west coast of Canada to service the growing demand from world markets.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this news release.

Cautionary Statement Regarding Forward-Looking Information

This news release contains "forward looking information" within the meaning of applicable Canadian securities legislation. Forward looking information includes without limitation, statements regarding the size and quality of the Company's mineral resources, progress in the development of mineral properties, future capital and operating expenses, the future financial or operating performance of the Company, the prospective mineralization of the properties, planned exploration programs and the anticipated production schedule. Generally, forward looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is based on assumptions that have been made by the Company as at the date of such information, including those assumption described in the Company's technical report entitled "Resource Estimate of the Palisades Coal Property" dated November 28, 2011 which is available at www.sedar.com. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: the future price of coal, industry market trends and predictions, the estimation of mineral reserves and resources, operating and exploration expenditures, costs and timing of future exploration, requirements for additional capital, government regulation of mining operations including changes in government policies, environmental risks, reclamation expenses, title

disputes or claims, limitations of insurance coverage, regulatory matters, and other risks described in the public filings of the Company. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

Contact

Investors:

[Altitude Resources Inc.](#)

Doug Porter

+1 403-870-4349

dporter@altituderesources.ca

www.altituderesources.ca

Dieser Artikel stammt von [Rohstoff-Welt.de](#)

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/193034--Drill-Program-Coal-Quality-Results-Indicate-Premium-Mid-Volatile-Coking-Coal-at-Elan-Project-in-southwestern-Altitude-Resources-Inc>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!

Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2026. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).