

**Lodgepole Project  
1997 Field Season  
Report**

**For submission to Barry Ryan  
Coal Geologist  
BC Geological Survey Branch**

Report, Appendices A-E

by

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## Executive Summary

Fording Coal Ltd. acquired the Lodgepole coal licence group in September of 1996. A drilling and sampling program on the licences began in September 1997 and was completed in October 1997. The objective of the program was to determine if sufficient tonnage of a metallurgical grade coal was on the property.

A total of 10 drill sites were completed. Samples were taken from all coal bearing zones on half metre intervals. All holes were logged with down hole geophysical equipment. The half metre samples were composited to match the coal seam picks from the geophysical results. These composite samples were washed at 1.60 SG and analysed for coking coal properties.

During December 1997 and, March 1998, a 3D digital block model of the Lodgepole coal deposit was created along with appropriate maps and cross sections. The final model produced the following total geological, in-place raw resources, no limiting factors:

Table 1-1  
*Total available coal resource in 1998 Lodgepole model*

<i>Source of Estimate</i>	<i>Volume (BCM)</i>
<i>3D digital block model</i>	<i>82,540,000</i>

Of this, roughly 62,000,000 BCM of raw coal resource is available at a 9.5:1 bcm/bcm ratio and, 32,000,000 BCM of raw coal resource is available at a 6.4:1 bcm/bcm ratio.

The quality results show the coal is not metallurgical grade and would not be suitable as a supplementary coal in the blend with Coal Mountain Operations coal.

Fording Coal Ltd subsequently did not renew the coal licences in the Lodgepole group on the September 1998 renewal date.

## Introduction

### *Location of property and licences*

The Lodgepole Coal property is located approximately 30 kilometres south east of the town of Fernie in south east British Columbia (see Figure 1-1). It is also approximately 25 kilometres south south-west of Fording Coal Ltd's. Coal Mountain Operations.

The property consisted of 14 crown coal licences that were obtained by Fording Coal Ltd in September 1996. Total land area held by Fording Coal under these crown coal licences was 3,257 hectares.

Table 2-1  
*Crown Coal Licence Summary for Lodgepole*

Coal Licence Number	Area in hectares
350604	337
350605	337
350606	104
350607	337
350608	337
350609	337
350610	87
350611	337
350612	337
350613	337
350614	78
350615	135
350616	154
350617	3
Total	3,257

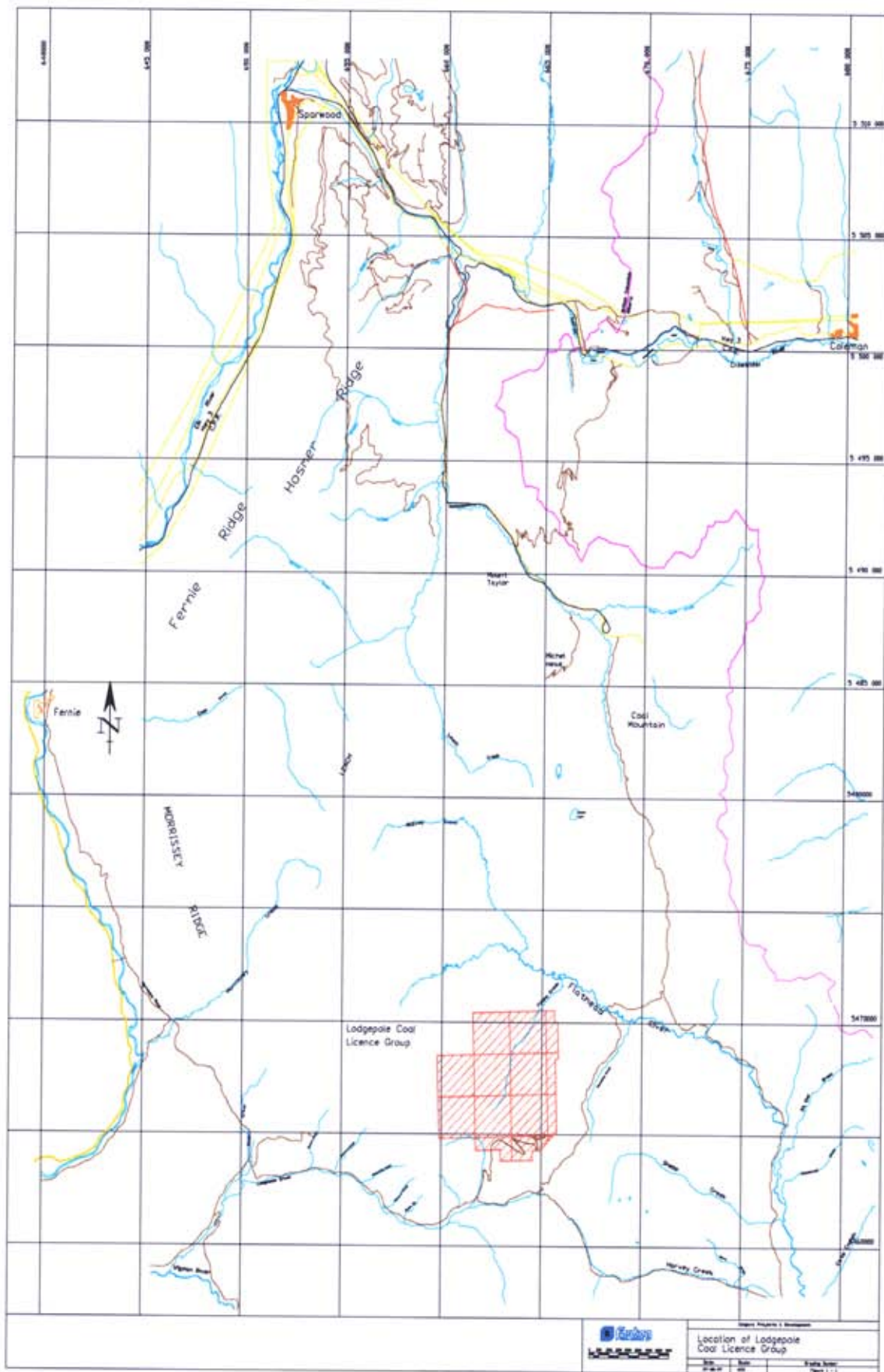


Figure 1-1

## **Field Work**

### ***Previous Exploration Programs***

- 1975 to 1977; 49 hand trenches and photogrametric mapping (Shell Canada).
- 1978; photogrametric mapping and 2 diamond drill holes (Shell Canada)
- 1979; mapping, 29 backhoe trenches, 1 DDH, 6 rotary holes (Shell Canada)
- 1980; mapping, 24 backhoe trenches, 13 DDH, 5 rotary holes, 4 adits (Shell)
- 1981; mapping (Shell Canada)
- In 1996, Fording performed a few days of reconnaissance mapping to confirm the known outcrops and verify or dispute the geological interpretation at the time.

### ***1997 Exploration Program***

- Site visit on August 16<sup>th</sup> with Fording staff and, officials from the British Columbia Ministries for Energy and Mines, Environment, Forestry. This allowed the BC officials to see what the site looked like before Fording started exploration work. Adit and drill sites left by the previous operator had deteriorated creating access and potential environmental liability problems that Fording wanted to demonstrate were there before our company's involvement.
- The drill sites for the 1997 program were spotted during September along with GPS surveying by a contract surveyor. Access road upgrading commenced September 25.
- The drill rig arrived on site October 1 and completed the drilling by October 12. Ten (10) reverse circulation holes were drilled totalling 800 metres.
- The drill crew returned October 14 to plug one drill hole with a rubber bladder (Bassani plug) along with bentonite and grout.
- All holes were geophysically logged through the drill pipe. Additional down hole geophysical logs were obtained where the hole stayed open after extraction of the drill pipe.
- Drill sites, access roads and stream crossings were reclaimed in the manner recommended by BC government staff during site visits and correspondences. All site work was completed by October 17.

Table 3-1  
Summary of 1997 Lodgepole Drill Holes

Hole ID number	Orientation	Date Started	Date Completed	Hole Depth
LP401	0.0°; -90°	Oct 2	Oct 2	66.0
LP402	0.0°; -90°	Oct 2	Oct 3	102.0
LP404	0.0°; -90°	Oct 9	Oct 10	102.0
LP405*	0.0°; -90°	Oct 9	Oct 9	1.0
LP406	0.0°; -90°	Oct 6	Oct 6	70.0
LP407	0.0°; -90°	Oct 6	Oct 7	84.0
LP408	0.0°; -90°	Oct 11	Oct 11	60.0
LP410	0.0°; -90°	Oct 4	Oct 4	102.0
LP412	0.0°; -90°	Oct 5	Oct 5	108.0
LP413	0.0°; -90°	Oct 7	Oct 8	108.0
			TOTAL METRES	803.0

\* - Hole abandoned after wrench stuck in hole and weather deteriorating

Table 3-2  
Summary of 1997 Lodgepole downhole geophysics

Hole ID Number	Deviation 9055A	Gamma-Neutron 9067A	Gamma-Density 9033A	Focused Beam Density (0012A)
LP401		Yes	Yes	
LP402		Yes	Yes	
LP404	Yes	Yes	Yes	Yes
LP405*				
LP406		Yes	Yes	
LP407	Yes	Yes	Yes	
LP408		Yes		Yes
LP410	Yes	Yes	Yes	Yes
LP412	Yes	Yes	Yes	
LP413		Yes	Yes	Yes



## 1997 Program Expenditures

Table 4-1  
Summary of Expenditures

<b>LODGEPOLE COAL LICENCES</b>	
<b>1997 QUALITY DRILLING PROGRAM</b>	
	November 1998
<b>ITEMS</b>	<b>Actual</b>
<b><u>I DRILLING</u></b>	
<b>Subtotal</b>	<b>\$ 56,981.38</b>
<b><u>II GEOPHYSICS</u></b>	
<b>Subtotal</b>	<b>\$ 10,324.16</b>
<b><u>III LAB ANALYSIS</u></b>	
<b>Subtotal</b>	<b>\$ 56,318.00</b>
<b><u>IV SURVEYING</u></b>	
<b>Subtotal</b>	<b>\$9,100.00</b>
<b><u>V SITE SUPPORT</u></b>	
<b>Subtotal</b>	<b>\$ 34,016.80</b>
<b><u>VI FIELD STAFF</u></b>	
<b>Subtotal</b>	<b>\$ 15,579.76</b>
<b>Calgary staff charge out)**</b>	<b>\$ 16,957.00</b>
<b>GRAND TOTAL*</b>	<b>\$199,277.10</b>
* additional expenditures for Lab Analysis and staff charges need to be added	
** not included in actual total	

## **Geological Interpretation**

### ***General Stratigraphy***

The coal seams on the Lodgepole property are from the Mist Mountain Formation, similar to the coals found at the other Fording Coal Ltd. properties in the Elk Valley and Fernie Basin. It appears the entire section is represented. Outcrops and drill intersections of Moose Mountain sandstone are found stratigraphically below the lowest coal seam and, Blairmore conglomerate is mapped on the ridge on the west end of the property stratigraphically above. Shell Canada geologists have described the upper most seams as belonging to the Elk Formation. These are generally non economic coal.

The coal seams form the east limb of a syncline whose axis runs northward along the west side of the property. The seams strike roughly N25°E and dip to the west at between 15° to 25°. The lower seams of the sequence outcrop along the east face of McLatchie Ridge where reasonably good mapping information is available.

### ***Methodology for 1998 interpretation***

The geophysical logs from the 1997 drilling program were reviewed and coal seam tops and bottoms were determined. Then, the geophysical logs from the previous Shell Canada drilling programs were re-picked based on the new seam stratigraphy established. The biggest change from previous interpretations was the addition of seam splits within the two thickest coal zones; the one seam series and the two seam series. Based on the geophysics and the half metre chip samples taken by the drillers, it was determined that 1 seam was made up of about 7 individual seams with mineable partings and 2 seam could be divided into 6 seams with mineable interburdens. These are the maximum number of splits. 1 seam zone on average is represented by 5 individual seams and, 2 seam zone is on average represented by 4 individual seams. The only other seam affected by the re-assigning of seam stratigraphy was the 7 seam series. It could be split into 3 separate seams from the one thicker seam interpreted by Shell.

All new seam picks were entered into the geology data base and imported to the Medsystem® project for Lodgepole. The *MineSight*® visualisation tool was used to produce coal seam bottom and top surfaces directly from the drill hole intersections and from subcrop and outcrop information gleaned from the Shell Canada reports

The seam surfaces were sliced to east west cross sections and imported to a digital cross section file. Additional interpretation was done to extend coal where holes were not drilled deep enough to hit the seams and, coal was extended a reasonable distance beyond the last point of information. The seam tops and bottoms were connected to produce closed polygons. Coal volumes were calculated from these sectional polygons and assigned to a 3D block model. New reserve and economic pit calculations were performed using the information in the 3D digital block model. (Note \*\* - this 3D model used a relatively coarse grid size as the data to build it is rather sparse. This must be kept in mind when utilizing the results for any specific conclusion about the coal deposit).

Only seam volume information was input into the 3D block digital model. No quality information about the coal was interpolated.

## Geological Reserve Estimates

Total available resource calculations were produced from a number of different sources to verify the numbers.

Table 6-1  
*Total available coal resource in 1998 Lodgepole models*

<b>Source of Estimate</b>	<b>Volumes (BCM)</b>
<b>Geology section volumes</b>	82,403,000
<b>3D digital model volumes</b>	82,540,000

From this, a few rudimentary strip ratio economic pits were calculated to try and match the reserves produced by Shell Canada in their 1981 report. The Shell report listed 54,000,000 BCM at 3.4:1 (BCM/BCM) geological in-place reserves<sup>1</sup>. These were based on a pit design which was not included in the report submitted to the British Columbia government.

Table 6-2  
*Rough estimate of reserves within strip ratio defined pits  
From Log15.3db model*

<b>Source of Estimate</b>	<b>Volumes coal (BCM)</b>	<b>Volumes waste (BCM)</b>	<b>Ratio bcm/bcm</b>
<b>8:1 gross ratio pit</b>	62,890,000	599,360,000	9.5:1
<b>4:1 gross ratio pit</b>	32,540,000	208,210,000	6.4:1

Please keep in mind that these resource numbers in Table 6-2 are quick calculations with very few parameters set. They were produced to try to emulate the Shell Canada numbers. It shows on a rough basis that with the current model interpretation, to produce the 54 million bcm's Shell Canada reported, the strip ratio would be more than double what Shell estimated.

If detailed economic pit work is to be performed, it would be recommended that the digital model be re-visited with an eye to establishing mineable coal limits and, introducing quality as a cut off to what is coal and what is carbonaceous rock.

<sup>1</sup> Lodgepole Project, Report on work done August to October 1980. Shell Canada Resources Ltd.; pp 30-32

## **Coal Quality Information**

### ***Summary of previous quality information***

Shell Canada did not summarize coal quality in any of their reports submitted to the BC government. They did report weighted average wash proximate data for a number of their drill holes. Physical and chemical analysis from the four adit samples were not reported. In general, Shell concluded that the oxidization of seams 1 and 2 have rendered them thermal coals<sup>2</sup>

### ***Sample gathering and analysis from 1997 program***

The drillers were instructed to take 0.5 metre samples in all coaly zones encountered. These samples were analysed for Moisture, Ash, Free Swelling Index. The results from the half metre samples were compared against the geophysical logs and, seam composites were created by combining the appropriate sequence of half metre samples. These composites underwent analysis for Proximate Analysis, Sulphur, Heating Value, Free Swelling Index and Light Transmittance. Each composite was floated at 1.60 SG with the float component undergoing the same suite of tests as the unwashed composite. The sink component was analysed for Ash and moisture. All this analysis work was performed by Elk Valley Environmental Services out of Sparwood, B.C.

Some selected wash samples were sent to the Fording Coal, Greenhills Operations laboratory for Dilatation and Fluidity tests.

All results are included in the Appendices.

### ***Quality results comments***

The results showed that the bulk of the coal resource in the one and two seam groups was not metallurgical coal. Free swelling index numbers were generally 1 or 2 in value. The other key component looked for was a consistent ash in washed coal below 10%. This generally was not the case. A summary table, included in the Appendices, of the 1997 wash results, non-weighted, show the coal is very similar in chemical analysis to Coal Mountain coal. An interesting analysis is the Light Transmittance percent which gives an estimate of the amount of humic acid in the coal. This is an indicator of oxidization. The values were good leading to the conclusion that the coal is not heavily oxidized as concluded by Shell Canada.

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<sup>2</sup> Lodgepole Project, Report on work done August to October 1980. Shell Canada Resources Ltd.; pg. 33

Physically, it was noted by the field geologist and the drillers that the coal can be extremely fine. The black dust plume that "billowed" out of the top of the cyclone on dry holes testified to the fineness of the coal. (Note – comments by Dr. Barry Ryan of the coal division of British Columbia Mines and Energy suggest that very fine coal does not behave as expected during some the standard coal tests, such as FSI). Also, the fineness of the material may lead to loss of good coal in the sampling process.

## Conclusions

The coal at Lodgepole is not a coking coal that can be used in the Coal Mountain Operations blend.

Chemically, the coal at Lodgepole is very similar to the average grade of coal produced at the Coal Mountain Operation. This is based on the arithmetic average of all the washability tests from the 1997 drilling. Physically the coal is probably finer in size fraction when compared to the Coal Mountain ROM feed to the plant.

Overall tonnage and stripping ratios appear to be less than what was predicted by Shell Canada in their May 1981 report on the Lodgepole property. This is mainly due to the addition of interburden splits within the one and two seam coal zones. Shell Canada had carried these zones as two thick seams.

If it is decided that the coal at Lodgepole could be a candidate to feed the Coal Mountain Operation process plant after the exhaustion of the Coal Mountain coal deposit, then, additional exploration and development drilling, mapping and sampling would be required. Also a thorough economic analysis will have to be performed on the coal deposit to determine if there is enough tonnage to warrant the development, operating, transportation and environmental costs associated with this project. Otherwise, the licences should be dropped and other Fernie basin coal deposits pursued.

## Appendix A      Volume Tables

### *Volumes from calculating all coal in the 3D digital block model*

	Seam	Volume 1x10 <sup>3</sup> bcm	Raw Tonnes 1x10 <sup>3</sup> @ 1.6SG
TOTALS	10	12036.0	19257.6
	11	52.5	84.0
	12	273.0	436.8
	13	18804.0	30086.4
	15	2016.0	3225.6
	17	13684.5	21895.2
	19	615.0	984.0
	20	8757.0	14011.2
	21	67.5	108.0
	22	3370.5	5392.8
	23	448.5	717.6
	25	223.5	357.6
	27	181.5	290.4
	30	5376.0	8601.6
	31	136.5	218.4
	38	705.0	1128.0
	40	316.5	506.4
	41	3.0	4.8
	50	5598.0	8956.8
	51	3.0	4.8
	52	186.0	297.6
	60	1290.0	2064.0
	70	3924.0	6278.4
	71	2055.0	3288.0
	72	717.0	1147.2
	80	109.5	175.2
	90	214.5	343.2
	100	540.0	864.0
	110	102.0	163.2
	111	94.5	151.2
	120	430.5	688.8
	121	210.0	336.0
	-----		
	SUMMARY	82540.5	132064.8



**Reserves from 8:1 pit, no limitations except ratio.**

LODGEPOLE 3D BLOCK Log15.3db

**\*\* RESERVES BY SEAM FOR LODGEPOLE 3DB CMPRES AT 8:1 MAX PIT \*\***

BENCH TOE	SEAM NAME	SEAM NO.	INSITU COAL (kBCM)	PARTINGS (kBCM)	RUN OF MINE (kTonne)	----- TOTAL	CLEAN COAL WASHED (kTonne)	----- UNWASHED
TOTALS	10	10	9175.5	.0	14680.8	14680.8	14680.8	.0
	11	11	16.5	.0	26.4	26.4	26.4	.0
	12	12	79.5	.0	127.2	127.2	127.2	.0
	13	13	14145.0	.0	22632.0	22632.0	22632.0	.0
	15	15	1690.5	.0	2704.8	2704.8	2704.8	.0
	17	17	10879.5	.0	17407.2	17407.2	17407.2	.0
	19	19	600.0	.0	960.0	960.0	960.0	.0
	20	20	6520.5	.0	10432.8	10432.8	10432.8	.0
	21	21	58.5	.0	93.6	93.6	93.6	.0
	22	22	2527.5	.0	4044.0	4044.0	4044.0	.0
	23	23	379.5	.0	607.2	607.2	607.2	.0
	25	25	181.5	.0	290.4	290.4	290.4	.0
	27	27	123.0	.0	196.8	196.8	196.8	.0
	30	30	4086.0	.0	6537.6	6537.6	6537.6	.0
	31	31	97.5	.0	156.0	156.0	156.0	.0
	38	38	345.0	.0	552.0	552.0	552.0	.0
	40	40	240.0	.0	384.0	384.0	384.0	.0
	50	50	4020.0	.0	6432.0	6432.0	6432.0	.0
	52	52	93.0	.0	148.8	148.8	148.8	.0
	60	60	973.5	.0	1557.6	1557.6	1557.6	.0
	70	70	3100.5	.0	4960.8	4960.8	4960.8	.0
	71	71	1762.5	.0	2820.0	2820.0	2820.0	.0
	72	72	370.5	.0	592.8	592.8	592.8	.0
	80	80	75.0	.0	120.0	120.0	120.0	.0
	90	90	186.0	.0	297.6	297.6	297.6	.0
	100	100	463.5	.0	741.6	741.6	741.6	.0
	110	110	79.5	.0	127.2	127.2	127.2	.0
	111	111	73.5	.0	117.6	117.6	117.6	.0
	120	120	373.5	.0	597.6	597.6	597.6	.0
	121	121	174.0	.0	278.4	278.4	278.4	.0
SUMMARY			62890.5	.0	100624.8	100624.8	100624.8	.0

WASTE: 599359.5 (kBCM) ROM S/R= 5.96

LODGEPOLE 3D BLOCK Log15.3db

**\*\* RESERVES BY BENCH FOR LODGEPOLE 3DB CMPRES AT 8:1 MAX PIT \*\***

BENCH TOE	INSITU COAL (kBCM)	PARTINGS (kBCM)	RUN OF MINE (kTonne)	----- TOTAL	CLEAN COAL WASHED (kTonne)	----- UNWASHED	WASTE (kBCM)	ROM S/R
2240.0	.0	.0	.0	.0	.0	.0	300.0	-1.00
2225.0	1.5	.0	2.4	2.4	2.4	.0	298.5	124.37
2210.0	12.0	.0	19.2	19.2	19.2	.0	588.0	30.62

2195.0	13.5	.0	21.6	21.6	21.6	.0	886.5	41.04
2180.0	22.5	.0	36.0	36.0	36.0	.0	1027.5	28.54
2165.0	84.0	.0	134.4	134.4	134.4	.0	1716.0	12.77
2150.0	114.0	.0	182.4	182.4	182.4	.0	2436.0	13.36
2135.0	214.5	.0	343.2	343.2	343.2	.0	3835.5	11.18
2120.0	351.0	.0	561.6	561.6	561.6	.0	5799.0	10.33
2105.0	450.0	.0	720.0	720.0	720.0	.0	7800.0	10.83
2090.0	675.0	.0	1080.0	1080.0	1080.0	.0	8625.0	7.99
2075.0	891.0	.0	1425.6	1425.6	1425.6	.0	11559.0	8.11
2060.0	949.5	.0	1519.2	1519.2	1519.2	.0	12100.5	7.97
2045.0	984.0	.0	1574.4	1574.4	1574.4	.0	13716.0	8.71
2030.0	1209.0	.0	1934.4	1934.4	1934.4	.0	15591.0	8.06
2015.0	1396.5	.0	2234.4	2234.4	2234.4	.0	16303.5	7.30
2000.0	1483.5	.0	2373.6	2373.6	2373.6	.0	17716.5	7.46
1985.0	1638.0	.0	2620.8	2620.8	2620.8	.0	18762.0	7.16
1970.0	1719.0	.0	2750.4	2750.4	2750.4	.0	19131.0	6.96
1955.0	1884.0	.0	3014.4	3014.4	3014.4	.0	21066.0	6.99
1940.0	2049.0	.0	3278.4	3278.4	3278.4	.0	22401.0	6.83
1925.0	2134.5	.0	3415.2	3415.2	3415.2	.0	23065.5	6.75
1910.0	2182.5	.0	3492.0	3492.0	3492.0	.0	23317.5	6.68
1895.0	2218.5	.0	3549.6	3549.6	3549.6	.0	23281.5	6.56
1880.0	2232.0	.0	3571.2	3571.2	3571.2	.0	23718.0	6.64
1865.0	2298.0	.0	3676.8	3676.8	3676.8	.0	23202.0	6.31
1850.0	2365.5	.0	3784.8	3784.8	3784.8	.0	23734.5	6.27
1835.0	2370.0	.0	3792.0	3792.0	3792.0	.0	22230.0	5.86
1820.0	2403.0	.0	3844.8	3844.8	3844.8	.0	22197.0	5.77
1805.0	2439.0	.0	3902.4	3902.4	3902.4	.0	22611.0	5.79
1790.0	2388.0	.0	3820.8	3820.8	3820.8	.0	21612.0	5.66
1775.0	2271.0	.0	3633.6	3633.6	3633.6	.0	20379.0	5.61
1760.0	2164.5	.0	3463.2	3463.2	3463.2	.0	18985.5	5.48
1745.0	2040.0	.0	3264.0	3264.0	3264.0	.0	17310.0	5.30
1730.0	1917.0	.0	3067.2	3067.2	3067.2	.0	15633.0	5.10
1715.0	1719.0	.0	2750.4	2750.4	2750.4	.0	13731.0	4.99
1700.0	1626.0	.0	2601.6	2601.6	2601.6	.0	12174.0	4.68
1685.0	1549.5	.0	2479.2	2479.2	2479.2	.0	11200.5	4.52
1670.0	1449.0	.0	2318.4	2318.4	2318.4	.0	10401.0	4.49
1655.0	1284.0	.0	2054.4	2054.4	2054.4	.0	8766.0	4.27
1640.0	1195.5	.0	1912.8	1912.8	1912.8	.0	7654.5	4.00
1625.0	1083.0	.0	1732.8	1732.8	1732.8	.0	6567.0	3.79
1610.0	1021.5	.0	1634.4	1634.4	1634.4	.0	6028.5	3.69
1595.0	861.0	.0	1377.6	1377.6	1377.6	.0	4539.0	3.29
1580.0	781.5	.0	1250.4	1250.4	1250.4	.0	3868.5	3.09
1565.0	664.5	.0	1063.2	1063.2	1063.2	.0	3085.5	2.90
1550.0	588.0	.0	940.8	940.8	940.8	.0	2862.0	3.04
1535.0	493.5	.0	789.6	789.6	789.6	.0	2056.5	2.60
1520.0	396.0	.0	633.6	633.6	633.6	.0	1404.0	2.22
1505.0	309.0	.0	494.4	494.4	494.4	.0	1191.0	2.41
1490.0	204.0	.0	326.4	326.4	326.4	.0	546.0	1.67
1475.0	100.5	.0	160.8	160.8	160.8	.0	349.5	2.17
-----								
TOTAL:	62890.5	.0	100624.8	100624.8	100624.8	.0	599359.5	5.96

**Reserves from 4:1 pit, no limitations except ratio.**

LODGEPOLE 3D BLOCK Log15.3db

\*\* RESERVES BY SEAM FOR LODGEPOLE 3DB CMPRES @ 4:1 PIT \*\*

BENCH TOE	SEAM NAME	SEAM NO.	INSITU COAL (kBCM)	PARTINGS (kBCM)	RUN OF MINE (kTonne)	----- TOTAL	CLEAN COAL WASHED UNWASHED (kTonne)	-----
TOTALS	10	10	5919.0	0.0	9470.4	9470.4	9470.4	0.0
	11	11	13.5	0.0	21.6	21.6	21.6	0.0
	12	12	37.5	0.0	60.0	60.0	60.0	0.0
	13	13	8260.5	0.0	13216.8	13216.8	13216.8	0.0
	15	15	1305.0	0.0	2088.0	2088.0	2088.0	0.0
	17	17	6853.5	0.0	10965.6	10965.6	10965.6	0.0
	19	19	552.0	0.0	883.2	883.2	883.2	0.0
	20	20	3100.5	0.0	4960.8	4960.8	4960.8	0.0
	21	21	30.0	0.0	48.0	48.0	48.0	0.0
	22	22	1422.0	0.0	2275.2	2275.2	2275.2	0.0
	23	23	289.5	0.0	463.2	463.2	463.2	0.0
	25	25	94.5	0.0	151.2	151.2	151.2	0.0
	27	27	57.0	0.0	91.2	91.2	91.2	0.0
	30	30	1237.5	0.0	1980.0	1980.0	1980.0	0.0
	31	31	45.0	0.0	72.0	72.0	72.0	0.0
	38	38	90.0	0.0	144.0	144.0	144.0	0.0
	40	40	76.5	0.0	122.4	122.4	122.4	0.0
	50	50	1564.5	0.0	2503.2	2503.2	2503.2	0.0
	52	52	36.0	0.0	57.6	57.6	57.6	0.0
	60	60	352.5	0.0	564.0	564.0	564.0	0.0
	70	70	733.5	0.0	1173.6	1173.6	1173.6	0.0
	71	71	349.5	0.0	559.2	559.2	559.2	0.0
	72	72	97.5	0.0	156.0	156.0	156.0	0.0
	80	80	9.0	0.0	14.4	14.4	14.4	0.0
	90	90	6.0	0.0	9.6	9.6	9.6	0.0
	100	100	6.0	0.0	9.6	9.6	9.6	0.0
	111	111	1.5	0.0	2.4	2.4	2.4	0.0
SUMMARY			32539.5	0.0	52063.2	52063.2	52063.2	0.0

WASTE: 208210.5 (kBCM) ROM S/R= 4.00

LODGEPOLE 3D BLOCK Log15.3db

\*\* RESERVES BY BENCH FOR LODGEPOLE 3DB CMPRES @ 4:1 PIT \*\*

BENCH TOE	INSITU COAL (kBCM)	PARTINGS (kBCM)	RUN OF MINE (kTonne)	----- TOTAL	CLEAN COAL WASHED UNWASHED (kTonne)	-----	WASTE (kBCM)	ROM S/R
2195.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0	-1.00
2180.0	4.5	0.0	7.2	7.2	7.2	0.0	145.5	20.21
2165.0	64.5	0.0	103.2	103.2	103.2	0.0	835.5	8.10
2150.0	85.5	0.0	136.8	136.8	136.8	0.0	1264.5	9.24
2135.0	175.5	0.0	280.8	280.8	280.8	0.0	2224.5	7.92
2120.0	297.0	0.0	475.2	475.2	475.2	0.0	3453.0	7.27
2105.0	393.0	0.0	628.8	628.8	628.8	0.0	4857.0	7.72
2090.0	609.0	0.0	974.4	974.4	974.4	0.0	5241.0	5.38

2075.0	792.0	0.0	1267.2	1267.2	1267.2	0.0	6858.0	5.41
2060.0	825.0	0.0	1320.0	1320.0	1320.0	0.0	6675.0	5.06
2045.0	808.5	0.0	1293.6	1293.6	1293.6	0.0	6841.5	5.29
2030.0	1029.0	0.0	1646.4	1646.4	1646.4	0.0	8121.0	4.93
2015.0	1218.0	0.0	1948.8	1948.8	1948.8	0.0	8232.0	4.22
2000.0	1251.0	0.0	2001.6	2001.6	2001.6	0.0	8649.0	4.32
1985.0	1318.5	0.0	2109.6	2109.6	2109.6	0.0	9031.5	4.28
1970.0	1390.5	0.0	2224.8	2224.8	2224.8	0.0	9409.5	4.23
1955.0	1516.5	0.0	2426.4	2426.4	2426.4	0.0	10183.5	4.20
1940.0	1563.0	0.0	2500.8	2500.8	2500.8	0.0	9837.0	3.93
1925.0	1552.5	0.0	2484.0	2484.0	2484.0	0.0	9397.5	3.78
1910.0	1506.0	0.0	2409.6	2409.6	2409.6	0.0	9144.0	3.79
1895.0	1476.0	0.0	2361.6	2361.6	2361.6	0.0	8274.0	3.50
1880.0	1326.0	0.0	2121.6	2121.6	2121.6	0.0	8124.0	3.83
1865.0	1309.5	0.0	2095.2	2095.2	2095.2	0.0	7540.5	3.60
1850.0	1321.5	0.0	2114.4	2114.4	2114.4	0.0	7828.5	3.70
1835.0	1185.0	0.0	1896.0	1896.0	1896.0	0.0	7065.0	3.73
1820.0	1222.5	0.0	1956.0	1956.0	1956.0	0.0	7327.5	3.75
1805.0	1225.5	0.0	1960.8	1960.8	1960.8	0.0	7174.5	3.66
1790.0	1176.0	0.0	1881.6	1881.6	1881.6	0.0	6774.0	3.60
1775.0	1078.5	0.0	1725.6	1725.6	1725.6	0.0	5821.5	3.37
1760.0	946.5	0.0	1514.4	1514.4	1514.4	0.0	4753.5	3.14
1745.0	784.5	0.0	1255.2	1255.2	1255.2	0.0	4015.5	3.20
1730.0	678.0	0.0	1084.8	1084.8	1084.8	0.0	3372.0	3.11
1715.0	580.5	0.0	928.8	928.8	928.8	0.0	2719.5	2.93
1700.0	493.5	0.0	789.6	789.6	789.6	0.0	2056.5	2.60
1685.0	432.0	0.0	691.2	691.2	691.2	0.0	1668.0	2.41
1670.0	304.5	0.0	487.2	487.2	487.2	0.0	1195.5	2.45
1655.0	193.5	0.0	309.6	309.6	309.6	0.0	706.5	2.28
1640.0	165.0	0.0	264.0	264.0	264.0	0.0	585.0	2.22
1625.0	109.5	0.0	175.2	175.2	175.2	0.0	340.5	1.94
1610.0	87.0	0.0	139.2	139.2	139.2	0.0	213.0	1.53
1595.0	45.0	0.0	72.0	72.0	72.0	0.0	105.0	1.46
<hr/>								
TOTAL:	32539.5	0.0	52063.2	52063.2	52063.2	0.0	208210.5	4.00

## **Appendix B**

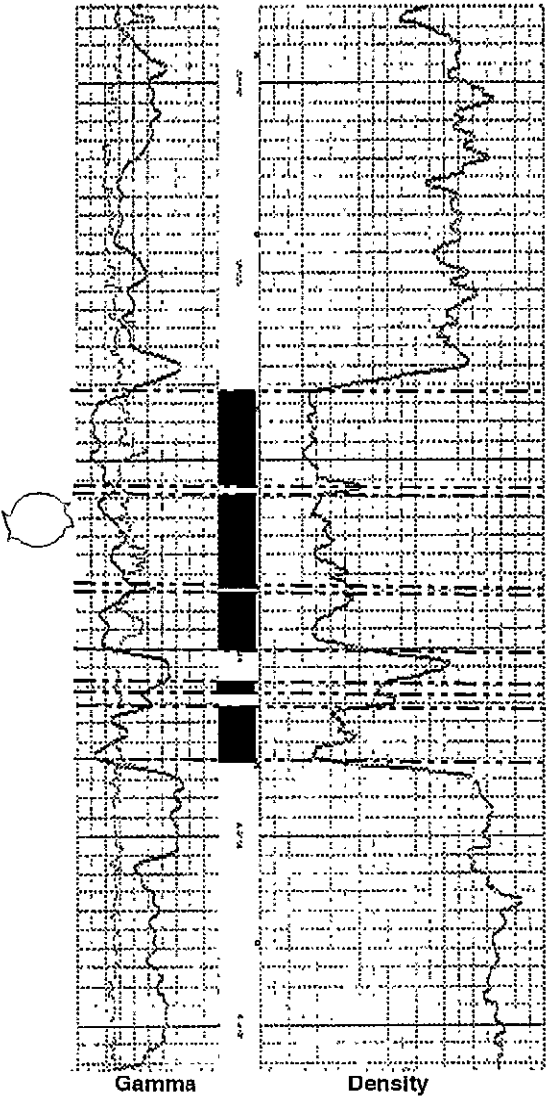
***Geophysical logs matched to quality results***

**HOLE # LP401**

**Lodepole 1997 Drilling Program  
Quality Results**

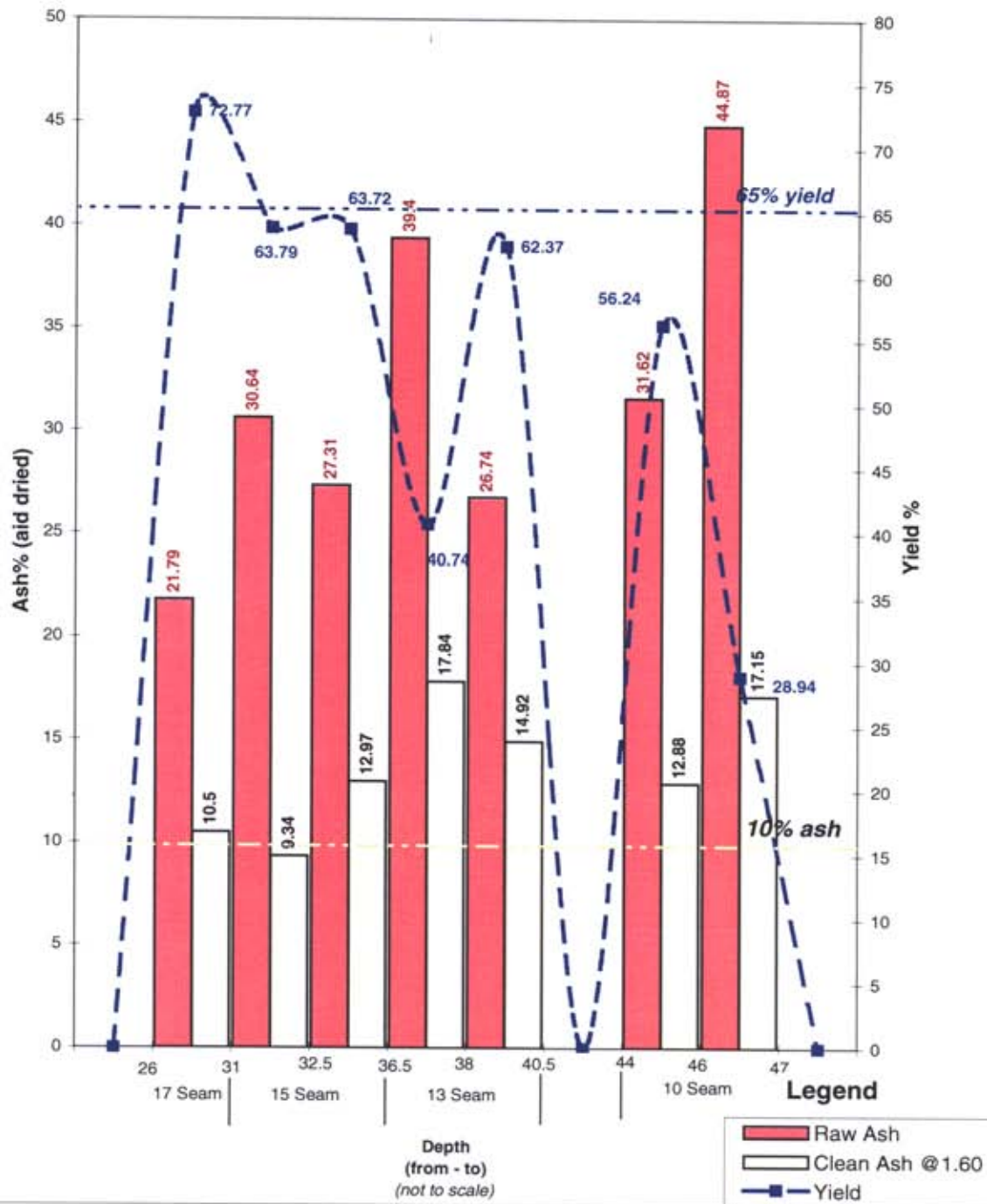


(one seam series)



Composite # Depth & Seam	Analysis Type	Yield %	Proximate				FSI	Other		Coking Tests	
			ASH %	RM %	VM %	FC %		LT %	Sulphur %	%dII	DDM (max)
#1 (26.0 - 31.0) 17 seam	Raw		21.78	0.71	17.96	59.54	1	97.6	0.46		
	Float 1.60	72.77	10.50	0.58	18.84	70.08	1	97.2	0.33	-23.0	0.6
#2 (31.0 - 32.5) 15 seam	Raw		30.64	0.57	18.50	50.29	1 1/2	99.0	0.36		
	Float 1.60	63.79	9.34	0.62	19.46	70.58	2	98.0	0.33	-18.0	0.7
#3 (32.5 - 36.5) 15 seam	Raw		27.31	0.54	18.40	53.75	1	98.0	0.33		
	Float 1.60	63.72	12.97	0.52	19.30	67.21	1	98.2	0.29	-17.0	0.5
#4 (36.5 - 38.0) 13 seam	Raw		39.40	0.62	17.43	42.55	1	98.0	0.36		
	Float 1.60	40.74	17.84	0.58	19.57	62.01	1 1/2	98.0	0.38	-23.0	0.9
#5 (38.0 - 40.5) 13 seam	Raw		26.74	0.56	18.87	53.83	1	99.4	0.34		
	Float 1.60	62.37	14.92	0.56	18.89	65.83	1	99.0	0.48	-8.0	0.3
#6 (44.0 - 46.0) 10 seam	Raw		31.62	0.57	17.49	50.32	1	99.2	0.46		
	Float 1.60	56.24	12.88	0.48	18.97	67.67	1	98.8	0.52	-24.0	0.6

Ash% and Yield vs Depth  
for Hole LP401  
(one seam series)

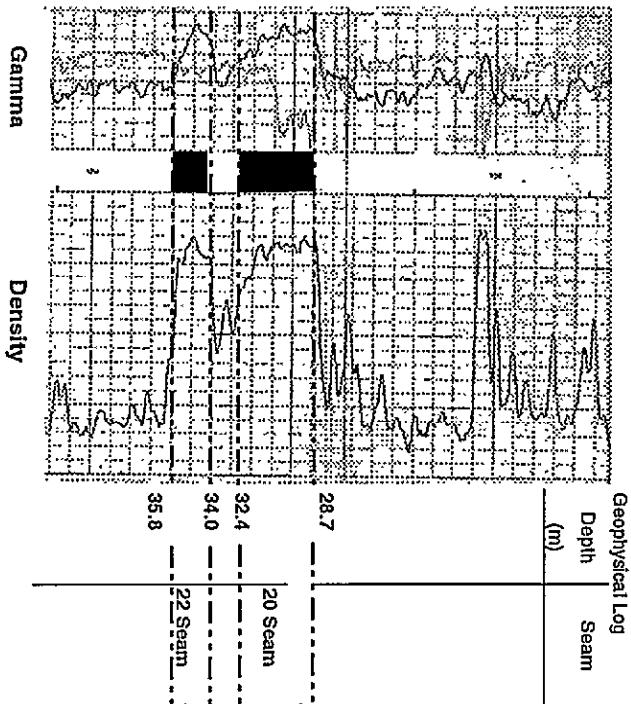


HOLE # LP402

Lodepole 1997 Drilling Program  
Quality Results



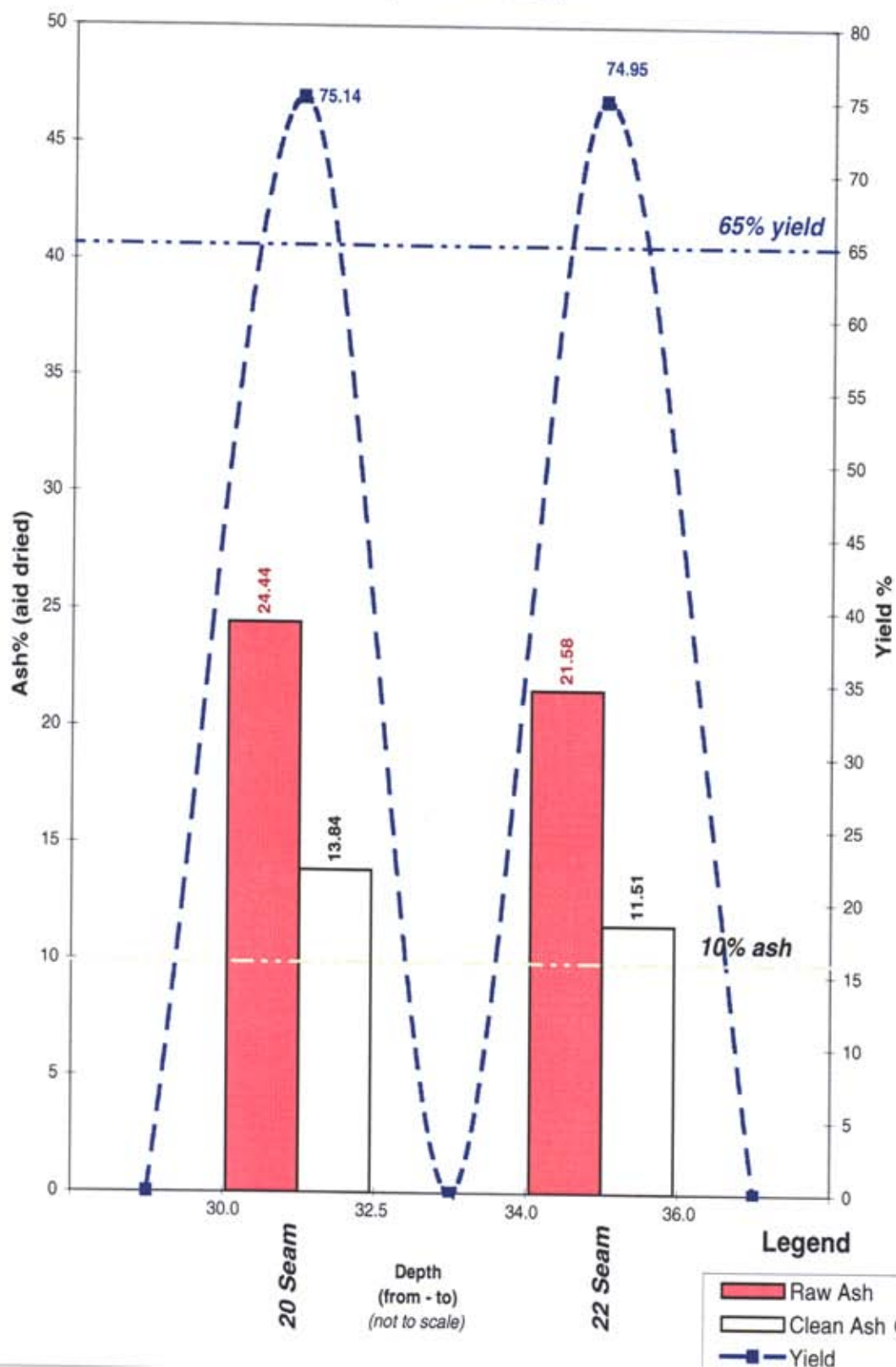
two seam series



Composite # Depth & Seam	Analysis Type	Yield %	Proximate				Other		Coking Tests	
			ASH %	RM %	VM %	FC %	FSI	LT %	Sulphur %	D1% DDM (max)
LP402 #1 (30.0 - 32.5) (20 seam)	Raw Float 1.60	75.14	24.44	0.58	17.45	57.59	1	99.6	0.50	21.0 0.4
LP402 #2 (34.0 - 36.0) (22 seam)	Raw Float 1.60	74.95	21.58	0.49	19.60	61.39	3	98.8	0.60	28.0 1.3



Ash% and Yield vs Depth  
for Hole LP402  
(two seam series)



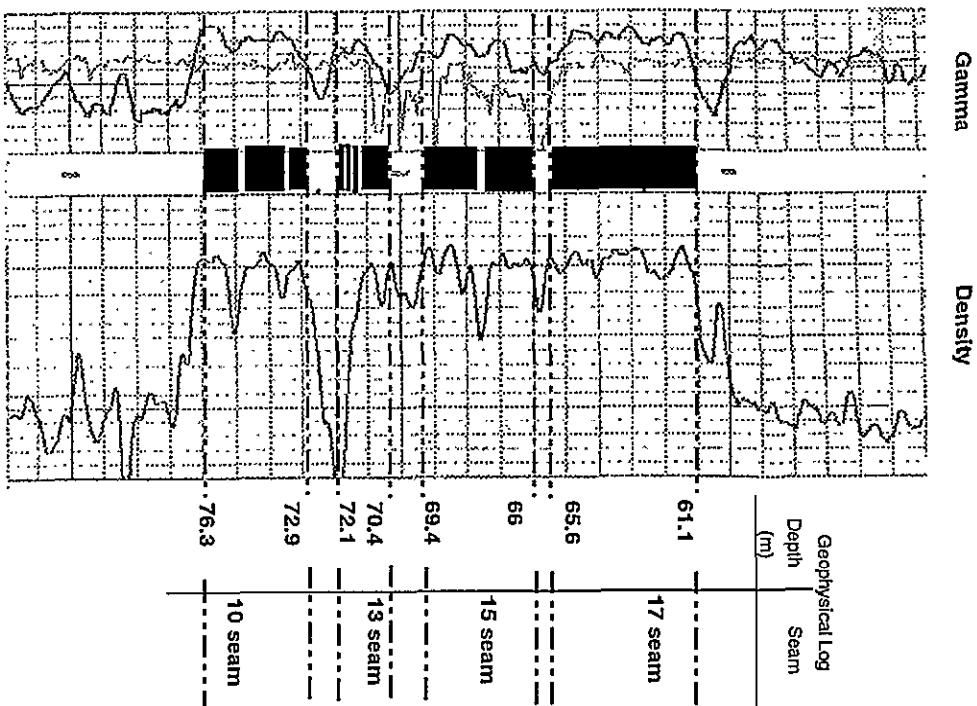
**HOLE # LP404**

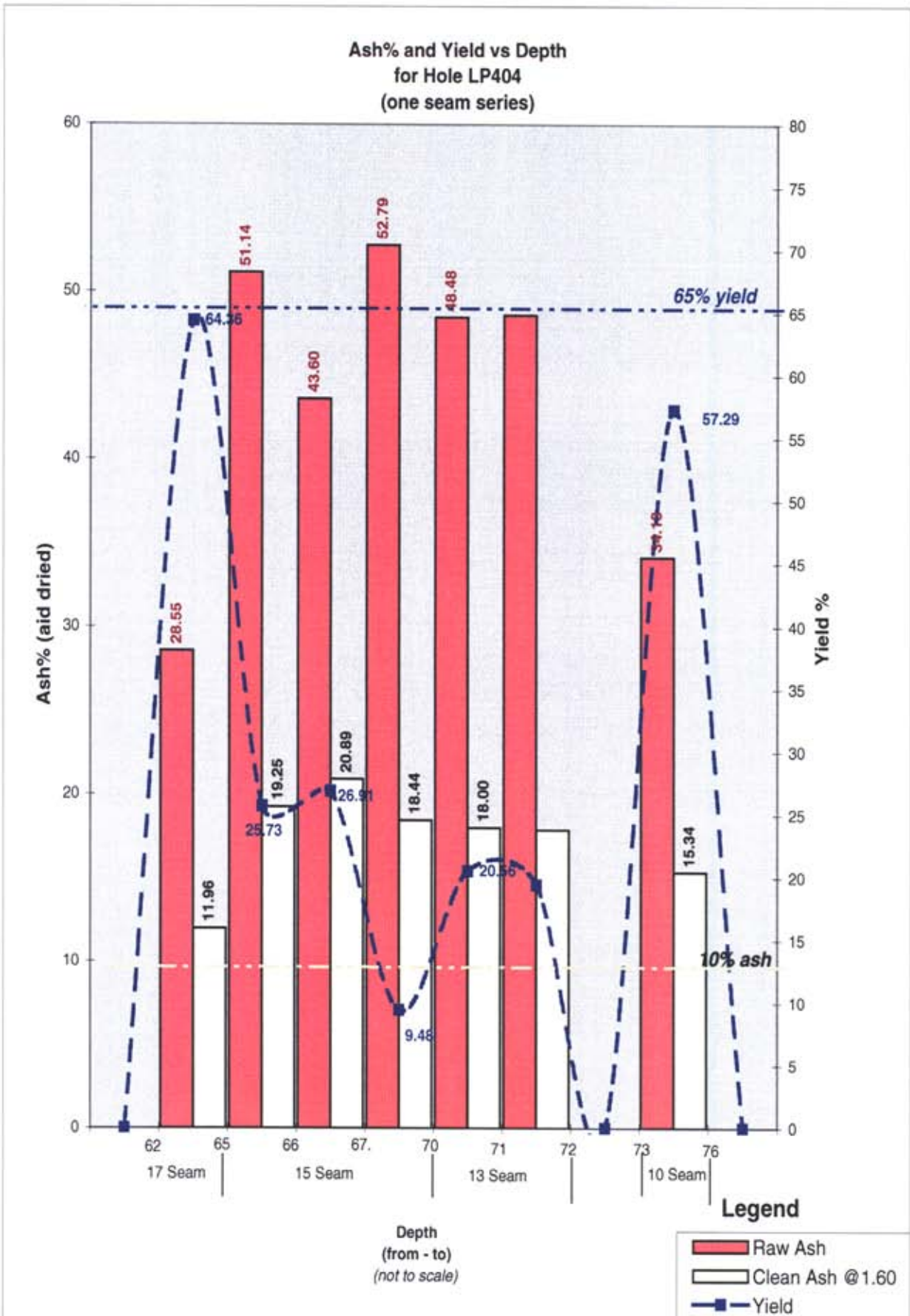
**Lodepole 1997 Drilling Program  
Quality Results**



**(one seam series)**

Composite # Depth & Seam	Analysis Type	Yield %	Proximate				FSI	Other		Coking Tests	
			ASH %	RM %	VM %	FC %		LT %	Sulphur %	%dill	DDM (max)
LP404 #1 (62.0 - 65.0) (17 seam)	Raw	64.96	28.55	0.61	17.27	53.57	1	98.0	0.29		
	Float 1.60		11.96	0.57	18.16	69.31	1 1/2	97.0	0.31	24.0	0.9
LP404 #2 (65.0 - 66.0)	Raw	25.73	51.14	0.62	15.18	33.16	1	99.2	0.18		
	Float 1.60		18.25	0.54	17.93	62.28	1 1/2	99.0	0.40	16.0	0.4
LP404 #3 (66.0 - 67.5) (15 seam)	Raw	25.91	49.60	0.47	15.21	40.72	1	99.0	0.26		
	Float 1.60		20.89	0.57	16.86	61.68	1	98.8	0.28	6.0	0.2
LP404 #4 (67.5 - 70.0) (15 seam)	Raw	9.48	52.79	0.56	15.06	31.60	1	99.6	0.12		
	Float 1.60		18.44	0.53	17.48	69.55	1	99.2	0.34	11.0	0.5
LP404 #5 (70.0 - 71.0) (13 seam)	Raw	20.66	48.48	0.46	15.03	36.03	1	99.4	0.21		
	Float 1.60		18.00	0.47	16.36	63.17	3 1/2	99.2	0.34	32.0	0.9
LP404 #6 (71.0 - 72.0) (13 seam)	Raw	19.45	48.61	0.32	21.95	29.12	1	99.0			
	Float 1.60		17.87	0.39	18.65	62.89	1	98.6		16.0	0.0
LP404 #7 (73.0 - 76.0) (10 seam)	Raw	57.29	34.13	0.33	18.25	47.29	1	96.8			
	Float 1.60		15.34	0.34	18.26	66.06	1	97.8		20.0	1.2





HOLE # LP406

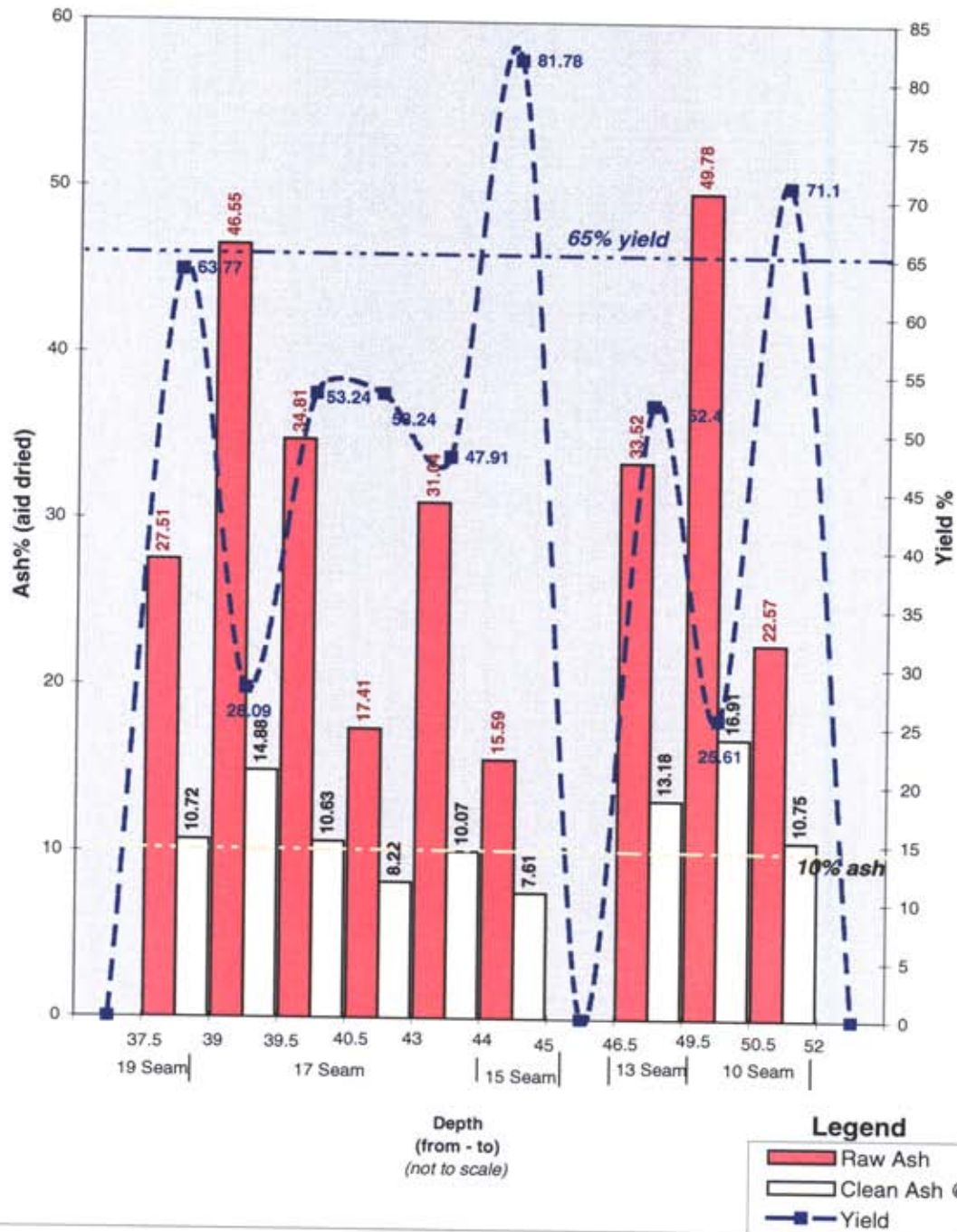
Lodepole 1997 Drilling Program  
Quality Results



(one seam series)

Composite # Depth & Seam	Analysis Type	Yield %	Proximate				Other		Coking Tests	
			ASH %	RM %	VM %	FC %	FSI	LT %	Sulphur %	%dfl DDM (max)
LP406 #1 (37.5 - 39.0) (19 seam)	Raw	63.77	27.51	0.48	17.03	54.98	1	97.4		
	Floet 1.60	63.77	10.72	0.60	18.55	70.13	1	98.2		13.0 0.5
LP406 #2 (39.0 - 39.5)	Raw	28.09	46.55	0.65	13.58	39.22	1	99.0		
	Floet 1.60	28.09	14.88	0.69	18.97	65.46	3 1/2	97.8		33 1.4
LP406 #3 (39.5 - 40.5) (17 seam)	Raw	53.24	34.81	0.40	15.48	48.31	1	96.5		
	Floet 1.60	53.24	10.63	0.64	18.20	70.53	1	97.8		10.0 0.3
LP406 #4 (40.5 - 43.0) (17 seam)	Raw	59.24	7.41	0.35	18.32	63.92	1	99.0		
	Floet 1.60	59.24	8.22	0.59	19.27	71.92	1	97.8		19.0 0.7
LP406 #5 (43.0 - 44.0) (17 seam)	Raw	47.91	31.04	0.56	21.54	48.76	1	96.8		
	Floet 1.60	47.91	10.07	0.80	19.87	69.26	1	98.0		18.0 0.6
LP406 #6 (44.0 - 45.0) (15 seam)	Raw	81.78	15.59	0.43	19.06	64.92	2	99.6		
	Floet 1.60	81.78	7.61	0.76	19.25	72.38	3 1/2	95.8		32.0 1.3
LP406 #7 (46.5 - 49.5) (13 seam)	Raw	52.4	33.52	0.42	19.06	47.00	1	98.8		
	Floet 1.60	52.4	13.18	0.56	19.28	66.98	1	99.0		24.0 0.9
LP406 #8 (49.5 - 50.5) (10 seam)	Raw	25.61	49.78	0.42	15.91	33.89	1	99.6		
	Floet 1.60	25.61	16.91	0.53	18.76	63.80	2	98.4		30.0 3.0
LP406 #9 (50.5 - 52.0) (10 seam)	Raw	71.1	22.57	0.37	19.32	57.74	1	97.4		
	Floet 1.60	71.1	10.75	0.55	19.04	69.66	1	97.4		14.0 0.5

Ash% and Yield vs Depth  
for Hole LP406  
(one seam series)



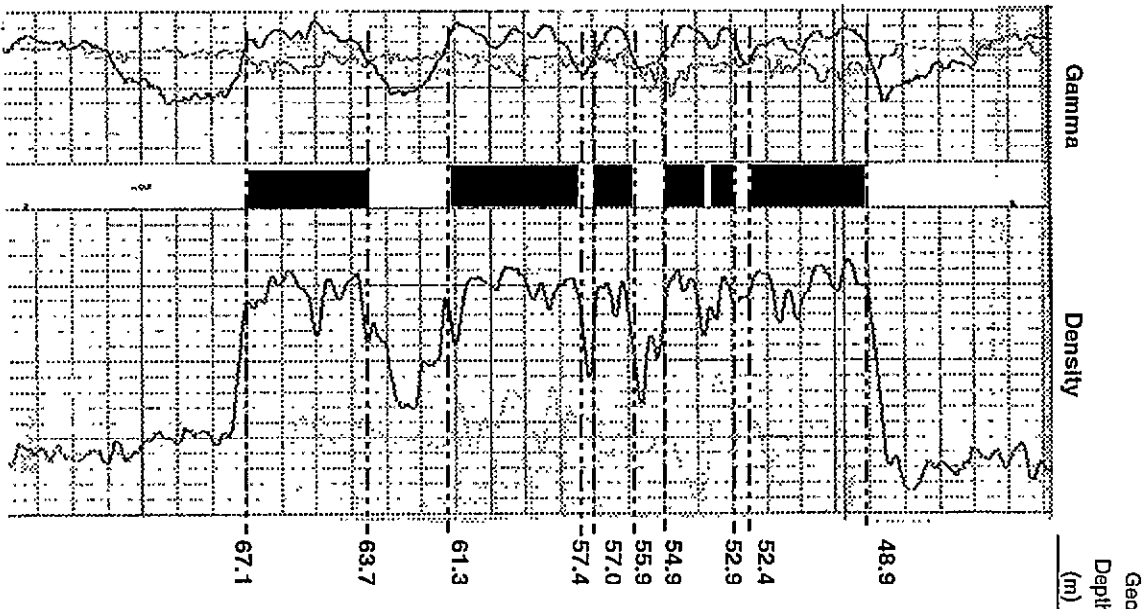




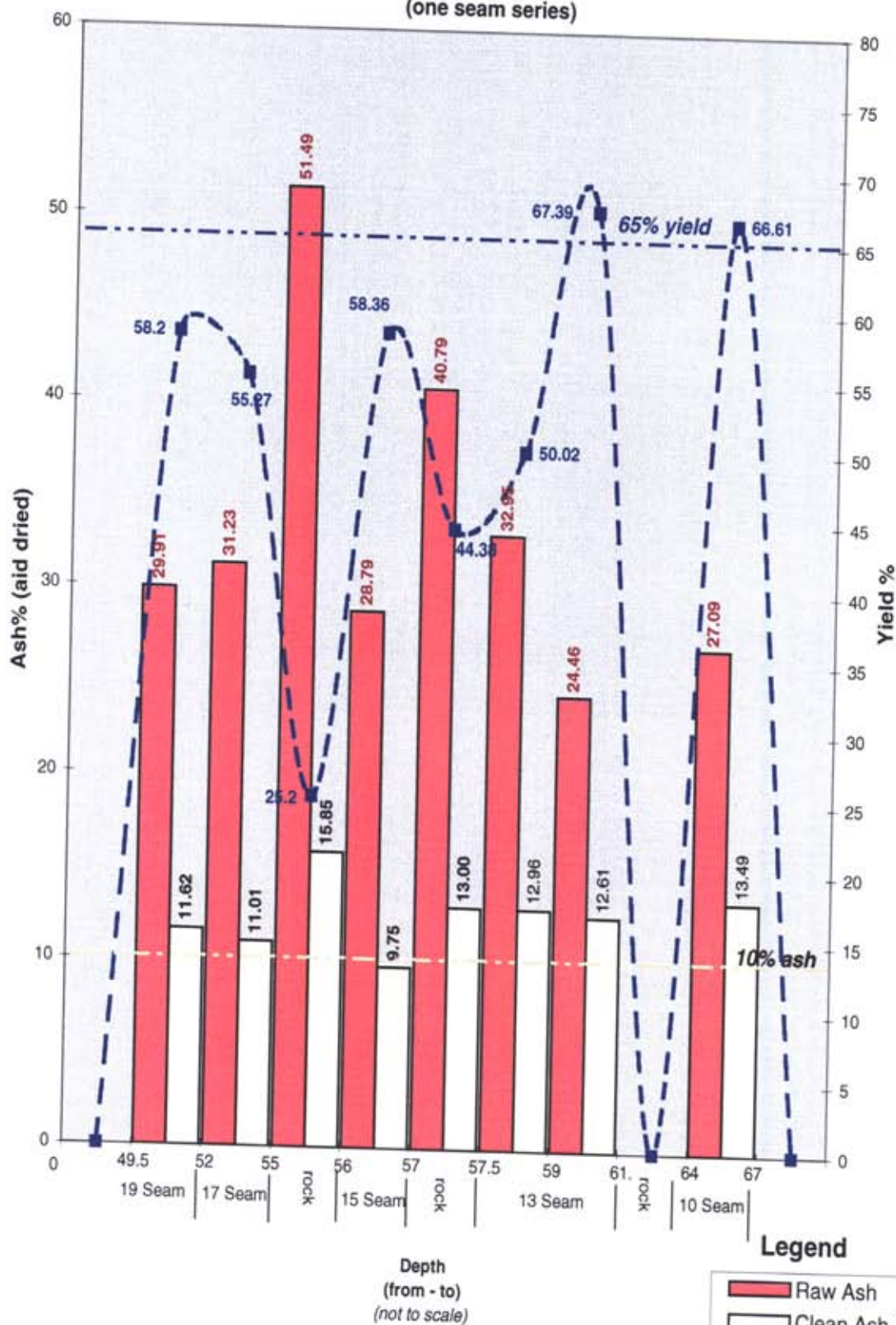
(one seam series)

Geophysical Log		Proximate												Other		Coking Tests						
Composite # Depth & Seam	Analysis Type	Yield %	ASH %	RM %	VM %	FC %	FSI	LT %	Sulphur %	%dli	DDM (max)											
LP407 #1 (49.5 - 52.5)	Raw		29.91	0.68	16.84	52.57	1	97.8	0.32													
	Float 1.60	58.2	11.62	0.85	18.14	69.39	1	98.0	0.38		10.0	0.5										
LP407 #2 (52.5 - 55.0)	Raw		31.23	0.67	17.16	50.94	1	98.6	0.26													
	Float 1.60	55.27	11.01	0.81	18.27	69.91	1 1/2	97.8	0.34		23.0	0.6										
LP407 #3 (55.0 - 56.0)	Raw		51.49	0.40	16.82	31.29	1	97.6	0.07													
	Float 1.60	25.2	15.85	0.57	18.90	64.68	1 1/2	98.6	0.41		19.0	1.1										
LP407 #4 (56.0 - 57.0)	Raw		28.79	0.58	20.89	49.74	1	98.2	0.22													
	Float 1.60	58.36	9.75	0.78	20.29	69.18	1 1/2	98.2	0.22		34.0	1.5										
LP407 #5 (57.0 - 57.5)	Raw		40.79	0.81	17.32	41.08	1	99.2	0.66													
	Float 1.60	44.38	13.00	0.48	20.60	65.92	3	98.8	0.39		33.0	0.0										
LP407 #6 (57.5 - 59.0)	Raw		32.95	0.51	19.03	47.51	1	98.2	0.55													
	Float 1.60	50.02	12.96	0.85	19.25	67.14	1	98.0	0.38		15.0	0.7										
LP407 #7 (59.0 - 61.5)	Raw		24.46	0.45	18.37	56.72	1	98.0	0.52													
	Float 1.60	67.39	12.61	0.84	18.80	67.95	1	97.6	0.35		14.0	0.5										
LP407 #8 (64.0 - 67.0)	Raw		27.09	0.55	18.52	53.84	1	97.2	0.50													
	Float 1.60	66.61	13.49	0.71	18.83	66.97	1	98.0	0.45		20.0	0.7										

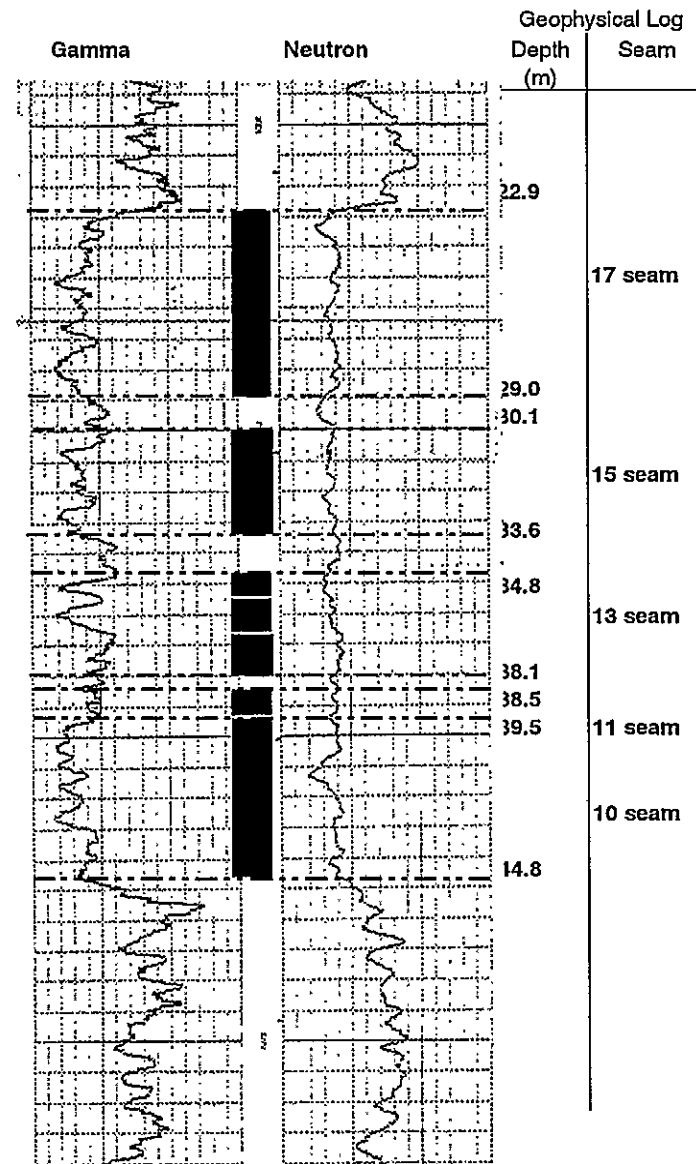
Gamma	Density	Geophysical Log Depth (m)	Seam
		48.9	19 seam
		52.4	19 seam
		52.9	19 seam
		54.9	17 seam
		55.9	17 seam
		57.0	15 seam
		57.4	15 seam
		61.3	13 seam
		63.7	13 seam
		67.1	10 seam



Ash% and Yield vs Depth  
for Hole LP407  
(one seam series)



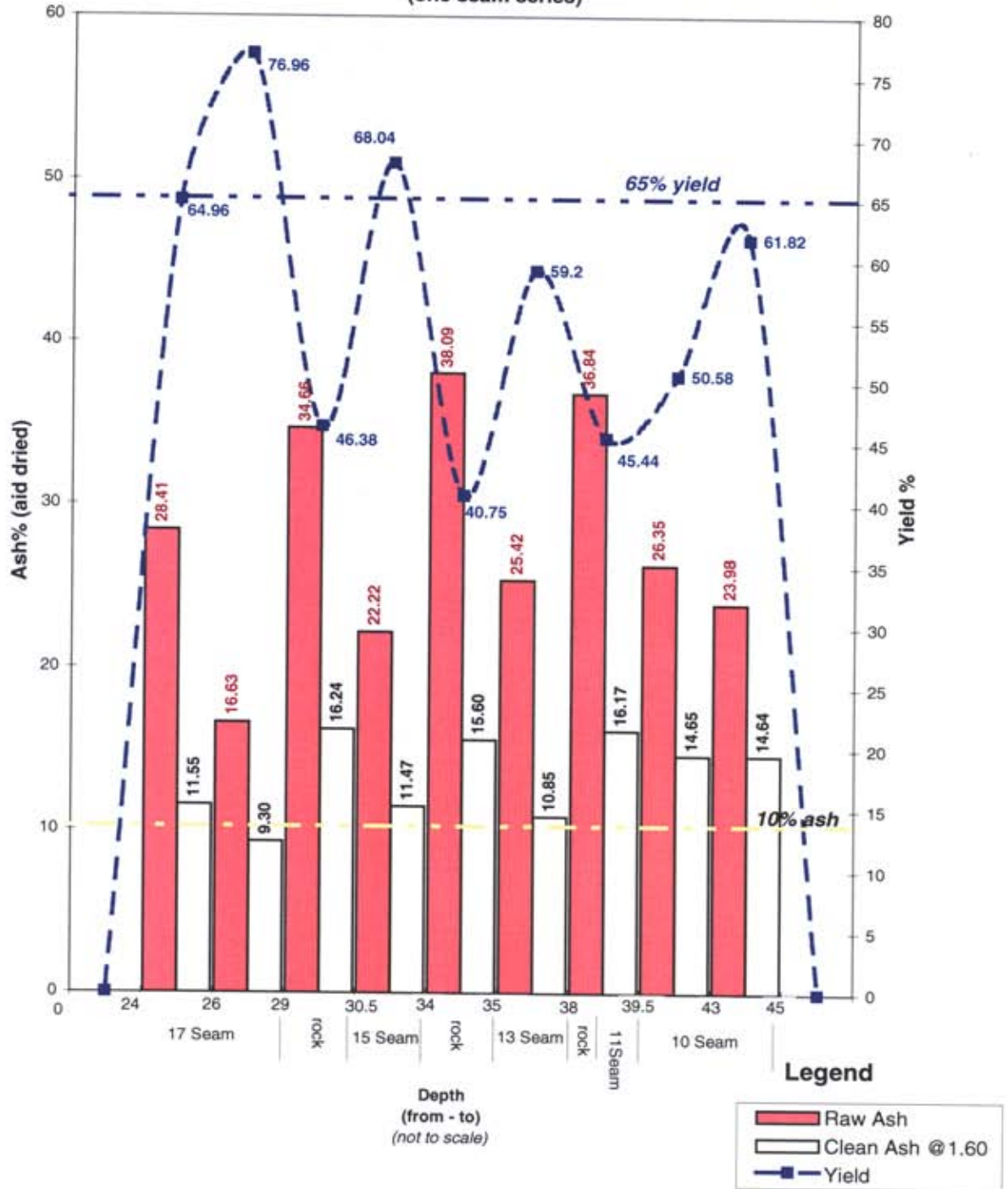
(one seam series)



Composite # Depth & Seam	Analysis Type	Yield %	Proximate				FSI	Other		Coking Tests	
			ASH %	RM %	VM %	FC %		LT %	Sulphur %	%dill	DDM (max)
LP408 #1 (24.0 - 26.0)	Raw		28.41	0.57	17.55	53.47	1	93.8	0.40		
	Float 1.60	64.96	11.55	0.56	18.15	69.74	1	95.0	0.46	-16.0	0.4
LP408 #2 (26.0 - 29.0)	Raw		16.63	0.51	18.95	62.91	2 1/2	91.6	0.35		
	Float 1.60	76.96	9.30	0.64	19.85	70.21	3 1/2	96.8	0.45	-30.0	1.3
LP408 #3 (29.0 - 30.5)	Raw		34.66	0.57	17.52	47.25	1	94.2	0.42		
	Float 1.60	46.38	16.24	0.57	18.29	64.90	1 1/2	97.6	0.44	-22.0	1.2
LP408 #4 (30.5 - 34.0)	Raw		22.22	0.49	19.68	57.61	1 1/2	93.2	0.25		
	Float 1.60	68.04	11.47	0.55	19.51	68.47	3	97.8	0.37	-28.0	1.3
LP408 #5 (34.0 - 35.0)	Raw		36.09	0.46	17.00	44.45	1	87.0	0.38		
	Float 1.60	40.75	15.60	0.50	18.07	65.83	1	97.8	0.39	-18.0	0.8
LP408 #6 (35.0 - 38.0)	Raw		25.42	0.43	18.23	55.92	1	96.2	0.31		
	Float 1.60	69.2	10.85	0.63	19.29	69.23	2 1/2	97.2	0.39	-24.0	1.9
LP408 #7 (38.0 - 39.5)	Raw		35.84	0.63	17.58	44.95	1	94.8	0.42		
	Float 1.60	45.44	16.17	0.64	18.76	64.49	1	95.4	0.37	-22.0	1.1
LP408 #8 (39.5 - 43.0)	Raw		26.35	0.56	21.18	51.91	1	97.0	0.38		
	Float 1.60	50.58	14.65	0.66	19.22	65.47	1	94.8	0.25	-7.0	0.3
LP408 #9 (43.0 - 45.0)	Raw		23.98	0.54	17.93	57.55	1	94.6	0.40		
	Float 1.60	61.82	14.64	0.58	18.24	66.54	1	94.6	0.40	-5.0	0.2

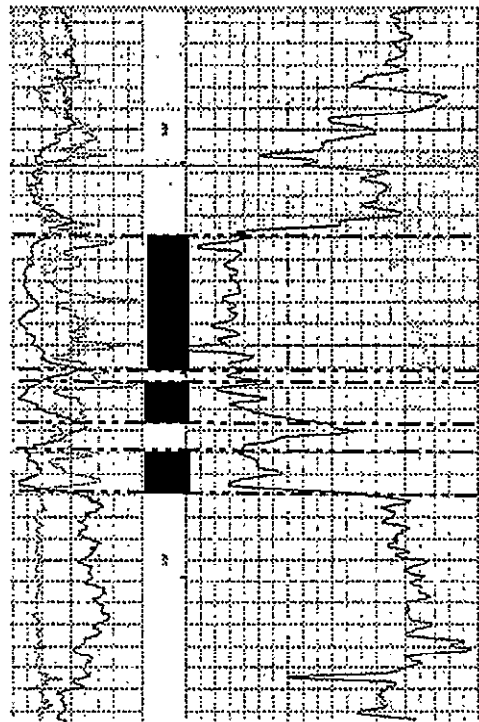


Ash% and Yield vs Depth  
for Hole LP408  
(one seam series)



# HOLE # LP410

Lodepole 1997 Drilling Program  
Quality Results



Gamma

Density

(one seam series)

Geophysical Log  
Depth  
(m)

Seam

54.6

17 seam

60.8

13 seam

61.3

63.2

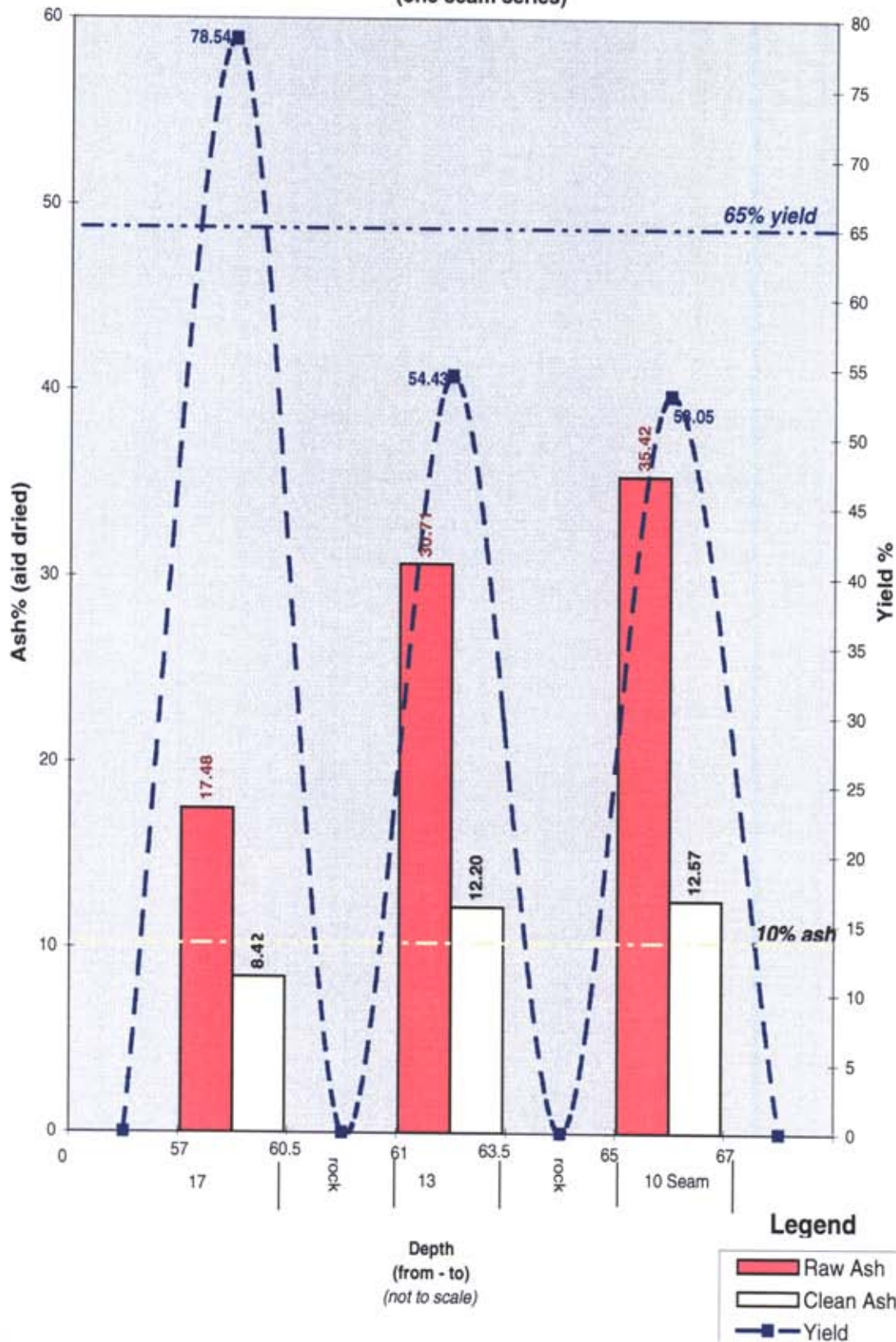
64.6

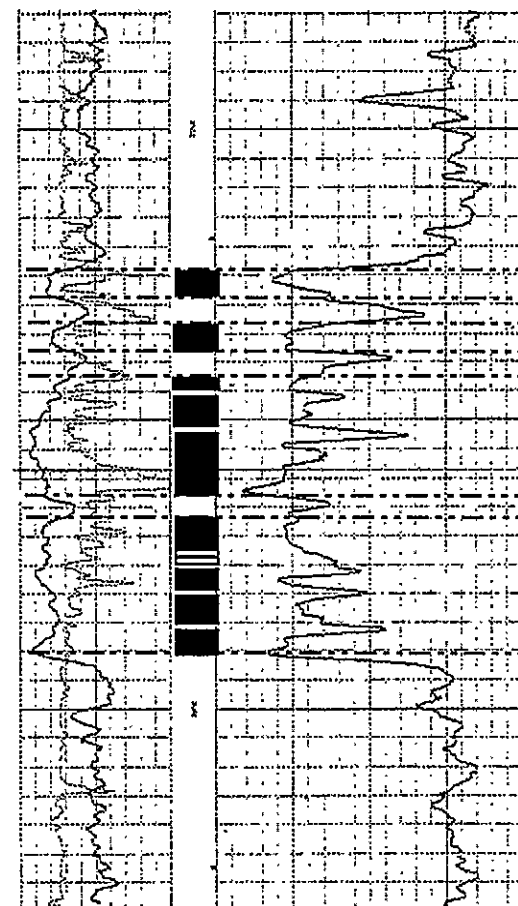
10 seam

66.7

			Proximate				Other			Coking Tests	
Composite # Depth & Seam	Analysis Type	Yield %	ASH %	RM %	VM %	FC %	FSI	LT %	Sulphur %	%dil	DDM
LP410 #1 (57.0 - 60.5)	Raw		17.48	0.57	18.64	63.31	2	91.4	0.63		
	Float 1.60	78.54	8.42	0.69	20.29	70.60	3	95.2	0.46	36.0	1.2
LP410 #2 (61.0 - 63.5)	Raw		30.71	0.49	18.02	50.78	1	97.0	0.61		
	Float 1.60	54.43	12.20	0.66	19.11	68.03	1	97.0	0.42	10.0	0.5
LP410 #3 (65.0 - 67.0)	Raw		35.42	0.46	17.30	46.82	1	96.8	0.48		
	Float 1.60	53.05	12.57	0.61	19.31	67.51	1	96.8	0.44	21.0	0.7

Ash% and Yield vs Depth  
for Hole LP410  
(one seam series)





HOLE # LP412

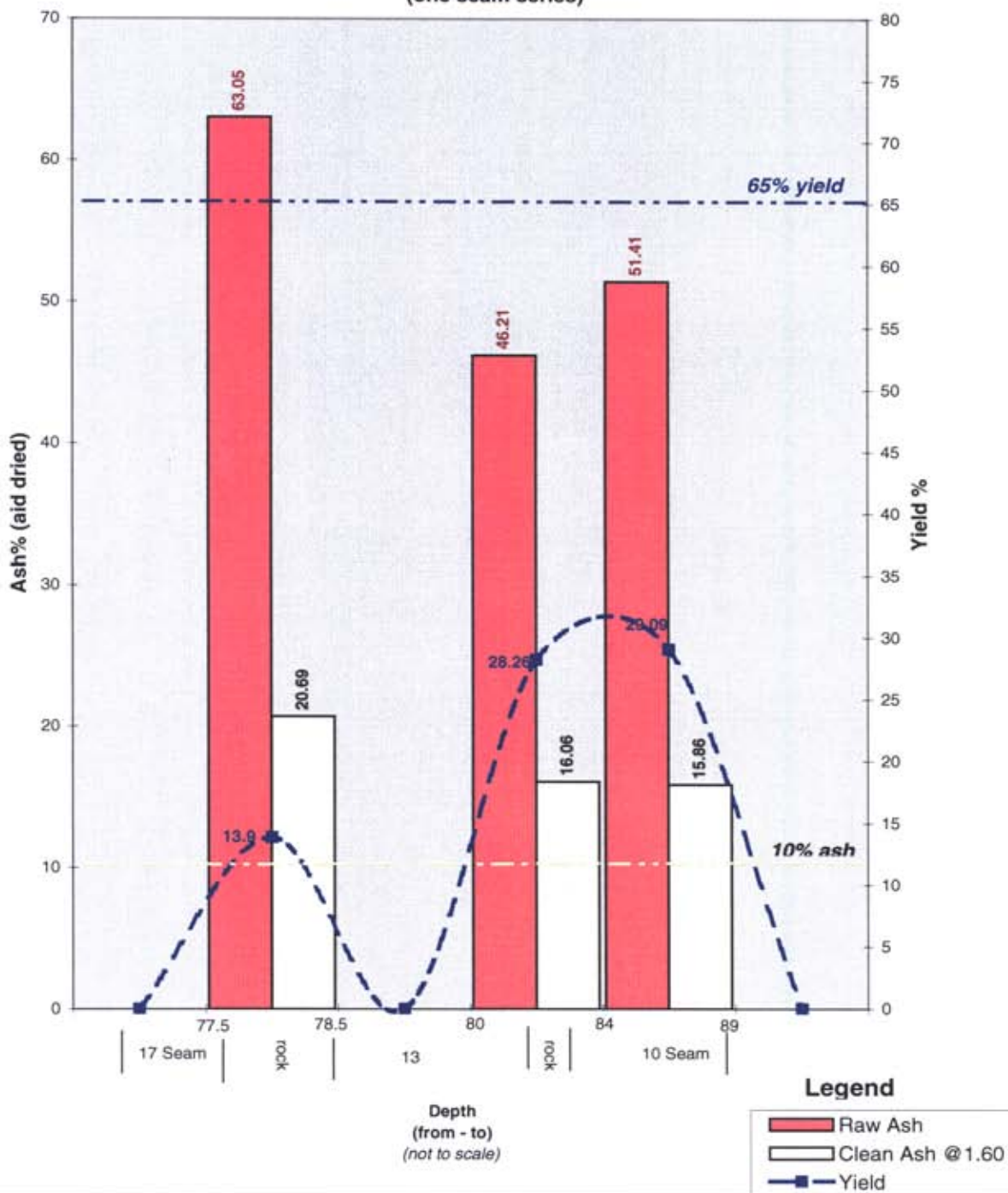
Lodepole 1997 Drilling Program  
Quality Results



(one seam series)

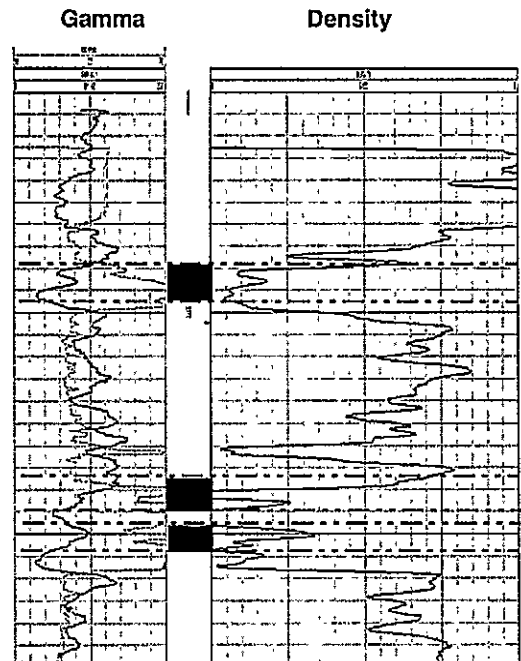
Composite # Depth & Seam	Analysis Type	Yield %	Proximate				FSI	Other		Coking Tests	
			ASH %	RM %	VM %	FC %		LT %	Sulphur %	%dil	DDM
LP412 #3 (77.5 - 78.5) (rock)	Raw		63.05	0.57	12.98	23.40	1/2	98.2	0.22		
	Float 1.60	13.9	20.69	0.64	18.17	60.50	1	98.6	0.45	14.0	0.6
LP412 #4 (80.0 - 84.0) (13 seam)	Raw		46.21	0.43	22.66	30.70	1	99.0	0.39		
	Float 1.60	28.26	16.06	0.49	18.11	65.34	1	99.0	0.46	9.0	0.3
LP412 #5 (84.0 - 89.0) (10 seam)	Raw		51.41	0.36	18.30	29.93	1	98.4	0.31		
	Float 1.60	29.09	15.86	0.43	17.91	65.80	1	97.2	0.45	7.0	0.2

Ash% and Yield vs Depth  
for Hole LP412  
(one seam series)



# HOLE # LP412

Lodepole 1997 Drilling Program  
Quality Results



Geophysical Log  
Depth  
(m)

8.1  
9.8  
18.2  
19.7  
20.3  
21.6

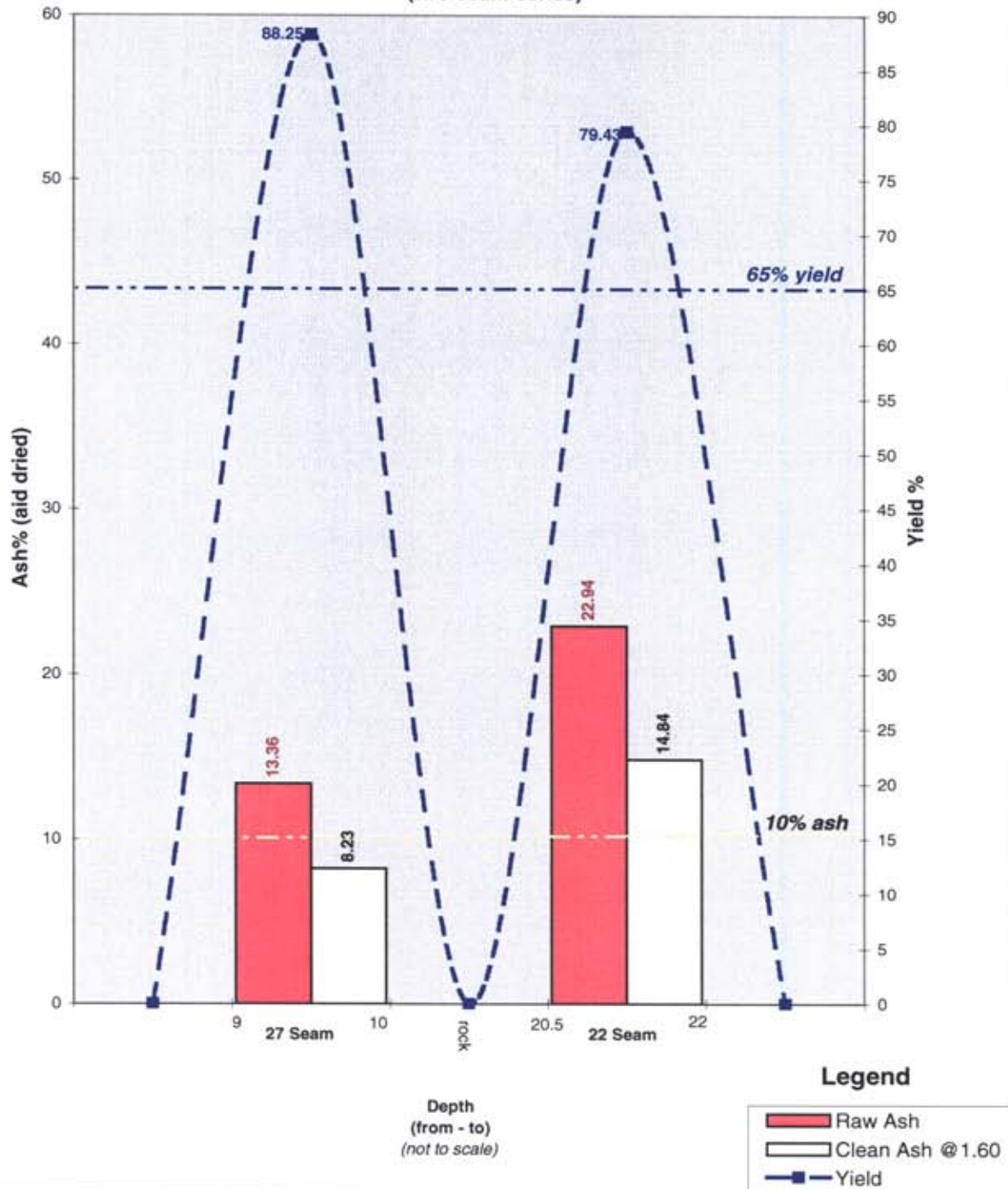
27 seam  
20 seam  
22 seam

(two seam series)

Composite # Depth & Seam	Analysis Type	Yield %	Proximate				FSI	Other		Coking Tests	
			ASH %	RM %	VM %	FC %		LT %	Sulphur %	%dil	DDM
LP412 #1 (9.0 - 10.0) (27 seam)	Raw		13.36	0.71	19.98	65.95	1 1/2	96.8	0.43		
	Float 1.60	88.25	8.23	0.75	20.56	70.46	2	96.8	0.43	-20.0	0.5
LP412 #2 (20.5 - 22.0) (22 seam)	Raw		22.94	0.88	17.67	58.51	0	97.4	0.22		
	Float 1.60	79.43	14.84	0.79	18.57	65.80	0	97.6	0.46	-1.0	0.0



Ash% and Yield vs Depth  
for Hole LP412  
\*\*(two seam series)\*\*



**HOLE # LP413**

 Lodepole 1997 Drilling Program  
 Quality Results


(one seam series)

 Geophysical Log  
 Depth  
 (m)

Seam

76.1

77.0

19 seam

77.4

17 seam

79.7

80.7

15 seam

81.9

83.3

13 seam

87.2

90.0

10 seam

94.3

Gamma

Neutron

 Composite #  
 Depth & Seam

 Analysis  
 Type

 Yield  
 %

Proximate

 ASH  
 %

 RM  
 %

 VM  
 %

 FC  
 %

FSI

Other

 LT  
 %

 Sulphur  
 %

Coking Tests

 %dill  
 DDM

 LP413 #5  
 (76.5 - 77.5)  
 (19 seam)

 Raw  
 Float 1:60

 26.47  
 62.31

 0.47  
 0.46

 16.31  
 17.54

 56.75  
 70.90

 1  
 1

 98.6  
 97.4

 0.47  
 0.54

 14.0  
 14.0

 0.5  
 0.5

 LP413 #6  
 (77.5 - 80.0)  
 (17 seam)

 Raw  
 Float 1:60

 27.25  
 62.95

 0.35  
 0.37

 17.79  
 18.62

 54.61  
 69.33

 1 1/2  
 3

 96.6  
 97.2

 0.39  
 0.50

 22.0  
 22.0

 1.7  
 1.7

 LP413 #7  
 (80.0 - 81.0)  
 (rock)

 Raw  
 Float 1:60

 50.40  
 24.68

 0.44  
 0.47

 13.56  
 16.38

 35.60  
 68.48

 1  
 1

 98.2  
 96.6

 0.15  
 0.47

 19.0  
 19.0

 0.8  
 0.8

 LP413 #8  
 (84.0 - 86.0)  
 (13 seam)

 Raw  
 Float 1:60

 35.65  
 46.05

 0.59  
 0.49

 17.05  
 17.20

 46.71  
 70.06

 1  
 1

 98.0  
 98.0

 0.42  
 0.38

 4.0  
 4.0

 0.0  
 0.0

 LP413 #9  
 (86.0 - 88.0)  
 (13 seam)

 Raw  
 Float 1:60

 55.41  
 17.48

 0.89  
 0.42

 13.02  
 17.21

 31.18  
 68.12

 1  
 1

 98.4  
 98.4

 0.12  
 0.39

 7.0  
 7.0

 0.0  
 0.0

 LP413 #10  
 (90.0 - 92.0)  
 (10 seam)

 Raw  
 Float 1:60

 39.86  
 39.27

 0.40  
 0.50

 19.85  
 17.64

 39.89  
 66.86

 1  
 1

 97.6  
 97.8

 0.45  
 0.44

 14.0  
 14.0

 0.0  
 0.0

 LP413 #11  
 (92.0 - 95.0)  
 (10 seam)

 Raw  
 Float 1:60

 43.02  
 20.9

 0.48  
 0.38

 14.51  
 17.74

 41.99  
 69.60

 1  
 1

 98.6  
 96.8

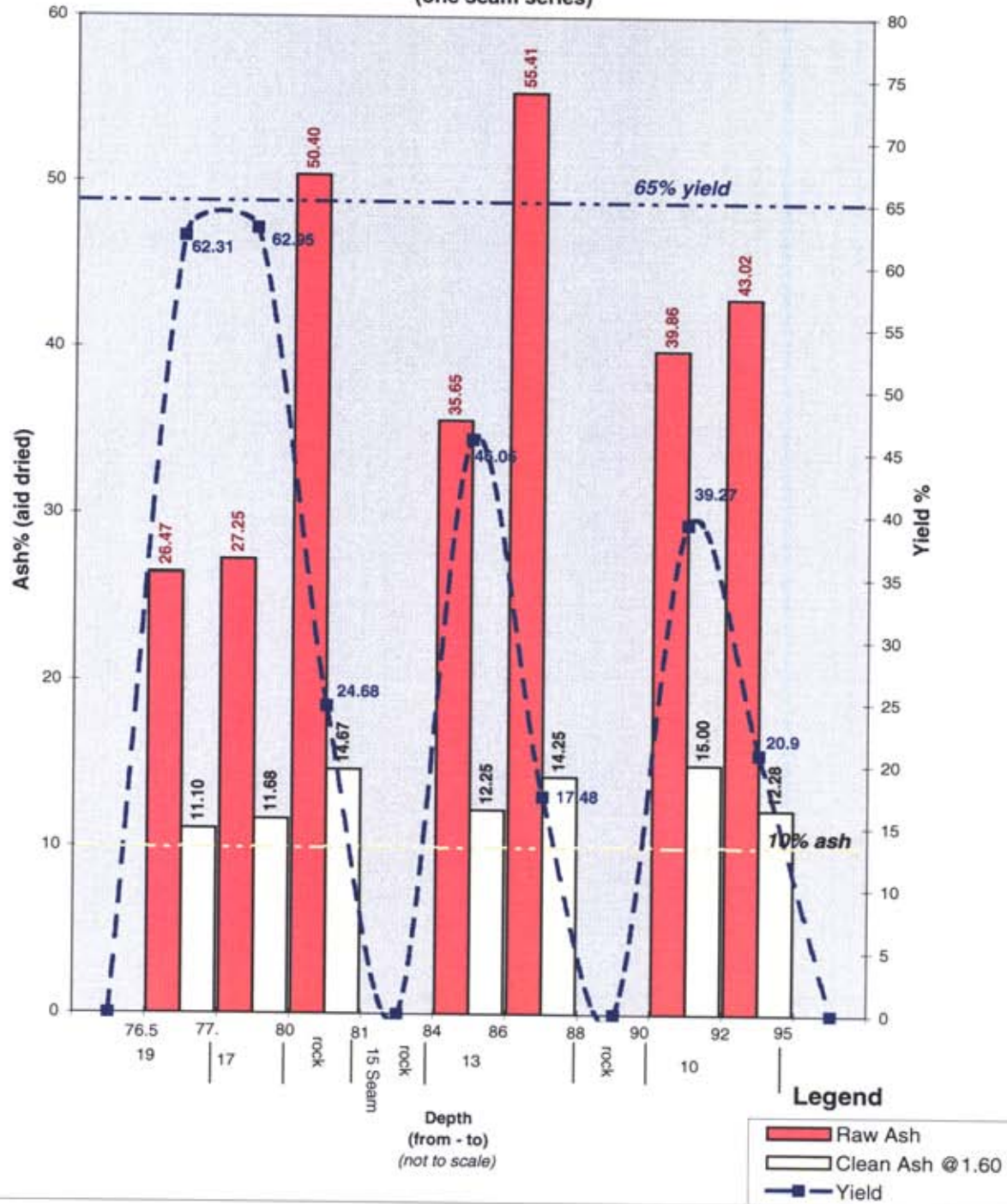
 0.34  
 0.50

 15.0  
 15.0

 0.7  
 0.7

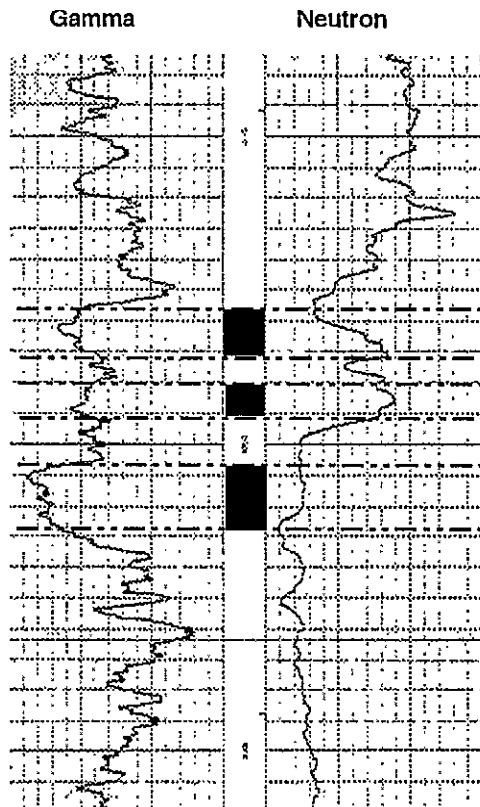


Ash% and Yield vs Depth  
for Hole LP413  
(one seam series)



# HOLE # LP413

Lodepole 1997 Drilling Program  
Quality Results



Geophysical Log  
Depth  
(m)

Seam

15.6

25 seam

17.1

18.0

23 seam

19.1

20.7

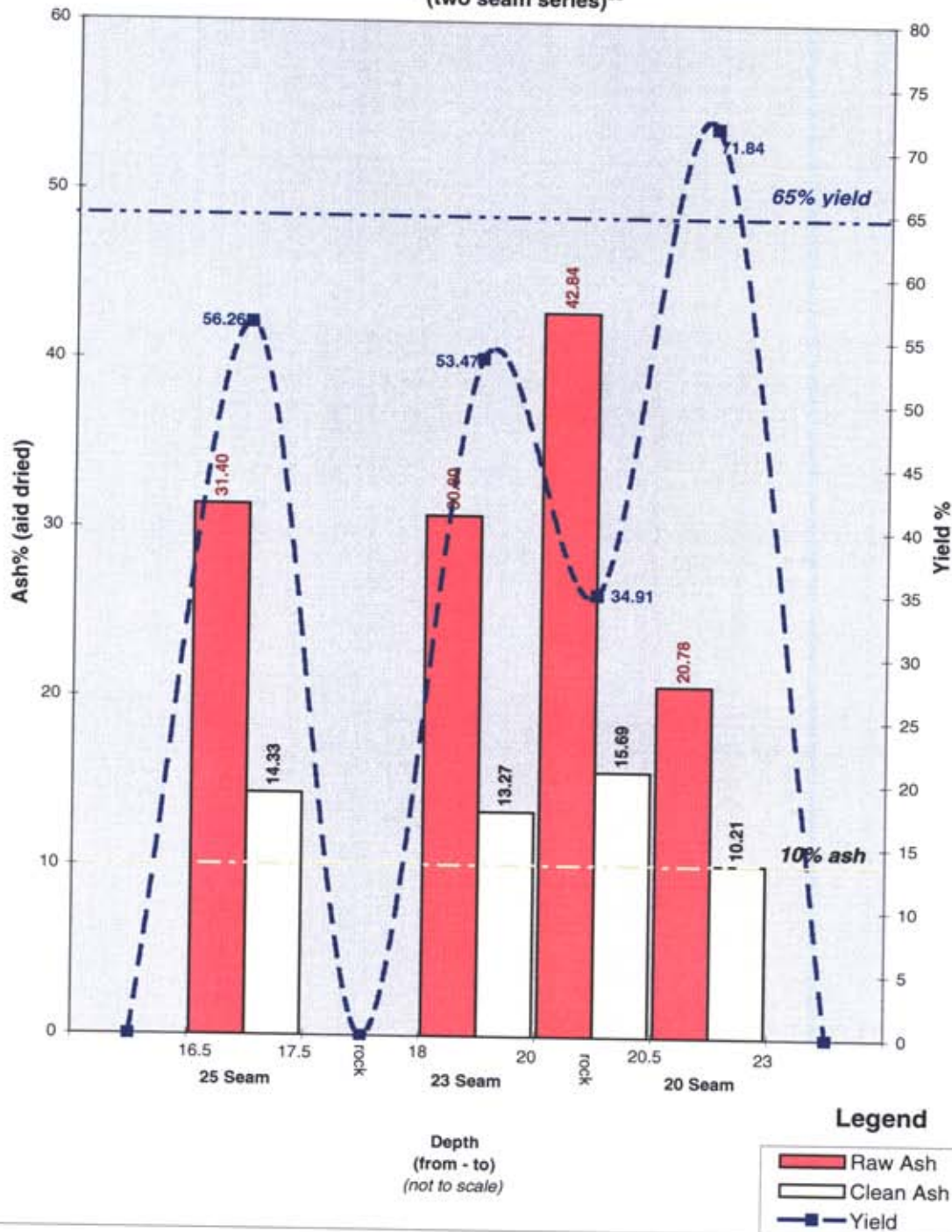
22.8

20 seam

**\*\* (two seam series) \*\***

Composite # Depth & Seam	Analysis Type	Yield %	Proximate				FSI	Other		Coking Tests	
			ASH %	RM %	VM %	FC %		LT %	Sulphur %	%dill	DDM
LP413 #1 (16.5 - 17.5) (25 seam)	Raw		31.40	1.05	15.60	51.95	1	80.8	0.59		
	Float 1.60	56.26	14.33	0.92	18.11	66.64	1	84.8	0.74	-5.0	0.2
LP413 #2 (18.0 - 20.0) (23 seam)	Raw		30.80	0.72	15.19	53.29	1 1/2	93.8	0.61		
	Float 1.60	53.47	13.27	0.70	17.87	68.16	3 1/2	94.0	0.67	-25.0	1.7
LP413 #3 (20.0 - 20.5) (rock)	Raw		42.84	0.72	14.84	41.60	2	97.2	0.38		
	Float 1.60	34.91	15.69	0.65	19.39	64.27	6	97.2	0.55	26.0	20.0
LP413 #4 (20.5 - 23.0) (20 seam)	Raw		20.78	0.58	19.47	59.17	2	98.0	0.50		
	Float 1.60	71.84	10.21	0.66	19.02	70.11	3 1/2	98.0	0.51	-26.0	1.6

Ash% and Yield vs Depth  
for Hole LP413  
\*\*(two seam series)\*\*



## Appendix C – Raw Quality Tables

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax # (403) 264-7339.								
Hole # LP-401: October 2, 1997.								
Tag Number	Sample Wt. (g.)	Moist. %	Interval, Meters	From	To	%ASH Dry Basis	%ASH (adb)	RM %
18251	7308	4.28	26.0	26.5	26.5	22.69	22.44	1.11 1
18252	7819	5.70	26.5	27.0	27.0	37.49	37.28	0.56 1
18253	8023	6.78	27.0	27.5	27.5	20.77	20.69	0.40 1
18254	9428	5.65	27.5	28.0	28.0	18.40	18.29	0.58 1
18255	7539	7.08	28.0	28.5	28.5	26.20	26.11	0.35 1
18256	6984	4.99	28.5	29.0	29.0	13.76	13.85	0.82 1
18257	7804	4.56	29.0	29.5	29.5	23.45	23.33	0.48 1
18258	6497	5.35	29.5	30.0	30.0	14.02	13.90	0.84 1
18259	8861	5.87	30.0	30.5	30.5	20.54	20.48	0.28 2
18260	5517	11.47	30.5	31.0	31.0	14.30	14.26	0.31 1
18261	5979	6.02	31.0	31.5	31.5	22.68	22.37	1.38 1
18262	8676	5.13	31.5	32.0	32.0	47.80	47.05	1.56 1
18263	11275	5.23	32.0	32.5	32.5	26.80	26.46	1.28 1 1/2
18264	9545	6.24	32.5	33.0	33.0	19.28	19.23	0.29 3
18265	10248	4.85	33.0	33.5	33.5	17.82	17.78	0.22 1 1/2
18266	10622	4.56	33.5	34.0	34.0	28.38	28.14	0.84 1
18267	9421	4.73	34.0	34.5	34.5	31.15	31.06	0.30 1
18268	9422	6.30	34.5	35.0	35.0	39.14	39.02	0.30 1
18269	8725	5.66	35.0	35.5	35.5	21.13	21.07	0.26 1
18270	12928	5.32	35.5	36.0	36.0	31.96	31.73	0.73 1 1/2
18271	8411	7.42	36.0	36.5	36.5	33.65	33.41	0.73 1
18272	8815	11.33	36.5	37.0	37.0	32.55	32.35	0.63 2 1/2
18273	14242	7.53	37.0	37.5	37.5	39.85	39.65	0.49 1
18274	10670	6.99	37.5	38.0	38.0	45.22	44.99	0.51 1
18275	9660	6.84	38.0	38.5	38.5	36.20	36.00	0.56 1
18276	10602	6.85	38.5	39.0	39.0	24.01	23.86	0.64 1
18277	8910	5.08	39.0	39.5	39.5	25.25	24.69	2.21 1
18278	8772	6.49	39.5	40.0	40.0	20.65	20.53	0.56 1
18279	7629	6.68	40.0	40.5	40.5	30.81	30.66	0.47 1
18280	10057	5.21	40.5	41.0	41.0	58.52	58.23	0.50 1
18281	20578	4.07	41.0	41.5	41.5	82.21	81.47	0.90 0
18282	18121	4.87	41.5	42.0	42.0	76.88	76.26	0.81 0
18283	9278	6.11	42.0	42.5	42.5	33.11	32.96	0.46 1
18284	5781	6.00	42.5	43.0	43.0	38.98	38.66	0.76 1
18285	9994	4.71	43.0	43.5	43.5	29.20	28.89	1.06 1
18286	10421	5.75	43.5	44.0	44.0	22.03	21.91	0.52 1
18287	11065	5.69	44.0	44.5	44.5	48.97	48.82	0.30 1
18288	9710	6.69	44.5	45.0	45.0	41.76	41.61	0.35 1
18289	22786	4.30	45.0	45.5	45.5	82.66	82.12	0.66 0
18290	14493	3.99	45.5	46.0	46.0	81.55	80.74	0.99 0

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax # (403) 264 - 7339								
Hole # LP-402: October 3, 1997								
Tag Number	Dry Wt. (g.)	Moist. %	Interval From	Meters To	%ASH Dry Basis	%ASH (adb)	RM %	FSI
18291	9818	5.24	30.0	30.5	39.33	39.14	0.50	1
18292	4858	26.76	30.5	31.0	24.34	24.13	0.85	3 1/2
18293	9058	8.04	31.0	31.5	13.89	13.83	0.42	1
18294	8359	7.30	31.5	32.0	12.48	12.44	0.35	1
18295	6791	6.66	32.0	32.5	27.75	27.63	0.40	2
18296	12072	5.72	32.5	33.0	45.14	44.94	0.45	1 1/2
18297	12472	5.10	33.0	33.5	56.43	56.19	0.43	1
18298	15934	4.55	33.5	34.0	63.44	63.19	0.39	1
18299	8523	4.74	34.0	34.5	28.61	28.51	0.35	1 1/2
18300	8533	5.51	34.5	35.0	16.62	16.55	0.40	1 1/2
18301	8212	5.06	35.0	35.5	9.15	9.11	0.35	7 1/2
18302	11864	5.16	35.5	36.0	32.43	32.31	0.35	3
Determinations:					12	12	12	12

23.5

21.6

LODGE\_97.XLS  
10/6/97

Page 1

LP - 402

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax # (403) 265-8794.								
Hole # LP-404: October 10, 1997.								
Tag	Dry	Moist.	Interval	Meters	%ASH	%ASH	Residual	FSI
Number	Wt. (g.)	%	From	To	Dry Basis	(adb)	Moisture	
18751	6775	15.84	62.0	62.5	35.39	35.22	0.47	1
18752	8467	26.50	62.5	63.0	33.65	33.50	0.44	1
18753	9104	27.78	63.0	63.5	19.58	19.49	0.47	1
18754	7413	31.30	63.5	64.0	16.92	16.85	0.46	1
18755	5891	24.78	64.0	64.5	33.95	33.79	0.47	1 1/2
18756	6749	30.31	64.5	65.0	21.43	21.34	0.44	2
18757	9008	21.54	65.0	65.5	55.14	54.85	0.53	1
18758	9989	23.98	65.5	66.0	47.12	46.87	0.52	1
18759	7743	22.64	66.0	66.5	40.66	40.46	0.50	1
18760	7017	22.66	66.5	67.0	42.55	42.34	0.50	1
18761	7424	29.20	67.0	67.5	46.85	46.59	0.55	1
18762	9826	17.65	67.5	68.0	52.12	51.81	0.59	1
18763	9711	19.62	68.0	68.5	50.94	50.69	0.48	1
18764	12288	21.69	68.5	69.0	53.95	53.70	0.47	1
18765	10115	26.30	69.0	69.5	55.48	55.17	0.55	1
18766	10169	17.53	69.5	70.0	51.62	51.35	0.52	1
18768	9151	26.71	70.0	70.5	48.25	48.02	0.49	1
18769	8190	24.68	70.5	71.0	48.96	48.74	0.45	1
18770	10418	22.13	71.0	71.5	50.47	50.29	0.36	1
18771	10941	21.22	71.5	72.0	46.93	46.75	0.38	1
18772	9527	24.68	73.0	73.5	31.80	31.66	0.44	1
18773	6454	28.19	73.5	74.0	30.30	30.16	0.45	1
18774	7608	29.88	74.0	74.5	31.30	31.16	0.47	1
18775	7795	27.58	74.5	75.0	29.11	28.98	0.45	1
18776	11686	18.66	75.0	75.5	43.50	43.32	0.43	1
18777	10590	28.25	75.5	76.0	42.35	42.16	0.45	1
18778	9286	21.75	76.0	76.5	58.90	58.57	0.57	1
18779	8857	22.82	76.5	77.0	55.97	55.68	0.53	1
Determinations:					28	28	28	28

LP-404  
10-20-97

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax # (403) 285 - 8794.								
Hole # LP-406: October 6, 1997.								
Tag Number	Dry Wt. (g.)	Moist. %	Interval, Meters From	To	%ASH Dry Basis	%ASH (adb)	Residual Moisture	PSI
18361	10103	4.28	37.0	37.5	57.33	57.08	0.44	0
18361	9415	4.36	37.5	38.0	35.88	35.77	0.31	1
18362	12811	5.44	38.0	38.5	18.28	18.21	0.37	1
18363	9844	4.68	38.5	39.0	29.63	29.52	0.39	1
18364	7016	6.38	39.0	39.5	46.85	46.81	0.52	1
18365	8792	5.68	39.5	40.0	22.88	22.78	0.44	1
18366	5537	11.62	40.0	40.5	43.19	42.98	0.47	1
18367	8195	4.86	40.5	41.0	23.95	23.89	0.27	1.5
18368	8348	5.02	41.0	41.5	14.01	13.97	0.31	2.5
18369	8827	5.43	41.5	42.0	10.65	10.62	0.33	1
18370	8213	5.60	42.0	42.5	15.66	15.61	0.33	1
18371	8696	5.51	42.5	43.0	22.31	22.24	0.33	1
18372	4825	5.88	43.0	43.5	32.07	31.95	0.38	1
18373	3162	5.26	43.5	44.0	31.47	31.35	0.38	1
18374	6527	4.27	44.0	44.5	16.58	16.54	0.25	1.5
18375	10060	4.44	44.5	45.0	15.35	15.31	0.22	3.5
18376	14656	4.62	45.0	45.5	48.66	48.52	0.29	1
18377	17262	3.68	45.5	46.0	76.93	76.70	0.30	0
18378	19607	3.65	46.0	46.5	69.95	69.71	0.34	0
18379	12846	3.20	46.5	47.0	48.03	47.93	0.21	1
18380	9078	4.34	47.0	47.5	34.99	34.86	0.37	1
18381	9785	5.00	47.5	48.0	31.59	31.46	0.41	1
18382	8664	3.99	48.0	48.5	36.38	36.26	0.35	1
18384	8513	4.46	48.5	49.0	23.88	23.81	0.32	1
18385	7661	3.77	49.0	49.5	28.85	28.76	0.30	1
18386	14707	12.91	49.5	50.0	50.68	50.47	0.40	1
18387	14086	3.24	50.0	50.5	48.25	48.09	0.34	1
18388	12520	3.65	50.5	51.0	26.80	26.73	0.24	1
18389	11445	3.82	51.0	51.5	24.81	24.73	0.32	1
18390	6113	4.86	51.5	52.0	16.88	16.83	0.27	1
18991	14364	4.45	52.0	52.5	71.44	71.22	0.31	0
Determinations:					31	31	31	31

19 ✓  
17-3 ✓  
17-2 ✓  
17-3 ✓  
15 ✓  
13 ✓  
10 ✓

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# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax # (403) 265 - 8794.								
Hole # LP- 407: October 7, 1997.								
Tag Number	Dry Wt. (g.)	Moist. %	Interval From	Meters To	%ASH Dry Basis	%ASH (adb)	Residual Moisture	Fish
18396	8585	2.73	49.5	50.0	23.52	23.40	0.55	1
18397	6751	3.86	50.0	50.5	35.75	35.54	0.58	1
18398	8427	3.82	50.5	51.0	33.28	33.08	0.59	1
18399	13021	3.08	51.0	51.5	37.85	37.65	0.55	1
18400	12138	2.72	51.5	52.0	37.57	37.37	0.54	1
18401	9086	2.68	52.0	52.5	17.54	17.46	0.44	1
18402	8632	2.10	52.5	53.0	33.62	33.45	0.51	1
18403	7784	2.62	53.0	53.5	26.22	26.10	0.45	1
18404	11652	2.26	53.5	54.0	34.68	34.52	0.47	1
18405	10528	2.98	54.0	54.5	38.93	38.72	0.54	1
18406	7293	2.74	54.5	55.0	23.23	23.14	0.40	1
18407	12396	3.35	55.0	55.5	40.58	40.38	0.48	1
18408	13719	2.69	55.5	56.0	59.54	59.15	0.64	1
18409	8069	3.66	56.0	56.5	30.05	29.91	0.47	1
18410	8254	3.48	56.5	57.0	24.93	24.85	0.34	1
18411	17080	4.23	57.0	57.5	48.81	48.55	0.55	1
18412	9339	4.41	57.5	58.0	33.86	33.71	0.44	1
18413	5899	3.77	58.0	58.5	30.39	30.30	0.31	1
18414	9709	3.13	58.5	59.0	35.69	35.57	0.34	1
18415	8514	4.18	59.0	59.5	20.36	20.28	0.36	1
18416	8800	4.03	59.5	60.0	19.29	19.20	0.47	1
18417	8162	3.82	60.0	60.5	28.25	28.12	0.45	1
18418	8714	3.75	60.5	61.0	20.65	20.56	0.42	1
18419	12660	3.67	61.0	61.5	27.29	27.20	0.36	1
18420	13922	3.05	61.5	62.0	58.80	58.45	0.59	1
18421	12115	2.86	62.0	62.5	83.53	82.78	0.89	0
18422	13113	3.09	62.5	63.0	81.85	81.18	0.81	0
18423	12397	2.94	63.0	63.5	62.28	61.88	0.65	1
18424	14004	2.98	63.5	64.0	46.96	46.72	0.52	1
18425	9758	3.06	64.0	64.5	29.18	29.06	0.43	1
18426	9199	2.80	64.5	65.0	24.54	24.44	0.38	1
18427	7986	2.91	65.0	65.5	25.98	25.91	0.28	1
18428	8948	3.58	65.5	66.0	19.78	19.70	0.39	1
18429	7604	13.53	66.0	66.5	24.63	24.55	0.35	1.5
18430	7970	5.58	66.5	67.0	37.13	36.98	0.39	1
18431	9121	6.09	67.0	67.5	50.72	50.45	0.55	1
18432	15247	4.39	67.5	68.0	84.08	83.61	0.56	0
Determinations:					37	37	37	37

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax #(403) 265 - 8794.								
Hole # LP- 408: October 11, 1997.								
Tag	Dry	Moist.	Interval, Meters		%ASH	%ASH	Residual	FSI
Number	Wt. (g.)	%	From	To	Dry Basis	(adb)	Moisture	
18479	3094	36.04	24.0	24.5	35.70	35.49	0.58	1
18480	3653	49.56	24.5	25.0	24.48	24.34	0.60	1
18481	4219	40.87	25.0	25.5	18.07	17.96	0.58	1
18482	1224	36.63	25.5	26.0	16.75	16.65	0.57	1
18483	4583	29.06	26.0	26.5	15.17	15.09	0.55	2 1/2
18484	4178	39.51	26.5	27.0	17.16	17.06	0.57	2 1/2
18485	4321	41.36	27.0	27.5	18.68	18.57	0.58	2 1/2
18486	3422	55.80	27.5	28.0	19.59	19.48	0.56	3 1/2
18487	7231	36.43	28.0	28.5	14.12	14.05	0.56	3 1/2
18488	5842	32.24	28.5	29.0	12.79	12.71	0.55	3
18489	6980	27.30	29.0	29.5	36.31	36.10	0.58	1
18490	6273	25.21	29.5	30.0	44.26	44.02	0.53	1
18491	5710	35.10	30.0	30.5	26.62	26.49	0.49	1
18492	5897	37.56	30.5	31.0	21.60	21.48	0.54	1 1/2
18493	5746	37.30	31.0	31.5	26.27	26.15	0.46	1
18494	4373	48.20	31.5	32.0	24.27	24.17	0.42	1 1/2
18495	5667	37.45	32.0	32.5	16.76	16.69	0.44	3 1/2
18496	10157	13.77	32.5	33.0	16.45	16.38	0.41	3 1/2
18497	6809	32.11	33.0	33.5	22.44	22.35	0.38	2 1/2
18498	8164	34.05	33.5	34.0	20.99	20.91	0.39	2 1/2
18499	5289	23.69	34.0	34.5	41.73	41.49	0.56	1
18500	7747	31.66	34.5	35.0	34.39	34.21	0.54	1
18780	7390	31.53	35.0	35.5	28.92	28.76	0.55	1
18781	6983	34.76	35.5	36.0	29.90	29.76	0.47	1
18782	7827	36.98	36.0	36.5	21.13	21.03	0.48	2
18783	6134	36.48	36.5	37.0	22.10	21.98	0.54	2
18784	6741	36.66	37.0	37.5	18.64	18.54	0.49	3
18785	5454	39.45	37.5	38.0	23.68	23.57	0.48	2 1/2
18786	5535	46.39	38.0	38.5	34.49	34.31	0.52	1
18787	11026	28.25	38.5	39.0	36.94	36.73	0.54	1
18788	4721	44.56	39.0	39.5	34.86	34.68	0.52	1
18789	4096	53.43	39.5	40.0	29.28	29.14	0.48	1
18790	4318	36.71	40.0	40.5	23.73	23.64	0.39	1
18791	4838	37.47	40.5	41.0	23.06	22.96	0.42	1
18792	6695	34.36	41.0	41.5	26.73	26.62	0.42	1
18793	6833	30.19	41.5	42.0	29.46	29.35	0.38	1
18794	7714	36.33	42.0	42.5	28.11	28.01	0.37	1
18795	6343	36.11	42.5	43.0	31.57	31.45	0.39	1

## ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax #(403) 265 - 8794.								
Hole # LP- 408: October 11, 1997.								
Tag Number	Dry Wt. (g.)	Moist. %	Interval From	Meters To	%ASH Dry Basis	%ASH (adb)	Residual Moisture	FSI
18796	7727	39.65	43.0	43.5	23.32	23.23	0.38	1
18797	5102	64.46	43.5	44.0	20.68	20.59	0.44	1
18798	8039	37.03	44.0	44.5	28.28	28.15	0.46	1
18799	5071	54.86	44.5	45.0	23.98	23.87	0.44	1
18800	10723	23.66	45.0	45.5	76.48	76.05	0.56	0
Determinations:					43	43	43	43

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# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax # (403) 265 - 8784.								
Hole # LP- 410: October 4, 1997.								
Tag Number	Dry Wt. (g.)	Moist. %	Interval, Meters		%ASH Dry Basis	%ASH (adb)	RM %	FSI
			From	To				
18303	6040	9.90	57.0	57.5	20.01	19.92	0.43	2
18304	8260	9.97	57.5	58.0	21.47	21.39	0.38	1
18305	9884	11.23	58.0	58.5	19.22	19.14	0.42	2 1/2
18306	9557	7.81	58.5	59.0	18.27	18.19	0.43	3 1/2
18307	8685	7.94	59.0	59.5	15.27	15.21	0.39	3 1/2
18308	12171	8.13	59.5	60.0	18.16	18.08	0.44	2
18309	5719	8.72	60.0	60.5	15.34	15.28	0.41	1 1/2
18311	11749	7.96	61.0	61.5	24.40	24.30	0.43	1
18312	9973	8.15	61.5	62.0	31.56	31.46	0.34	1
18313	12167	6.37	62.0	62.5	31.92	31.81	0.33	1
18314	11451	6.33	62.5	63.0	25.13	25.03	0.37	1
18315	10165	6.29	63.0	63.5	33.36	33.24	0.35	1
18316	12631	5.36	63.5	64.0	46.47	46.29	0.38	1
18317	17100	5.21	64.0	64.5	69.10	68.78	0.47	1
18318	14482	6.15	64.5	65.0	59.75	59.52	0.38	1
18319	8987	7.59	65.0	65.5	33.33	33.23	0.28	1
18320	9688	6.39	65.5	66.0	38.87	38.76	0.28	1
18321	7643	6.16	66.0	66.5	43.28	43.14	0.32	1
18322	7421	7.76	66.5	67.0	23.34	23.29	0.23	1
18323	11332	6.08	67.0	67.5	54.61	54.40	0.38	1
18324	13993	5.27	67.5	68.0	79.80	79.45	0.44	0
18325	16429	4.78	68.0	68.5	86.06	85.69	0.43	0
Determinations:					22	22	22	22

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 381 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax # (403) 265-8794.								
Hole # LP-412: October 5, 1997.								
Tag	Dry	Moist.	Interval	Meters	%ASH	%ASH	RM	FSI
Numbe	Wt. (g.)	%	From	To	Dry Basis	(adb)	%	
18326	12921	6.34	9.0	9.5	12.15	12.10	0.42	4
18327	7408	9.41	9.5	10.0	15.26	15.16	0.60	1
18328	6355	6.73	10.0	10.5	62.13	61.75	0.61	0
18329	14085	5.83	10.5	11.0	70.23	69.86	0.53	0
18330	5013	6.54	20.0	20.5	61.42	61.07	0.56	0
18331	7061	6.72	20.5	21.0	26.91	26.74	0.63	1/2
18332	5786	8.49	21.0	21.5	18.21	18.09	0.62	0
18333	5726	10.03	21.5	22.0	26.92	26.74	0.67	0
18334	12244	5.82	22.0	22.5	82.06	81.66	0.48	0
18335	3904	24.66	77.5	78.0	59.83	59.54	0.48	1/2
18336	6932	20.79	78.0	78.5	63.94	63.44	0.78	1/2
18337	4477	21.09	78.5	79.0	74.17	73.86	0.41	0
18338	6902	20.29	79.0	79.5	70.93	70.72	0.30	1/2
18339	4236	20.75	79.5	80.0	64.66	64.35	0.48	1/2
18340	6453	21.12	80.0	80.5	48.73	48.51	0.46	1/2
18341	5657	22.63	80.5	81.0	47.81	47.69	0.25	1/2
18342	4851	21.42	81.0	81.5	51.26	51.13	0.27	0
18343	6303	21.37	81.5	82.0	47.53	47.44	0.19	1/2
18344	5188	25.55	82.0	82.5	40.92	40.77	0.37	1
18345	6267	21.30	82.5	83.0	46.52	46.24	0.61	1
18346	6137	26.16	83.0	83.5	37.62	37.45	0.43	1
18347	8495	26.79	83.5	84.0	33.14	33.00	0.40	1
18348	6573	28.43	84.0	84.5	40.92	40.76	0.39	1
18349	8267	24.75	84.5	85.0	51.41	51.19	0.42	1
18350	5142	22.11	85.0	85.5	50.07	49.82	0.48	1/2
18351	6579	21.82	85.5	86.0	50.02	49.86	0.33	1/2
18353	3184	19.73	86.0	86.5	59.54	59.39	0.26	0
18354	5147	23.90	86.5	87.0	51.98	51.72	0.45	1/2
18355	12967	16.52	87.0	87.5	51.55	51.38	0.34	1
18356	7987	20.60	87.5	88.0	48.32	48.15	0.36	1
18357	6338	22.56	88.0	88.5	54.10	53.88	0.41	1
18358	9517	23.31	88.5	89.0	53.83	53.62	0.39	1/2
18359	6275	20.24	89.0	89.5	88.18	87.38	0.91	0
Determinations:					33	33	33	33

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# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax # (403) 265 - 8794.								
Hole # LP- 413: October 7, 1997.								
Tag	Dry	Moist.	Interval	Meters	%ASH	%ASH	Residual	FSI
Number	Wt. (g.)	%	From	To	Dry Basis	(adb)	Moisture	
18433	6730	7.34	16.5	17.0	33.57	33.22	1.04	0
18434	9057	6.15	17.0	17.5	24.36	24.18	0.74	3
18435	17492	4.29	17.5	18.0	74.36	73.78	0.78	0
18436	7969	5.65	18.0	18.5	37.73	37.50	0.59	1
18437	9520	5.12	18.5	19.0	31.03	30.87	0.52	3 1/2
18438	12348	4.39	19.0	19.5	20.65	20.55	0.47	1
18439	8531	4.61	19.5	20.0	28.66	28.52	0.50	6 1/2
18440	13302	3.19	20.0	20.5	43.23	43.03	0.48	3
18441	12531	2.33	20.5	21.0	25.12	25.01	0.41	2
18442	11744	4.12	21.0	21.5	13.46	13.41	0.39	2 1/2
18443	9155	3.76	21.5	22.0	11.65	11.61	0.38	2 1/2
18444	8391	3.37	22.0	22.5	18.18	18.11	0.36	5
18445	10594	2.72	22.5	23.0	27.92	27.80	0.41	1
18446	11490	2.95	23.0	23.5	48.56	48.29	0.55	1
18447	16603	3.08	23.5	24.0	73.18	72.69	0.66	1/2
18448	5003	32.11	76.5	77.0	25.13	25.03	0.42	1
18449	7027	31.38	77.0	77.5	28.69	28.57	0.41	1
18450	7312	28.29	77.5	78.0	30.03	29.91	0.40	1
18451	5991	33.45	78.0	78.5	30.35	30.22	0.43	1 1/2
18452	5048	30.43	78.5	79.0	22.18	22.09	0.44	2 1/2
18453	7340	29.15	79.0	79.5	27.15	27.04	0.41	2
18454	6579	32.92	79.5	80.0	27.30	27.18	0.44	5
18455	7685	25.12	80.0	80.5	47.25	47.09	0.35	1
18456	10061	27.10	80.5	81.0	48.36	48.14	0.46	1
18457	12413	22.49	81.0	81.5	50.29	50.15	0.28	1
18458	11660	23.67	81.5	82.0	61.81	61.61	0.31	1
18459	8300	26.76	82.0	82.5	51.73	51.44	0.55	1
18460	3873	33.96	83.5	84.0	72.71	72.38	0.45	1
18461	2544	30.19	84.0	84.5	49.86	49.65	0.43	1
18462	3634	20.46	84.5	85.0	33.25	33.10	0.44	1
18463	3049	24.72	85.0	85.5	29.18	29.08	0.34	1
18464	4024	31.29	85.5	86.0	27.80	27.70	0.36	1
18465	8189	20.22	86.0	86.5	53.15	52.85	0.55	1
18466	8612	21.88	86.5	87.0	63.58	63.23	0.55	1
18467	9534	29.25	87.0	87.5	56.64	56.36	0.48	1
18468	10879	26.49	87.5	88.0	48.24	47.99	0.52	1
18469	5772	23.01	90.0	90.5	49.51	49.23	0.57	1
18470	4187	36.57	90.5	91.0	33.63	33.44	0.56	1

## ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.								
INITIAL RESULTS - Attn: Ross Griffiths								
Fax #(403) 265 - 8794.								
Hole # LP- 413: October 7, 1997.								
Tag	Dry	Moist.	Interval	Meters	%ASH	%ASH	Residual	FSI
Number	Wt. (g.)	%	From	To	Dry Basis	(adb)	Moisture	
18471	4290	30.14	91.0	91.5	40.39	40.18	0.51	1
18472	4097	34.45	91.5	92.0	36.97	36.79	0.48	1
18473	6837	25.34	92.0	92.5	51.37	51.12	0.47	1
18474	8056	28.08	92.5	93.0	47.57	47.34	0.48	1
18475	9569	27.56	93.0	93.5	46.08	45.87	0.47	1
18476	9914	26.68	93.5	94.0	46.05	45.85	0.43	1
18477	4342	27.95	94.0	94.5	43.43	43.20	0.53	1
18478	4311	29.47	94.5	95.0	26.66	26.52	0.50	1
Determinations:					46	46	46	46

**Appendix D - Wash quality results**

***Float sink analysis data sheets***



LODGEPOLE EXPLORATION				Reverse circulation Drilling 1997								WASHABILITY ANALYSIS													
				RAW ANALYSIS - DRY BASIS								CLEAN PRODUCT ANALYSIS - DRY BASIS													
Hole ID	from	to	comp lngth	raw ash	raw RM	Raw LT%	Raw FSI	Raw VM	Raw FC	Raw CV	Raw Sul	%float	cln Ash%	cln RM	cln VM%	cln FC	cln FSI	cln LT%	cln CV	cln Sul%	% SINK	Sink Ash%			
I #1	26	31	5	21.94	0.71	97.8	1	17.96	59.54	6441	0.46	72.77	10.57	0.58	18.84	70.08	1	97.2	7678	0.33	27.23	51.17			
LP401 #2	31	32.5	1.5	30.82	0.57	99	1.5	18.5	50.29	5969	0.36	63.79	9.4	0.62	19.46	70.58	2	98	7769	0.33	36.21	68.61			
LP401 #3	32.5	36.5	4	27.46	0.54	98	1	18.4	53.75	5951	0.33	63.72	13.04	0.52	19.3	67.21	1	98.2	7461	0.29	36.28	51.72			
LP401 #4	36.5	38	1.5	39.64	0.62	98	1	17.43	42.55	4784	0.36	40.74	17.95	0.58	19.57	62.01	1.5	98	7028	0.38	59.26	54.45			
LP401 #5	38	40.5	2.5	26.89	0.56	99.4	1	18.87	53.83	5737	0.34	62.37	15	0.56	18.69	65.83	1	99	7251	0.48	37.63	45.74			
LP401 #6	44	46	2	31.8	0.57	99.2	1	17.49	50.32	5246	0.46	56.24	12.94	0.48	18.97	67.67	1	98.8	7436	0.52	43.76	55			
LP401 #7	46	47	1	45.08	0.47	99.2	1	16.24	38.42	4167	0.33	28.94	17.23	0.49	19.46	62.9	1.5	98.6	7032	0.49	71.06	56.29			
LP402 #1	30	32.5	2.5	24.58	0.58	99.6	1	17.45	57.53	6154	0.5	75.14	13.92	0.57	18.63	66.96	1.5	98.6	7389	0.49	24.86	56.34			
LP402 #2	34	36	2	21.68	0.49	98.8	3	16.6	61.33	6538	0.6	74.95	11.56	0.49	18.08	69.92	4	97.6	7628	0.61	25.05	48.21			
LP404 #1	62	65	3	28.72	0.61	98	1	17.27	53.57	5728	0.29	64.36	12.03	0.57	18.16	69.31	1.5	97	7541	0.31	35.64	62.8			
LP404 #2	65	66	1	51.41	0.52	99.2	1	15.18	33.16	3586	0.18	25.73	19.35	0.54	17.93	62.28	1.5	99	6948	0.4	74.27	62.59			
LP404 #3	66	67.5	1.5	43.81	0.47	99	1	15.21	40.72	4447	0.23	26.91	21.01	0.57	16.86	61.68	1	98.8	6614	0.28	73.09	52.63			
LP404 #4	67.5	70	2.5	53.08	0.55	99.6	1	15.06	31.6	3279	0.12	9.48	18.54	0.53	17.48	63.55	1	99.2	6925	0.34	90.52	55.96			
LP404 #5	70	71	1	48.7	0.46	99.4	1	15.03	36.03	3934	0.21	20.56	18.09	0.47	18.36	63.17	3.5	99.2	7021	0.34	79.44	56.88			
LP404 #6	71	72	1	48.76	0.32	99	1	21.95	29.12	3274	0.11	19.45	17.94	0.39	18.85	62.89	1	98.6	6978	0.3	80.55	56.13			
LP404 #7	73	76	3	34.25	0.33	96.8	1	18.25	47.29	5430	0.35	57.29	15.39	0.34	18.26	66.06	1	97.8	7214	0.41	42.71	61.48			
LP406 #1	37.5	39	1.5	27.64	0.48	97.4	1	17.03	54.98	6033	0.39	63.77	10.79	0.6	18.55	70.13	1	98.2	7698	0.38	36.23	59.22			
LP406 #2	39	39.5	0.5	46.85	0.65	99	1	13.58	39.22	3987	0.4	28.09	14.98	0.69	18.97	65.46	3.5	97.8	7460	0.55	71.91	59.86			
LP406 #3	39.3	40.5	1.2	34.95	0.4	96.6	1	16.48	48.31	6205	0.52	53.24	10.7	0.64	18.2	70.53	1	97.8	7664	0.45	46.76	60.76			
LP406 #4	40.5	43	2.5	17.48	0.35	99	1	18.32	63.92	6940	0.54	80.05	8.27	0.59	19.27	71.92	1	97.8	7981	0.41	19.95	53.32			
LP406 #5	43	44	1	31.22	0.56	96.8	1	21.64	46.76	5486	0.2	47.91	10.15	0.8	19.87	69.26	1	98	7774	0.21	52.09	49.06			
LP406 #6	44	45	1	15.66	0.43	99.6	2	19.06	64.92	6876	0.41	81.78	7.67	0.76	19.25	72.38	3.5	95.8	8040	0.44	18.22	51.84			
LP406 #7	46.5	49.5	3	33.66	0.42	98.8	1	19.06	47	5203	0.33	52.4	13.25	0.56	19.28	66.98	1	99	7441	0.38	47.6	53.27			
LP406 #8	49.5	50.5	1	49.99	0.42	99.6	1	15.91	33.89	3785	0.25	25.61	17	0.53	18.76	63.8	2	98.4	7139	0.48	74.39	61.02			
LP406 #9	50.5	52	1.5	22.65	0.37	97.4	1	19.32	57.74	6344	0.4	71.1	10.81	0.55	19.04	69.66	1	97.4	7684	0.45	28.9	50.62			
LP407 #1	49.5	52.5	3	30.11	0.68	97.8	1	16.84	52.57	5726	0.32	58.2	11.72	0.85	18.14	69.39	1	98	7656	0.38	41.8	56.16			
LP407 #2	52.5	55	2.5	31.44	0.67	98.6	1	17.16	50.94	5536	0.26	55.27	11.1	0.81	18.27	69.91	1.5	97.8	7743	0.34	44.73	58.15			
LP407 #3	55	56	1	51.7	0.4	97.6	1	16.82	31.29	3519	0.07	25.2	15.94	0.57	18.9	64.68	1.5	98.6	7330	0.41	74.8	63.3			
LP407 #4	56	57	1	28.96	0.58	98.2	1	20.89	49.74	5495	0.22	58.36	9.83	0.78	20.29	69.18	1.5	98.2	7799	0.22	41.64	53.44			
LP407 #5	57	57.5	0.5	41.13	0.81	99.2	1	17.32	41.08	4809	0.66	44.38	13.06	0.48	20.6	65.92	3	98.8	7531	0.39	55.62	59.99			
LP407 #6	57.5	59	1.5	33.12	0.51	98.2	1	19.03	47.51	5313	0.55	50.02	13.05	0.65	19.25	67.14	1	98	7482	0.38	49.98	52.21			
LP407 #7	59	61.5	2.5	24.57	0.45	98	1	18.37	56.72	6163	0.52	67.39	12.69	0.64	18.8	67.95	1	97.6	7492	0.35	32.61	49.01			
LP407 #8	64	67	3	27.24	0.55	97.2	1	18.52	53.84	6021	0.5	66.61	13.59	0.71	18.83	66.97	1	98	7449	0.45	33.39	53.8			
LP408 #1	24	26	2	28.58	0.57	93.8	1	17.55	53.47	5952	0.4	64.96	11.62	0.56	18.15	69.74	1	95	7595	0.46	35.04	57.14			
LP408 #2	26	29	3	16.72	0.51	91.6	2.5	19.95	62.91	6985	0.35	76.96	9.36	0.64	19.										

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPALDWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
Composite	Specific	Weight	Proximate						Dry Basis		
Number	Gravity	%	ASH	RM	VM	FC	FSI	LT	ASH	CV	S
			%	%	%	%		%	%	Cal/g	%
LP401 #1	Raw		21.79	0.71	17.96	59.54	1	97.8	21.94	6441	0.46
(26.0 - 31.0)											
	Float 1.60	72.77	10.50	0.58	18.84	70.08	1	97.2	10.57	7678	0.33
	Sink 1.60	27.23	50.90	0.52					51.17		
	Total:	100.00	21.50						21.63		
LP401 #2	Raw		30.64	0.57	18.50	50.29	1 1/2	99.0	30.82	5969	0.36
(31.0 - 32.5)											
	Float 1.60	63.79	9.34	0.62	19.46	70.58	2	98.0	9.40	7769	0.33
	Sink 1.60	36.21	68.19	0.62					68.61		
	Total:	100.00	30.65						30.84		
LP401 #3	Raw		27.31	0.54	18.40	53.75	1	98.0	27.46	5951	0.33
(32.5 - 36.5)											
	Float 1.60	63.72	12.97	0.52	19.30	67.21	1	98.2	13.04	7461	0.29
	Sink 1.60	36.28	51.48	0.47					51.72		
	Total:	100.00	26.94						27.07		
LP401 #4	Raw		39.40	0.62	17.43	42.55	1	98.0	39.64	4784	0.36
(36.5 - 38.0)											
	Float 1.60	40.74	17.84	0.58	19.57	62.01	1 1/2	98.0	17.95	7028	0.38
	Sink 1.60	59.26	54.17	0.50					54.45		
	Total:	100.00	39.37						39.58		
LP401 #5	Raw		26.74	0.56	18.87	53.83	1	99.4	26.89	5737	0.34
(38.0 - 40.5)											
	Float 1.60	62.37	14.92	0.56	18.69	65.83	1	99.0	15.00	7251	0.48
	Sink 1.60	37.63	45.51	0.50					45.74		
	Total:	100.00	26.43						26.57		
LP401 #6	Raw		31.62	0.57	17.49	50.32	1	99.2	31.80	5246	0.46
(44.0 - 46.0)											
	Float 1.60	56.24	12.88	0.48	18.97	67.67	1	98.8	12.94	7436	0.52
	Sink 1.60	43.76	54.80	0.35					55.00		
	Total:	100.00	31.22						31.35		

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
			Proximate					Dry Basis			
Composite Number	Specific Gravity	Weight %	ASH %	RM %	VM %	FC %	FSI	LT %	ASH %	CV Cal/g	S %
LP401 #7 (46.0 - 47.0)	Raw		44.87	0.47	16.24	38.42	1	99.2	45.08	4167	0.33
	Float 1.60	28.94	17.15	0.49	19.46	62.90	1 1/2	98.6	17.23	7032	0.49
	Sink 1.60	71.06	55.99	0.54					56.29		
	Total:	100.00	44.75						44.99		
LP402 #1 (30.0 - 32.5)	Raw		24.44	0.58	17.45	57.53	1	99.6	24.58	6154	0.50
	Float 1.60	75.14	13.84	0.57	18.63	66.96	1 1/2	98.6	13.92	7389	0.49
	Sink 1.60	24.86	56.04	0.54					56.34		
	Total:	100.00	24.33						24.47		
LP402 #2 (34.0 - 36.0)	Raw		21.58	0.49	16.60	61.33	3	98.8	21.68	6538	0.60
	Float 1.60	74.95	11.51	0.49	18.08	69.92	4	97.6	11.56	7628	0.61
	Sink 1.60	25.05	47.99	0.47					48.21		
	Total:	100.00	20.65						20.74		
LP404 #1 (62.0 - 65.0)	Raw		28.55	0.61	17.27	53.57	1	98.0	28.72	5728	0.29
	Float 1.60	64.36	11.96	0.57	18.16	69.31	1 1/2	97.0	12.03	7541	0.31
	Sink 1.60	35.64	62.48	0.52					62.80		
	Total:	100.00	29.97						30.12		
LP404 #2 (65.0 - 66.0)	Raw		51.14	0.52	15.18	33.16	1	99.2	51.41	3586	0.18
	Float 1.60	25.73	19.25	0.54	17.93	62.28	1 1/2	99.0	19.35	6948	0.40
	Sink 1.60	74.27	62.32	0.43					62.59		
	Total:	100.00	51.24						51.46		
LP404 #3 (66.0 - 67.5)	Raw		43.60	0.47	15.21	40.72	1	99.0	43.81	4447	0.23
	Float 1.60	26.91	20.89	0.57	16.86	61.68	1	98.8	21.01	6614	0.28
	Sink 1.60	73.09	52.40	0.43					52.63		
	Total:	100.00	43.92						44.12		

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK-VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
Composite Number	Specific Gravity	Weight %	Proximate				FSI	LT %	Dry Basis		
			ASH %	RM %	VM %	FC %			ASH %	CV Cal/g	S %
LP404 #4 (67.5 - 70.0)	Raw		52.79	0.55	15.06	31.60	1	99.6	53.08	3279	0.12
	Float 1.60	9.48	18.44	0.53	17.48	63.55	1	99.2	18.54	6925	0.34
	Sink 1.60	90.52	55.76	0.37					55.96		
	Total:	100.00	52.22						52.41		
LP404 #5 (70.0 - 71.0)	Raw		48.48	0.46	15.03	36.03	1	99.4	48.70	3934	0.21
	Float 1.60	20.56	18.00	0.47	18.36	63.17	3 1/2	99.2	18.09	7021	0.34
	Sink 1.60	79.44	56.69	0.33					56.88		
	Total:	100.00	48.74						48.90		
LP404 #6 (71.0 - 72.0)	Raw		48.61	0.32	21.95	29.12	1	99.0	48.76	3274	0.11
	Float 1.60	19.45	17.87	0.39	18.85	62.89	1	98.6	17.94	6978	0.30
	Sink 1.60	80.55	56.00	0.22					56.13		
	Total:	100.00	48.58						48.70		
LP404 #7 (73.0 - 76.0)	Raw		34.13	0.33	18.25	47.29	1	96.8	34.25	5430	0.35
	Float 1.60	57.29	15.34	0.34	18.26	66.06	1	97.8	15.39	7214	0.41
	Sink 1.60	42.71	61.21	0.44					61.48		
	Total:	100.00	34.93						35.08		
LP406 #1 (37.5 - 39.0)	Raw		27.51	0.48	17.03	54.98	1	97.4	27.64	6033	0.39
	Float 1.60	63.77	10.72	0.60	18.55	70.13	1	98.2	10.79	7698	0.38
	Sink 1.60	36.23	58.86	0.61					59.22		
	Total:	100.00	28.16						28.34		
LP406 #2 (39.0 - 39.5)	Raw		46.55	0.65	13.58	39.22	1	99.0	46.85	3987	0.40
	Float 1.60	28.09	14.88	0.69	18.97	65.46	3 1/2	97.8	14.98	7460	0.55
	Sink 1.60	71.91	59.42	0.75					59.86		
	Total:	100.00	46.91						47.25		

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
			Proximate							Dry Basis	
Composite	Specific	Weight	ASH	RM	VM	FC	FSI	LT	ASH	CV	S
Number	Gravity	%	%	%	%	%		%	%	Cal/g	%
LP406 #3 (39.3 - 40.5)	Raw		34.81	0.40	16.48	48.31	1	96.6	34.95	6205	0.52
	Float 1.60	53.24	10.63	0.64	18.20	70.53	1	97.8	10.70	7664	0.45
	Sink 1.60	46.76	60.37	0.64					60.76		
	Total:	100.00	33.89						34.11		
LP406 #4 (40.5 - 43.0)	Raw		17.41	0.35	18.32	63.92	1	99.0	17.48	6940	0.54
	Float 1.60	80.05	8.22	0.59	19.27	71.92	1	97.8	8.27	7981	0.41
	Sink 1.60	19.95	53.01	0.58					53.32		
	Total:	100.00	17.16						17.26		
LP406 #5 (43.0 - 44.0)	Raw		31.04	0.56	21.64	46.76	1	96.8	31.22	5486	0.20
	Float 1.60	47.91	10.07	0.80	19.87	69.26	1	98.0	10.15	7774	0.21
	Sink 1.60	52.09	48.72	0.70					49.06		
	Total:	100.00	30.20						30.42		
LP406 #6 (44.0 - 45.0)	Raw		15.59	0.43	19.06	64.92	2	99.6	15.66	6876	0.41
	Float 1.60	81.78	7.61	0.76	19.25	72.38	3 1/2	95.8	7.67	8040	0.44
	Sink 1.60	18.22	51.52	0.60					51.84		
	Total:	100.00	15.61						15.72		
LP406 #7 (46.5 - 49.5)	Raw		33.52	0.42	19.06	47.00	1	98.8	33.66	5203	0.33
	Float 1.60	52.40	13.18	0.56	19.28	66.98	1	99.0	13.25	7441	0.38
	Sink 1.60	47.60	52.98	0.53					53.27		
	Total:	100.00	32.12						32.30		
LP406 #8 (49.5 - 50.5)	Raw		49.78	0.42	15.91	33.89	1	99.6	49.99	3785	0.25
	Float 1.60	25.61	16.91	0.53	18.76	63.80	2	98.4	17.00	7139	0.48
	Sink 1.60	74.39	60.72	0.50					61.02		
	Total:	100.00	49.50						49.75		

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
			Proximate							Dry Basis	
Composite	Specific	Weight	ASH	RM	VM	FC	FSI	LT	ASH	CV	S
Number	Gravity	%	%	%	%	%		%	%	Cal/g	%
LP406 #9	Raw		22.57	0.37	19.32	57.74	1	97.4	22.65	6344	0.40
(50.5 - 52.0)											
	Float 1.60	71.10	10.75	0.55	19.04	69.66	1	97.4	10.81	7684	0.45
	Sink 1.60	28.90	50.39	0.45					50.62		
	Total:	100.00	22.21						22.32		
LP407 #1	Raw		29.91	0.68	16.84	52.57	1	97.8	30.11	5726	0.32
(49.5 - 52.5)											
	Float 1.60	58.20	11.62	0.85	18.14	69.39	1	98.0	11.72	7656	0.38
	Sink 1.60	41.80	55.72	0.78					56.16		
	Total:	100.00	30.05						30.30		
LP407 #2	Raw		31.23	0.67	17.16	50.94	1	98.6	31.44	5536	0.26
(52.5 - 55.0)											
	Float 1.60	55.27	11.01	0.81	18.27	69.91	1 1/2	97.8	11.10	7743	0.34
	Sink 1.60	44.73	57.74	0.71					58.15		
	Total:	100.00	31.91						32.15		
LP407 #3	Raw		51.49	0.40	16.82	31.29	1	97.6	51.70	3519	0.07
(55.0 - 56.0)											
	Float 1.60	25.20	15.85	0.57	18.90	64.68	1 1/2	98.6	15.94	7330	0.41
	Sink 1.60	74.80	62.99	0.49					63.30		
	Total:	100.00	51.11						51.37		
LP407 #4	Raw		28.79	0.58	20.89	49.74	1	98.2	28.96	5495	0.22
(56.0 - 57.0)											
	Float 1.60	58.36	9.75	0.78	20.29	69.18	1 1/2	98.2	9.83	7799	0.22
	Sink 1.60	41.64	53.08	0.67					53.44		
	Total:	100.00	27.79						27.99		
LP407 #5	Raw		40.79	0.81	17.32	41.08	1	99.2	41.13	4809	0.66
(57.0 - 57.5)											
	Float 1.60	44.38	13.00	0.48	20.60	65.92	3	98.8	13.06	7531	0.39
	Sink 1.60	55.62	59.62	0.62					59.99		
	Total:	100.00	38.93						39.16		

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARROWWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
			Proximate							Dry Basis	
Composite Number	Specific Gravity	Weight %	ASH %	RM %	VM %	FC %	FSI	LT %	ASH %	CV Cal/g	S %
LP407 #6 (57.5 - 59.0)	Raw		32.95	0.51	19.03	47.51	1	98.2	33.12	5313	0.55
	Float 1.60	50.02	12.96	0.65	19.25	67.14	1	98.0	13.05	7482	0.38
	Sink 1.60	49.98	51.90	0.59					52.21		
	Total:	100.00	32.42						32.62		
LP407 #7 (59.0 - 61.5)	Raw		24.46	0.45	18.37	56.72	1	98.0	24.57	6163	0.52
	Float 1.60	67.39	12.61	0.64	18.80	67.95	1	97.6	12.69	7492	0.35
	Sink 1.60	32.61	48.68	0.67					49.01		
	Total:	100.00	24.37						24.53		
LP407 #8 (64.0 - 67.0)	Raw		27.09	0.55	18.52	53.84	1	97.2	27.24	6021	0.50
	Float 1.60	66.61	13.49	0.71	18.83	66.97	1	98.0	13.59	7449	0.45
	Sink 1.60	33.39	53.48	0.59					53.80		
	Total:	100.00	26.84						27.02		
LP408 #1 (24.0 - 26.0)	Raw		28.41	0.57	17.55	53.47	1	93.8	28.58	5952	0.40
	Float 1.60	64.96	11.55	0.56	18.15	69.74	1	95.0	11.62	7595	0.46
	Sink 1.60	35.04	56.86	0.49					57.14		
	Total:	100.00	27.43						27.57		
LP408 #2 (26.0 - 29.0)	Raw		16.63	0.51	19.95	62.91	2 1/2	91.6	16.72	6985	0.35
	Float 1.60	76.96	9.30	0.64	19.85	70.21	3 1/2	96.8	9.36	7863	0.45
	Sink 1.60	23.04	45.65	0.52					45.88		
	Total:	100.00	17.68						17.77		
LP408 #3 (29.0 - 30.5)	Raw		34.66	0.57	17.52	47.25	1	94.2	34.86	5469	0.42
	Float 1.60	46.38	16.24	0.57	18.29	64.90	1 1/2	97.6	16.33	7212	0.44
	Sink 1.60	53.62	50.86	0.55					51.15		
	Total:	100.00	34.80						35.00		

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
			Proximate						Dry Basis		
Composite Number	Specific Gravity	Weight %	ASH %	RM %	VM %	FC %	FSI	LT %	ASH %	CV Cal/g	S %
LP408 #4 (30.5 - 34.0)	Raw		22.22	0.49	19.68	57.61	1 1/2	93.2	22.33	6444	0.25
	Float 1.60	68.04	11.47	0.55	19.51	68.47	3	97.8	11.53	7684	0.37
	Sink 1.60	31.96	50.37	0.43					50.59		
	Total:	100.00	23.90						24.01		
LP408 #5 (34.0 - 35.0)	Raw		38.09	0.46	17.00	44.45	1	97.0	38.27	4985	0.38
	Float 1.60	40.75	15.60	0.50	18.07	65.83	1	97.8	15.68	7170	0.39
	Sink 1.60	59.25	54.88	0.41					55.11		
	Total:	100.00	38.87						39.04		
LP408 #6 (35.0 - 38.0)	Raw		25.42	0.43	18.23	55.92	1	96.2	25.53	5843	0.31
	Float 1.60	59.20	10.85	0.63	19.29	69.23	2 1/2	97.2	10.92	7680	0.39
	Sink 1.60	40.80	48.01	0.59					48.29		
	Total:	100.00	26.01						26.17		
LP408 #7 (38.0 - 39.5)	Raw		36.84	0.63	17.58	44.95	1	94.8	37.07	5233	0.42
	Float 1.60	45.44	16.17	0.64	18.76	64.43	1	96.4	16.27	7165	0.37
	Sink 1.60	54.56	55.18	0.57					55.50		
	Total:	100.00	37.45						37.67		
LP408 #8 (39.5 - 43.0)	Raw		26.35	0.56	21.18	51.91	1	97.0	26.50	5832	0.38
	Float 1.60	50.58	14.65	0.66	19.22	65.47	1	94.8	14.75	7261	0.25
	Sink 1.60	49.42	43.94	0.53					44.18		
	Total:	100.00	29.13						29.29		
LP408 #9 (43.0 - 45.0)	Raw		23.98	0.54	17.93	57.55	1	94.6	24.11	6135	0.40
	Float 1.60	61.82	14.64	0.58	18.24	66.54	1	94.6	14.72	7266	0.40
	Sink 1.60	38.18	43.90	0.51					44.12		
	Total:	100.00	25.81						25.94		



# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
			Proximate							Dry Basis	
Composite Number	Specific Gravity	Weight %	ASH %	RM %	VM %	FC %	FSI	LT %	ASH %	CV Cal/g	S %
LP410 #1 (57.0 - 60.5)	Raw		17.48	0.57	18.64	63.31	2	91.4	17.58	7002	0.63
	Float 1.60	78.54	8.42	0.69	20.29	70.60	3	95.2	8.48	7930	0.46
	Sink 1.60	21.46	52.67	0.52					52.94		
	Total:	100.00	17.92						18.02		
LP410 #2 (61.0 - 63.5)	Raw		30.71	0.49	18.02	50.78	1	97.0	30.86	5666	0.61
	Float 1.60	54.43	12.20	0.66	19.11	68.03	1	97.0	12.28	7573	0.42
	Sink 1.60	45.57	50.01	0.59					50.31		
	Total:	100.00	29.43						29.61		
LP410 #3 (65.0 - 67.0)	Raw		35.42	0.46	17.30	46.82	1	96.8	35.58	5144	0.48
	Float 1.60	53.05	12.57	0.61	19.31	67.51	1	96.8	12.65	7492	0.44
	Sink 1.60	46.95	59.63	0.52					59.94		
	Total:	100.00	34.66						34.85		
LP412 #1 (9.0 - 10.0)	Raw		13.36	0.71	19.98	65.95	1 1/2	96.8	13.46	7328	0.92
	Float 1.60	88.25	8.23	0.75	20.56	70.46	2	96.8	8.29	7867	0.97
	Sink 1.60	11.75	51.18	0.83					51.60		
	Total:	100.00	13.28						13.38		
LP412 #2 (20.5 - 22.0)	Raw		22.94	0.88	17.67	58.51	0	97.4	23.14	6139	0.43
	Float 1.60	79.43	14.84	0.79	18.57	65.80	0	97.6	14.96	6993	0.43
	Sink 1.60	20.57	53.20	0.80					53.63		
	Total:	100.00	22.73						22.91		
LP412 #3 (77.5 - 78.5)	Raw		63.05	0.57	12.98	23.40	1/2	98.2	63.41	2574	0.22
	Float 1.60	13.90	20.69	0.64	18.17	60.50	1	98.6	20.82	6808	0.45
	Sink 1.60	86.10	70.03	0.56					70.43		
	Total:	100.00	63.17						63.53		

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
			Proximate							Dry Basis	
Composite Number	Specific Gravity	Weight %	ASH %	RM %	VM %	FC %	FSI	LT %	ASH %	CV Cal/g	S %
LP412 #4 (80.0 - 84.0)	Raw		46.21	0.43	22.66	30.70	1	99.0	46.41	3649	0.39
	Float 1.60	28.26	16.06	0.49	18.11	65.34	1	99.0	16.13	7164	0.46
	Sink 1.60	71.74	58.11	0.30					58.28		
	Total:	100.00	46.23						46.37		
LP412 #5 (84.0 - 89.0)	Raw		51.41	0.36	18.30	29.93	1	98.4	51.60	3826	0.31
	Float 1.60	29.09	15.86	0.43	17.91	65.80	1	97.2	15.93	7122	0.45
	Sink 1.60	70.91	66.66	0.46					66.97		
	Total:	100.00	51.88						52.12		
LP413 #1 (16.5 - 17.5)	Raw		31.40	1.05	15.60	51.95	1	80.8	31.73	5623	0.59
	Float 1.60	56.26	14.33	0.92	18.11	66.64	1	84.8	14.47	7255	0.74
	Sink 1.60	43.74	53.20	0.80					53.63		
	Total:	100.00	31.33						31.60		
LP413 #2 (18.0 - 20.0)	Raw		30.80	0.72	15.19	53.29	1 1/2	93.8	31.02	5735	0.61
	Float 1.60	53.47	13.27	0.70	17.87	68.16	3 1/2	94.0	13.36	7481	0.67
	Sink 1.60	46.53	51.10	0.73					51.48		
	Total:	100.00	30.87						31.10		
LP413 #3 (20.0 - 20.5)	Raw		42.84	0.72	14.84	41.60	2	97.2	43.16	4604	0.38
	Float 1.60	34.91	15.69	0.65	19.39	64.27	6	97.2	15.79	7337	0.55
	Sink 1.60	65.09	57.51	0.61					57.87		
	Total:	100.00	42.91						43.18		
LP413 #4 (20.5 - 23.0)	Raw		20.78	0.58	19.47	59.17	2	98.0	20.90	6626	0.50
	Float 1.60	71.84	10.21	0.66	19.02	70.11	3 1/2	98.0	10.28	7744	0.51
	Sink 1.60	28.16	48.38	0.50					48.62		
	Total:	100.00	20.96						21.08		

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
			Proximate							Dry Basis	
Composite Number	Specific Gravity	Weight %	ASH %	RM %	VM %	FC %	FSI	LT %	ASH %	CV Cal/g	S %
LP413 #5 (76.5 - 77.5)	Raw		26.47	0.47	16.31	56.75	1	98.6	26.60	6071	0.47
	Float 1.60	62.31	11.10	0.46	17.54	70.90	1	97.4	11.15	7633	0.54
	Sink 1.60	37.69	52.96	0.40					53.18		
	Total:	100.00	26.88						26.99		
LP413 #6 (77.5 - 80.0)	Raw		27.25	0.35	17.79	54.61	1 1/2	96.6	27.35	5796	0.39
	Float 1.60	62.95	11.68	0.37	18.62	69.33	3	97.2	11.73	7627	0.50
	Sink 1.60	37.05	54.04	0.34					54.22		
	Total:	100.00	27.37						27.47		
LP413 #7 (80.0 - 81.0)	Raw		50.40	0.44	13.56	35.60	1	98.2	50.62	3997	0.15
	Float 1.60	24.68	14.67	0.47	16.38	68.48	1	96.6	14.74	7281	0.47
	Sink 1.60	75.32	62.27	0.64					62.67		
	Total:	100.00	50.52						50.84		
LP413 #8 (84.0 - 86.0)	Raw		35.65	0.59	17.05	46.71	1	98.0	35.86	4769	0.42
	Float 1.60	46.05	12.25	0.49	17.20	70.06	1	98.0	12.31	7532	0.38
	Sink 1.60	53.95	55.43	0.44					55.67		
	Total:	100.00	35.55						35.70		
LP413 #9 (86.0 - 88.0)	Raw		55.41	0.39	13.02	31.18	1	98.4	55.62	2947	0.12
	Float 1.60	17.48	14.25	0.42	17.21	68.12	1	98.4	14.31	7370	0.39
	Sink 1.60	82.52	63.89	0.31					64.09		
	Total:	100.00	55.21						55.39		
LP413 #10 (90.0 - 92.0)	Raw		39.86	0.40	19.85	39.89	1	97.6	40.02	4540	0.45
	Float 1.60	39.27	15.00	0.50	17.64	66.86	1	97.8	15.08	7272	0.44
	Sink 1.60	60.73	55.77	0.39					55.99		
	Total:	100.00	39.76						39.92		

# ELK VALLEY ENVIRONMENTAL SERVICES

#115 ELK VALLEY INDUSTRIAL ROAD #3 • P.O. BOX 481 • SPARWOOD, B.C. V0B 2G0  
PHONE/FAX: (250) 425-6900 • LAB: (250) 425-0300

LODGEPOLE DRILLING PROGRAM, FORDING COAL LTD.											
FLOAT/SINK RESULTS - Attn: Ross Griffiths											
Fax #(403) 265 - 8794.											
Proximate								Dry Basis			
Composite	Specific	Weight	ASH	RM	VM	FC	FSI	LT	ASH	CV	S
Number	Gravity	%	%	%	%	%		%	%	Cal/g	%
LP413 #11	Raw		43.02	0.48	14.51	41.99	1	98.6	43.23	4495	0.34
(92.0 - 95.0)											
	Float 1.60	20.90	12.28	0.38	17.74	69.60	1	96.8	12.32	7500	0.50
	Sink 1.60	79.10	51.52	0.29					51.67		
	Total:	100.00	43.32						43.45		

***Dilatation and fluidity data sheets***



Fording Greenhills Operations  
Engineering Coal Quality Lab

## LODGEPOLE EXPLORATION 1997

### LP 401

	#1 (26.0-31.0)		#2 (31.0-32.5)		#3 (32.5-36.5)		#4 (36.5-38.0)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	423.4		440.9		433.5		427.1	
Max Con	479.3	23	482.4	18	484.9	17	487.7	23
Max Dil	479.3	-23	482.4	-18	484.9	-17	487.7	-23
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial								
Maximum	474.4	0.6	469.9	0.7	471.8	0.5	468.2	0.9
Final								
Range	0		0		0		0	

	#5 (38.0-40.5)		#6 (44.0-46.0)		#7 (46.0-47.0)	
DILATATION	temp	%	temp	%	temp	%
Initial	444.8		428.7		435.4	
Max Con	485.2	8	482.0	24	484.8	23
Max Dil	485.2	-8	482.0	-24	484.8	-23
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm
Initial						
Maximum	465.5	0.3	465.8	0.6	471.2	0.8
Final						
Range	0		0		0	



Fording Greenhills Operations  
Engineering Coal Quality Lab

## LODGEPOLE EXPLORATION 1997

### LP 402

	#1 (30.0-32.5)		#2 (34.0-36.0)	
DILATATION	temp	%	temp	%
Initial	435.4		423.8	
Max Con	481.7	21	470.5	29
Max Dil	481.7	-21	473.6	-28
FLUIDITY	temp	ddpm	temp	ddpm
Initial			467.5	1.1
Maximum	365.8	0.4	471.0	1.3
Final			483.1	0.9
Range	0		15.6	



Fording Greenhills Operations  
Engineering Coal Quality Lab

# LODGEPOLE EXPLORATION 1997

## LP 404

	#1 (62.0-65.0)		#2 (65.0-66.0)		#3 (66.0-67.5)		#4 (67.5-70.0)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	423.8		437.6		446.4		417.3	
Max Con	482.4	24	484.1	16	484.1	5	481.3	11
Max Dil	482.4	-24	484.1	-16	484.1	-5	481.3	-11
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial								
Maximum	471.9	0.9	468.5	0.4	462.7	0.2	471.5	0.5
Final								
Range	0		0		0		0	

	#5 (70.0-71.0)		#6 (71.0-72.0)		#7 (73.0-76.0)	
DILATATION	temp	%	temp	%	temp	%
Initial	434		431.3		424.7	
Max Con	487.5	32	478.0	16	475.0	20
Max Dil	487.5	-32	478.0	-16	475.0	-20
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm
Initial	468.0	1.1			463.9	1
Maximum	471.0	1.2		0	467.0	1.2
Final	479.8	0.9			482.9	0.7
Range	11.8		0		19	





Fording Greenhills Operations  
Engineering Coal Quality Lab

## LODGEPOLE EXPLORATION 1997

### LP 406

	#1 (37.5-39.0)		#2 (39.0-39.5)		#3 (39.3-40.5)		#4 (40.5-43.0)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	438.1		427.8		420.0		433.5	
Max Con	482.2	13	482.2	33	485.4	10	482.2	19
Max Dil	482.2	-13	482.2	-33	485.4	-10	482.2	-19
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial			464.8	1.0				
Maximum	470.8	0.5	470.7	1.4	472.1	0.3	468.9	0.7
Final			483.2	0.9				
Range	0		18.4		0		0	

	#5 (43.0-44.0)		#6 (44.0-45.0)		#7 (46.5-49.5)		#8 (49.5-50.5)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	434.5		427.8		424.2		424.2	
Max Con	482.2	18	482.2	32	479.4	24	473.3	30
Max Dil	482.2	-18	482.2	-32	479.4	-24	473.3	-30
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial			463.6	1.0			453.5	1.1
Maximum	467.6	0.6	470.5	1.3	465.1	0.9	475.1	3.0
Final			479.7	0.9			489.1	0.8
Range	0		16.1		0		35.6	

	#9 (50.5-52.0)	
DILATATION	temp	%
Initial	430.8	
Max Con	475.3	14
Max Dil	475.3	-14
FLUIDITY	temp	ddpm
Initial		
Maximum	467.3	0.5
Final		
Range	0	



Fording Greenhills Operations  
Engineering Coal Quality Lab

## LODGEPOLE EXPLORATION 1997

### LP 407

	#1 (49.5-52.5)		#2 (52.5-55.0)		#3 (55.0-56.0)		#4 (56.0-57.0)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	439.9		419.5		448.6		421.0	
Max Con	478.4	10	478.9	23	485.0	19	487.5	34
Max Dil	478.4	-10	478.9	-23	485.0	-19	487.5	-34
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial					468.5	1.0	459.7	1.0
Maximum	470.9	0.5	469.0	0.6	471.5	1.1	472.2	1.5
Final					480.8	0.9	481.4	0.9
Range	0		0		12.3		21.7	

	#5 (57.0-57.5)		#6 (57.5-59.0)		#7 (59.0-61.5)		#8 (64.0-67.0)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	417.1		424.2		434.5		434.1	
Max Con	463.5	33	476.0	15	478.8	14	484.3	20
Max Dil	463.5	-33	476.0	-15	478.8	-14	484.3	-20
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial								
Maximum		0	466.4	0.7	466.0	0.5	466.7	0.7
Final								
Range	0				0		0	



Fording Greenhills Operations  
Engineering Coal Quality Lab

## LODGEPOLE EXPLORATION 1997

### LP 408

	#1 (24.0-26.0)		#2 (26.0-29.0)		#3 (29.0-30.5)		#4 (30.5-34.0)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	437.3		417.7		431.5		425.6	
Max Con	484.3	16	466.2	30	478.2	22	472.9	28
Max Dil	484.3	-16	466.2	-30	478.1	-22	472.9	-28
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial			465.8	1.0	469.4	1.1	472.0	1.2
Maximum	467.1	0.4	471.3	1.3	472.8	1.2	474.9	1.3
Final			484.5	0.8	484.1	0.7	487.2	0.9
Range	0		18.7		14.7		15.2	

	#5 (34.0-35.0)		#6 (35.0-38.0)		#7 (38.0-39.5)		#8 (39.5-43.0)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	437.9		420.5		441.0		436.6	
Max Con	478.9	18	466.8	24	482.1	22	475.4	7
Max Dil	478.9	-18	466.8	-24	482.1	-22	475.4	-7
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial			460.0	1.0	472.3	1.0		
Maximum	469.8	0.8	469.1	1.9	478.3	1.1	471.7	0.3
Final			486.9	0.7	484.5	0.8		
Range			26.9		12.2			

	#9 (43.0-45.0)	
DILATATION	temp	%
Initial	445.7	
Max Con	475.4	5
Max Dil	475.4	-5
FLUIDITY	temp	ddpm
Initial		
Maximum	466.7	0.2
Final		
Range		



Fording Greenhills Operations  
Engineering Coal Quality Lab

## LODGEPOLE EXPLORATION 1997

### LP 410

	#1 (57.0-60.5)		#2 (61.0-63.5)		#3 (65.0-67.0)	
DILATATION	temp	%	temp	%	temp	%
Initial	418.7		442.2		427.5	
Max Con	481.6	36	478.5	10	485.1	21
Max Dil	481.6	-36	478.5	-10	485.1	-21
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm
Initial	463.3	1.1				
Maximum	466.5	1.2	470.8	0.5	466.7	0.7
Final	478.5	0.9				
Range	15.2					



Fording Greenhills Operations  
Engineering Coal Quality Lab

## LODGEPOLE EXPLORATION 1997

### LP 412

	#1 (9.0-10.0)		#2 (20.5-22.0)		#3 (77.5-78.5)		#4 (80.0-84.0)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	431.0		485.2		431.2		434.0	
Max Con	482.1	20	485.2	1	482.1	14	478.3	9
Max Dil	482.1	-20	485.2	-1	482.1	-14	478.3	-9
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial								
Maximum	465.2	0.5		0	475.7	0.6	468.4	0.3
Final								
Range								

	#5 (84.0-89.0)	
DILATATION	temp	%
Initial	440.0	
Max Con	478.3	7
Max Dil	478.3	-7
FLUIDITY	temp	ddpm
Initial		
Maximum	462.5	0.2
Final		
Range		



Fording Greenhills Operations  
Engineering Coal Quality Lab

## LODGEPOLE EXPLORATION 1997

### LP 413

	#1 (16.5-17.5)		#2 (18.0-20.0)		#3 (20.0-20.5)		#4 (20.5-23.0)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	414.7		425.2		401.4		427.8	
Max Con	460.9	5	467.6	25	447.9	32	467.1	26
Max Dil	460.9	-5	467.6	-25	482	26	467.1	-26
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial			461.8	1.0	449.4	1.3	464.8	1.2
Maximum	465.8	0.2	474.0	1.7	476.6	20.0	469.9	1.6
Final			486.9	0.8	497.6	0.4	479.2	0.8
Range			25.1		48.2		14.4	

	#5 (76.5-77.5)		#6 (77.5-80.0)		#7 (80.0-81.0)		#8 (84.0-86.0)	
DILATATION	temp	%	temp	%	temp	%	temp	%
Initial	432.0		428.8		421.1		452	
Max Con	475.6	14	466.5	22	475.1	19	475.1	4
Max Dil	475.6	-14	466.5	-22	475.1	-19	475.1	-4
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm	temp	ddpm
Initial			462.6	0.9				
Maximum	474.0	0.5	475.2	1.7	468.7	0.8		0
Final			487.9	0.8				
Range			25.3					

	#9 (86.0-88.0)		#10 (90.0-92.0)		#11 (92.0-95.0)	
DILATATION	temp	%	temp	%	temp	%
Initial	435.1		444.8		437.7	
Max Con	481.7	7	481.7	14	476.0	15
Max Dil	481.7	-7	481.7	-14	476.0	-15
FLUIDITY	temp	ddpm	temp	ddpm	temp	ddpm
Initial						
Maximum		0	476.3	0	471.2	0.7
Final						
Range						

**Appendix E –Permits, Contractors and Contacts List**



FORDING COAL LIMITED  
**RECEIVED**  
AUG 11 1997  
PROJECTS & DEVELOPMENT

File: 0501157/14675-30  
August 7, 1997

Ross T. Griffiths  
Fording Coal Limited  
1000-205 Ninth Ave. SE  
Calgary AB T2G 0R4

Dear Sir:

**Re: Mines Act Section 10 Permit C-84**  
**Approval Number: CBK97-0501157-001-C14**  
**Lodgepole Property on the Licence #'s: 350609, 350610, 350613,**  
**350614, 350615, 350616, 350617 in the Fort Steele Mining Division**

---

Receipt is acknowledged of your Notice of Work and Reclamation Program on a Coal property dated July 30, 1997, for the above.

As the proposed work program does not involve any substantial new development or additional surface disturbance, you are authorized to proceed subject to the terms and conditions of your permit C-84 and the following conditions under the above-noted approval number. This approval is valid until the end of the current calendar year only.

**Reclamation Permit C-84 is hereby amended to include the following site specific approval conditions:**

- The drainage shall be repaired in the area of the #3 adit, such that erosion of surface materials will be minimized and that water is directed into the natural course in a safe manner;
- The plugged culvert outside the #3 adit shall be removed and a drainage to the natural water course is established in a manner that does not require maintenance; The waste pile in this area contains a significant volume of coal, which must not reach the streams;
- That any culverts left in the area of the #3 adit are inspected and maintained as long as the property is active or that they are removed as part of the reclamation program upon termination of the project;
- Water bars shall be replaced and the temporary bridge deck removed at the end of the season, on the access roads.

Please attach this amendment to your permit as it becomes an integral part of it.

...2...



Page 2  
August 7, 1997

You are reminded that all work must comply with the Mines Act, the Health, Safety and Reclamation Code and the "Guidelines for Coal Exploration".

If your proposed program of coal exploration includes any line cutting or other tree felling activity or the use of forest service roads, you should apply for the necessary cutting and/or road use authority from the appropriate office of the Ministry of Forests. It is your responsibility to comply with the Forest Fire Prevention and Suppression regulations.

Please submit the attached "Notice of Completion" at the end of your work season and accept our wishes for a successful program.

Sincerely



Steven E. Wuschke P. Eng.  
District Manager/Engineer  
Mines Branch, Kootenay Region

SEW/vs

Encl. Notice of Completion

c Reclamation Section - Victoria  
D. Stokes, Fording Coal - Coal Mountain Operations  
R. Berdusco, Fording Coal - Fording River Operations



File: 19540-20/L44113

September 11, 1997

Ross Griffiths  
Fording Coal Ltd.  
1000 205 9<sup>th</sup> Avenue SE  
Calgary, Alberta T2G 0R4

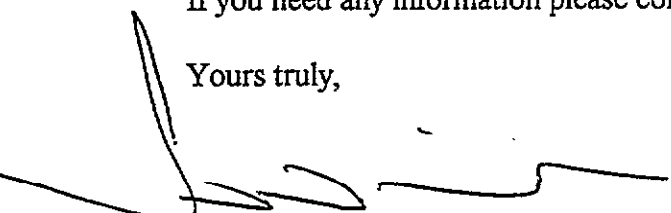
Dear Ross Griffiths:

You are hereby advised that I have exempted you from the requirement to submit a logging plan for 1997 drilling logging operations as shown on the attached map. The area is known as Block A of Licence to Cut L44113. This exemption is given under Section 29(2) of the *Forest Practices Code of British Columbia Act*.

Although you are exempt from a logging plan, to help us with our administration of the Licence to Cut would you please fill in the attached information sheet and submit it to us prior to commencement of logging.

If you need any information please contact Jack Selman at 426-1745.

Yours truly,



Tony Wideski, R.P.F.  
District Manager  
Cranbrook Forest District

Attachment

Ministry of  
Forests



Ministry of Forests

Mailing Address:  
1902 Theatre Road  
Cranbrook, BC V1C 4H4

Telephone: (250) 426-1700  
Facsimile: (250) 426-1449

Location:  
1902 Theatre Road  
Cranbrook, British Columbia



File: 19540-20/L44113

September 18, 1997

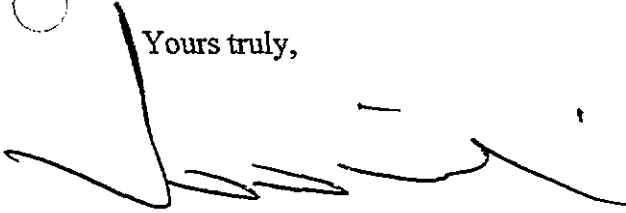
Fording Coal Limited  
1000, 205 Ninth avenue SE  
Calgary, Alberta T2G 0R4

Dear Sir/Madam:

Enclosed is your copy of Licence to Cut L44113 signed by the District Manager.

You may now proceed operations with conditions set out in the contract. No harvesting may occur without an approved logging plan or you have been exempted from the requirement of a logging plan.

Yours truly,

  
Tony Wideski, R.P.F.  
District Manager  
Cranbrook Forest District

Encl.

Ministry of  
Forests



Cranbrook Forest District

Mailing Address:  
Ministry of Forests  
Cranbrook, BC V1C 4H4

Telephone: (250) 426-1700  
Facsimile: (250) 426-1449

Location:  
1902 Theatre Road  
Cranbrook



## LICENCE TO CUT L44113



THIS LICENCE, dated September 8, 1997

BETWEEN:

THE DISTRICT MANAGER, on behalf of  
HER MAJESTY THE QUEEN IN RIGHT  
OF THE PROVINCE OF BRITISH COLUMBIA,  
1902 Theatre Road  
Cranbrook, British Columbia V1C 4H4

AND

**Fording Coal Limited**  
1000, 205 Ninth Ave SE  
Calgary, Alberta T2G 0R4  
:  
(the "Licensee")

WHEREAS:

- A. The Licensee is the lawful occupier of the areas of land referred to in this Licence pursuant to Mines permits issued under the authority of Ministry of Investment, Energy and Minerals Division
- B. The Licensee does not have the right to harvest Crown timber from the areas of land referred to in this Licence otherwise than under this Licence;
- C. The parties have entered into this Licence pursuant to section 51 of the *Forest Act*;

THE PARTIES agree as follows:

## **1.00 PERMIT AREA AND TERM**

- 1.01 Subject to this Licence and the Acts, regulations and standards referred to in paragraph 8.01, the Licensee is authorized to harvest Crown timber from the areas of land designated for harvest on the map attached as Exhibit "A" to this Licence.
- 1.02 The term of this Licence begins on October 1, 1997 and ends on the earlier of
- (a) the day upon which the Licensee's right to occupy the areas of land referred to in paragraph 1.01 expires or is surrendered, cancelled or otherwise terminated, or
  - (b) September 30, 1998
- provided, however, that the Licensor or District Manager may grant extensions on such terms and conditions as he may deem appropriate.
- 1.03 The Licensee's rights under this Licence are suspended and of no force or effect during any period during which the Licensee's right to occupy the areas of land referred to in paragraph 1.01 is suspended.
- 1.04 If the Licensee commits an act of bankruptcy, makes a general assignment for the benefit of its creditors or otherwise acknowledges its insolvency, the District Manager may, in a notice given to the Licensee, cancel this Licence.

## **2.00 REPRESENTATIONS AND WARRANTIES**

- 2.01 The Licensee represents and warrants that the Licensee
- (a) is the lawful occupier of the areas of land referred to in paragraph 1.01 pursuant to Mines Permits issued under the authority of Ministry of Investment, Energy and Minerals Division, and
  - (b) does not have the right to harvest Crown timber from these areas of land otherwise than under this Licence.

## **3.00 SPECIAL CONDITIONS AND REQUIREMENTS**

- 3.01 The Licensee must comply with the conditions and requirements set out in Schedule "A" to this Licence.

## **4.00 FELLING, BUCKING AND UTILIZATION SPECIFICATIONS**

- 4.01 Subject to paragraph 4.05, the Licensee must

- (a) fell standing timber of the species specified in Schedule "B" to this Licence, in accordance with the felling specifications set out in that Schedule,
  - (b) buck felled and dead-and-down timber of the species referred to in paragraph (a) in accordance with the bucking specifications set out in Schedule "B" to this Licence, and
  - (c) utilize all timber of the species and grades specified as obligatory utilization in Schedule "B" to this Licence if the timber meets the utilization specifications set out in that Schedule.
- 4.02 The following will be identified as waste in an assessment under Part 4.00:
  - (a) timber referred to in paragraph 4.01(a) that is not felled in accordance with the requirements of that paragraph;
  - (b) timber referred to in paragraph 4.01(b) that is not bucked in accordance with the requirements of that paragraph; and
  - (c) timber referred to in paragraph 4.01(c) that is not utilized in accordance with the requirements of that paragraph.
- 4.03 Schedule "B" to this Licence may include a requirement that the Licensee fell other timber in addition to the timber referred to in paragraph 4.01(a), in which case, subject to paragraph 4.05, the Licensee must fell but need not utilize such timber.
- 4.04 Subject to paragraph 4.05, the Licensee may utilize
  - (a) timber of the species and grades specified as optional utilization in Schedule "B" to this Licence, and
  - (b) timber referred to in paragraph 4.03.
- 4.05 The Licensee must not fell standing timber, or must not buck or utilize felled or dead-and-down timber, as the case may be, if
  - (a) the timber is specified as reserved timber in Schedule "B" to this Licence, or
  - (b) under an operational plan or the Acts, regulations or standards referred to in paragraph 8.01, the Licensee is required not to fell the timber, or not to buck or utilize the timber, for any reason, including *silviculture, biodiversity or other forest management reasons*.
- 4.06 If the Licensee fells, bucks or utilizes timber contrary to paragraph 4.05, the Licensee must
  - (a) immediately notify the District Manager, and
  - (b) comply with any directions of the District Manager in respect of the timber.

## 5.00 RESIDUE AND WASTE ASSESSMENTS

- 5.01 The District Manager may, in accordance with the *Provincial Logging Residue and Waste Measurement Procedures Manual*, dated January 1, 1994, as amended from time to time,
- (a) carry out an assessment of the volume of residue and waste left on an area of land referred to in paragraph 1.01
    - (i) at any time after primary logging on the area has been completed, or
    - (ii) if primary logging on the area is not completed before the Licence expires or is otherwise terminated, at any time after the expiry or termination of this Licence, and
  - (b) as part of the assessment,
    - (i) measure the timber that was not felled, or was not bucked or utilized, in accordance with the specifications set out in Schedule "B" to this Licence,
    - (ii) classify the timber referred to in clause (i) as residue or waste, and
    - (iii) classify the residue and waste as avoidable or unavoidable.
- 5.02 The District Manager, in a notice given to the Licensee, may require the Licensee to pay in respect of avoidable waste left on an area of land referred to in paragraph 1.01 an amount determined in accordance with paragraph 5.03.
- 5.03 For the purpose of determining the amount payable under paragraph 5.02, the District Manager will
- (a) multiply
    - (i) the volume of avoidable waste assessed under paragraph 5.01 based on sawlog grades, by
    - (ii) the average stumpage rate charged for sawlogs harvested under this Licence in statements or invoices issued during the 12 month period ending 1 month after the month in which
      - (A) primary logging on the area was completed, or
      - (B) this Licence expires or is otherwise terminated, as the case may be, and
  - (b) multiply
    - (i) the volume of avoidable waste assessed under paragraph 5.01 based on grades other than sawlog grades, by
    - (ii) the stumpage rate charged for timber of the applicable grades.

## **6.00 TIMBER MARK**

6.01 The timber mark for this Licence is:

**L44**

**113**

6.02 If directed to do so by the District Manager, the Licensee must erect signs at all exits from the areas of land referred to in paragraph 1.01, clearly showing the timber mark(s) referred to in paragraph 6.01.

## **7.00 SCALE-BASED STUMPAGE**

7.01 For the purpose of determining the amount of stumpage payable in respect of timber harvested from the areas of land referred to in paragraph 1.01, the volume or quantity of timber harvested will be determined using information provided in a scale of the timber.

7.02 The Licensee must ensure that

- (a) all timber harvested from the areas of land referred to in paragraph 1.01 is scaled, and
- (b) the scale of the timber is conducted properly in accordance with the requirements of the *Forest Act* and the regulations made under that Act.

## **8.00 LEGISLATIVE FRAMEWORK**

8.01 This Licence is subject to

- (a) the *Forest Act* and the regulations made under that Act, and
- (b) the *Forest Practices Code of British Columbia Act* and the regulations and standards made under that Act.

8.02 The Licensee must

- (a) comply with the Acts, regulations and standards referred to in paragraph 8.01, and
- (b) ensure that its employees, agents and contractors comply with these Acts, regulations and standards when engaging in or carrying out activities or operations under or associated with this Licence.

8.03 Nothing in this Licence is to be construed as authorizing the Licensee to harvest timber or engage in or carry out any other forest practices until

- (a) all applicable operational plans have been approved by the District Manager, and
- (b) in the case of road construction or modification, a road layout and design has been approved by the District Manager.



- 8.04 Nothing in this Licence is to be construed as authorizing the Licensee to carry out any operations or engage in any activities otherwise than in accordance with the requirements of the Acts, regulations and standards referred to in paragraph 8.01.
- 8.05 The area surrounding the cutblock boundary(s) identified on the attached map as Exhibit A, is subject to hazard tree felling as required by Worker's Compensation Board Standards and Regulations. This applies only to trees on vacant Crown land outside the cutblock boundary that represent a hazard to workers.

## **9.00 INTERFERENCE WITH ABORIGINAL RIGHTS**

- 9.01 Notwithstanding any other provision of this Licence, if a court of competent jurisdiction
- (a) determines that activities or operations under or associated with this Licence are interfering or may interfere with an aboriginal right,
  - (b) grants an injunction further to a determination referred to in subparagraph (a), or
  - (c) grants an injunction pending a determination of whether activities or operations under or associated with this Licence are interfering or may interfere with an aboriginal right,

the District Manager, in a notice given to the Licensee, may vary or suspend this Licence, in whole or in part, to the extent necessary to ensure there is no interference or no further interference with the aboriginal right or the alleged aboriginal right, having regard to any determination of the court and the terms of any injunction granted by the court.

- 9.02 Subject to this Licence and the Acts, regulations and standards referred to in paragraph 8.01, if

- (a) the District Manager has varied this Licence under paragraph 9.01,
- (b) a court of competent jurisdiction subsequently overturns, sets aside or dissolves the determination or injunction referred to in that paragraph, and
- (c) it is practical to do so,

the District Manager, at the request of the Licensee, will vary this Licence to reflect as closely as possible, for the remainder of its term, the terms and conditions of this Licence prior to the variation under paragraph 9.01.

- 9.03 Subject to this Licence and the Acts, regulations and standards referred to in paragraph 8.01, if

- (a) the District Manager has suspended this Licence under paragraph 9.01,

- (b) a court of competent jurisdiction subsequently overturns, sets aside or dissolves the determination or injunction referred to in that paragraph, and
  - (c) it is practical to do so,
- the District Manager, at the request of the Licensee, will reinstate this Licence for the remainder of its term.

## 10.00 FINANCIAL AND DEPOSITS

10 01 In addition to any money payable in respect of this Licence under the Acts or regulations referred to in paragraph 8.01, the Licensee must pay to the Crown, immediately upon receipt of a notice, statement or invoice issued on behalf of the Crown,

- (a) stumpage under Part 7 of the *Forest Act* in respect of timber harvested under this Licence at rates determined, redetermined and varied under section 105 of that Act, and
- (c) any payment required under Part 4.00.

10.02 The District Manager may require the Licensee to maintain a deposit with the Crown in an amount determined by the District Manager, in a form acceptable to the Minister,

- (a) to act as security for the Licensee's performance of its obligations under or in respect of this Licence, and
- (b) to indemnify the Crown against
  - (i) any damages or losses the Crown might suffer, or
  - (ii) any liability which the Crown might incur,as a consequence of any act or omission of the Licensee in respect of any activity engaged in or operation carried out under or in respect of this Licence.

10.03 If

- (a) the Licensee fails
  - (i) to pay money that the Licensee is required to pay to the Crown under
    - (A) this Licence, or
    - (B) the Acts or regulations referred to in paragraph 8.01 in respect of this Licence, or
  - (ii) to otherwise perform its obligations under,
    - (A) this Licence, or
    - (B) the Acts or regulations referred to in paragraph 8.01 in respect of this Licence, or

- (b) any activity or operation engaged in or carried out under this Licence causes damage to persons or property, and the Licensee fails to
  - (i) remedy the damage, or
  - (ii) compensate any person who suffers a loss as a result of the activity or operation,

then the District Manager may take from the deposit referred to in paragraph 10.02 an amount

- (c) equal to the money which the Licensee failed to pay,
- (d) sufficient to cover all costs incurred by the District Manager in remedying the Licensee's failure to perform its obligations,
- (e) equal to the District Manager's estimate of the costs which the District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations,
- (f) equal to the District Manager's estimate of any losses incurred by the Crown as a result of the Licensee's failure to perform its obligations,
- (g) sufficient to indemnify the Crown against any liability which the Crown might incur as a consequence of an activity or operation referred to in subparagraph (b),

and for that purpose a security included in the deposit may be realized.

10.04 If the District Manager gives the Licensee a notice that an amount has been taken under this Part from the deposit referred to in paragraph 10.02 the Licensee, within four weeks of the date on which the notice is given, must pay to the Crown, in a form acceptable to the Minister, an amount sufficient to replenish the deposit.

10.05 Subject to paragraphs 10.07, 10.08 and 10.09, if

- (a) the District Manager, under paragraph 10.03, takes from the deposit an amount equal to the District Manager's estimate of the costs which the District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations, and
- (b) the costs incurred by the District Manager in remedying the Licensee's failure to perform its obligations are less than the amount taken from the deposit,

the Crown will as soon as feasible return to the Licensee an amount equal to the difference between the amount taken from the deposit and the costs incurred by the District Manager.

10.06 If

- (a) the District Manager, under paragraph 10.03, takes from the deposit an amount equal to the District Manager's estimate of the costs which the District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations, and
- (b) the costs incurred by the District Manager in remedying the Licensee's failure to perform its obligations are greater than the amount taken from the deposit,

the District Manager may take from the deposit an additional amount equal to the difference between the costs incurred by the District Manager and the amount originally taken from the deposit, and for that purpose a security included in the deposit may be realized.

10.07 If the District Manager, under paragraph 10.03, takes from the deposit an amount equal to the District Manager's estimate of the costs which the District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations, the District Manager is under no obligation to remedy the Licensee's failure.

10.08 If

- (a) the District Manager, under paragraph 10.03, takes from the deposit an amount equal to the District Manager's estimate of the costs which the District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations,
- (b) the District Manager does not remedy the Licensee's failure to perform its obligations, and
- (c) the District Manager gives a notice to the Licensee indicating that the Crown will not be remedying the Licensee's failure to perform its obligations,

then, subject to paragraph 10.09, the Crown may retain the amount taken from the deposit under paragraph 10.03.

10.09 If, after receiving a notice referred to in paragraph 10.08, the Licensee

- (a) remedies the failure to perform its obligations, and
- (b) gives a notice to that effect to the District Manager within three months of the date on which the notice referred to in paragraph 10.08 is given to the Licensee, or within such longer period as the District Manager may approve,

then the Crown will return to the Licensee an amount equal to the difference between the amount taken from the deposit and any costs incurred by the District Manager in respect of the Licensee's failure to perform its obligations.

10.10 The Crown will return to the Licensee the deposit referred to in paragraph 10.02, less deductions made under paragraph 10.03 or 10.06, when this Licence expires or is surrendered or otherwise terminated, provided the District Manager is satisfied

- (a) that the Licensee has fulfilled its obligations under or in respect of this Licence, and
- (b) the deposit is not required to indemnify the Crown against any damages, losses or liabilities referred to in paragraph 10.02.

## 11.00 REPORTING

11.01 The District Manager, in a notice given to the Licensee, may require the Licensee to submit a report containing such information as the District Manager requires regarding the Licensee's performance of its obligations under or in respect of this Licence if the information is not included in any other reports which the Licensee must submit under the Acts or regulations referred to in paragraph 8.01.

11.02 Upon receipt of a notice referred to in paragraph 11.01, the Licensee, on or before the date specified in the notice, must submit a report to the District Manager containing the required information.

11.03 Subject to paragraph 11.04, the District Manager may include the information contained in a report submitted under paragraph 11.02 in any reports prepared by the Ministry of Forests for public review.

11.04 Subject to the *Freedom of Information and Protection of Privacy Act*, the District Manager will not disclose information provided in confidence by the Licensee in a report submitted under paragraph 11.02.

## 12.00 LIABILITY AND INDEMNITY

12.01 The Licensee must indemnify the Crown against and save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses faced, incurred or suffered by the Crown as a result, directly or indirectly, of any act or omission of

- (a) the Licensee,
- (b) an employee or agent of the Licensee,
- (c) a contractor of the Licensee who engages in any activity or carries out any operation, including but not restricted to harvesting operations, under or associated with this Licence, or

- (d) any other person who on behalf of or with the consent of the Licensee engages in any activity or carries out any operation, including but not restricted to harvesting operations, under or associated with this Licence.

12.02 For greater certainty, the Licensee has no obligation to indemnify the Crown under paragraph 12.01 in respect of any act or omission of

- (a) an employee, agent or contractor of the Crown, in the course of carrying out his or her duties as employee, agent or contractor of the Crown, or
- (b) a person, other than the Licensee, to whom the Crown has granted the right to use or occupy the areas of land referred to in paragraph 1.01, in the course of exercising those rights.

12.03 Amounts taken under Part 10.00 from the deposit referred to in paragraph 10.02, and any payments required under Part 5.00, are in addition to and not in substitution for any other remedies available to the Crown in respect of a default of the Licensee.

### **13.00 LIMITATION OF LIABILITY**

13.01 The Crown is not liable to the Licensee for injuries, losses, expenses, or costs incurred or suffered by the Licensee as a result, directly or indirectly, of an act or omission of a person who is not a party to this Licence, including but not restricted to an act or omission of a person disrupting, stopping or otherwise interfering with the Licensee's operations under this Licence by road blocks or other means.

### **14.00 NOTICE**

14.01 A notice given under this Licence must be in writing.

14.02 A notice given under this Licence may be

- (a) delivered by hand,
- (b) sent by mail, or
- (c) subject to paragraph 14.05, sent by facsimile transmission, to the address or facsimile number, as applicable, specified on the first page of this Licence, or to such other address or facsimile number as is specified in a notice given in accordance with this Part.

14.03 If a notice is given under this Licence, it is deemed to have been given

- (a) if it is given in accordance with subparagraph 14.02(a), on the date it is delivered by hand,

- (b) if it is given in accordance with subparagraph 14.02(b), subject to paragraph 14.04, on the eighth day after its deposit in a Canada Post Office at any place in Canada, and
  - (c) if it is given in accordance with subparagraph 14.02(c), subject to paragraph 14.05, on the date it is sent by facsimile transmission.
- 14.04 If, between the time a notice is mailed in accordance with subparagraph 14.02(b) and the time it is actually received, there occurs a postal strike, lockout or slowdown that might reasonably affect delivery of the notice, the notice is not deemed to be given until the party actually receives it.
- 14.05 If a notice is sent by facsimile transmission, the party sending the notice must take reasonable steps to ensure that the transmission has been successfully completed.

## 15.00 MISCELLANEOUS

- 15.01 This Licence will enure to the benefit of, and be binding on, the parties and their respective heirs, executors, successors and permitted assigns.
- 15.02 Any power conferred or duty imposed on the District Manager under this Licence may be exercised or fulfilled by any person authorized to do so by the District Manager.
- 15.03 The Exhibit and Schedules to this Licence are deemed to be part of this Licence.
- 15.04 The laws of British Columbia will govern the interpretation of this Licence and the performance of the parties' obligations under this Licence.
- 15.05 The Licensee must comply with the requirements of all legislation applicable to activities or operations under or associated with this Licence, including but not restricted to the *Workers Compensation Act*, *Health Act*, and *Employment Standards Act*, and the regulations made under those Acts.

## 16.00 INTERPRETATION

- 16.01 In this Licence, unless the context otherwise requires
- (a) "average stumpage rate charged for sawlogs" means the total stumpage charged for sawlogs divided by the total volume of sawlogs,
  - (b) "avoidable" in respect of residue or waste means timber that does not fall within the definition of unavoidable,

- (c) "*Forest Practices Code of British Columbia Act*" means the *Forest Practices Code of British Columbia Act*, S.B.C. 1996, c. 159, as amended from time to time, or the successor to this Act, if it is repealed,
- (d) "logging plan" means a logging plan referred to in the *Forest Practices Code of British Columbia Act* that is approved in respect of this Licence,
- (e) "primary logging" means felling timber and yarding or forwarding the timber to central landings or road-sides, but does not include removing the timber from these landings or road-sides,
- (f) "residue" means timber of a species and grade specified as optional utilization in Schedule "B" to this Licence that is not utilized by the Licensee, excluding timber which, under the *Provincial Logging Residue and Waste Measurement Procedures Manual*, dated January 1, 1994, as amended from time to time, is not assessed as residue,
- (g) "unavoidable" in respect of residue or waste means timber that was not felled, or was not bucked or utilized, in accordance with the specifications set out in Schedule "B" to this Licence, because the timber
  - (i) is inaccessible or physically obstructed,
  - (ii) could not be felled, bucked or utilized safely,
  - (iii) could not be felled, bucked or utilized because of the restriction referred to in paragraph 4.06,
- (h) "utilize" means remove timber from an area of land referred to in paragraph 1.01 for use or processing elsewhere,
- (i) "waste" means
  - (i) timber referred to in paragraph 4.01(a) that is not felled in accordance with the requirements of that paragraph;
  - (ii) timber referred to in paragraph 4.01(b) that is not bucked in accordance with the requirements of that paragraph; or
  - (iii) timber referred to in paragraph 4.01(c) that is not utilized in accordance with the requirements of that paragraph.

16.02 Unless otherwise provided in paragraph 16.01 if a word or phrase used in this Licence is defined in the *Forest Act* or the *Forest Practices Code of British Columbia Act* the definition in the Act applies to this Licence, and where the word or phrase in the Act is replaced by a new word or phrase, this Licence is deemed to have been amended accordingly.



16.04 If a provision of the *Forest Act* or the *Forest Practices Code of British Columbia Act* referred to in this Licence is renumbered, the reference in this Licence is to be construed as a reference to the provision as renumbered.

16.04 In this Licence, unless the context otherwise requires,

- (a) the singular includes the plural and the plural includes the singular, and
- (b) the masculine, the feminine and the neuter are interchangeable.

16.05 This Licence is divided into parts, paragraphs, subparagraphs, clauses and subclauses, illustrated as follows:


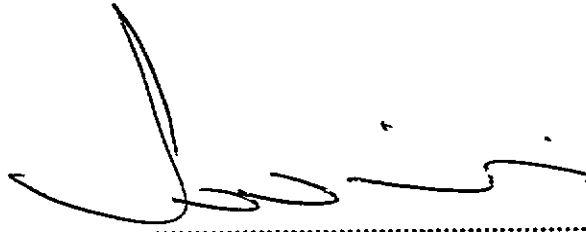
- 1.00 part,
  - 1.01 paragraph,
    - (a) subparagraph,
      - (i) clause,
        - (A) subclause;

and a reference to a subparagraph, clause or subclause is to be construed as a reference to a subparagraph, clause or subclause of the paragraph, subparagraph or clause, as the case may be, in which the reference occurs.

IN WITNESS WHEREOF this Licence has been executed by the District Manager and the Licensee on the date first written above.

SIGNED by the )  
District Manager )  
on behalf of Her Majesty )  
the Queen in Right of )  
the Province of )  
British Columbia in the )  
presence of: )

*D. Henderson*



.....  
Tony Wideski, RPF  
District Manager  
Cranbrook Forest District

THE COMMON SEAL of )  
the Licensee was affixed )  
in the presence of: )

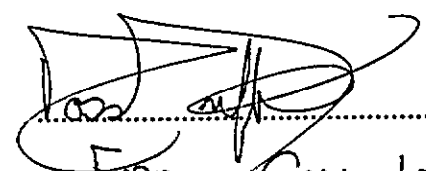
.....  
.....  
.....

c/s

(or)

SIGNED by the Licensee )  
in the presence of: )

*[Signature]*  
*W.F.C.L.*



.....  
per FORDING COAL LTD  
(Licensee)

## **SCHEDULE "A"**

### **SPECIAL CONDITIONS AND REQUIREMENTS**

**1.00 Status of Operational Area**

The Licensee is responsible for determining the status of those lands upon which operations are proposed, and this Licence pertains only to timber on vacant Crown Lands.

**2.00 Status of Operational Area**

This Licence is subject to any existing rights, permits or tenures on those lands upon which geophysical or petroleum operations will be conducted. Operations must be conducted in consultation with the holders of those rights.

**3.00 Reporting**

The Licensee must submit, at the completion of the Yearly Exploration Program, a plan showing the details of the ground disturbance associated with the Licensee's exploration activities in the areas approved under this Licence. The maps should be at a scale of 1:20,000.

**4.00 Commencement Date**

Prior to the commencement of operations, the Licensee must contact the office of the District Manager at Cranbrook to confirm the date of commencement of operations.

**5.00 Right to Timber**

Provided, that when the term of this Licence expires all rights of the Licensee must terminate, and any timber cut from and lying on the Licence area must become the property of the Licensor.

**6.00 Timber to be Decked**

All timber cut from the lands described in this Licence must not be sold or traded. All such timber must be decked at landings approved by the Forest Officer for subsequent sale by the Licensor.

**7.00 Miscellaneous**

**7.01**

Within designated areas, the Licensee shall full tree skid or yard all felled trees to landings as approved in the logging plan.

7.02

Any tree which is pushed or knocked over or otherwise caused to lean over during logging operations or road construction shall be felled by the Licensee, as required by the Forest Officer. The tree shall be bucked into usable lengths and such lengths utilized. The remaining bole shall be bucked into lengths so that each section lies close to the ground. All branches shall be lopped and scattered in such a manner as to lie close to the ground and be clear of all reserved trees, immature trees, and seedlings.

7.03

"The Licensee (Permittee) shall

- (a) upon completion of harvesting operations or termination of the Licence (Permit), whichever is sooner, remove from the Licence (Permit) Area
  - (i) all logging equipment, fuel tanks or chattels, and
  - (ii) any materials brought onto the Licence (Permit) Area by or on behalf of the Licensee (Permittee),
- (b) concurrently with harvesting operations, remove all refuse resulting from occupation of the Licence (Permit) Area, and
- (c) leave the licence (Permit) Area in an orderly and sanitary condition."

7.04

- (a) All trees shall be felled so that they fall within the areas on which cutting is authorized, and any slash resulting therefrom shall not be left or allowed to accumulate within ten (10) metres of any boundaries of areas on which cutting is authorized.
- (b) No timber shall be yarded through areas not authorized for cutting, and in no case shall any roads such as tractor, swing, or haul roads be constructed through such areas without the prior written approval of the Forest Officer.
- (c) Any cutting on or yarding through areas on which cutting is not authorized may be considered in trespass and subject to trespass charges.

7.05

- (a) The lands described in this licence are subject to use and occupation by the holder(s) of a registered trapline(s)/guiding licence(s) issued by the Crown. The licensee shall forward a copy of the Schedule of Harvesting prior to commencement of operations to the registered trapline holder and/or guide identified in (b).
- (b) The trapline and/or guiding areas mentioned in (a) above are recorded in the name of  
Guide:  
Trapper:
- (c) In consideration of the foregoing, the licensee agrees to indemnify and save harmless the Crown from and against all claims for loss or damage to improvements or personal property associated with the foregoing uses.

7.06

- (a) The lands described in this Licence are subject to use and occupation by the holders of tenures granted by the Crown to others, and the Licensee covenants not to obstruct or impede the use or occupation held under the terms of the tenures.
- (b) The tenures mentioned above are Mining.
- (c) In consideration of the foregoing, the Licensee agrees to indemnify and save harmless the Licensor from and against all claims for loss or damage whether caused by act or omission including losses or damage arising out of the Licensee's interference or obstruction of others having an interest in the use of the lands.
- (d) Provided that the Licence shall be deemed to be suspended in the event the Licensee, its contractors, agents, or servants damage any improvements are replaced or repaired to the satisfaction of the Forest Officer.

7.07

In the event that the Licensee (or Permittee) causes or permits the discharge into the land or water of a substance that is, or may be, injurious to health, the Licensee (or Permittee) shall promptly notify the Medical Health Officer of the location, time, duration, nature and quantity of the discharge of the substance and shall take immediate action to prevent and cease the discharge.

All fluids and lubricants used by machinery used in conjunction with this contract shall be in sealed containers at all times. All refuse, fluids, and lubricants must be removed from the area of operations and disposed of in an approved manner at approved disposal sites.

7.08

Landing size will include the area disturbed and/or used for bucking, decking, and the debris pile. If a fire break is constructed around the debris pile the break will be included in the landing measurement. Landings constructed on slopes will be measured from the top of the cut to the bottom of the side cast.

7.09

After the date that is six months after the enactment of the *Forest Practices Code Act of B.C. (FPC)* all excavated or bladed trails or compacted areas as defined by the *FPC* standards may have to be rehabilitated as directed by a Forest Officer.

7.10

The Licensee shall maintain security with the Minister of Finance and Corporate Relations as a condition of the Reclamation Permit issued by the Ministry of Energy, Mines and Petroleum Resources.

If the Licensee/Permittee fails to pay money that it is required to pay to the Crown or otherwise fails to perform its obligations under the *Forest Act* and regulations of this Licence/Permit in respect of operations carried on under, or in conjunction with, this Licence/Permit:

- (a) The Licensor or the District Manager may, after at least 30 days notice to the Licensee, take from the security such amounts as may be reasonably be required to remedy the default.
- (b) the Licensor or the District Manager may, if the Licensee has had a reasonable opportunity to remedy a default and the Licensor or the District Manager considers that it is not practical to remedy the default, and the Licensor or the District Manager considers that it is not practical to remedy the default, make an assessment in respect of the default equal to the costs that would have been incurred by the Licensor or the District Manager had he remedied the default and that assessment may be paid from the security.

7.11

Prior to the commencement of any operations on areas approved for cutting, all cut block boundaries shall be established on the ground, utilizing blazes and/or paint. Boundary station markers utilizing squared trees shall be established at least every two hundred (200) metres. The removal of lower tree limbs and the use of coloured ribbons may be used to enhance visibility of boundary markers.

All boundary markers, including blazed, painted and ribboned trees, must be left intact during and upon completion of harvesting.

7.12

The hazard tree felling area surrounding the cutblock boundary(s) identified on the attached map as Exhibit "A", is subject to an exemption from the requirement for a forest development plan as provided under Section 28.(1)(a)(i) of the *Forest Practices Code of British Columbia Act*. Where required, the licensee may apply in writing to the District Manager for this exemption.

7.13

The Licensee may fell trees outside of the cutblock boundary(s) but within area described in paragraph 8.01 if the person conducting tree felling or rigging tail hold/anchor trees determines that the tree represents a safety hazard according to Workers' Compensation Board standards.

7.14

**The Licensee must not buck or utilize a tree felled under paragraph 8.02 without the consent of the District Manager.**

7.15

If consent is granted under paragraph 8.03, then the felled hazard tree(s) shall be bucked and utilized according to the standards specified in Schedule "B" of this authority, unless otherwise directed by the District Manager.

7.16

Harvesting of timber shall occur only in areas of work as approved by Ministry of Employment and Investment.

## **SCHEDULE "B" - INTERIOR**

### **FELLING, BUCKING AND UTILIZATION SPECIFICATIONS**

#### **1.00 FELLING SPECIFICATIONS**

- 1.01 Subject to paragraph 1.02, standing timber of the species shown on the table attached to this Schedule must be felled in accordance with the following specifications:
- (a) all timber meeting the minimum diameter at stump height shown for that species in the table attached to this Schedule must be felled; and
  - (b) unless otherwise authorized in writing by the District Manager, timber must be felled to a stump height that does not exceed the maximum stump height shown for that species in the table attached to this Schedule.
- 1.02 The Licensee must not fell standing timber if
- (a) the timber is specified in Part 6.00 as reserved timber, or
  - (b) under an operational plan or the Acts, regulations or standards referred to in paragraph 8.01 of the Licence, the Licensee is required not to fell the timber for any reason, including silviculture, biodiversity or other forest management reasons.

#### **2.00 BUCKING SPECIFICATIONS**

- 2.01 Subject to paragraph 2.02, felled and dead-and-down timber of the species referred to in paragraph 1.01 must be bucked so as to maximize the volume of logs and slabs which
- (a) meet the utilization specifications referred to in paragraph 3.01, and
  - (b) are of the species and grades specified as obligatory utilization under Part 4.00.
- 2.02 The Licensee must not buck felled or dead-and-down timber if
- (a) the timber is specified in Part 6.00 as reserved timber, or
  - (b) under an operational plan or the Acts, regulations or standards referred to in paragraph 8.01 of the Licence, the Licensee is required not to buck the timber for any reason, including silviculture, biodiversity or other forest management reasons.



### **3.00 UTILIZATION SPECIFICATIONS**

3.01 Subject to paragraphs 3.02 and 3.03, the following utilization specifications apply to timber authorized for harvest under this Licence:

- (a) all butt logs meeting
  - (i) the minimum diameter at stump height,
  - (ii) the minimum log length, and
  - (iii) the minimum top diametershown for that species in the table attached to this Schedule must be utilized; and
- (b) all top logs meeting
  - (i) the minimum log length, and
  - (ii) the minimum top diametershown for that species in the table attached to this Schedule must be utilized;
- (c) all slabs meeting
  - (i) the minimum slab length, and
  - (ii) the minimum slab thicknessshown for that species in the table attached to this Schedule must be utilized.

3.02 The Licensee need not utilize timber of the species and grades specified in Part 5.00 as optional utilization.

3.03 The Licensee must not utilize timber if

- (a) the timber is specified in Part 6.00 as reserved timber, or
- (b) under an operational plan or the Acts, regulations or standards referred to in paragraph 8.01 of the Licence, the Licensee is required not to utilize the timber for any reason, including silviculture, biodiversity or other forest management reasons.

### **4.00 OBLIGATORY UTILIZATION**

4.01 Timber of the following species and grades is specified as obligatory utilization:

- (a) all coniferous species that are
  - (I) Sawlog grade (Grade Code Blank), or
  - (ii) Dead and Dry Sawlog (Grade Code 3).

## **5.00 OPTIONAL UTILIZATION**

5.01 Timber of the following species and grades is specified as optional utilization:

- (a) firmwood rejects;
- (b) all deciduous species of all grades; and
- (c) all coniferous species of the following grades:
  - (i) Lumber Reject (Grade Code 4);
  - (ii) Dead and Dry Lumber Reject (Grade Code 5); and
  - (iii) Undersized Log Grade (Grade Code 6).

## **6.00 RESERVED TIMBER**

6.01

Notwithstanding section 4.01 and 5.01 and subject to 7.01, trees must be reserved in accordance with the approved silviculture prescription and/or logging plan.

## **7.00 DEFINITIONS**

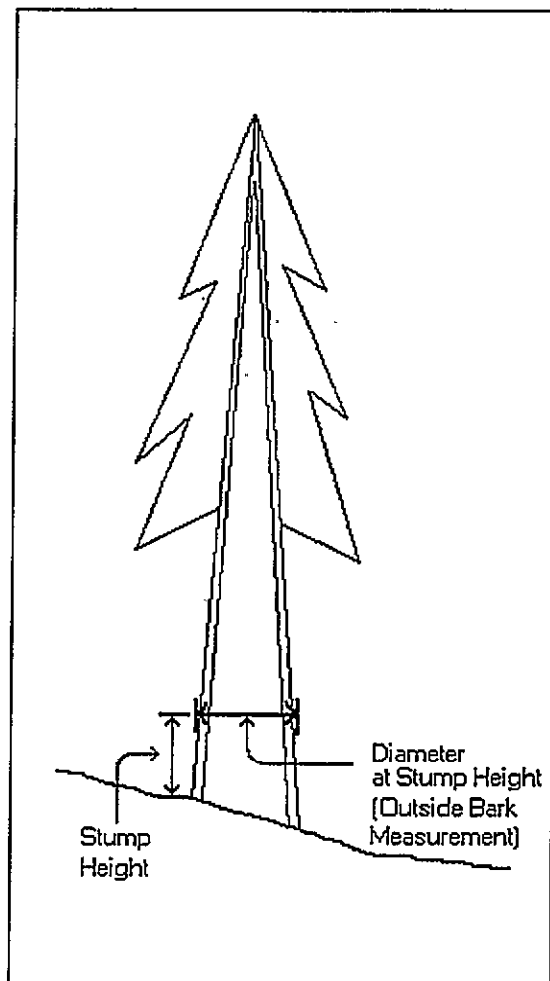
7.01 In this Schedule, as exemplified by the diagrams attached to this Schedule,

- (a) "butt end" means the log end that was previously attached to the stump;
- (b) "butt log" means the log cut from the portion of the tree that was previously attached to the stump;
- (c) "diameter at stump height" means
  - (i) in the case of standing timber, the diameter of the tree (outside bark) measured at the point of the maximum stump height shown in the table attached to this Schedule, and
  - (ii) in the case of a butt log, the diameter (outside bark) at the butt end of the log; and
- (d) "slab" means one of 2 or more parts of a log produced as a result of the log fracturing along its length;
- (e) "stump height" means the height of the stump measured on the side of the stump adjacent to the highest ground;
- (f) "top diameter" means the diameter (inside bark) at the narrowest end of the log;
- (g) "top log" means any log that is not a butt log.

# SCHEDULE "B" - INTERIOR

## Diagrams and Tables for Block(s)

### 1. Falling Specifications

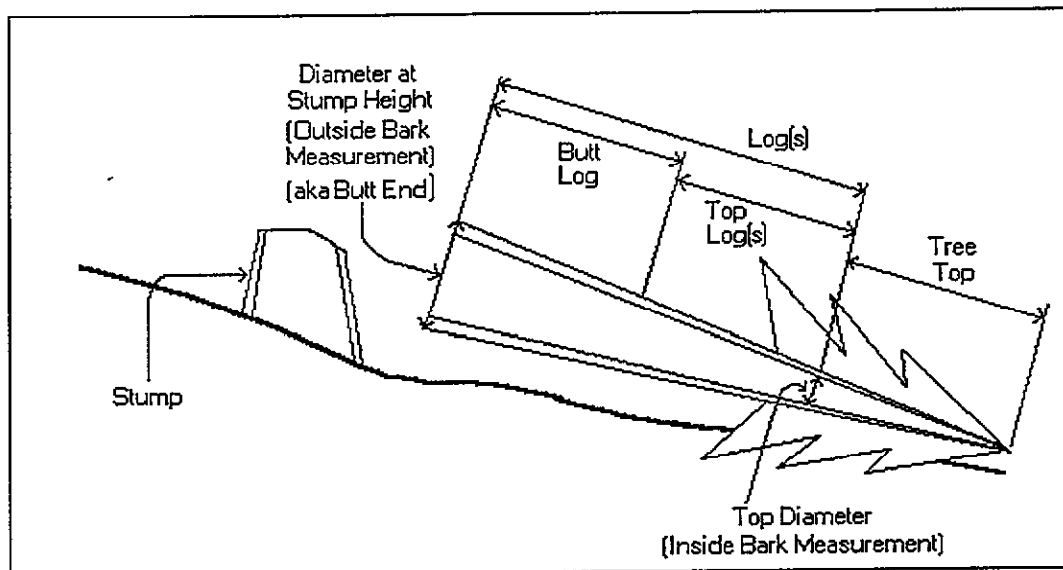


Species	Maximum Stump Height	Minimum Diameter at Stump Height
Lodgepole Pine	30cm	15cm
All other species	30cm	20cm

## SCHEDULE "B" - INTERIOR

### Diagrams and Tables for Block

#### 2. Utilization Specifications



Species	Minimum Log or Slab Length	Minimum Diameter at Stump Height	Minimum Top Diameter or Slab Thickness
Lodgepole Pine	3.0 m	15 cm	10 cm
Cedar	3.0 m	20 cm	15 cm
All other species	3.0 m	20 cm	10 cm

Note: Minimum top diameter or slab thickness (inside bark measurement) for cedar older than 141 years is 15.0 cm

Licence to Cut L44113



## EXHIBIT "A"



Province of  
British Columbia

Ministry of  
Forests



EXHIBIT 'A'

1 OF 1

FILE: L44113

APPLICANT:

ADDRESS:

SHOWN AS A

BOLD SOLID LINE

Pulpwood

BCGS Reference Maps:

082G037

NAD 27/83 83

Reg Compt. L  
20 005

Drawn by AM

Revised by

Date 1997-08-28

Date

ODM Map ID 144113

ORCS \* 19540-25

Scale 1: 20,000

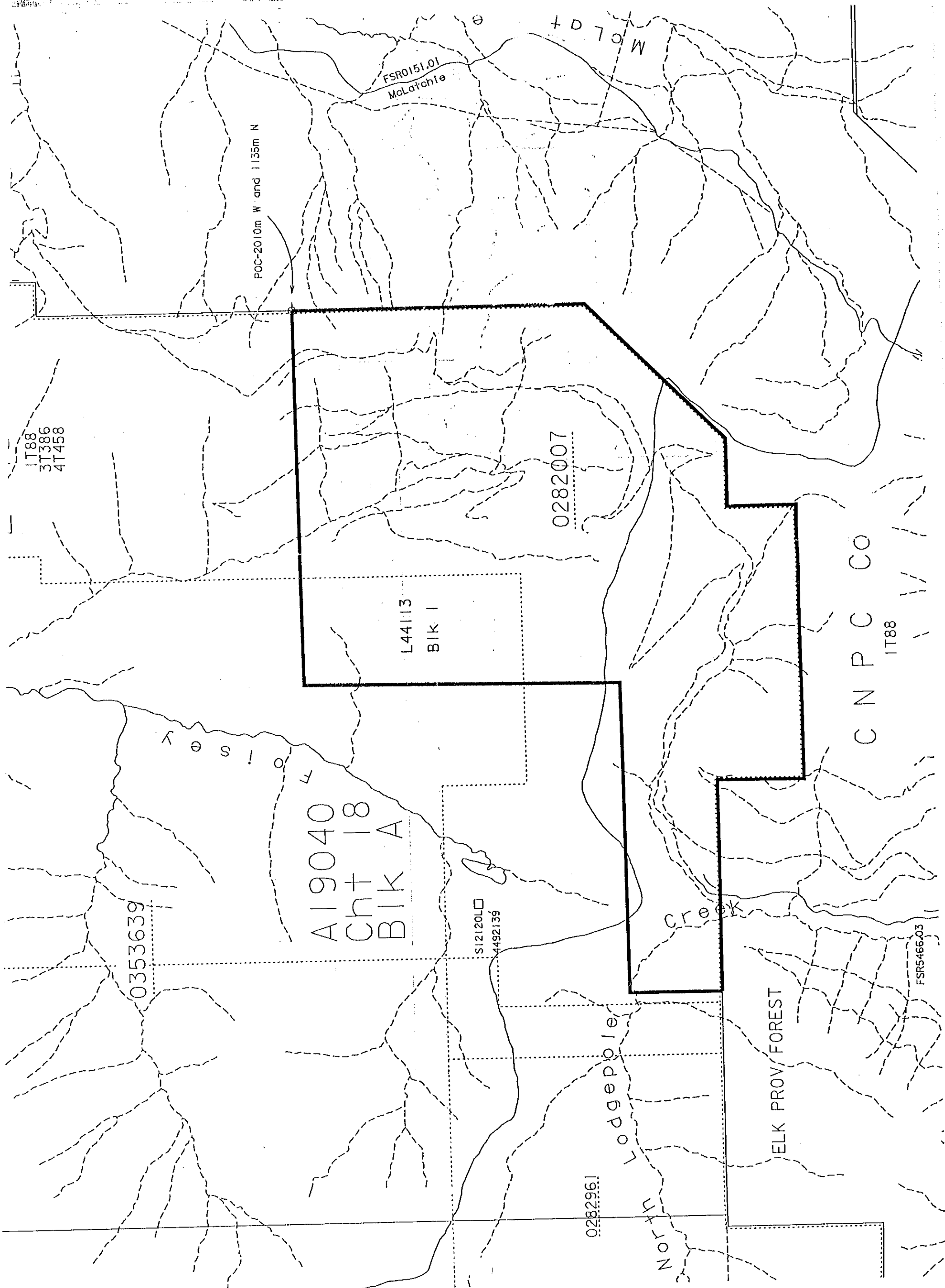
Area  
hectares 693

Planning Cell  
F130

CASCADES E

WITHIN PREV CLEARED AREA: FLA19040 CHT 18 BK A  
ALL POINTS TIED TO: SW COR L10972  
EXCLUDING THEREOUT:  
SAVE AND EXCEPT PRIOR RIGHTS OF:  
POC

LIC TO CUT ON CL350613-CL350617



# Lodgepole Drilling program - 1997

Contact and Activities List as at October 13, 1997



Organization	Name	Title	Number	permit or activity	status
BC Mines and Energy	Andrew Whale	Regional Manager	426-1563	Notice of Work / Reclamation Approval	Permit received
	Steve Wuschke	District Engineer	426-1655		#CBK97-0504457-001-C14
	Doug Martin	MOE, fish and wildlife	489-8548 489-8506(fax)	first site visit October 1	
	Dennis Roach	Mines Inspector	426-1654 489-7236 (cell) 429-3371 (home)		
	Gordon Mackay				
Ministry of Forests	Jack Sellman (Dale & Georgina)	inspection officer technicians	426-1700	Licence to Cut	Licence L44113 Exemption from plan (file# 19540-20/L44113)
	Len Palajec	?	426-1700	Road Use Permit for Lodgepole and North Lodgepole roads.	Road permit # 01,03,04-0942-97
	Bob Couperus	timber technician	426-1787 426-1449(fax)		
	Crestbrook Forest Industries	Don Miller	forest manager	426-9360 426-5372(fax)	Road Use Agreement for Lodgepole Forest Service road
Margaret Shreeves		office assistant	426-9262	road use/maintenance agreement for Lodgepole Forest service road	agreement in place
Duke Armleder		sparwood harvesting superintendent	425-2232		
Jim Thorner		Land Superintendent (Fernie)	423-4464 423-7411(fax)	Access permit for MFU27 land adjoining coal licences	permit in place #AC-15



Organization	Name	Title	Number	permit or activity	status
SDS Drilling	Art Vollendorf		403-287-1460	Drilling	contract price accepted
	Dave Sutherland	Operations Manager	403-287-1460		Starting Oct. 1
		tool push	423-1708/1709	(cell #s)	
Century Geophysical	Brian Peterson	N.A. Service Manager	918-838-9811 (ext. 103)	down hole geophysics	contract price ok.
	Rob Kowalich	logger	403-476-1621(home)	423-1715 (cell)	Starting Oct 1
Raymond Myles Contracting			425-7783	tree and brush removal at pads	starting Sept 29
Elkford Industries	Terry Sharp		425-2519	road fixing and pad construction	starting sept 24
			425-0144(fax)		
Baldy Mtn Outfitters	Harry Lundberger	owner	429-3985	guiding and outfitting rights to Lodgepole area	wife has been notified of startup visit at main camp
Terrain Resources	Malcolm Lowings	president	403-329-0379 403-320-6349(fax)	surveying, GPS, ACAD map generation	all old drill sites and proposed sites surveyed
JRT communication	Buzz Bissonnette	president	423-4160 423-3717 (fax)	field GPS in association with Terrain Resources	
(Lawrence) Sam Samuelson		president	423-6906 423-1714 (cell)	Lodgepole field program supervision	running the show
Elk Valley Environmental	Pal Sharma	president	425-6900 (phone/fax) 425-0300 (lab)	all sample analysis	started October 2.