

## CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

WORKORDER:	RC12020427
Hole:	RT-11-672C
Seam:	Arbour
Diameter:	63.5mm
Depth:	32.5m TO 42.0m
Plies:	A,B,C,D1,D2

### WET SIZING

Size (mm)	Weight (g)	Weight %	Cum.Weight %
+31.5	2198	9.9	9.9
+25	1295	5.8	15.7
+16	2076	9.3	25.0
+12.5	1104	5.0	30.0
+8	2146	9.6	39.6
+4	2779	12.5	52.1
+2	2822	12.7	64.8
+1	2380	10.7	75.5
+0.5	1440	6.5	82.0
+0.25	704	3.2	85.1
+0.15	314	1.4	86.5
+0.063	765	3.4	90.0
+0.038	702	3.2	93.1
-0.038	1531	6.9	100.0

\*All losses allocated to -0.038mm fraction

Sample was attrited in maximum 50kg lots with 18 cubes and 150 L of water or equivalent mass for 5 min @ 20 rpm

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

<original signed by>

Brett Warden Laboratory Manager

## ASTM Standard of Analysis

D4749 (split with RSD)

30-Jul-12

**Preliminary Report** 

Final Report

AIR-DRIED BASIS



30-Jul-12

#### Preliminary Report Final Report CERTIFICATE OF ANALYSIS Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada WORKORDER: RC12020427 Hole: RT-11-672C Seam: Arbour Diameter: 63.5mm 32.5m TO 42.0m A,B,C,D1,D2 Depth: Plies:

#### ANALYSIS

#### FLOAT SINK ANALYSIS

	SIZE: +12.5mm									
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FSI				
F1.35	568	8.6	7.14	4.84	6624	0.0				
S1.35 - F1.40	754	11.3	6.93	8.48	6297	0.0				
S1.40 - F1.45	789	11.9	6.42	14.07	5913	0.0				
S1.45 - F1.50	478	7.2	6.20	18.54	5507	0.0				
S1.50 - F1.55	351	5.3	5.76	25.26	5043	0.0				
S1.55 - F1.60	349	5.2	5.25	30.87	4597	0.0				
S1.60 - F1.70	1034	15.6	4.72	38.11	3945					
S1.70 - F1.80	910	13.7	4.11	47 44	3384					
S1.80 - F1.90	599	9.0	3.78	54.62	2617					
S1.90 - F2.00	384	5.8	3.39	64.65	1970					
S2.00	431	6.5	3.17	74.24	1091	*				

	SIZE: -12.5mm x +1.0mm										
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FS					
F1.30	33	0.6	8.01	2.62	6708	0.0					
S1.30 - F1.35	1525	29.9	8.17	3.73	6548	0.0					
S1.35 - F1.40	1051	20.6	7.41	8.43	6240	0.0					
S1.40 - F1.45	601	11.8	6.45	13.78	5848	0.0					
S1.45 - F1.50	337	6.6	5.90	18.57	5531	0.0					
S1.50 - F1.55	291	5.7	6.23	22.73	5184	0.0					
S1.55 - F1.60	182	3.6	5.34	28.67	4755	0.0					
S1.60 - F1.70	263	5.2	5.19	36.04	4193						
S1.70 - F1.80	204	4.0	4.49	44.68	3508						
S1.80 - F1.90	184	3.6	3.83	53.63	2775						
S1.90 - F2.00	160	3.1	3.94	61.01	1961	*					
S2.00	262	5.2	2.78	72.03	1180						

	SIZE: 1mm x 0.15mm										
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FS					
F1.35	315	29.5	7.33	2.73	6639	0.0					
S1.35 - F1.40	240	22.5	7.21	6.09	6314	0.0					
S1.40 - F1.45	97	9.0	6.44	11.61	5953	0.0					
S1.45 - F1.50	65	6.1	6.43	15.16	5688	0.0					
S1.50 - F1.55	55	5.1	6.15	17.47	5478	0.0					
S1.55 - F1.60	38	3.6	5.99	22.42	5089	0.0					
S1.60 - F1.70	50	4.6	5.25	32.08	4380						
S1.70 - F1.80	39	3.7	4.56	43.32	3592	*					
S1.80 - F1.90	34	3.2	4.36	51.91	2916						
S1.90 - F2.00	27	2.5	3.95	59.43	2347						
S2.00	107	10.1	2.40	72 32	795						

#### FROTH FLOTATION

	SIZE: 0.15mm x 0.038mm										
TIME	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FSI					
15 SEC	3	0.8	NSS	12.08	6278	0.0					
30 SEC	1	0.2	NSS	NSS	NSS	0.0					
60 SEC	1	0.2	NSS	NSS	NSS	0.0					
90 SEC	0	0.1	NSS	NSS	NSS	0.0					
Tails (T2)	6	1.6	5.74	56.11	2335	0.0					
Tails (T1)	354	97.1	6.41	65.24	1567	0.0					
PARAMETERS:			ND. TIME 90 IBC, DENVER								

#### FINES

SIZE: -0.038mm										
Mois %	Ash %	GCV (kcal/kg)								
6.46	78.32	702								

NSS = Not sufficient Sample We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

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Brett Warden Laboratory Manager ASTM Standard of Analysis

D4371 D3172 D4239 D720

AIR-DRIED BASIS



#### CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

 WORKORDER:
 RC12020427

 Hole:
 RT-11-672C

 Seam:
 Arbour

 Diameter:
 63.5mm

 Depth:
 32.5m TO 42.0m

 Plies:
 A,B,C,D1,D2

#### ANALYSIS

#### FLOAT SINK ANALYSIS

Preliminary Report Final Report 30-Jul-12

CUMULATIVE WEIGHT % SIZE: +12.5mm CV (kcal/kg) WT% CUM WT% FSI S.G Mois % Ash % F1.35 8.6 0.0 8.6 4.84 7.14 6624 S1.35 - F1.40 11.3 19.9 7.02 6.92 6438 0.0 S1.40 - F1.45 11.9 31.8 6.80 9.59 6242 0.0 S1.45 - F1.50 S1.50 - F1.55 7.2 38.9 6.69 11.24 6106 0.0 5.3 44.2 6.58 12.92 5979 0.0 S1.55 - F1.60 49.5 52 6 43 14 82 5832 0.0 S1.60 - F1.70 15.6 6.02 20.39 5381 65.0 . S1.70 - F1.80 13.7 5.69 25.09 5034 78.7 S1.80 - F1.90 9.0 87.7 5.50 28.13 4786 S1.90 - F2.00 5.8 93.5 5.37 30.38 4612 S2.00 6.5 100.0 5.22 33.22 4384

S.G.	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FS
F1.30	0.6	0.6	8.01	2.62	6708	0.0
S1.30 - F1.35	29.9	30.6	8.17	3.71	6551	0.0
S1.35 - F1.40	20.6	51.2	7.86	5.61	6426	0.0
S1.40 - F1.45	11.8	63.0	7.60	7.14	6318	0.0
S1.45 - F1.50	6.6	69.6	7.44	8.22	6243	0.0
S1.50 - F1.55	5.7	75.3	7.34	9.33	6163	0.0
\$1.55 - F1.60	3.6	78.9	7.25	10.20	6099	0.0
S1.60 - F1.70	5.2	84.1	7.13	11.79	5982	
S1.70 - F1.80	4.0	88.1	7.01	13.29	5869	
S1.80 - F1.90	3.6	91.7	6.88	14.88	5747	
S1.90 - F2.00	3.1	94.8	6.78	16.41	5622	-
S2.00	5.2	100.0	6.58	19.27	5393	

	CUMULATIVE WEIGHT % SIZE: 1mm x 0.15mm											
S.G.	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FS						
F1.35	29.5	29.5	7.33	2.73	6639	0.0						
S1.35 - F1.40	22.5	52.0	7.28	4.18	6498	0.0						
S1.40 - F1.45	9.0	61.0	7.15	5.28	6417	0.0						
S1.45 - F1.50	6.1	67.1	7.09	6.18	6351	0.0						
S1.50 - F1.55	5.1	72.3	7.02	6.99	6289	0.0						
S1.55 - F1.60	3.6	75.9	6.97	7.72	6232	0.0						
S1.60 - F1.70	4.6	80.5	6.87	9.12	6125							
S1.70 - F1.80	3.7	84.2	6.77	10.62	6015							
S1.80 - F1.90	3.2	87.4	6.68	12.13	5901	-						
S1.90 - F2.00	2.5	89.9	6.61	13.47	5800							
S2.00	10.1	100.0	6.18	19.39	5297	1						

## FROTH FLOTATION

CUMULATIVE WEIGHT % SIZE 0.15mm x 0.038mm										
TIME	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FS				
15 SEC (P2)	0.8	0.8		12.08	6278	0.0				
30 SEC (P3)	0.2	1.0	8 <b>-</b> 9	-		0.0				
60 SEC (P4)	0.2	1.2	120	-	÷.	0.0				
90 SEC (P5)	0.1	1.2	-	20	2	0.0				
Tails (T2)	1.6	2.9	-	23	2	0.0				
Tails (T1)	97.1	100.0		+	-	0.0				

## FINES

CUMULATIVE WE	IGHT % SIZE:	-0.038mm
Mois %	Ash %	CV (kcal/kg)
6.46	78.32	702

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

<original signed by>

Brett Warden Laboratory Manager ASTM Standard of Analysis

> D4371 D3172 D4239 D720

Robb Trend Project

Coal Sample Results – 2012 Core Program

## RT-11-719C

## Arbour Seam

# Sample Horizon: 47.1 to 57.56



CERTIFICATE OF ANALYSIS Preliminary Report 31-Jul-12 Final Report Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB RC12020421

Seam: Arbour Diameter: 63.5mm Depth: 47.1m to 57.56m Plies: A,B,D1,D2

#### Raw Analysis

<b></b>	Wt (g)	Mois%	Ash%	VM%	F.C.%	S%	CV (kcal/kg)	CI %	RD	ARD
Raw Coal	32950	6.59	28.60	28.18	36.63	0.25	4707	0.01	1.58	1.53

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

## <original signed by>

Brett Warden Laboratory Manager

T5J 3G1,Canada WORKORDER:

Hole: RT-11-719C

## ALS LABORATORY GROUP - COAL DIVISION

RICHMOND BC CANADA 11191 Coppersmith Place, Richmond BC V7A 5H1 Canada Tel: +1 604 241 3166 Fax: +1 604 241 3126 Email: adrian.reifenstein@alsglobal.com



31-Jul-12

#### **Preliminary Report** CERTIFICATE OF ANALYSIS **Final Report** Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada WORKORDER: RC12020421 RT-11-719C Hole: Seam: Arbour Diameter: 63.5mm Depth: 47.1m to 57.56m Plies: A,B,D1,D2

## SIZING AFTER 20 DROPS

Size (mm)	Weight (g)	Weight %
+50	2500	7.6
-50	30450	92.4

We certify the analysis reported hereon was determined in accordance with the modified procedure for Drop Shatter Testing.

## <original signed by>



31-Jul-12

Preliminary Report

**Final Report** 

### CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

## WORKORDER: RC12020421

Hole:	RT-11-719C
Seam:	Arbour
Diameter:	63.5mm
Depth:	47.1m to 57.56m
Plies:	A,B,D1,D2

### DRY SIZING

Size (mm)	Weight (g)	Weight %	Cum.Weight %
+31.5	4920	14.9	14.9
-31.5+25	1384	4.2	19.1
-25+16	2908	8.8	28.0
-16+8	3508	10.6	38.6
-8+4	3432	10.4	49.0
-4+2	7487	22.7	71.7
-2	9311	28.3	100.0

## ASTM Standard of Analysis

D4749 (split with RSD)

## \*All losses allocated to -2mm fraction

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

## <original signed by>

## ALS LABORATORY GROUP – COAL DIVISION

RICHMOND BC CANADA

11191 Coppersmith Place, Richmond BC V7A 5H1 Canada Tel: +1 604 241 3166 Fax: +1 604 241 3126 Email: adrian.reifenstein@alsglobal.com



## CERTIFICATE OF ANALYSIS

Preliminary Report Final Report 31-Jul-12

ASTM Standard of Analysis

D4749 (split with RSD)

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

WORKORDER:	RC12020421
Hole:	RT-11-719C
Seam:	Arbour
Diameter:	63.5mm
Depth:	47.1m to 57.56m
Plies:	A,B,D1,D2

## WET SIZING

Size (mm)	Weight (g)	Weight %	Cum.Weight %
+31.5	2031	8.2	8.2
+25	1185	4.8	13.1
+16	1840	7.5	20.5
+12.5	976	4.0	24.5
+8	1671	6.8	31.3
+4	2490	10.1	41.4
+2	4808	19.5	60.9
+1	3534	14.3	75.2
+0.5	1830	7.4	82.7
+0.25	777	3.2	85.8
+0.15	326	1.3	87.2
+0.063	865	3.5	90.7
+0.038	605	2.5	93.1
-0.038	1696	6.9	100.0

\*All losses allocated to -0.038mm fraction

Sample was attrited in maximum 50kg lots with 18 cubes and 150 L of water or equivalent mass for 5 min @ 20 rpm

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

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CERTIFICATE OF A	NALYSIS	Preliminary Report Final Report	31-Jul-12
Coal Valley Resourc	es Inc.		
1600 Oxford Tower			
10235-101 Street			
Edmonton,AB			
T5J 3G1,Canada			
WORKORDER:	RC12020421		
Hole:	RT-11-719C		
Seam:	Arbour		
Diameter:	63.5mm		
Depth:	47.1m to 57.56m		
Plies:	A,B,D1,D2		

AIR-DRIED BASIS

#### ANALYSIS

#### FLOAT SINK ANALYSIS

		A REAL PROPERTY AND A REAL PROPERTY.	12.5mm			
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FSI
F1.30	13	0.2	7.48	3.45	6765	0.0
S1.30 - F1.35	599	9.9	7.39	4.75	6569	0.0
S1.35 - F1.40	1143	19.0	6.65	10.42	6223	0.0
S1.40 - F1.45	741	12.3	6.24	15.60	5803	0.0
S1.45 - F1.50	425	7.1	5.90	21.39	5349	0.0
S1.50 - F1.55	390	6.5	5.63	26.53	4953	0.0
S1.55 - F1.60	381	6.3	5.35	32.12	4597	0.0
S1.60 - F1.70	1118	18.6	4.37	35.55	4083	•
S1.70 - F1.80	244	4.1	3.89	47.24	3300	•
S1.80 - F1.90	219	3.6	3.30	52.33	2815	
S1.90 - F2.00	261	4.3	3.04	62.13	2018	+
S2.00	492	8.2	1.55	71.78	843	

		SIZE: -12.5r	nm x +1.0mn	1		
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FS
F1.30	63	1.3	7.79	2.94	6777	0.5
S1.30 - F1.35	1431	30.5	7.15	4.07	6560	0.0
S1.35 - F1.40	921	19.7	6.57	8.87	6242	0.0
S1.40 - F1.45	527	11.3	6.04	13.73	5896	0.0
S1.45 - F1.50	347	7.4	5.42	19.05	5531	0.0
S1.50 - F1.55	232	5.0	5.30	23.89	5141	0.0
S1.55 - F1.60	184	3.9	5.74	29.09	4738	0.0
S1.60 - F1.70	280	6.0	5.30	36.25	4196	
S1.70 - F1.80	168	3.6	4.62	45.32	3441	
S1.80 - F1.90	122	2.6	3.96	54.01	2787	
S1.90 - F2.00	90	1.9	3.82	61.27	2104	
S2.00	319	6.8	2.65	74.61	1046	*3

		SIZE: 1mn	n x 0.15mm			
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FS
F1.30	12	1.1	6.74	3.42	6811	0.0
S1.30 - F1.35	318	29.0	7.97	2.91	6622	0.0
S1.35 - F1.40	250	22.8	7.69	6.27	6350	0.0
S1.40 - F1.45	106	9.6	7.09	11.89	5980	0.0
S1.45 - F1.50	66	6.0	6.82	15.91	5688	0.0
S1.50 - F1.55	48	4.4	6.44	19.14	5397	0.0
S1.55 - F1.60	38	3.4	5.98	24.91	4974	0.0
S1.60 - F1.70	47	4.2	5.50	33.35	4308	•
S1.70 - F1.80	36	3.3	5.23	43.26	3565	*
S1.80 - F1.90	26	2.4	4.98	51.58	2921	•
S1.90 - F2.00	23	2.1	4.73	59.59	2261	:
S2.00	128	11.6	2.71	74.72	900	

#### FROTH FLOTATION

		SIZE: 0.15m	m x 0.038mm	1		
TIME	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FSI
15 SEC	5	1.3	NSS	9.21	6691	0.0
30 SEC	3	0.7	NSS	10.06	6359	0.0
60 SEC	1	0.2	NSS	NSS	NSS	0.0
90 SEC	0	0.1	NSS	NSS	NSS	0.0
Tails (T1)	339	93.5	5.20	66.75	1705	0.0
Tails (T2)	15	4.2	5.33	75.60	1027	0.0
PARAMETERS:			ND. TIME 90 IBC, DENVER		200 RPM	

### FINES

	SIZE: -0.038mm					
0.0110.02	Mois %	Ash %	GCV (kcal/kg)			
	4.38	83.98	509			

NSS = Not Sufficient Sample We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

## <original signed by>

Brett Warden Laboratory Manager ASTM Standard of Analysis

D4371 D3172 D4239 D720



### CERTIFICATE OF ANALYSIS

### Preliminary Report Final Report

31-Jul-12

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WORKORDER:

Hole:	RT-11-719C
Seam:	Arbour
Diameter:	63.5mm
Depth:	47.1m to 57.56m
Plies:	A,B,D1,D2

RC12020421

### ANALYSIS

### FLOAT SINK ANALYSIS

## AIR-DRIED BASIS

ASTM Standard of Analysis

> D4371 D3172 D4239 D720

	CUMUL	ATIVE WEIGHT	% SIZE: +	12.5mm		
S.G.	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FS
F1.30	0.2	0.2	7.48	3.45	6765	0.0
S1.30 - F1.35	9.9	10.2	7.39	4.72	6574	0.0
S1.35 - F1.40	19.0	29.1	6.91	8.43	6345	0.0
S1.40 - F1.45	12.3	41.4	6.71	10.56	6184	0.0
S1.45 - F1.50	7.1	48.5	6.59	12.14	6063	0.0
S1.50 - F1.55	6.5	54.9	6.48	13.83	5932	0.0
S1.55 - F1.60	6.3	61.3	6.36	15.72	5794	0.0
S1.60 - F1.70	18.6	79.8	5.90	20.33	5396	
S1.70 - F1.80	4.1	83.9	5.80	21.63	5295	. (e
S1.80 - F1.90	3.6	87.5	5.70	22.90	5192	1.0
S1.90 - F2.00	4.3	91.8	5.57	24.76	5042	
S2.00	8.2	100.0	5.24	28.59	4700	-

		/E WEIGHT % S	and the second se			_
S.G.	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FSI
F1.30	1.3	1.3	7.79	2.94	6777	0.5
S1.30 - F1.35	30.5	31.9	7.18	4.02	6569	0.0
S1.35 - F1.40	19.7	51.5	6.95	5.87	6444	0.0
S1.40 - F1.45	11.3	62.8	6.78	7.28	6346	0.0
S1.45 - F1.50	7.4	70.2	6.64	8.52	6260	0.0
S1.50 - F1.55	5.0	75.2	6.55	9.54	6186	0.0
S1.55 - F1.60	3.9	79.1	6.51	10.51	6114	0.0
S1.60 - F1.70	6.0	85.1	6.43	12.32	5979	-
S1.70 - F1.80	3.6	88.7	6.35	13.65	5877	- 12
S1.80 - F1.90	2.6	91.3	6.28	14.81	5788	57
S1.90 - F2.00	1.9	93.2	6.23	15.77	5712	
S2.00	6.8	100.0	5.99	19.77	5395	

		IVE WEIGHT %			and the second s	
S.G.	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FSI
F1.30	1.1	1.1	6.74	3.42	6811	0.0
S1.30 - F1.35	29.0	30.0	7.93	2.93	6629	0.0
S1.35 - F1.40	22.8	52.8	7.82	4.37	6508	0.0
S1.40 - F1.45	9.6	62.5	7.71	5.53	6427	0.0
S1.45 - F1.50	6.0	68.5	7.63	6.45	6362	0.0
S1.50 - F1.55	4.4	72.9	7.56	7.21	6303	0.0
S1.55 - F1.60	3.4	76.3	7.49	8.01	6244	0.0
S1.60 - F1.70	4.2	80.6	7.38	9.34	6142	
S1.70 - F1.80	3.3	83.9	7.30	10.66	6041	्
S1.80 - F1.90	2.4	86.2	7.24	11.79	5956	
S1.90 - F2.00	2.1	88.4	7.18	12.94	5866	1.5
S2.00	11.6	100.0	6.66	20.13	5288	-

#### FROTH FLOTATION

TIME	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FS
15 SEC (P2)	1.3	1.3	-	9.21	6691	0.0
30 SEC (P3)	0.7	2.0	2	9.51	6575	0.0
60 SEC (P4)	0.2	2.2	-		-	0.0
90 SEC (P5)	0.1	2.3	23	24	2	0.0
Tails (T1)	93.5	95.8	-	12	14	0.0
Tails (T2)	4.2	100.0	-	1.00		0.0

#### FINES

CUMULATIVE WE	IGHT % SIZE:	-0.038mm
Mois %	Ash %	CV (kcal/kg)
4.38	83.98	509

NSS = Not Sufficient Sample

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

## <original signed by>

Robb Trend Project

Coal Sample Results – 2012 Core Program

# McPherson Seam

Robb Trend Project

Coal Sample Results – 2012 Core Program

## RT-11-424C

## McPherson Seam

## Sample Horizon: 43.2 to 51.2



 
 CERTIFICATE OF ANALYSIS
 Preliminary Report Final Report
 31-Jul-12

 Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada
 RC12020624

 WORKORDER:
 RC12020624

 Hole:
 RT-11-424C Seam:

 Seam:
 MCPherson Diameter:

#### Raw Analysis

Depth: Plies: 43.2m to 51.2m

1,2

	Wt (g)	Mois%	Ash%	VM%	F.C.%	S%	CV (kcal/kg)	CI %	RD	ARD
Raw Coal	11200	7.74	26.53	28.00	37.73	0.24	4821	0.01	1.56	1.50

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

## <original signed by>



31-Jul-12

#### Preliminary Report CERTIFICATE OF ANALYSIS **Final Report** Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada WORKORDER: RC12020624 Hole: RT-11-424C Seam: McPherson Diameter: 63.5mm Depth: 43.2m to 51.2m Plies: 1,2

## SIZING AFTER 20 DROPS

 Size (mm)	Weight (g)	Weight %
+50	109	1.0
-50	11091	99.0

We certify the analysis reported hereon was determined in accordance with the modified procedure for Drop Shatter Testing.

## <original signed by>



31-Jul-12

**Preliminary Report** 

**Final Report** 

CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

## WORKORDER: RC12020624

Hole:	RT-11-424C
Seam:	McPherson
Diameter:	63.5mm
Depth:	43.2m to 51.2m
Plies:	1,2

## DRY SIZING

Size (mm)	Weight (g)	Weight %	Cum.Weight %	
+31.5	479	4.3	4.3	
-31.5+25	408	3.6	7.9	
-25+16	1123	10.0	17.9	
-16+8	1660	14.8	32.8	
-8+4	1506	13.5	46.2	
-4+2	1635	14.6	60.8	
-2	4388	39.2	100.0	

ASTM Standard of Analysis

D4749 (split with RSD)

\*All losses allocated to -2mm fraction

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

<original signed by>



## CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

WORKORDER:	RC12020624
Hole:	RT-11-424C
Seam:	McPherson
Diameter:	63.5mm
Depth:	43.2m to 51.2m
Plies:	1,2

## WET SIZING

Size (mm)	Weight (g)	Weight %	Cum.Weight %
+31.5	122	1.4	1.4
+25	203	2.4	3.8
+16	564	6.7	10.5
+12.5	322	3.8	14.3
+8	644	7.6	21.9
+4	1154	13.6	35.5
+2	1290	15.2	50.8
+1	1237	14.6	65.4
+0.5	954	11.3	76.6
+0.25	493	5.8	82.5
+0.15	205	2.4	84.9
+0.063	359	4.2	89.1
+0.038	159	1.9	91.0
-0.038	763	9.0	100.0

\*All losses allocated to -0.038mm fraction

Sample was attrited in maximum 50kg lots with 18 cubes and 150 L of water or equivalent mass for 5 min @ 20 rpm

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

## <original signed by>

Brett Warden Laboratory Manager

## ASTM Standard of Analysis

D4749 (split with RSD)

31-Jul-12

**Preliminary Report** 

**Final Report** 

AIR-DRIED BASIS



31-Jul-12

Preliminary Report

Final Report

#### CERTIFICATE OF ANALYSIS Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

RC12020624

WORKORDER:

RT-11-424C McPherson Diameter: 63.5mm 43.2m to 51.2m 1,2

#### ANALYSIS

Hole:

Seam:

Depth: Plies:

#### FLOAT SINK ANALYSIS

SIZE: +12.5mm S.G. F1.30 WT(g) WT% GCV (kcal/kg) FSI Mois % Ash % 0 \$1.30 - F1.35 \$1.35 - F1.40 58 4.8 7.70 5.91 6517 0.0 0.0 272 22.6 7.54 9.32 6185 S1.40 - F1.45 267 22.2 7.63 14.55 5786 S1.45 - F1.50 253 21.0 7.46 16.96 5562 0.0 S1.50 - F1.55 152 12.6 7.10 26.21 4912 0.0 S1.55 - F1.60 66 5.5 5.82 30.60 4571 0.0 S1.60 - F1.70 S1.70 - F1.80 4026 51 4.2 5.66 37.05 .  $\sim$ -S1.80 - F1.90 . S1.90 - F2.00 82 6.8 3.00 40.76 3840 . S2.00 4 03 1.14 53.86 1595

States was strained		SIZE: -12.5r	nm x +1.0mm	1		
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FSI
F1.30	38	0.9	6.28	3.04	7011	0.5
S1.30 - F1.35	1329	31.1	8.01	3.95	6560	0.0
S1.35 - F1.40	805	18.8	7.48	8.86	6218	0.0
S1.40 - F1.45	487	11.4	7.50	13.84	5824	0.0
S1.45 - F1.50	430	10.1	7.26	17.73	5492	0.0
S1.50 - F1.55	384	9.0	7.00	22.21	5165	0.0
S1.55 - F1.60	195	4.6	6.92	28.65	4678	0.0
S1.60 - F1.70	179	4.2	6.69	35.68	4081	
S1.70 - F1.80	119	2.8	6.76	45.89	3312	
S1.80 - F1.90	89	2.1	6.18	53.92	2624	
S1.90 - F2.00	95	2.2	6.07	62.22	1851	
S2.00	124	2.9	4.33	71.14	917	

		SIZE: 1mn	n x 0.15mm			
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FS
F1.30	12	0.8	6.17	3.53	6863	0.5
S1.30 - F1.35	294	20.5	8.37	3.02	6529	0.0
S1.35 - F1.40	156	10.9	8.01	6.70	6261	0.0
S1.40 - F1.45	89	6.2	7.73	11.98	5870	0.0
S1.45 - F1.50	86	6.0	7.57	15.88	5588	0.0
S1.50 - F1.55	88	6.2	7.56	19.28	5285	0.0
S1.55 - F1.60	75	5.2	7.62	23.69	4922	0.0
S1.60 - F1.70	78	5.5	7.47	32.68	4224	
S1.70 - F1.80	69	4.8	7.49	43.09	3420	
S1.80 - F1.90	68	4.8	7.48	51.41	2775	
S1.90 - F2.00	88	6.1	7.27	58.68	2113	
S2.00	331	23.1	5.52	72.87	786	

#### FROTH FLOTATION

		SIZE: 0.15m	m x 0.038mm	1		
TIME	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FSI
15 SEC	7	3.7	7.02	13.20	5889	0.0
30 SEC	2	1.0	NSS	29.97	4432	0.0
60 SEC	1	0.5	NSS	34.81	NSS	0.0
90 SEC	1	0.4	NSS	52.18	NSS	0.0
Tails (T1)	164	89.8	9.12	62.55	1442	0.0
Tails (T2)	8	4.5	8.99	64.12	1337	0.0
PARAMETERS:			ND. TIME 90 IBC, DENVER		200 RPM	

#### FINES

SIZE: -0.038mm					
Mois %	Ash %	GCV (kcal/kg)			
9.57	70.99	1053			

NSS = Not Sufficient Sample

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

Brett Warden Laboratory Manager ASTM Standard

of Analysis

D4371 D3172 D4239

D720

AIR-DRIED BASIS



#### CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

 WORKORDER:
 RC12020624

 Hole:
 RT-11-424C

 Seam:
 McPherson

 Diameter:
 63.5mm

 Depth:
 43.2m to 51.2m

 Plies:
 1,2

#### ANALYSIS

### FLOAT SINK ANALYSIS

S.G.	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FSI
F1.30	0.0	0.0	-	-		
S1.30 - F1.35	4.8	4.8	7.70	5.91	6517	0.0
S1.35 - F1.40	22.6	27.4	7.57	8.72	6243	0.0
S1.40 - F1.45	22.2	49.6	7.60	11.33	6039	0.0
S1.45 - F1.50	21.0	70.6	7.56	13.00	5897	0.0
S1.50 - F1.55	12.6	83.2	7.49	15.00	5748	0.0
S1.55 - F1.60	5.5	88.7	7.38	15.97	5675	0.0
S1.60 - F1.70	4.2	92.9	7.31	16.92	5601	-
S1.70 - F1.80		-	-		-	82
S1.80 - F1.90	-				-	
S1.90 - F2.00	6.8	99.7	7.01	18.55	5480	
S2.00	0.3	100.0	6.99	18.66	5468	

S.G.	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FS
F1.30	0.9	0.9	6.28	3.04	7011	0.5
S1.30 - F1.35	31.1	32.0	7.96	3.92	6572	0.0
S1.35 - F1.40	18.8	50.8	7.78	5.75	6441	0.0
S1.40 - F1.45	11.4	62.2	7.73	7.23	6328	0.0
S1.45 - F1.50	10.1	72.3	7.67	8.69	6212	0.0
S1.50 - F1.55	9.0	81.3	7.59	10.19	6096	0.0
S1.55 - F1.60	4.6	85.8	7.56	11.17	6021	0.0
S1.60 - F1.70	4.2	90.0	7.52	12.31	5931	
S1.70 - F1.80	2.8	92.8	7.49	13.32	5852	
S1.80 - F1.90	2.1	94,9	7.46	14.21	5781	
S1.90 - F2.00	2.2	97.1	7.43	15.31	5691	
S2.00	2.9	100.0	7 34	16.92	5553	

S.G.	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FSI
F1.30	0.8	0.8	6.17	3.53	6863	0.5
S1.30 - F1.35	20.5	21.3	8.28	3.04	6542	0.0
S1.35 - F1.40	10.9	32.2	8.19	4.28	6447	0.0
S1.40 - F1.45	6.2	38.3	8.12	5.52	6354	0.0
S1.45 - F1.50	6.0	44.4	8.04	6.92	6250	0.0
S1.50 - F1.55	6.2	50.5	7.98	8.43	6132	0.0
S1.55 - F1.60	5.2	55.8	7.95	9.86	6019	0.0
S1.60 - F1.70	5.5	61.2	7.91	11.90	5859	
S1.70 - F1.80	4.8	66.0	7.88	14.18	5680	-
S1.80 - F1.90	4.8	70.8	7.85	16.68	5485	
S1.90 - F2.00	6.1	76.9	7.80	20.02	5217	4
S2.00	23.1	100.0	7.28	32.22	4194	-

#### FROTH FLOTATION

	CUMULATIV	E WEIGHT % S	IZE 0.15mr	n x 0.038n	nm	
TIME	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FS
15 SEC (P2)	3.7	3.7	7.02	13.20	5889	0.0
30 SEC (P3)	1.0	4.7	-	16.71	5584	0.0
60 SEC (P4)	0.5	5.3		18.60	150	0.0
90 SEC (P5)	0.4	5.7		21.18		0.0
Tails (T1)	89.8	95.5		60.08		0.0
Tails (T2)	4.5	100.0	÷	60.26		0.0

#### FINES

CUMULATIVE WE	IGHT % SIZE:	-0.038mm
Mois %	Ash %	CV (kcal/kg)
9.57	70.99	1053

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

## Preliminary Report Final Report

31-Jul-12

ASTM Standard of Analysis

D4371 D3172 D4239 D720

<original< th=""><th>signed</th><th>by&gt;</th></original<>	signed	by>
Prott Movies		

Robb Trend Project

Coal Sample Results – 2012 Core Program

## RT-11-523C

## McPherson Seam

# Sample Horizon: 25.1 to 33.7



 CERTIFICATE OF ANALYSIS
 Preliminary Report
 9-Aug-12

 Coal Valley Resources Inc.
 Final Report
 10235-101 Street

 1600 Oxford Tower
 10235-101 Street
 Final Report

 25J 3G1, Canada
 WORKORDER:
 RC12020621

 Hole:
 RT-11-523C

 Seam:
 McPherson

 Diameter:
 63.5mm

 Depth:
 25.1m to 33.7m

 Plies:
 1,2

#### Raw Analysis

	Wt (g)	Mois%	Ash%	VM%	F.C.%	S%	CV (kcal/kg)	C1 %	RD	ARD
Raw Coal	17700	7.09	21.94	29.66	41.31	0.21	5149	0.01	1.52	1.48

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

## <original signed by>

## ALS LABORATORY GROUP - COAL DIVISION

RICHMOND BC CANADA 11191 Coppersmith Place, Richmond BC V7A 5H1 Canada Tel: +1 604 241 3166 Fax: +1 604 241 3126 Email: adrian.reifenstein@alsglobal.com



9-Aug-12

Preliminary Report

#### **Final Report** Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada WORKORDER: RC12020621 RT-11-523C Hole: Seam: McPherson Diameter: 63.5mm 25.1m to 33.7m Depth: Plies: 1,2

## SIZING AFTER 20 DROPS

CERTIFICATE OF ANALYSIS

Size (mm)	Weight (g)	Weight %
+50	627	3.5
-50	17073	96.5

We certify the analysis reported hereon was determined in accordance with the modified procedure for Drop Shatter Testing.

## <original signed by>



### CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

#### WORKORDER: RC12020621

Hole:	RT-11-523C
Seam:	McPherson
Diameter:	63.5mm
Depth:	25.1m to 33.7m
Plies:	1,2

## DRY SIZING

**ASTM Standard** of Analysis

Size (mm) Weight (g) Weight % Cum.Weight % +31.5 697 3.9 3.9 -31.5+25 835 4.7 8.7 -25+16 1728 9.8 18.4 -16+8 2815 15.9 34.3 -8+4 2695 15.2 49.6 -4+2 2976 16.8 66.4 -2 5953 33.6 100.0

D4749 (split with RSD)

\*All losses allocated to -2mm fraction

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

## <original signed by>

Brett Warden Laboratory Manager

**Preliminary Report Final Report**  9-Aug-12



## CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

WORKORDER:	RC12020621
Hole:	RT-11-523C
Seam:	McPherson
Diameter:	63.5mm
Depth:	25.1m to 33.7m
Plies:	1,2

### WET SIZING

Size (mm)	Weight (g)	Weight %	Cum.Weight %
+31.5	76	0.6	0.6
+25	117	0.9	1.5
+16	486	3.7	5.1
+12.5	422	3.2	8.3
+8	1019	7.7	16.0
+4	+4 2343 17.6		33.6
+2	+2 2807 21.1		54.7
+1	2425 18.3		73.0
+0.5	1298	9.8	82.8
+0.25	697	5.2	88.0
+0.15	320	320 2.4	
+0.063	609	4.6	95.0
+0.038	226	1.7	96.7
-0.038	437	3.3	100.0

\*All losses allocated to -0.038mm fraction

Sample was attrited in maximum 50kg lots with 18 cubes and 150 L of water or equivalent mass for 5 min @ 20 rpm

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

<original signed by>

Brett Warden Laboratory Manager

## ASTM Standard of Analysis

D4749 (split with RSD)

9-Aug-12

**Preliminary Report** 

**Final Report** 



#### CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

WORKORDER: RC12020621

> RT-11-523C McPherson 63.5mm 25.1m to 33.7m 1.2

> > WT(g)

124

120

223

148

49

31

70

WT%

11.4

20.5

13.6

4.5

2.9

6.4

6.23

6.10

5.45

4.92

22.10

26.26 26.82

32.24

#### ANALYSIS

Hole:

Depth:

Plies:

Seam: Diameter:

FLOAT SINK ANALYSIS

S.G. F1.35 S1.35 - F1.40

S1.40 - F1.45

S1.45 - F1.50 S1.50 - F1.55

S1.55 - F1.60

S1.60 - F1.70

Preliminary Report Final Report

9-Aug-12

of Analysis AIR-DRIED BASIS SIZE: +12.5mm Mois % Ash % GCV (kcal/kg) FSI 7.64 4.57 6543 0.0 0.0 10.06 6209 7.17 13.95 5831 0.0

5332

4898

4595

3811

0.0

0.0

0.0

•

D4371 D3172 D4239 D720

ASTM Standard

S1.70 - F1.80	53	4.9	4.30	39.21	3494		
S1.80 - F1.90	127	11.6	3.40	54.86	2718		
S1.90 - F2.00	106	9.7	3.07	63.97**	2097		
S2.00	37	3.4	2.03	59.46*	1583	•	
		SIZE: -12.5r	nm x +1.0mm	1			
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FSI	
F1.30	32	0.6	7.69	2.31	6832	0.0	Î
S1.30 - F1.35	1684	31.7	8.46	3.35	6536	0.0	
S1.35 - F1.40	1072	20.2	7.46	8.15	6319	0.0	
S1.40 - F1.45	828	15.6	7.19	12.99	5960	0.0	
S1.45 - F1.50	514	9.7	7.61	17.06	5564	0.0	
S1.50 - F1.55	290	5.5	6.92	22.37	5165	0.0	
S1.55 - F1.60	155	2.9	6.52	28.44	4731	0.0	
S1.60 - F1.70	178	3.3	5.85	35.99	4160		
S1.70 - F1.80	131	2.5	5.51	45.61	3398	#2	
S1.80 - F1.90	93	1.7	4.87	53.82	2782	•	
S1.90 - F2.00	71	1.3	4.04	60.85	2249	*	
S2.00	258	4.9	2.88	73.28	967	•	

		SIZE: 1mn	n x 0.15mm			1.77
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FS
F1.30	6	0.5	6.12	5.87	6622	0.0
S1.30 - F1.35	290	25.0	7.35	2.60	6634	0.0
S1.35 - F1.40	189	16.3	7.00	6.06	6335	0.0
S1.40 - F1.45	107	9.2	6.72	10.72	5994	0.0
S1.45 - F1.50	82	7.0	6.97	14.26	5703	0.0
S1.50 - F1.55	73	6.3	7.23	17.24	5454	0.0
S1.55 - F1.60	46	3.9	6.87	22.83	5051	0.0
S1.60 - F1.70	45	3.9	6.26	32.17	4358	
S1.70 - F1.80	33	2.8	5.96	43.18	3520	٠
S1.80 - F1.90	28	2.4	5.75	51.24	2854	
S1.90 - F2.00	28	2.4	5.52	58.85	2271	:
S2.00	233	20.1	4.15	74.68	709	

#### FROTH FLOTATION

		SIZE: 0.15m	m x 0.038mm	1		
TIME	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FSI
15 SEC	6	1.7	5.45	10.20	6405	NSS
30 SEC	3	0.7	5.54	11.82	6125	NSS
60 SEC	2	0.7	5.90	14.48	5779	NSS
90 SEC	1	0.3	NSS	15.66	NSS	NSS
Tails (T2)	6	1.7	7.22	54.05	2464	0.0
Tails (T1)	331	94.8	6.89	60.20	1760	0.0
PARAMETERS:		DENSITY, CO 10:1 KERO:M			200 RPM	

FINES

SIZE: -0.038mm						
-	Mois %	Ash %	GCV (kcal/kg)			
1	7.09	73.26	1013			

\* = Lab bottle checked

\* = Lab bottle checked and sample re-prepped

Samples marked with a \* or \*\* were tested with HCI and had a positive reaction

NSS = Not Sufficient Sample

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

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AIR-DRIED BASIS



9-Aug-12

#### CERTIFICATE OF ANALYSIS Preliminary Report Final Report Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada WORKORDER: RC12020621 Hole: RT-11-523C Seam: McPherson Diameter 63.5mm 25.1m to 33.7m Depth: Plies: 1,2

#### ANALYSIS

### FLOAT SINK ANALYSIS

#### CUMULATIVE WEIGHT % SIZE: +12.5mm WT% CUM WT% Mois % CV (kcal/kg) FSI Ash % F1.35 4.57 11.4 11.4 7.64 6543 0.0 S1.35 - F1.40 11.1 22.5 7.34 6379 0.0 S1.40 - F1.45 20.5 43.0 7.26 10.46 6118 0.0 S1.45 - F1.50 13.6 56.5 7.01 13.25 5929 0.0 S1.50 - F1.55 4.5 61.1 6.94 14.21 5853 0.0 S1.55 - F1.60 2.9 63.9 6.88 14.77 5797 0.0 S1.60 - F1.70 6.4 70.3 6.70 16.37 5616 S1.70 - F1.80 4.9 75.2 6.54 17.86 5477 S1.80 - F1.90 6.12 11.6 86.9 22.82 5107 -S1.90 - F2.00 9.7 96.6 5.81 20.52 4805 . S2.00 3.4 100.0 5.68 19.83 4695

S.G.	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FSI
F1.30	0.6	0.6	7.69	2.31	6832	0.0
S1.30 - F1.35	31.7	32.4	8.45	3.33	6542	0.0
S1.35 - F1.40	20.2	52.6	8.07	5.18	6456	0.0
S1.40 - F1.45	15.6	68.2	7.87	6.97	6342	0.0
S1.45 - F1.50	9.7	77.9	7.83	8.23	6246	0.0
S1.50 - F1.55	5.5	83.3	7.77	9.15	6175	0.0
S1.55 - F1.60	2.9	86.3	7 73	9.81	6126	0.0
S1.60 - F1.70	3.3	89.6	7.66	10.78	6052	
S1.70 - F1.80	2.5	92.1	7.60	11.72	5981	2
S1.80 - F1.90	1.7	93.8	7.55	12.50	5922	2
S1.90 - F2.00	1.3	95.1	7.50	13.18	5870	¥.
S2.00	4.9	100.0	7.28	16.10	5632	-

S.G.	WT%	CUM WT%	Mois %	Ash %	CV (kcal/kg)	FS
F1.30	0.5	0.5	6.12	5.87	6622	0.0
S1.30 - F1.35	25.0	25.5	7.33	2.67	6634	0.0
S1.35 - F1.40	16.3	41.8	7.20	3.99	6517	0.0
S1.40 - F1.45	9.2	51.0	7.11	5.20	6423	0.0
S1.45 - F1.50	7.0	58.0	7.09	6.30	6336	0.0
S1.50 - F1.55	6.3	64.4	7.11	7.38	6249	0.0
S1.55 - F1.60	3.9	68.3	7.09	8.27	6180	0.0
S1.60 - F1.70	3.9	72.2	7.05	9.56	6081	
S1.70 - F1.80	2.8	75.0	7.01	10.82	5985	-
S1.80 - F1.90	2.4	77.4	6.97	12.09	5887	1
S1.90 - F2.00	2.4	79.9	6.92	13.52	5776	2
S2.00	20.1	100.0	6.37	25.82	4758	10

#### FROTH FLOTATION CUMULATIVE WEIGHT % SIZE 0.15mm x 0.038mm TIME WT% CUM WT% Mois % Ash % CV (kcal/kg) FSI 15 SEC (P2) 1.7 5.45 10.20 6405 NSS 1.7 30 SEC (P3) 0.7 2.5 5.48 10.69 6320 0.0 60 SEC (P4) 0.7 3.2 11.52 5.57 6202 0.0 90 SEC (P5) 0.3 3.5 11.92 0.0 -Tails (T2) Tails (T1) 5.2 100.0 1.7 25.81 0.0 94.8 58.41 0.0

#### FINES

CUMULATIVE	WEIGHT % SIZE:	-0.038mm
Mois %	Ash %	CV (kcal/kg)
7.09	73.26	1013

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

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ASTM Standard of Analysis

> D4371 D3172 D4239

D720

Robb Trend Project

Coal Sample Results – 2012 Core Program

# McLeod Seam

Robb Trend Project

Coal Sample Results – 2012 Core Program

## RT-11-523C

## McLeod Seam

# Sample Horizon: 21.2 to 22.9



Preliminary Report 31-Jul-12 Final Report

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

CERTIFICATE OF ANALYSIS

 WORKORDER:
 RC12020620

 Hole:
 RT-11-523C

 Seam:
 McLeod

 Diameter:
 63.5mm

 Depth:
 21.2m to 22.9m

 Plies:
 Plies:

#### Raw Analysis

	Wt (g)	Mois%	Ash%	VM%	F.C.%	S%	CV (kcal/kg)	CI%	RD	ARD
Raw Coal	7945	7.70	23.20	32.61	36.49	0.30	5084	0.01	1.53	1.45

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

## <original signed by>

## ALS LABORATORY GROUP - COAL DIVISION

RICHMOND BC CANADA 11191 Coppersmith Place, Richmond BC V7A 5H1 Canada Tel: +1 604 241 3166 Fax: +1 604 241 3126 Email: adrian.reifenstein@alsglobal.com



CERTIFICATE OF AN	ALYSIS	Preliminary Report Final Report	31-Jul-12
Coal Valley Resource 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada	s Inc.		
WORKORDER:	RC12020620		
Hole: Seam: Diameter: Depth: Plies:	RT-11-523C McLeod 63.5mm 21.2m to 22.9m		

## SIZING AFTER 20 DROPS

Size (mm)	Weight (g)	Weight %
+50	0	0.0
-50	7945	100.0

We certify the analysis reported hereon was determined in accordance with the modified procedure for Drop Shatter Testing.

## <original signed by>



CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

WORKORDER: RC12020620

Hole:RT-11-523CSeam:McLeodDiameter:63.5mmDepth:21.2m to 22.9mPlies:

## DRY SIZING

Preliminary Report Final Report 31-Jul-12

ASTM Standard of Analysis

D4749 (split with RSD)

Size (mm)	Weight (g)	Weight %	Cum.Weight %
+31.5	0	0.0	0.0
-31.5+25	12	0.2	0.2
-25+16	245	3.1	3.2
-16+8	993	12.5	15.7
-8+4	1259	15.8	31.6
-4+2	1561	19.7	51.2
-2	3874	48.8	100.0

\*All losses allocated to -2mm fraction

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

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### CERTIFICATE OF ANALYSIS

Preliminary Report Final Report 31-Jul-12

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada

WORKORDER:RC12020620Hole:RT-11-523CSeam:McLeodDiameter:63.5mmDepth:21.2m to 22.9mPlies:Plies:

## WET SIZING

Size (mm)	Weight (g)	Weight %	Cum.Weight %
+31.5	0	0.0	0.0
+25	0	0.0	0.0
+16	85	1.4	1.4
+12.5	163	2.7	4.1
+8	470	7.9	12.0
+4	904	15.1	27.1
+2	1172	19.6	46.7
+1	1306	21.8	68.6
+0.5	636	10.6	79.2
+0.25	303	5.1	84.2
+0.15	131	2.2	86.4
+0.063	301	5.0	91.5
+0.038	142	2.4	93.8
-0.038	368	6.2	100.0

\*All losses allocated to -0.038mm fraction

Sample was attrited in maximum 50kg lots with 18 cubes and 150 L of water or equivalent mass for 5 min @ 20 rpm

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

<original signed by>

Brett Warden Laboratory Manager

## ASTM Standard of Analysis

D4749 (split with RSD)



31-Jul-12

Preliminary Report Final Report

#### CERTIFICATE OF ANALYSIS

Coal Valley Resources Inc. 1600 Oxford Tower 10235-101 Street Edmonton,AB T5J 3G1,Canada WORKORDER: RC12020620

Hole: RT-11-523C Seam: McLeod Diameter: 63.5mm Depth: 21.2m to 22.9m Plies:

#### ANALYSIS

#### FLOAT SINK ANALYSIS

### AIR-DRIED BASIS

ASTM Standard of Analysis

> D4371 D3172 D4239 D720

SIZE: +12.5mm						
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FSI
F1.35	46	18.8	7.11	8.08	6455	0.0
S1.35 - F1.40	59	23.8	6.94	11.64	6197	0.0
S1.40 - F1.45	50	20.3	6.74	18.46	5643	0.0
S1.45 - F1.50	24	9.6	6.57	21.70	5335	0.0
S1.50 - F1.55	12	4.7	5.29	25.10	4996	0.0
S1.55 - F1.60	9	3.6	4.75	26.14	4812	0.0
S1.60 - F1.70	28	11.4	3.89	27.02	4554	
S1.70 - F1.80	17	6.8	2.51	27.20	4296	128
S1 80	2	10	NSS	39 69	3262	0.0

SIZE: -12.5mm x +1.0mm						
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FS
F1.30	35	0.9	7.92	3.10	6799	0.0
S1.30 - F1.35	1315	34.3	8.43	4.06	6546	0.0
S1.35 - F1.40	952	24.8	7.77	8.68	6226	0.0
S1.40 - F1.45	590	15.4	7.50	14.44	5798	0.0
S1.45 - F1.50	343	9.0	7.34	19.00	5452	0.0
S1.50 - F1.55	180	4.7	7.22	23.54	5082	0.0
S1.55 - F1.60	104	2.7	6.73	28.58	4714	0.0
S1.60 - F1.70	116	3.0	5.86	33.78	4239	
S1.70 - F1.80	64	1.7	4.72	39.71	3682	
S1.80 - F1.90	35	0.9	4.63	49.52	2944	*
S1.90 - F2.00	30	0.8	3.80	54.89	2448	*
S2.00	69	1.8	4.09	73.12	1194	

SIZE: 1mm x 0.15mm						
S.G.	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FS
F1.30	6	0.6	6.11	3.36	6983	0.0
S1.30 - F1.35	261	24.7	8.23	2.91	6538	0.0
S1.35 - F1.40	171	16.2	7.67	6.50	6311	0.0
S1.40 - F1.45	88	8.3	7.41	11.53	5944	0.0
S1.45 - F1.50	65	6.1	7.30	15.07	5667	0.0
S1.50 - F1.55	60	5.6	7,48	17.89	5411	0.0
S1.55 - F1.60	40	3.8	7.41	23.61	4965	0.0
S1.60 - F1.70	41	3.8	6.94	31.89	4318	
S1.70 - F1.80	27	2.5	6.23	41.64	3577	
S1.80 - F1.90	21	1.9	5.37	50.13	2569	1.0
S1.90 - F2.00	22	2.1	5.11	57.70	2054	
S2.00	257	24.3	4.30	77.02	814	10

#### FROTH FLOTATION

SIZE: 0.15mm x 0.038mm						
TIME	WT(g)	WT%	Mois %	Ash %	GCV (kcal/kg)	FSI
15 SEC	1	0.2	NSS	NSS	NSS	NSS
30 SEC	1	0.2	NSS	NSS	NSS	NSS
60 SEC	1	0.2	NSS	NSS	NSS	NSS
90 SEC	0	0.1	NSS	NSS	NSS	NSS
Tails (T2)	15	4.2	5.54	54.26	2670	0.0
Tails (T1)	341	95.2	5.73	68.93	1490	0.0
PARAMETERS:			ND. TIME 90 S BC, DENVER		00 RPM	

#### FINES

SIZE: -0.038mm						
Ash %	GCV (kcal/kg)					
81.49	647					
	Ash %					

NSS = Not Sufficient Sample

We certify the analysis reported hereon was determined in accordance with the applicable ASTM Standard Methods of analysis of Coal.

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