TELKWA PROJECT

GEOLOGICAL ASSESSMENT REPORT

NTS Map Sheet	93L/11	
Lat./Long.	54°35'/127°8'	
Land District	Coast Range 5	
Coal Licences	Group 368	4272, 4283 4226 - 4281 5305 - 5307 7695, 7696 6040, 4274
Licences held by:	Shell Canada Limited	
Operated by:	Crows Nest Resources Limited	
Exploration Period:	March 2, 1986 - March 11, 1986	
Report Date:	February 1987	
Project Members:	Steve Cameron - Geologist Brian McKinstry - Staff Geologist Barry Ryan - Manager Geology	

CONFIDENTIAL

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TELKWA NORTH PROJECT

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February 28, 1987

Ministry of Energy Mines and Petroleum Resources
525 Superior Street
Victoria, B.C.
V8V 1T7

Dear Sirs:

Please find enclosed the 1986 Telkwa Project report. Field work for this report was conducted by Mr. S. Cameron and Mr. B. McKinstry geologists for Crows Nest Resources.

Mr. S. Cameron, B.Sc., in Geology graduated from the University of Calgary in 1981. Prior to graduation, Mr. Cameron worked as an assistant for a major exploration company in the North West Territories. He also worked for Crows Nest Resources Limited as a geological assistant in 1980. Mr. Cameron has been employed by Crows nest Resources Limited as a Geologist since May 1981.

Mr. B. McKinstry, M.Sc., graduated in Geology from Carleton University, Ottawa in 1971. Prior to graduation, Mr. McKinstry worked as an assistant for a major mining firm and after graduation as a geologist with a mining firm, a research assistant at Carleton University and as a geologist with a consulting firm. Mr. McKinstry has been employed by Crows Nest Resources Limited as a Staff Geologist since 1981.

The report was prepared by myself (Dr. Barry Ryan). I have a B.Sc. hon (Geology) UBC, 1967 and a Phd (Geology/geophysics) UBC, 1974. I have worked for a number of mining companies prior to joining Crows Nest Resources in 1981.

Yours truly,

Dr. Barry Ryan, P.Geol.
Manager Geology

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LIST OF ENCLOSURES
(LOCATED SEQUENTIALLY AFTER TEXT)

NO.	DESCRIPTION	SCALE
1	Index Map for Coal Licences	1 : 250,000
2	Road Access Map	1 : 50,000
3	Coal Land Disposition Map	1 : 50,000
4	Geology Compilation Map	1 : 50,000
5	Application to extend term of Licence	
6	Drill Core description holes DDH601 DDH602 DDH603 DDH604	
7	Typical Stratigraphic Section	1 : 400
8	Geological Map with East Pit Outline	1 : 2,000
9	Geological Map with West Pit Outline	1 : 2,000
10	Geological Section 6059800N East Pit	1 : 2,000
11	Geological Section 6059600N West Pit	1 : 2,000
12	Geophysical Logs for DDH601 to DDH604 and Cementing Certificatest	
13	Drill hole projection data and plots used to construc East Pitt	
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15	Coal Quality printouts; Telkwa North Data, by hole an by seam	

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1.0 SUMMARY

The Telkwa North area is contained within 14 coal licences (Group 368) and two freehold lots covering 3,626 hectares. Shell Canada Limited holds the licences with the freehold lots being under option agreements.

The Telkwa North licences are in close proximity to the Canadian National Railway and are 360km east of the port of Prince Rupert. Existing infrastructure, the proximity of a coal handling port (Ridley Island) and the quality of the coal make Telkwa an attractive project.

Early Cretaceous sedimentary rocks of the Skeena Group contain significant thicknesses (single seams up to 4.5 meters in the Telkwa North area) of low ash, medium to high volatile bituminous coal amenable to thermal use.

In 1986, a spring drilling program was commissioned to further delineate the mineable coal resources north of the Telkwa River. This included the construction of access roads and the drilling of four NQ diamond drill holes.

The total field expenditure for the 1986 program was $76,774.32.

2.0 INTRODUCTION

2.1 Location and Access

The exploration area is located 15 km south of the town of Smithers in West Central British Columbia; Coast Land District 5, NTS Map Sheet 93L/11. The coal licences are north of the Telkwa River and east of Pine Creek (Enclosure 1). The center of the licence block is situated at Lat. 54°35'N, Long. 127°8'W. Smithers is 360 km from the port of Prince Rupert along the CNR line and Highway 16. The Telkwa North area is 20 km from Smithers and accessible by good gravel road (Enclosure 2).

2.2 Tenure

The Telkwa Project licences are subdivided into three groups. The licences reported herein are contained in licence group No. 368.

Group Number	Licence Numbers
366	3878 - 3881, 4269 - 4271 7690 - 7694, 3710, 3884, 4275
367	3785 - 3877, 4260 - 4262, 4264, 4265 3882, 3883, 3709, 3885, 4267, 4282, 5839
368	4276 - 4281, 5305 - 5307, 7695, 7696 4272, 4274, 4283, 6040

All Licences within group 368 are operated by Crows Nest Resources Limited. All licences in the Telkwa North area are held by Shell Canada Limited with the exception of the Whalen option (2 lots).

Enclosure 3 of this report contains a "Coal Land Disposition Map".

3.0 REGIONAL GEOLOGY (Enclosure 4)

Mesozoic successor basins developed in the Intermontane Belt between the Columbian and Pacific Orogens in the B.C. Cordillera. These deeply subsiding troughs usually had both marine and continental depositional environments. Coal bearing clastic sequences often accumulated in areas of dip-slip and strike-slip faulting in the troughs.

The Skeena Group successor basin is filled with interbedded marine and non-marine sedimentary and volcanic strata. This assemblage was deposited on the folded and faulted terrane of the Bowser Lake Group and older groups such as the Hazelton. Sediments of the Skeena Group are distinguishable from the Bowser Lake and Hazelton Sediments by the presence of fine grained detrital muscovite. "In the Late Jurassic to Early Cretaceous, prior to deposition of the Skeena Group sediments, the Hazelton Group underwent a period of uplift, deformation and erosion. During the mid Early Cretaceous, the sea readvanced from the west, in the area of Skeena Valley, inundating the non-marine, late Lower Cretaceous coal basins such as Telkwa and Lake Kathlyn. The sediments of the Skeena Group were derived from an uplifted Pinchi-belt - Columbian Orogen. They were deposited in a southwesterly direction, across the Skeena Arch, which apparently had little influence on the shape of the basin receiving the Skeena clastics"[1], but may have influenced the location of the best coal development (ie. Telkwa) (Schroeter et al 1986).

Tipper and Richards (1976) have taken Sutherland Brown's (1960) subdivision from the Hazelton Group and applied it to the Skeena Group as follows: The Brian Boru Formation for the Early Cretaceous volcanics and the Red Rose Formation for the Late Jurassic to Early Cretaceous sediments.

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[1] Tipper H.W. and Richards T.A., Jurassic Stratigraphy and History of North Central British Columbia, 1976, page 7.

4.0 SUMMARY OF PREVIOUS WORK

1979
- 1:10000 scale geological mapping
- bulldozer trenching
- road upgrading
- rotary drilling (4 holes)
- coal sampled and analyzed
- drill site reclamation

1980
- no exploration

1981
- 1:10000 scale geological mapping
- 1:5000 scale geological mapping
- road upgrading
- bulldozer trenching
- rotary drilling (7 holes)
- diamond drilling (1 hole)
- coal sampled and analyzed
- drill site reclamation
- topographic survey
- geophysical survey - EM37
- 1:5000 scale topographical maps constructed

1982
- 1:5000 scale geological mapping
- backhoe trenching
- road construction and upgrading
- rotary drilling
- diamond drilling
- coal sampled and analyzed

1982 (continued)

- geophysical surveys - EM37
  - seismic refraction
  - proton magnetometer
- geotechnical studies - piezometer installation
  - soil sampling
  - core logging
- 1:5000 scale topographical maps constructed
- 1:1000 scale topographical maps constructed
- 1:2000 scale topographical maps constructed
- road and drill site reclamation

1983

- 1:1000 scale geological mapping (test pit)
- road construction
- diamond drilling - NQ and 6 inch diameter
- coal sampled and analyzed
- seismic refraction survey
- geotechnical studies - piezometer installation
  - core logging
- test pit excavated
- 219 tonnes of coal bulk sampled from seven seams
- road and drill site reclamation
- test pit reclamation

1984

- road construction
- diamond drilling
- coal sampled and analyzed
- piezometer installation
- road and drill site reclamation

1985

- road construction
- diamond drilling
- coal sampled and analyzed
- road and drill site reclamation

Prior to 1986, there were 14 cored holes north of the Telkwa River (Table 1).

5.0 1986 EXPLORATION PROGRAM

The total cost of the 1986 program was $76,774.32. An application to Extend Term of Licence is included in Enclosure 5.

Four vertical NQ holes were drilled for a total depth of 328.3 meters. All drill holes were surveyed (Table 1). Access road (750m) was constructed to the four drill sites. Field work lasted from March 2/86 to March 11/86. Holes 603 and 604 were drilled on coal licence 4278 and holes 601 and 602 were drilled on coal licence 4279.

Drill core was described on site (Enclosure 6) and is stored at the CNRL core storage facility at the Bulkley Valley Collieries site.

Roads were reclaimed and local land owners compensated for crop damage.

TABLE 1

TELKWA NORTH
SURVEY COORDINATES
DRILL HOLES USED FOR QUALITY AND RESOURCE CALCULATIONS

DRILL HOLE	TAG NO.	NORTHINGS	EASTINGS	GROUND ELEVATION
DH 601	3770	6,059,815.071	616,957.024	923.210
DH 602	3753	6,059,280.323	617,799.350	848.440
DH 603	4081	6,059,284.819	618,626.001	772.202
DH 604	3757	6,059,944.147	618,747.168	812.642
DH 501	3785	6,059,566.810	617,481.350	896.610
DH 502	3790	6,059,435.510	617,855.240	863.680
DH 503	3794	6,059,061.770	618,780.930	735.750
DH 504	3797	6,059,689.380	618,644.040	804.560
DH 440	3676	6,059,637.490	617,695.880	891.100
DH 441	3681	6,059,598.970	618,291.690	839.230
DH 442	3662	6,059,821.640	618,519.920	830.020
DH 443	3669	6,059,544.040	618,880.290	770.210
DH 444	3666	6,059,853.380	619,102.180	765.480
DH 213	3149	6,059,650.040	617,149.220	907.770
DH 214	3155	6,059,806.120	618,179.730	866.340
DH 216	3163	6,059,476.900	618,656.750	786.190
DH 217	3126	6,059,047.890	618,467.990	766.920
DH 218	3158	6,059,835.330	618,791.870	799.620

6.0 TELKWA GEOLOGY

6.1 Stratigraphy

The rocks of the Telkwa coal field consist of interbedded marine and non-marine sedimentary and volcanic strata of the Skeena Group. The sediments include a predominance of mudstone and siltstone with minor sandstone and shale, a basal conglomerate and coal. Volcanics are grey to green basaltic to rhyolitic breccias, tuffs and flows. The Hazelton volcanics are usually weathered to a deep reddish-purple at their contact with the overlying Skeena sediments. Porphyritic Tertiary intrusive rocks in the form of dykes and sills have been found over the property. A large rhyolite plug has intruded the Skeena sediments north of the Telkwa River. In the Telkwa area recent erosion has removed the coal-bearing sediments from the higher ridges leaving most of the sedimentary sequence preserved in topographic lows. Outcrops are usually found in stream valleys which have cut through the glacial drift cover. Few exposures occur away from the creeks until the higher ridges are reached and invariably these are volcanics of the Hazelton Group. The Skeena-Hazelton contact over most of the area is drift covered and heavily timbered making accurate delineation of the aerial extent of the coal bearing sediments very difficult.

The Skeena Group stratigraphic section (Enclosure 7) varies in thickness over the Telkwa area but probably does not exceed 500 metres. Laterally, individual beds often pinch out over short distances.

The Skeena section has been informally subdivided into four units based on interpretation of cores and palynological work. Unit 1, the lowest unit, is characterized by the #1 coal zone. Palynological data in the Goathorn Creek area indicates clastic deposition started in Neocomian times in a marine depositional environment. A marine regression occurred, resulting in a fluvial flood plain environment with the deposition of the #1 coal zone.

The second unit consists mainly of siltstones and shales which were deposited in a shallow, low energy marine environment with occasional regression/transgression cycles.

The third stratigraphic unit contains up to 10 coal seams interbedded with sandstones and shales. This unit is believed to have been deposited in a deltaic environment supporting swamp and/or marsh vegetation. The upper part of this unit has been subjected to several minor marine transgressions.

Unit 4 consists largely of siltstones and sandstones with rare occurrences of thin coal seams. Palynological data suggest an upland depositional environment in a fluvial regime. In general, a major marine regression near the end of the Lower Cretaceous explains the sequence of depositional environments in units 2 through 4.

The Skeena sediments in the Telkwa area exhibit numerous soft sediment deformation structures including rip up clasts, micro slump faults and load casts. Heavily bioturbated zones are common. Thin clay layers (1 to 5 cm thick) are present at certain locations in several of the coal horizons. X-ray defraction indicates most of these clays to be kaolinitic in composition and not mixed layer "swelling clays".

6.2 Coal Stratigraphy

At least 14 individual coal seams exist at Telkwa.

The #1 zone is in unit one of the stratigraphic section. The rest of the mineable coal seams are contained within unit three.

Individual coal seams can be correlated across the Goathorn Creek area. However, while the coal zones within unit 3 can be correlated to the Telkwa North area, individual seam correlation is tenuous. A distinct marker horizon occurs beneath seam 2 on the gamma ray logs. This geophysical signature has been used as a datum line for seam correlation over the entire property. Over the property individual coal seams often develop splits, their thickness changes over short lateral distances, and the seams exhibit an extremely variable nature. These inconsistencies will require a very flexible approach to mining.

Average aggregate coal thickness is 16m in the Telkwa North area.

6.3 Structure

The geology is presented on two 1:2,000 scale maps, enclosures 8 and 9 and 2 sections enclosures 10 and 11.

North of the Telkwa River, the seams appear to be disrupted by a number of north trending faults with down drop on the west. This is a similar geometry to the Goathorn East area. Dip meter logs for the 500 and 600 series holes provide strike and dip values for most seams (Table 2, Enclosures 12) which help localize the faults. There is a complete lack of outcrop to provide further information on the location or dip of the faults.

Sections were constructed (Enclosures 10 and 11) using the drill hole data. Drill holes were projected into sections using strikes obtained from the dip meter logs.

The hole deviation data (where available) down hole U.T.M. coordinates of the coal intercepts and the U.T.M. coordinates of the intercepts projected into the sections are tabulated in Enclosures 13 and 14. Also included are the computer plots of the projected drill holes which were used to construct the sections.

TABLE 2

TELKWA NORTH DRILL DATA USED IN DEFINING PITS

HOLE	TOTAL DEPTH	STR/DIP 2 SEAM	DIP METER LOG	PROJECTED AZ/PL	DEPTH TO FW 2 SEAM
		EAST PIT AREA			
214	292.0	-	x	196/00	249.18
216	136.0	-	x		52.13
218	97.0	-	x	203/00	76.01
441	224.6	-	x		N/A
442	139.3	-	x	196/00	15.32
443	110.0	-	x		91.92
444	124.0	-	x	200/00	109.44
503	69.2	-	x		
504	75.3	020/15	v	20/00	55.72
603	60.0	328/70	v	15/00	26.74
604	84.4	018/18	v	198/00	68.30
		WEST PIT AREA			
213	167.0	-	x	100/00	19.97
440	145.0	-	x	130/00	109.16
501	60.0	333/12	v	333/00	26.42
502	148.4	306/26	v	306/00	137.32
601	72.0	346/17	v	166/00	36.43
602	111.9	310/50	v	310/00	N/A

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7.0 RESOURCE POTENTIAL

Two provisional pits have been delineated north of the Telkwa River (Enclosure 7 and 8). These pits have not been optimized for reserve/(strip ratio) ratio but do provide an inital estimate of resource potential. A 10 meter overburden (glacial till) depth was assumed and the pit walls were defined by #2 seam or set to 45°. The subcrop extent of each seam within the pits was calculated using an average stratigraphic section and the base of #2 seam for control. Seam thicknesses were isopached and then coal volumes calculated on a by seam basis by digitizing. Seam thickness and stratigraphic data for the two pits is presented in Table 3. Tonnage calculations were made using a fixed SG of 1.5. No allowances for dilution or coal loss were made though no vertical coal thicknesses less than 0.5 meters were used in the calculations. The SG of 1.5 is probable high and the tonnage numbers presented in Table 4 represent an inplace resource estimate. There appears to be a resource potential of about nine million tonnes in the two pits at a strip ratio of between 3:1 and 4:1. There are other areas north of the Telkwa River where faults probably bring the coal stratigraphy close to surface and small pits could be delineated. At this stage, there is insufficient drill data to permit realistic calculations.

TABLE 3

SEAM THICKNESSES (IN METERS) AND HEIGHT ABOVE #2 SEAM

WEST PIT SEAMS

HOLE	2	3	4	5	6	7	8	9	10
213	3.43	-	-	-	-	-	-	-	-
480	2.22	2.04	1.71	4.07	2.62	0.45	1.83	0.62	0.85
501	1.77	0	1.70	0	4.93	0.55	0.58	-	-
502	3.53	0	2.86	1.30	9.49	-	-	-	-
601	4.33	0	2.20	1.68	2.10	-	-	-	-
602	-	-	-	-	-	-	-	-	-
Average*	3.06	0.51	2.12	1.76	4.79	0.50	1.21	0.62	0.85
Height	0	14.5	13.4	18.8	21.3	39.6	63.9	60.0	63.7
Height**	0	15.0	15.0	15.0	20.0	40.0	60.0	60.0	60.0

EAST PIT SEAMS

HOLE	2	3	4	5	6	7	8	9	10
214	2.44	0.8	4.73	0	3.90	0	2.48	0.83	-
216	3.96	0	1.06	1.84	3.91	1.14	-	-	-
218	3.53	1.39	2.32	0	2.51	0	-	-	-
441	-	1.76	1.28	3.28	2.48	2.08	2.16	1.28	0.96
442	2.49	-	-	-	-	-	-	-	-
443	3.1	0	0	0.8	3.36	0.80	1.18	-	-
444	2.52	1.97	0	0	1.37	-	-	-	-
503	-	-	-	-	-	-	-	-	-
504	3.92	0	1.69	2.10	7.02	3.33	-	-	-
603	4.54	-	-	-	-	-	-	-	-
604	3.38	0	1.12	3.77	6.41	0	-	-	-
Average*	3.32	0.74	1.53	1.48	3.07	1.05	1.94	1.06	0.96
Height	0	8.30	12.7	21.6	29.6	42.2	67.6	69.8	?
Height**	0	10.0	15.0	20.0	30.0	40.0	70.0	70.0	?

* Thicknesses less than 0.5 meters counted as zero when averaged.

** Height averaged values used for drafting subcrop extent of seams in pits.

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TABLE 4
INPLACE RESOURCE CALUCULATIONS

WEST PIT

Rock + coal volume = 18.322 x 10^6 BCM
Coal volume = 2.964 x 10^6 BCM
Rock volume = 15.358 x 10^6 BCM
Coal Tonnes (at 1.5 SG) = 4.446 x 10^6 M tonnes
Strip ratio 3.45:1

SEAM	TONNES x 10^6	% OF TOTAL
2	1.352	30.4
3&4	0.898	20.2
5	0.595	[illegible]
6	1.105	[illegible]4.8
7	0.1168	[illegible]
8	0.152	[illegible].40
9	[illegible]	2.20
10	[illegible]	3.00
TOTAL	[illegible].446	100.0

EAST PIT

Rock + Coal Volume = 17.362 x 10^6 BCM
Coal volume = 2.955 x 10^6 BCM
Rock volume = 14.407 x 10^6 BCM
Coal Tonnes (at 1.5 SG) = 4.443 x 10^6 M tonnes
Strip ratio 3.24:1

SEAM	TONNES x 10^6	% OF TOTAL
2	1.548	34.7
3	0.091	20.5
4	0.538	12.1
5	0.625	14.1
6	1.433	32.2
7	0.198	4.4
TOTAL	4.433	100

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8.0 COAL QUALITY

All the quality available for Telkwa north is presented by drill hole and by seam in Enclosure 15. Averaged quality is presented in tables 5, 6, 7. Table 5 presents average intercept thickness and seam thickness data. Seams #2 and #6 are the thickest seams in the upper part of the section. Raw and wash quality data is in Tables 6 and 7. Only intercepts thicker than 0.5m and with raw ash less than 40% have been used in the compilation. The coal washes easily to an ash of 10-15% at 1.6 SG. Averaged yield data provides an average raw ash of 25.2%, wash ash of 13.3%, and yield of 71.6% (Figure 1). The average sulphur values for the 2 pits using the wash data and seam proportions from the two pits are 0.80% for the East Pit and 0.85% for the West Pit. The volatile content on a DAF basis ranges from 30.4 to 35.4 over the section.

The single intersection of 1 seam in DDH503 has a DAF volatile content of 35.4 indicating that this may in fact be misnumbered. It could be #2 seam which would change the location of the fault shown on the map (Enclosure 8). In general, the volatile contents of the seams do not appear to have been affected by the intrusion to the north.

The calorific value of the seams is over 7,000 cals/gm (29.3 MJ/kg) on a wash basis. Figure 2 illustrates the CV vs ash trends for seams 6 and 2. Both have ash free CV values of over 8,000 cals/gm (33.5 MJ/kg). Sulphur trends can be analysed by regression analysis of ash vs sulphur plots (Figure 3); an alternative approach is to construct tie lines from the raw sulphur ash point to the wash sulphur ash point (Figure 4). This gives a better visual understanding of the sulphur distribution. As can be seen from Figure 4, the pyritic sulphur distribution is very variable whereas the organic sulphur distribution is fairly constant in #2 seam, but variable in #6 seam.

Figure 5 plots averaged tieline crossing points at fix ash values with accompanying 1 standard deviation error lines. This diagram probably best depicts the sulphur trends vs ash.

TABLE 5

TELKWA NORTH

SEAM THICKNESS DATA

INTERCEPTS GREATER THAN 0.5M

SEAM	AV INTERCEPT THICK M (NUMBER)	AV HOLE THICK M (NUMBER)
10	.91 (2)	.91 (2)
9	1.06 (3)	1.06 (3)
8	1.35 (5)	1.35 (5)
7	1.58 (5)	1.58 (5)
6	1.69 (28)	3.94 (12)
5	1.71 (12)	2.28 (9)
4	1.33 (14)	1.56 (12)
3	1.10 (7)	1.54 (5)
2	2.80 (15)	3.00 (14)
1	1.42 (3)	4.26 (1)

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TABLE 6

TELKWA NORTH

RAW QUALITY

SEAMS GREATER THAN 0.5M AND ASH LESS THAN 40%

SEAM	ASH %	MOIST A.D. %	VOLS %	F.C. %	CALORIES/GM	SULPHUR %
10	15.7	.87	-	-	-	2.13
9	10.3	.73	30.5	56.7	7,354	2.61
8	23.2	.79	21.2	43.0	5,122	1.70
7	22.2	.73	27.9	60.4	7,359	1.93
6	22.2	.81	26.4	55.1	6,685	1.41
5	18.9	1.16	28.7	58.2	7,160	.65
4	9.88	.79	27.1	56.7	6,857	1.90
3	22.7	.85	26.9	59.3	6,901	.86
2	20.9	1.08	24.8	51.8	6,215	.68
1	32.2	.56	-	-	-	1.16

NOTE: Some values are unrealistic because of very few analyses.

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TABLE 7

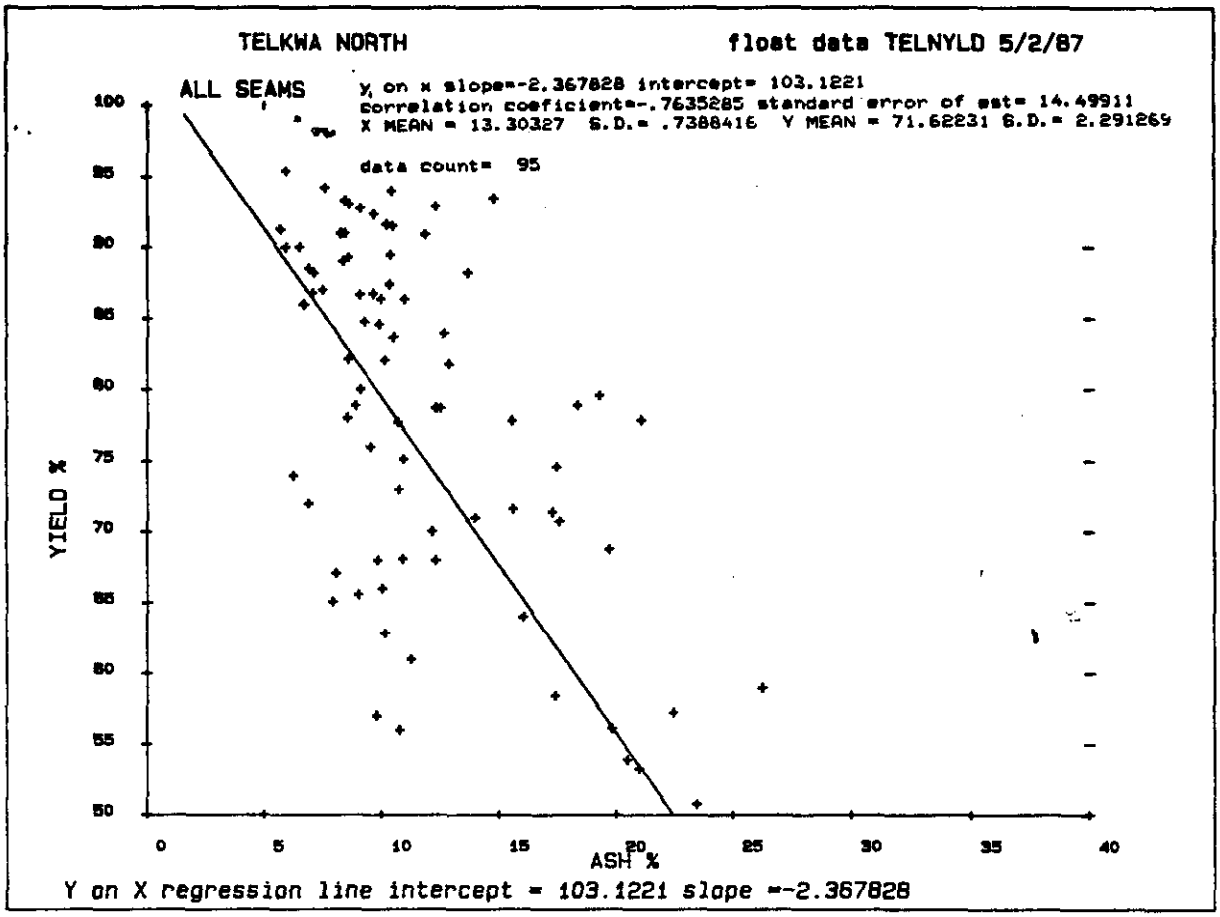
TELKWA NORTH

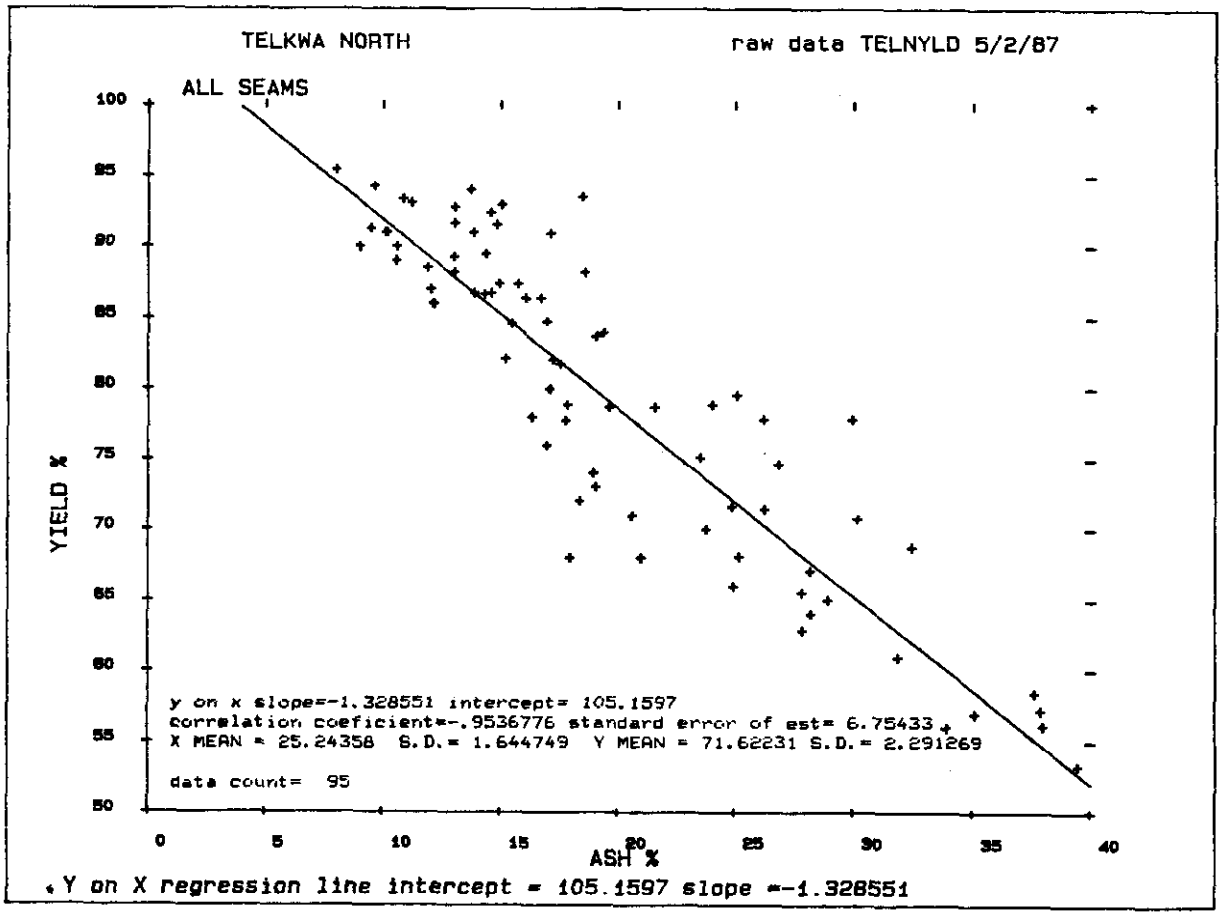
WASH QUALITY (SG 1.6 except 1984 = 1.7)

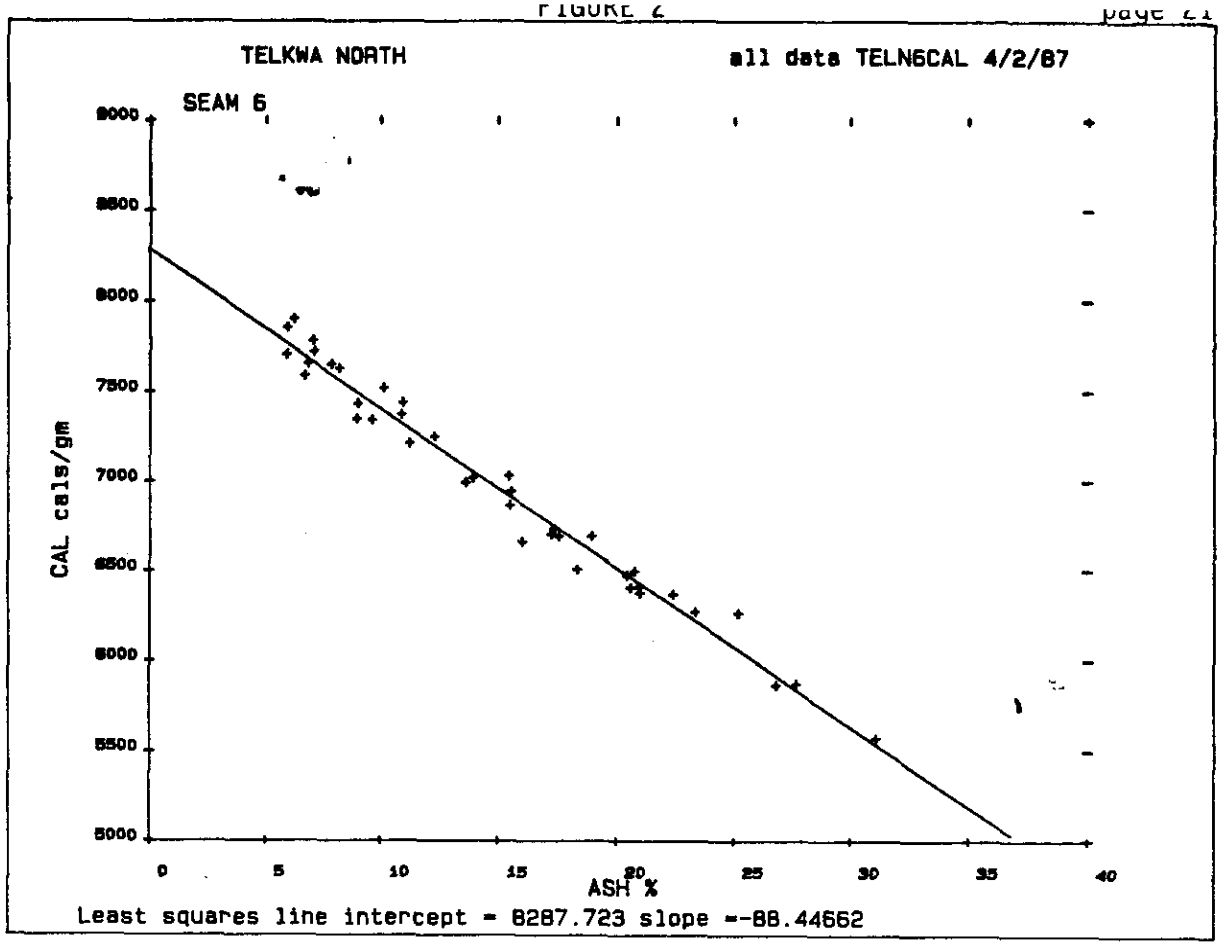
SEAMS GREATER THAN 0.5M AND RAW ASH LESS THAN 40%

SEAM	ASH %	MOIST A.D. %	VOLS %	F.C. %	C
10	10.9	1.39	30.5	57.0	
9	7.8	1.04	32.0	59.2	
8	11.3	1.57	27.1	60.1	
7	9.8	1.05	30.2	59.0	
6	10.7	1.03	27.1	61.2	
5	11.1	1.59	27.7	59.6	
4	15.3	0.91	27.7	61.5	
3	15.1	1.63	27.1	56.2	
2	10.8	1.34	26.7	61.2	
1	16.0	0.67	29.5	54.5	

FIGURE 1


TELKWA NORTH
float data TELNYLD 5/2/87
ALL SEAMS
y on x slope=-2.367828 intercept= 103.1221
correlation coeficient=-.7635285 standard error of est= 14.49911
X MEAN = 13.30327 S.D.= .7388416 Y MEAN = 71.62231 S.D.= 2.291269
data count= 95
YIELD %
ASH %
Y on X regression line intercept = 103.1221 slope =-2.367828


TELKWA NORTH
raw data TELNYLD 5/2/87
ALL SEAMS
y on x slope=-1.328551 intercept= 105.1597
correlation coeficient=-.9536776 standard error of est= 6.75433
X MEAN = 25.24358 S.D.= 1.644749 Y MEAN = 71.62231 S.D.= 2.291269
data count= 95
YIELD %
ASH %
Y on X regression line intercept = 105.1597 slope =-1.328551


TELKWA NORTH
all data TELN6CAL 4/2/87
SEAM 6
CAL cals/gm
9000
8500
8000
7500
7000
6500
6000
5500
5000
0
5
10
15
20
25
30
35
40
ASH %
Least squares line intercept = 8287.723 slope =-88.44662

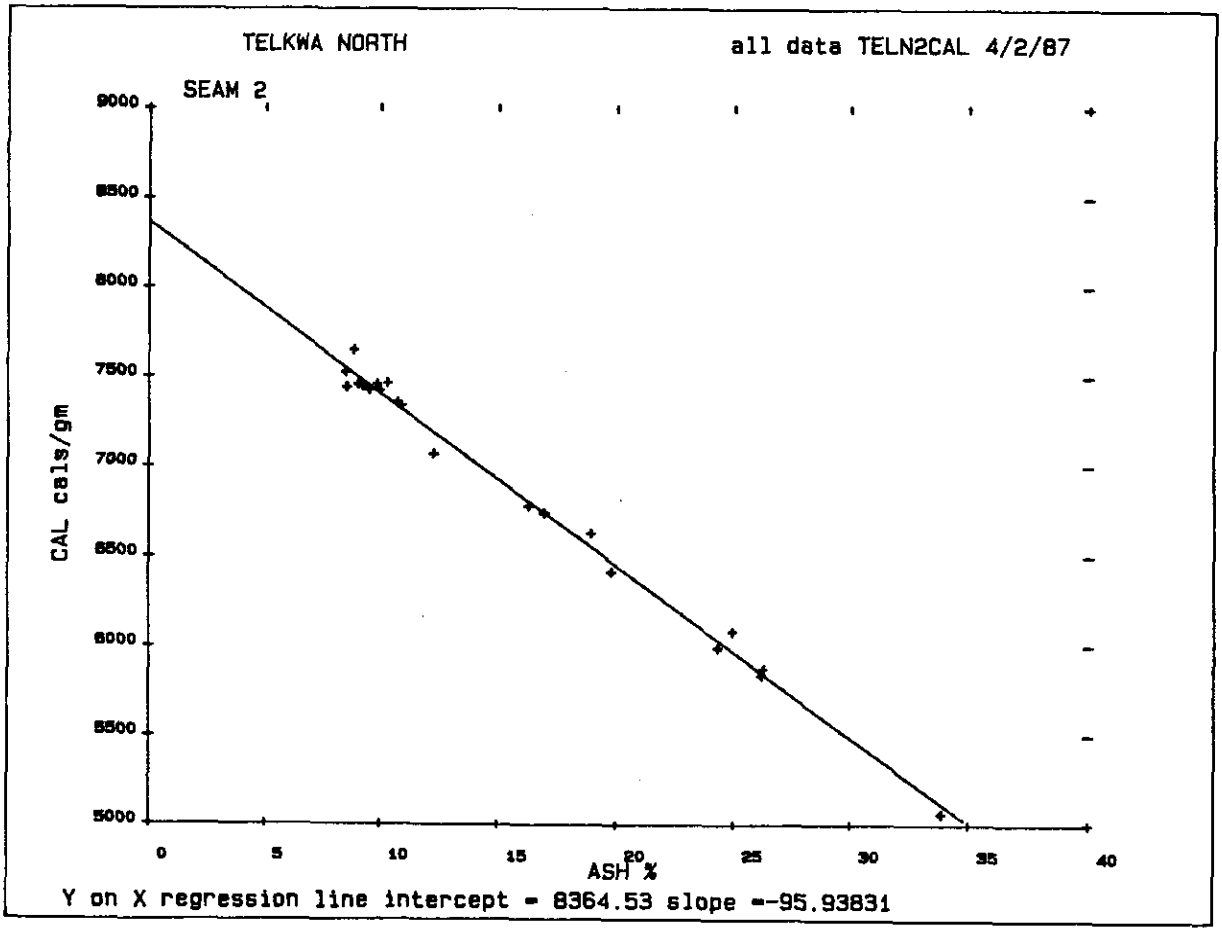
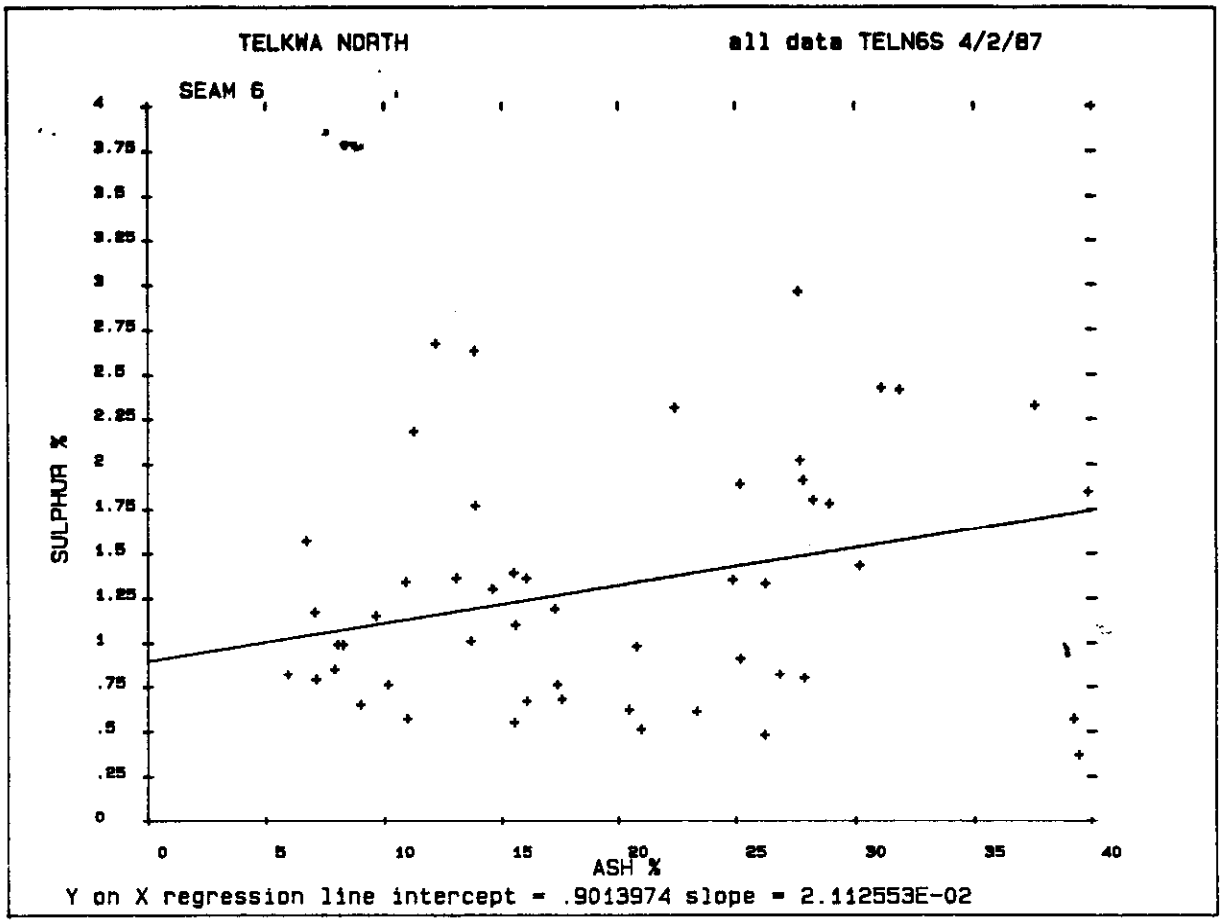
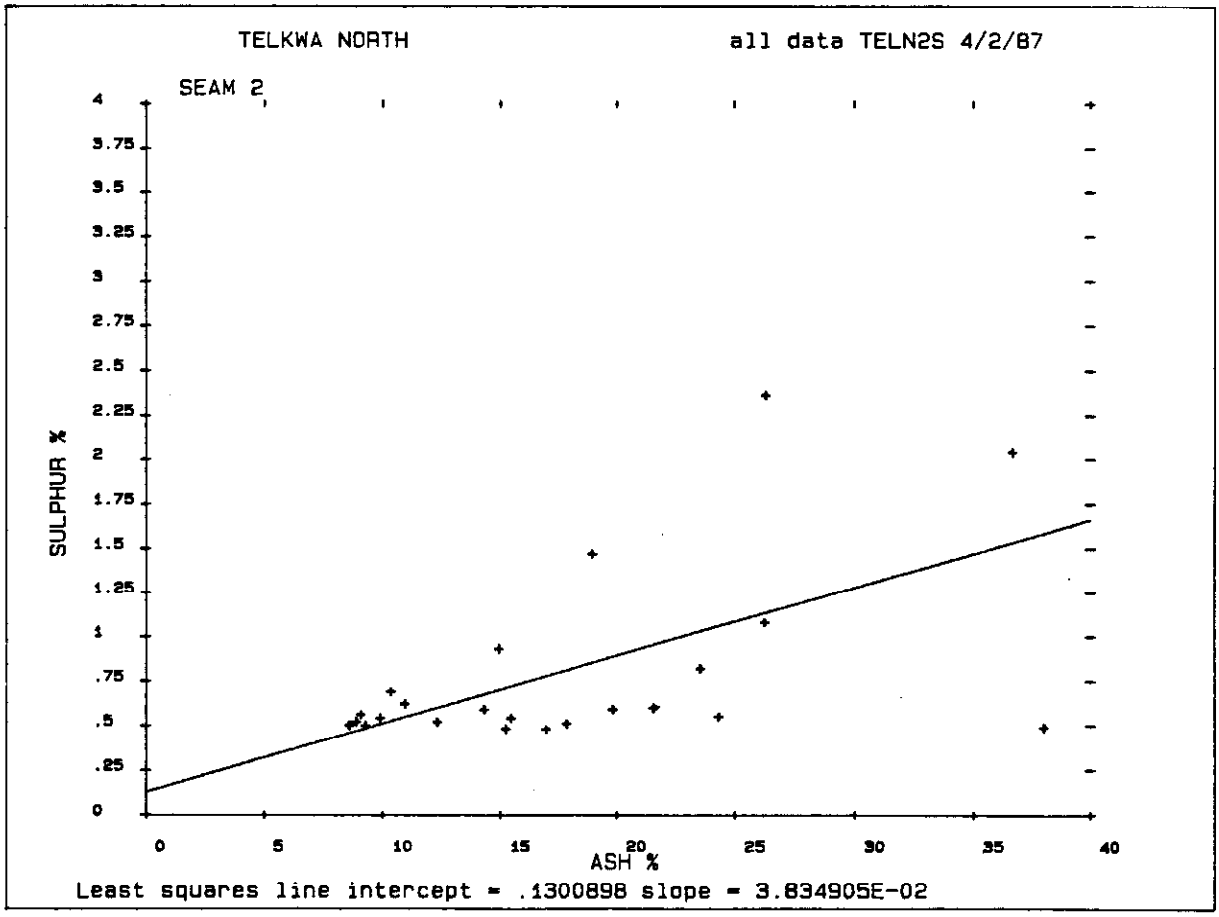
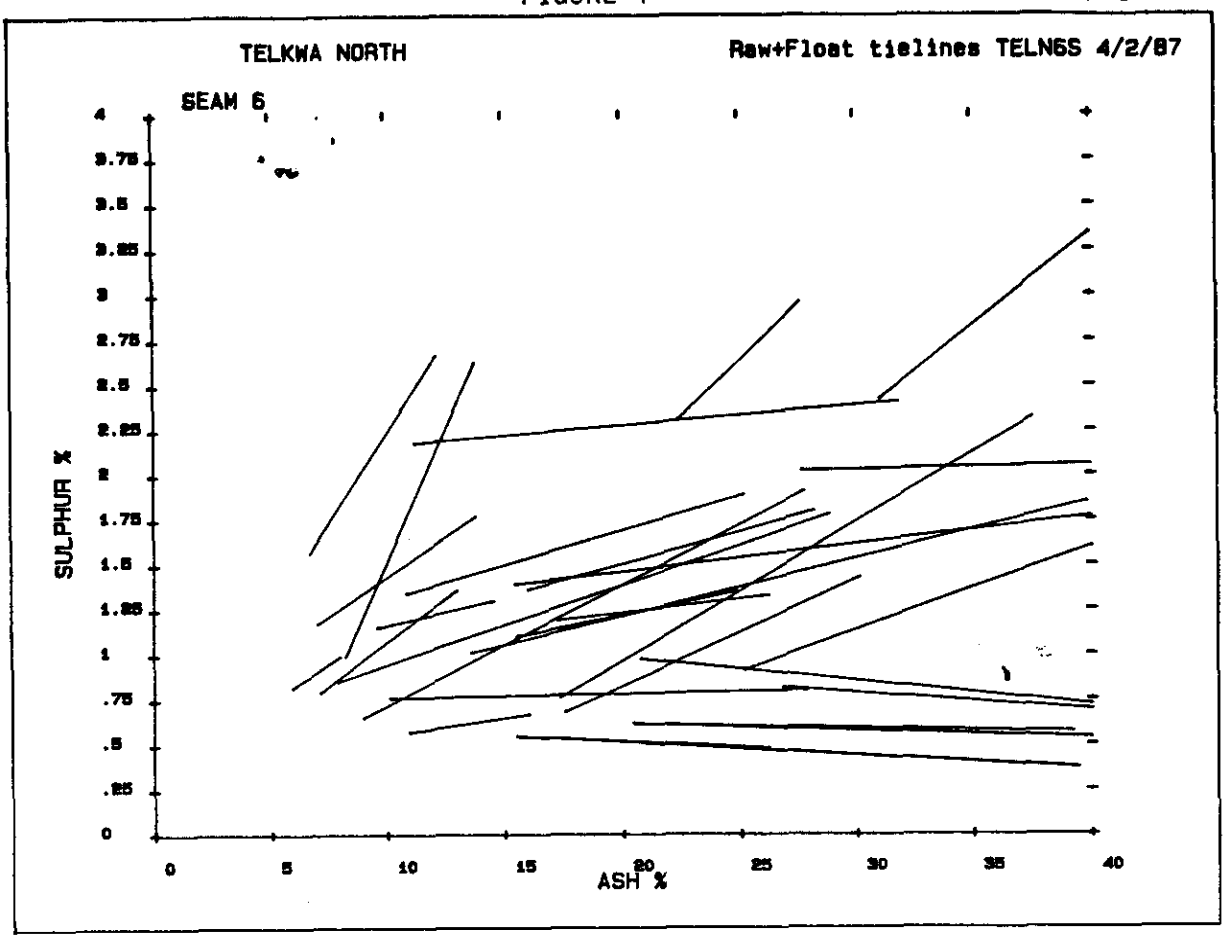
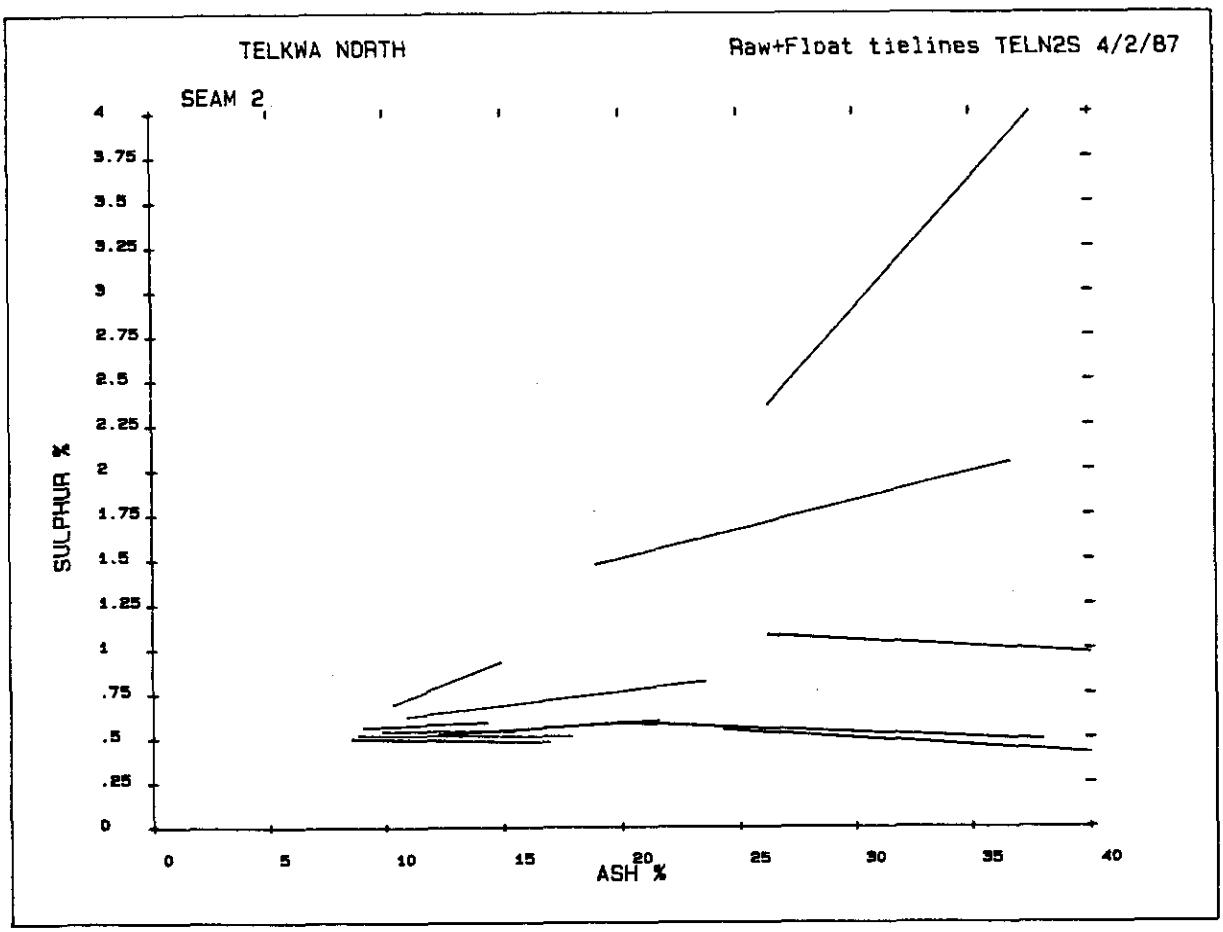

TELKWA NORTH
all data TELN2CAL 4/2/87
SEAM 2
CAL cals/gm
9000
8500
8000
7500
7000
6500
6000
5500
5000
0
5
10
15
20
25
30
35
40
ASH %
Y on X regression line intercept = 8364.53 slope =-95.93831

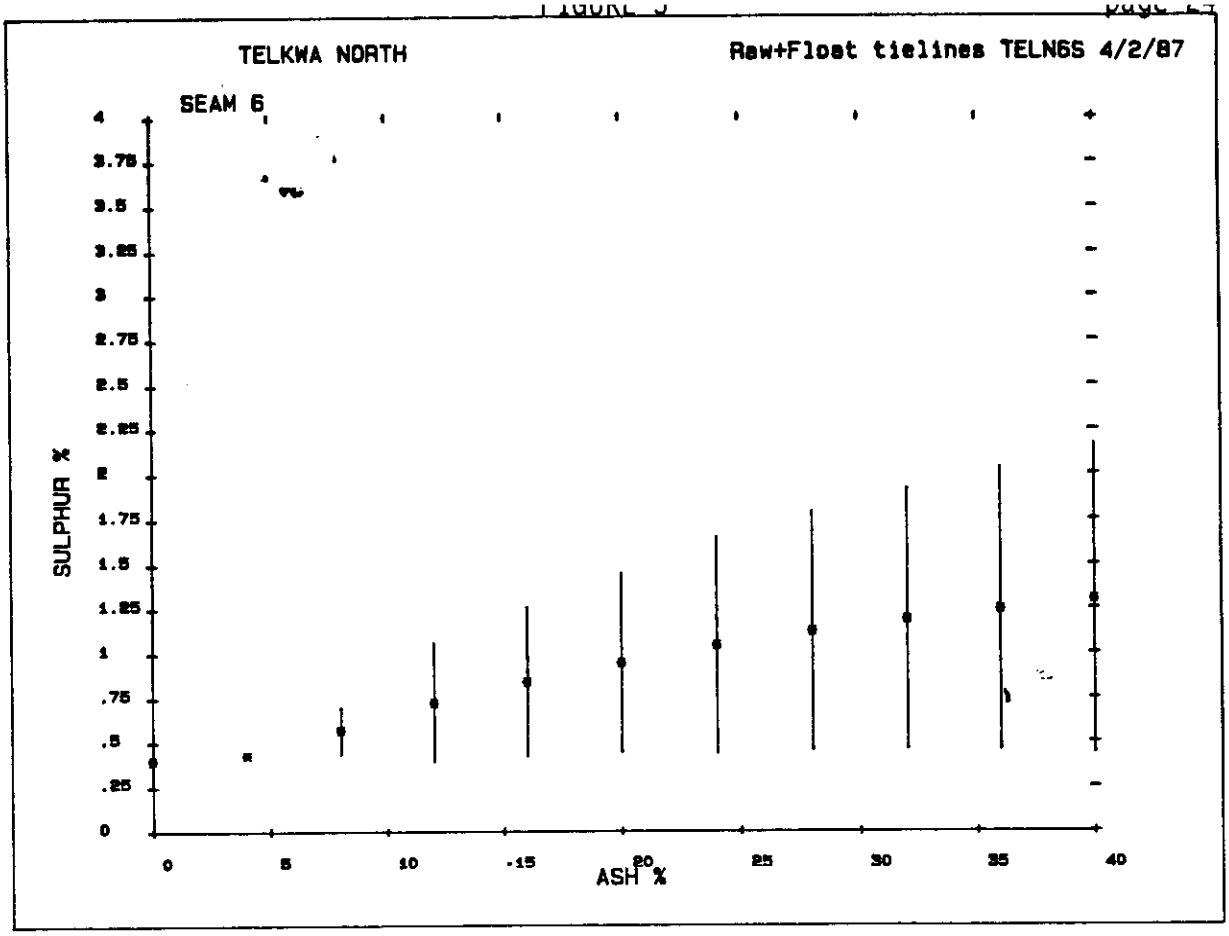
FIGURE 3

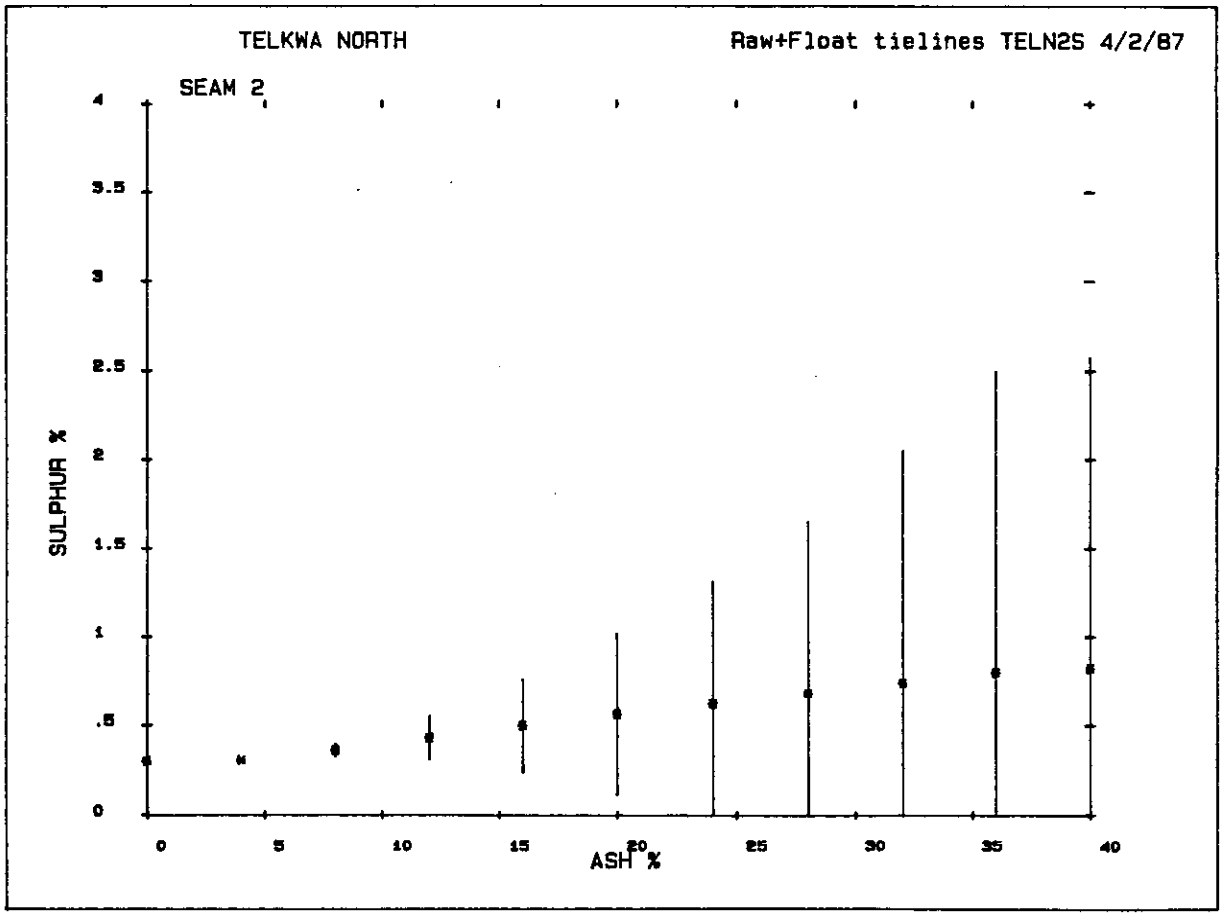

TELKWA NORTH
all data TELN6S 4/2/87
SEAM 6
SULPHUR %
ASH %
Y on X regression line intercept = .9013974 slope = 2.112553E-02


TELKWA NORTH
all data TELN2S 4/2/87
SEAM 2
SULPHUR %
ASH %
Least squares line intercept = .1300898 slope = 3.834905E-02


TELKWA NORTH
Raw+Float tielines TELN6S 4/2/87
SEAM 6
SULPHUR %
ASH %
0
.25
.5
.75
1
1.25
1.5
1.75
2
2.25
2.5
2.75
3
3.25
3.5
3.75
4
0
5
10
15
20
25
30
35
40


TELKWA NORTH
Raw+Float tielines TELN2S 4/2/87
SEAM 2
SULPHUR %
ASH %
0
.25
.5
.75
1
1.25
1.5
1.75
2
2.25
2.5
2.75
3
3.25
3.5
3.75
4
0
5
10
15
20
25
30
35
40


TELKWA NORTH
Raw+Float tielines TELN6S 4/2/87
SEAM 6
SULPHUR %
ASH %
0
.25
.5
.75
1
1.25
1.5
1.75
2
2.25
2.5
2.75
3
3.25
3.5
3.75
4
0
5
10
15
20
25
30
35
40


TELKWA NORTH
Raw+Float tielines TELN2S 4/2/87
SEAM 2
SULPHUR %
ASH %
0
.5
1
1.5
2
2.5
3
3.5
4
0
5
10
15
20
25
30
35
40

9.0 RECOMMENDATIONS FOR FUTURE WORK

The present two pit areas which are only roughly outlined should be better delineated by more drilling followed by an optimizing of reserves based upon a realistic strip ratio. The interplay of faults and topography almost certainly ensures that other mineable areas of the upper coal section and of #1 seam remain to be found north of the Telkwa River.

10.0 REFERENCES

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Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

MEMORANDUM

TO: Geological Division (Coal)

Deputy Coal Administrator

Inspection Division (Coal)

DATE: April 21, 1987

RE: Report of Work on Coal Licences 4272, 4283, 4226-4281, 5305-5307, 7695, 7696, 6040, 4274

The attached report entitled Telkwa North Project

has been submitted by Crows Nest Resources Limited

on the following date March 9, 1987

in compliance with Section 18(2)(d) of the Coal Act and the Coal Act Regulations.

It is requested that the report be examined and that the cover sheet be completed to indicate the acceptable expenditures.

On completion, please return the cover sheet to this office.

for Lynn Sam
(Mrs.) Kim Stone
Deputy Coal Administrator

see pg. 10.

COAL ACT - WORK REPORT COVER SHEET

Licensee Shell Canada Limited

Operator Crows Nest Res. Ltd.

Coal Licence No.(s) 4272, 4283, 4226-4281, 5305-5307, 7695, 7696, 6041, 4274

Map Number 93 L/11

Property Name Telkwa

Land District Coast Range 5

Title of Report Telkwa North Project

Period Covered by Report Jan 1/86 to Dec 31/86

ITEM	Category of Work Covered in Report	
1.	Geological Mapping	0
2.	Surveys: Geophysical	9344.22
3.	Geochemical	0
4.	Other	2500.00
5.	Road Construction	3562.25
6.	Surface Work	0
7.	Underground Work	0
8.	Drilling	28170.21
9.	Logging, Sampling & Testing	14502.14
10.	Reclamation	3833.00
11.	Other Work	0
12.	Off-Property Costs	14862.50

TOTAL COSTS OF WORK REPORTED $76,774.32

COMMENTS

Cost of Item Numbers _____ Acceptable _____

Geologist - Coal Date

COMMENTS

Cost of Item Numbers _____ Acceptable _____

Senior Inspector - Coal Date

Telkwa Project
Geological Assessment
Report
~~Certificates~~ Analyses

00725

TELKWA NORTH file is c:hold 7/1/87

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
213	2	16.54	19.97	R	.93	16.32	26.14	56.61	a.a	6776	.00	66
213	2	16.54	19.97	W	1.03	8.52	27.40	63.05	2.5	7522	.00	78.00
214	9	178.57	179.40	R	.80	12.02	30.52	56.66	a.a	7354	.00	86
214	9	178.57	179.40	W	.99	7.48	31.35	60.18	4.0	7770	.00	87.00
214	8	188.28	190.76	R	.67	35.09	21.20	43.04	a.a	5122	.00	52
214	8	188.28	190.76	W	.66	9.79	26.58	62.97	3.0	7493	.00	57.00
214	6	224.50	228.40	R	.51	18.94	26.26	54.29	a.a	6695	.00	76
214	6	224.50	228.40	W	.67	6.22	30.06	63.05	5.5	7900	.00	74.00
214	4	236.52	241.25	R	.63	17.95	27.05	54.37	a.a	6614	.00	80
214	4	236.52	241.25	W	.56	9.83	27.72	61.89	4.5	7507	.00	68.00
214	3	244.88	245.68	R	.59	17.08	27.02	55.31	a.a	6686	.00	80
214	3	244.88	245.68	W	.55	9.09	29.01	61.35	4.5	7479	.00	80.00
214	2	246.74	249.18	R	.72	33.87	22.80	42.61	a.a	5061	.00	82
214	2	246.74	249.18	W	1.06	10.75	24.85	63.34	1.5	7352	.00	56.00
216	7	19.91	21.05	R	1.04	10.61	27.92	60.43	a.a	7359	.00	.00
216	7	19.91	21.05	W	1.05	6.50	29.03	63.42	2.0	7715	.00	90.00
216	6	21.64	25.55	R	1.05	18.36	27.10	53.49	a.a	6508	.00	96
216	6	21.64	25.55	W	1.21	6.86	28.30	63.63	2.5	7653	.00	72.00
216	5	27.66	29.50	R	.98	12.12	28.67	58.23	a.a	7160	.00	77
216	5	27.66	29.50	W	1.05	6.66	29.01	63.28	3.5	7681	.00	86.00
216	4	36.12	37.18	R	.91	10.09	26.88	62.12	a.a	7358	.00	.00
216	4	36.12	37.18	W	1.11	8.25	26.49	64.15	1.5	7526	.00	91.00

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
216	2	48.17	52.13	R	.86	24.94	24.43	49.77	a.a	6083	.00	96
216	2	48.17	52.13	W	1.38	10.01	27.38	61.23	3.0	7419	.00	66.00
218	6	35.15	35.72	R	.87	20.60	23.89	54.64	a.a	6407	.00	95
218	6	35.15	35.72	W	1.01	13.95	25.71	59.33	1.0	7018	.00	71.00
218	6	46.95	48.37	R	.91	9.03	25.77	64.29	a.a	7430	.00	74
218	6	46.95	48.37	W	.96	5.91	27.69	65.44	2.0	7702	.00	90.00
218	6	49.56	50.08	R	.73	21.00	26.84	51.43	a.a	6378	.00	80
218	6	49.56	50.08	W	.69	12.29	30.38	56.64	6.5	7249	.00	68.00
218	4	52.82	54.56	R	.74	10.15	27.98	61.13	a.a	7349	.00	80
218	4	52.82	54.56	W	.77	8.41	28.53	62.29	2.5	7527	.00	91.00
218	3	59.93	61.32	R	.75	10.58	26.88	61.79	a.a	7373	.00	95
218	3	59.93	61.32	W	.96	8.36	27.31	63.37	2.0	7567	.00	89.00
218	4	62.08	62.66	R	.65	19.05	26.00	54.30	a.a	6603	.00	95
218	4	62.08	62.66	W	.63	10.72	27.29	61.36	3.5	7387	.00	73.00
218	2	72.48	76.01	R	.65	16.97	25.57	56.81	a.a	6737	.00	100
218	2	72.48	76.01	W	1.03	9.53	26.41	63.03	2.5	7424	.00	76.00
440	10	44.68	45.53	R	.92	13.03	.00	.00	a.a	0	3.35	00.00
440	10	44.68	45.53	W	1.26	9.08	34.68	54.98	a.a	7474	2.20	92.76
440	9	48.51	49.13	R	1.26	54.04	.00	.00	a.a	0	2.53	00.00
440	9	48.51	49.13	W	.98	10.98	33.48	54.56	a.a	7349	2.65	39.82
440	8	49.76	51.59	R	1.08	14.56	.00	.00	a.a	0	.75	00.00
440	8	49.76	51.59	W	2.01	9.65	28.14	60.20	a.a	7285	.71	92.36
440	7	70.88	71.33	R	.97	13.72	.00	.00	a.a	0	3.84	.00

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
440	7	70.88	71.33	W	1.12	10.43	28.56	59.89	a.a	7297	2.53	94.01
440	6	75.38	76.30	R	.82	25.19	.00	.00	a.a	0	1.89	90.00
440	6	75.38	76.30	W	1.17	10.89	32.27	55.67	a.a	7372	1.34	68.09
440	6	77.40	79.10	R	.95	28.92	.00	.00	a.a	0	1.78	00.00
440	6	77.40	79.10	W	1.45	7.88	29.43	61.24	a.a	7649	.85	65.07
440	6	80.05	80.42	R	1.37	65.45	.00	.00	a.a	0	.45	81.00
440	6	80.05	80.42	W	1.17	26.84	25.30	46.69	a.a	5863	.82	8.81
440	5	82.76	86.83	R	.97	17.09	.00	.00	a.a	0	.49	94.00
440	5	82.76	86.83	W	2.30	11.84	26.85	59.01	a.a	7103	.50	90.92
440	4	88.00	89.71	R	.88	14.81	.00	.00	a.a	0	2.95	00.00
440	4	88.00	89.71	W	1.85	10.45	27.40	60.30	a.a	7318	.80	91.53
440	3	93.63	94.65	R	.89	14.37	.00	.00	a.a	0	1.39	00.00
440	3	93.63	94.65	W	2.16	10.38	27.20	60.26	a.a	7284	1.06	89.47
440	3	95.20	96.22	R	.80	15.03	.00	.00	a.a	0	1.74	96.00
440	3	95.20	96.22	W	2.34	12.30	25.55	59.81	a.a	7073	1.23	92.91
440	2	106.94	109.16	R	.97	16.95	.00	.00	a.a	0	.48	94.00
440	2	106.94	109.16	W	1.92	9.25	24.51	64.32	a.a	7446	.50	84.75
441	10	89.64	90.60	R	.82	17.98	.00	.00	a.a	0	1.10	90.00
441	10	89.64	90.60	W	1.51	12.42	26.84	59.23	a.a	7162	1.06	92.69
441	9	95.36	96.64	R	.68	9.08	.00	.00	a.a	0	2.61	70.00
441	9	95.36	96.64	W	1.08	7.94	32.39	58.59	a.a	7667	2.17	97.37
441	8	101.08	103.24	R	.87	17.14	.00	.00	a.a	0	1.66	90.00
441	8	101.08	103.24	W	2.47	11.03	26.28	60.22	a.a	7281	1.19	87.07

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
441	7	125.72	127.80	R	.82	15.34	.00	.00	a.a	0	.43	00.00
441	7	125.72	127.80	W	1.36	10.65	28.61	59.38	a.a	7248	.44	90.36
441	6	140.72	141.10	R	1.23	48.10	.00	.00	a.a	0	1.98	00.00
441	6	140.72	141.10	W	.72	25.18	28.81	45.29	a.a	6263	.91	44.81
441	6	141.64	142.84	R	1.38	39.21	.00	.00	a.a	0	.57	00.00
441	6	141.64	142.84	W	1.20	23.34	25.98	49.48	a.a	6272	.61	52.32
441	6	145.00	146.28	R	1.12	27.64	.00	.00	a.a	0	2.96	00.00
441	6	145.00	146.28	W	1.16	22.41	28.00	48.43	a.a	6368	2.31	82.10
441	6	147.32	147.64	R	1.03	50.96	.00	.00	a.a	0	4.48	00.00
441	6	147.32	147.64	W	.71	31.10	27.15	41.04	a.a	5572	2.42	24.01
441	5	151.56	152.28	R	1.13	36.19	.00	.00	a.a	0	.40	00.00
441	5	151.56	152.28	W	1.34	20.43	24.15	54.08	a.a	6485	.47	60.31
441	5	154.40	154.96	R	1.18	39.96	.00	.00	a.a	0	.93	00.00
441	5	154.40	154.96	W	.85	21.37	27.79	49.99	a.a	6395	.41	52.57
441	5	157.56	159.56	R	1.34	33.39	.00	.00	a.a	0	.33	00.00
441	5	157.56	159.56	W	1.83	15.41	26.38	56.38	a.a	6804	.41	67.06
441	4	169.04	169.84	R	1.57	50.73	.00	.00	a.a	0	.27	00.00
441	4	169.04	169.84	W	1.42	21.50	25.13	51.95	a.a	6272	.48	41.11
441	4	172.16	172.64	R	1.29	38.87	.00	.00	a.a	0	.30	00.00
441	4	172.16	172.64	W	2.17	31.57	21.37	44.89	a.a	5393	.33	70.18
441	3	179.76	180.56	R	1.12	32.31	.00	.00	a.a	0	.35	00.00
441	3	179.76	180.56	W	1.85	24.59	24.65	48.91	a.a	6114	.37	73.58
441	3	181.48	182.44	R	1.24	43.71	.00	.00	a.a	0	.30	00.00

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
441	3	181.48	182.44	W	1.69	22.24	26.13	49.94	a.a	6190	.45	51.24
442	2	12.83	15.32	R	1.05	21.57	.00	.00	a.a	0	.60	75.00
442	2	12.83	15.32	W	2.46	12.29	26.26	58.99	a.a	7068	.52	78.70
443	8	13.83	15.01	R	.70	18.58	.00	.00	a.a	0	2.39	64.40
443	8	13.83	15.01	W	1.52	13.67	26.80	58.01	a.a	7096	1.94	88.21
443	7	34.04	34.84	R	.54	26.87	.00	.00	a.a	0	3.73	92.50
443	7	34.04	34.84	W	1.26	17.44	28.12	53.18	a.a	6830	1.64	74.64
443	6	49.36	50.00	R	.75	39.45	.00	.00	a.a	0	.37	00.00
443	6	49.36	50.00	W	1.67	20.96	24.15	53.33	a.a	6412	.51	53.29
443	6	50.68	51.39	R	.85	37.57	.00	.00	a.a	0	2.32	00.00
443	6	50.68	51.39	W	1.59	17.35	26.36	54.70	a.a	6735	.76	58.45
443	6	53.60	54.44	R	.80	42.03	.00	.00	a.a	0	.53	84.50
443	6	53.60	54.44	W	1.93	20.46	24.37	53.24	a.a	6478	.62	53.91
443	6	55.28	56.45	R	.81	30.18	.00	.00	a.a	0	1.43	00.00
443	6	55.28	56.45	W	1.68	17.55	25.29	55.48	a.a	6693	.68	70.78
443	5	66.50	67.30	R	.88	32.45	.00	.00	a.a	0	.35	00.00
443	5	66.50	67.30	W	2.30	19.70	24.13	53.87	a.a	6428	.40	68.77
443	4	72.20	72.50	R	.83	45.46	.00	.00	a.a	0	.31	00.00
443	4	72.20	72.50	W	1.52	25.57	22.69	50.22	a.a	5921	.43	47.22
443	2	87.16	88.50	R	.50	37.98	.00	.00	a.a	0	.49	00.00
443	2	87.16	88.50	W	2.50	19.82	25.92	51.76	a.a	6411	.59	56.13
443	2	90.16	91.92	R	.74	51.35	.00	.00	a.a	0	.32	93.70
443	2	90.16	91.92	W	1.52	24.32	24.18	49.98	a.a	5991	.55	29.71

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
444	6	67.47	68.84	R	.90	26.21	.00	.00	a.a	0	.48	54.00
444	6	67.47	68.84	W	1.73	15.51	25.09	57.67	a.a	6864	.55	77.83
444	5	76.92	77.34	R	.72	29.94	.00	.00	a.a	0	.43	43.00
444	5	76.92	77.34	W	1.54	21.06	24.97	52.43	a.a	6372	.37	77.86
444	4	87.04	87.48	R	.76	40.26	.00	.00	a.a	0	.25	75.00
444	4	87.04	87.48	W	1.43	23.46	23.41	51.70	a.a	6144	.34	50.72
444	3	98.65	99.04	R	.88	18.46	.00	.00	a.a	0	.40	49.00
444	3	98.65	99.04	W	1.53	14.75	29.24	54.48	a.a	6970	.36	93.49
444	3	99.88	101.46	R	.90	37.89	.00	.00	a.a	0	.35	66.00
444	3	99.88	101.46	W	1.81	22.47	28.17	47.55	a.a	6192	.46	57.23
444	2	106.72	107.86	R	.79	41.61	.00	.00	a.a	0	.97	82.00
444	2	106.72	107.86	W	1.22	26.24	26.12	46.42	a.a	5836	1.08	58.96
444	2	108.06	109.44	R	.67	45.11	.00	.00	a.a	0	5.10	72.00
444	2	108.06	109.44	W	.93	26.30	25.79	46.98	a.a	5871	2.36	37.44
501	6	6.83	11.76	R	.45	16.05	00.00	00.00	a.a	0.0	.67	70
501	6	6.83	11.76	W	.56	10.96	29.4	59.27	a.a	7437	.57	86.36
501	4	13.56	14.44	R	.32	13.02	0.0	0.0	a.a	0	1.84	87.5
501	4	13.56	14.44	W	.75	10.18	29.4	59.67	a.a	7584	1.22	91.64
501	4	15.36	16.18	R	.18	15.74	0.0	0.0	a.a	0	1.21	81.7
501	4	15.36	16.18	W	.51	10.34	28.12	61.03	a.a	7499	1.05	87.37
501	3	22.8	23.14	R	.44	47.21	0.0	0.0	a.a	0	3.35	88.2
501	3	22.8	23.14	W	.55	13.7	17.13	68.62	a.a	7016	.76	2.89
501	2	24.65	26.42	R	.5	17.83	0.0	0.0	a.a	0	.51	100

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
501	2	24.65	26.42	W	.67	8.86	22.77	67.7	a.a	7646	.52	78.88
502	8	73.9	74.48	R	.32	24.04	0.0	0.0	a.a	0	3.31	100
502	8	73.9	74.48	W	.78	18.32	29.34	51.56	a.a	6759	2.66	78.91
502	7	95.36	95.91	R	.27	23.79	0.0	0.0	a.a	0	3.11	100
502	7	95.36	95.91	W	.76	12.14	31.54	55.56	a.a	7283	2.07	70.03
502	6	102.13	103.76	R	.38	13.86	0.0	0.0	a.a	0	1.77	100
502	6	102.12	103.76	W	.74	7.04	32.49	59.73	a.a	7779	1.17	86.77
502	6	103.76	104.28	R	.41	83.26	0.0	0.0	a.a	0	4.03	82.1
502	6	103.76	104.28	W	.88	42.99	25.6	30.53	a.a	4462	3.08	1.2
502	6	104.28	105.5	R	.31	8.01	0.0	0.0	a.a	0	.99	100
502	6	104.28	105.5	W	.8	5.92	30.2	63.08	a.a	7852	.82	95.43
502	6	106.68	107.46	R	.59	45.39	0.0	0.0	a.a	0	.65	100
502	6	106.68	107.46	W	1.0	20.78	24.93	53.29	a.a	6499	.98	35.84
502	6	109.63	110.3	R	.38	40.78	0.0	0.0	a.a	0	1.78	95.5
502	6	109.63	110.3	W	1.04	15.48	26.44	57.04	a.a	7029	1.39	48.43
502	6	111.42	116.08	R	.34	27.87	0.0	0.0	a.a	0	.8	99.35
502	6	111.42	116.08	W	.74	10.14	14.65	74.47	a.a	7518	.76	62.84
502	5	118.08	119.38	R	.38	19.08	0.0	0.0	a.a	0	.52	92.3
502	5	118.08	119.38	W	1.17	10.51	29.88	58.44	a.a	7401	.59	83.68
502	4	122.46	123.48	R	.38	11.2	0.0	0.0	a.a	0	1.41	98
502	4	122.46	123.48	W	.71	8.6	28.61	62.08	a.a	7666	1.01	93.07
502	4	123.48	124.2	R	1.0	89.0	0.0	0.0	a.a	0	.66	100
502	4	123.48	124.2	W	1.02	46.81	18.16	34.01	a.a	4210	.60	1.5

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
502	4	124.2	125.32	R	.49	19.39	0.0	0.0	a.a	0	1.70	100
502	4	124.2	125.32	W	.61	12.64	26.77	59.98	a.a	7310	1.17	83.91
502	2	133.79	137.32	R	.44	14.93	0.0	0.0	a.a	0	.93	87.8
502	2	133.79	137.32	W	.81	10.33	28.32	60.54	a.a	7461	.69	87.4
503	1	19.17	20.06	R	.46	18.74	0.0	0.0	a.a	0	1.82	100
503	1	19.17	20.06	W	.67	11.56	30.01	57.76	a.a	7382	1.82	83.8
503	1	30.02	31.11	R	.67	27.54	0.0	0.0	a.a	0	2.47	57.8
503	1	30.02	31.11	W	.51	17.19	30.12	52.18	a.a	6966	1.48	68.23
503	1	50.8	53.08	R	.56	38.74	0.0	0.0	a.a	0	.36	57
503	1	50.8	53.08	W	.83	17.15	28.49	53.53	a.a	6774	.46	49.96
504	7	13.84	17.17	R	.70	28.19	0.0	0.0	a.a	0	2.17	99.1
504	7	13.84	17.17	W	.85	8.03	31.8	59.32	a.a	7557	1.36	67.09
504	6	20.1	21.3	R	.43	13.82	0.0	0.0	a.a	0	2.63	100
504	6	20.1	21.3	W	.78	8.23	29.6	61.39	a.a	7626	.99	90.99
504	6	22.62	26.92	R	.74	13.03	0.0	0.0	a.a	0	1.36	100
504	6	22.62	26.92	W	.69	7.11	29.61	62.59	a.a	7717	.79	88.2
504	6	26.92	27.62	R	1.3	82.1	0.0	0.0	a.a	0	2.19	95.7
504	6	26.92	27.62	W	.42	27.7	27.66	44.22	a.a	5871	2.02	1.81
504	6	27.62	28.44	R	1.12	24.87	0.0	0.0	a.a	0	1.35	85.4
504	6	27.62	28.44	W	.74	15.56	30.1	53.6	a.a	6942	1.1	71.62
504	5	30.04	32.14	R	1.04	11.9	0.0	0.0	a.a	0	1.11	95.2
504	5	30.04	32.14	W	.7	6.9	31.13	61.27	a.a	7777	.77	88.51
504	4	38.32	39.29	R	.8	13.02	0.0	0.0	a.a	0	1.61	100

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
504	4	38.32	39.29	W	.54	8.59	29.68	61.19	a.a	7648	1.2	89.27
504	4	40.52	41.24	R	.94	17.25	0.0	0.0	a.a	Ó	1.59	100
504	4	40.52	41.24	W	.48	10.15	28.61	60.76	a.a	7493	1.01	82.04
504	2	51.8	55.72	R	1.04	23.54	0.0	0.0	a.a	O	.82	100
504	2	51.8	55.72	W	.84	10.93	29.17	59.56	a.a	7336	.62	75.14
504	4	39.8	40.16	R	.73	17.54	0.0	0.0	a.a	O	3.46	100
504	4	39.8	40.16	W	.73	12.87	25.98	60.42	a.a	7205	1.68	81.74
601	6	13.05	14.47	R	1.28	39.84	0.0	0.0	a.a	00000	1.85	100
601	6	13.05	14.47	W	1.22	13.64	27.58	57.56	a.a	6993	1.01	48.82
601	6	15.22	15.9	R	1.3	26.25	00	00	a.a	00000	1.33	94
601	6	15.22	15.9	W	1.06	17.25	27.25	54.44	a.a	6704	1.19	71.42
601	5	18.5	20.18	R	2.23	14.93	00	00	a.a	0000	1.09	100
601	5	18.5	20.18	W	2.26	11.21	26.92	59.61	a.a	7177	.81	
601	4	21.72	22.8	R	1.44	10.85	00	00	a.a	00000	1.85	77
601	4	21.72	22.8	W	1.86	8.43	27.29	62.42	a.a	7458	1.25	93.34
601	4	23.28	24.4	R	1.76	19.62	00	00	a.a	00000	1.58	100
601	4	23.28	24.4	W	1.57	12.49	25.91	60.03	a.a	7125	.79	78.69
601	2	31.16	31.88	R	1.12	36.66	00	00	a.a	00000	2.04	76
601	2	31.16	31.88	W	1.12	18.93	26.25	53.7	a.a	6622	1.47	46.61
601	2	32.82	36.43	R	2.33	15.22	00	00	a.a	00	.48	96
601	2	32.82	36.43	W	1.92	8.57	26.3	63.21	a.a	7438	.5	82.11
602	Q	93.32	93.7	R	.90	25.09	00	00	a.a	00	1.66	100
602	Q	93.32	93.7	W	1.1	19.28	27.59	52.03	a.a	6624	1.62	79.56

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
602	2	22.2	26.74	R	1.83	14.3	0	0	a.a	00000	.59	90
602	2	22.2	26.74	W	1.64	9.06	27.07	62.23	a.a	7454	.56	86.66
604	6	25.41	27.12	R	1.28	12.17	00	00	a.a	00000	2.67	84
604	6	25.41	27.12	W	1.61	6.7	29.02	62.67	a.a	7586	1.57	85.96
604	6	27.87	28.43	R	1.15	31.87	00	00	a.a	00000	2.41	100
604	6	27.87	28.43	W	1.24	11.24	27.1	60.42	a.a	7212	2.18	60.98
604	6	29.4	31.36	R	1.52	14.59	00	00	a.a	00000	1.3	100
604	6	29.4	31.36	W	1.31	9.63	25.82	63.24	a.a	7340	1.15	86.75
604	6	33.8	35.36	R	1.37	27.83	00	00	a.a	00000	1.91	97
604	6	33.8	35.36	W	1.84	8.98	26.6	62.58	a.a	7347	.65	65.57
604	6	36.06	36.68	R	.84	28.24	00	00	a.a	00000	1.8	94
604	6	36.06	36.68	W	1.62	16.02	24.83	57.57	a.a	6661	1.36	64.01
604	5	40.49	42.34	R	1.36	9.63	00	00	a.a	00000	.51	100
604	5	40.49	42.34	W	1.41	7.57	27.71	63.31	a.a	7604	.53	94.24
604	5	47.36	49.28	R	1.24	9.47	00	00	a.a	00000	.84	100
604	5	47.36	49.28	W	1.14	5.67	28.44	64.75	a.a	7747	.72	91.27
604	4	53.93	55.05	R	1.14	16.7	00	00	a.a	0000	2.33	100
604	4	53.93	55.05	W	1.0	9.97	26.8	62.23	a.a	7448	1.37	86.4
604	4	55.81	56.23	R	1.07	17.75	00	00	a.a	00000	2.23	100
604	4	55.81	56.23	W	.92	10.67	28.61	59.8	a.a	7406	1.64	77.74
604	2	64.92	68.3	R	1.4	15.45	00	00	a.a	00000	.54	99
604	2	64.92	68.3	W	1.04	9.88	26.51	62.57	a.a	7455	.54	84.59

Enclosure 15

telkwa north file is c:hold 8/1/87

SEAM 1

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
503	1	19.17	20.06	R	.46	18.74	0.0	0.0	a.a	0	1.82	100
503	1	19.17	20.06	W	.67	11.56	30.01	57.76	a.a	7382	1.82	83.8
503	1	30.02	31.11	R	.67	27.54	0.0	0.0	a.a	0	2.47	57.8
503	1	30.02	31.11	W	.51	17.19	30.12	52.18	a.a	6966	1.48	68.23
503	1	50.8	53.08	R	.56	38.74	0.0	0.0	a.a	0	.36	57
503	1	50.8	53.08	W	.83	17.15	28.49	53.53	a.a	6774	.46	49.96

telkwa north file is c:hold 13/1/87

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
213	2	16.54	19.97	R	.93	16.32	26.14	56.61	a.a	6776	.00	68
213	2	16.54	19.97	W	1.03	8.52	27.40	63.05	2.5	7522	.00	78.00
214	2	246.74	249.18	R	.72	33.87	22.80	42.61	a.a	5061	.00	82
214	2	246.74	249.18	W	1.06	10.75	24.85	63.34	1.5	7352	.00	56.00
216	2	48.17	52.13	R	.86	24.94	24.43	49.77	a.a	6083	.00	96
216	2	48.17	52.13	W	1.38	10.01	27.38	61.23	3.0	7419	.00	66.00
218	2	72.48	76.01	R	.65	16.97	25.57	56.81	a.a	6737	.00	100
218	2	72.48	76.01	W	1.03	9.53	26.41	63.03	2.5	7424	.00	76.00
440	2	106.94	109.16	R	.97	16.95	.00	.00	a.a	0	.48	94.00
440	2	106.94	109.16	W	1.92	9.25	24.51	64.32	a.a	7446	.50	84.75
442	2	12.83	15.32	R	1.05	21.57	.00	.00	a.a	0	.60	75.00
442	2	12.83	15.32	W	2.46	12.29	26.26	58.99	a.a	7068	.52	78.70
443	2	87.16	88.50	R	.50	37.98	.00	.00	a.a	0	.49	00.00
443	2	87.16	88.50	W	2.50	19.82	25.92	51.76	a.a	6411	.59	56.13
443	2	90.16	91.92	R	.74	51.35	.00	.00	a.a	0	.32	93.70
443	2	90.16	91.92	W	1.52	24.32	24.18	49.98	a.a	5991	.55	29.71
444	2	106.72	107.86	R	.79	41.61	.00	.00	a.a	0	.97	82.00
444	2	106.72	107.86	W	1.22	26.24	26.12	46.42	a.a	5836	1.08	58.96
444	2	108.06	109.44	R	.67	45.11	.00	.00	a.a	0	5.10	72.00
444	2	108.06	109.44	W	.93	26.30	25.79	46.98	a.a	5871	2.36	37.44
501	2	24.65	26.42	R	.5	17.83	0.0	0.0	a.a	0	.51	100
501	2	24.65	26.42	W	.67	8.86	22.77	67.7	a.a	7646	.52	78.88

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
502	2	133.79	137.32	R	.44	14.93	0.0	0.0	a.a	0	.93	87.8
502	2	133.79	137.32	W	.81	10.33	28.32	60.54	a.a	7461	.69	87.4
504	2	51.8	55.72	R	1.04	23.54	0.0	0.0	a.a	0	.82	100
504	2	51.8	55.72	W	.84	10.93	29.17	59.56	a.a	7336	.62	75.14
601	2	31.16	31.88	R	1.12	36.66	00	00	a.a	00000	2.04	76
601	2	31.16	31.88	W	1.12	18.93	26.25	53.7	a.a	6622	1.47	46.81
601	2	32.82	36.43	R	2.33	15.22	00	00	a.a	00	.48	96
601	2	32.82	36.43	W	1.92	8.57	26.3	63.21	a.a	7438	.5	82.11
603	2	22.2	26.74	R	1.83	14.3	0	0	a.a	00000	.59	90
603	2	22.2	26.74	W	1.64	9.06	27.07	62.23	a.a	7454	.56	86.66
604	2	64.92	68.3	R	1.4	15.45	00	00	a.a	00000	.54	99
604	2	64.92	68.3	W	1.04	9.88	26.51	62.57	a.a	7455	.54	84.59

telkwa north seam 3 file is c:hold 8/1/87

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
214	3	244.88	245.68	R	.59	17.08	27.02	55.31	a.a	6686	.00	80
214	3	244.88	245.68	W	.55	9.09	29.01	61.35	4.5	7479	.00	80.00
218	3	59.93	61.32	R	.75	10.58	26.88	61.79	a.a	7373	.00	95
218	3	59.93	61.32	W	.96	8.36	27.31	63.37	2.0	7567	.00	89.00
440	3	93.63	94.65	R	.89	14.37	.00	.00	a.a	0	1.39	00.00
440	3	93.63	94.65	W	2.16	10.38	27.20	60.26	a.a	7284	1.06	89.47
440	3	95.20	96.22	R	.80	15.03	.00	.00	a.a	0	1.74	96.00
440	3	95.20	96.22	W	2.34	12.30	25.55	59.81	a.a	7073	1.23	92.91
441	3	179.76	180.56	R	1.12	32.31	.00	.00	a.a	0	.35	00.00
441	3	179.76	180.56	W	1.85	24.59	24.65	48.91	a.a	6114	.37	73.58
441	3	181.48	182.44	R	1.24	43.71	.00	.00	a.a	0	.30	00.00
441	3	181.48	182.44	W	1.69	22.24	26.13	49.94	a.a	6190	.45	51.24
444	3	98.65	99.04	R	.88	18.46	.00	.00	a.a	0	.40	49.00
444	3	98.65	99.04	W	1.53	14.75	29.24	54.48	a.a	6970	.36	93.49
444	3	99.88	101.46	R	.90	37.89	.00	.00	a.a	0	.35	66.00
444	3	99.88	101.46	W	1.81	22.47	28.17	47.55	a.a	6192	.46	57.23
501	3	22.8	23.14	R	.44	47.21	0.0	0.0	a.a	0	3.35	88.2
501	3	22.8	23.14	W	.55	13.7	17.13	68.62	a.a	7016	.76	2.89

MASTER FILE SORT PROGRAM 8/1/87

telkwa north seam 4 file is c:hold 8/1/87

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
214	4	236.52	241.25	R	.63	17.95	27.05	54.37	a.a	6614	.00	80
214	4	236.52	241.25	W	.56	9.83	27.72	61.89	4.5	7507	.00	68.00
216	4	36.12	37.18	R	.91	10.09	26.88	62.12	a.a	7358	.00	.00
216	4	36.12	37.18	W	1.11	8.25	26.49	64.15	1.5	7526	.00	91.00
218	4	52.82	54.56	R	.74	10.15	27.98	61.13	a.a	7349	.00	80
218	4	52.82	54.56	W	.77	8.41	28.53	62.29	2.5	7527	.00	91.00
218	4	62.08	62.66	R	.65	19.05	26.00	54.30	a.a	6603	.00	95
218	4	62.08	62.66	W	.63	10.72	27.29	61.36	3.5	7387	.00	73.00
440	4	88.00	89.71	R	.88	14.81	.00	.00	a.a	0	2.95	00.00
440	4	88.00	89.71	W	1.85	10.45	27.40	60.30	a.a	7318	.80	91.53
441	4	169.04	169.84	R	1.57	50.73	.00	.00	a.a	0	.27	00.00
441	4	169.04	169.84	W	1.42	21.50	25.13	51.95	a.a	6272	.48	41.11
441	4	172.16	172.64	R	1.29	38.87	.00	.00	a.a	0	.30	00.00
441	4	172.16	172.64	W	2.17	31.57	21.37	44.89	a.a	5393	.33	70.18
443	4	72.20	72.50	R	.83	45.46	.00	.00	a.a	0	.31	00.00
443	4	72.20	72.50	W	1.52	25.57	22.69	50.22	a.a	5921	.43	47.22
444	4	87.04	87.48	R	.76	40.26	.00	.00	a.a	0	.25	75.00
444	4	87.04	87.48	W	1.43	23.46	23.41	51.70	a.a	6144	.34	50.72
501	4	13.56	14.44	R	.32	13.02	0.0	0.0	a.a	0	1.84	87.5
501	4	13.56	14.44	W	.75	10.18	29.4	59.67	a.a	7584	1.22	91.64
501	4	15.36	16.18	R	.18	15.74	0.0	0.0	a.a	0	1.21	81.7
501	4	15.36	16.18	W	.51	10.34	28.12	61.03	a.a	7499	1.05	87.37

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
502	4	122.46	123.48	R	.38	11.2	0.0	0.0	a.a	0	1.41	98
502	4	122.46	123.48	W	.71	8.6	28.61	62.08	a.a	7666	1.01	93.07
502	4	123.48	124.2	R	1.0	89.0	0.0	0.0	a.a	0	.66	100
502	4	123.48	124.2	W	1.02	46.81	18.16	34.01	a.a	4210	.60	1.5
502	4	124.2	125.32	R	.49	19.39	0.0	0.0	a.a	0	1.70	100
502	4	124.2	125.32	W	.61	12.64	26.77	59.98	a.a	7310	1.17	83.91
504	4	38.32	39.29	R	.8	13.02	0.0	0.0	a.a	0	1.61	100
504	4	38.32	39.29	W	.54	8.59	29.68	61.19	a.a	7648	1.2	89.27
504	4	40.52	41.24	R	.94	17.25	0.0	0.0	a.a	0	1.59	100
504	4	40.52	41.24	W	.48	10.15	28.61	60.76	a.a	7493	1.01	82.04
504	4	39.8	40.16	R	.73	17.54	0.0	0.0	a.a	0	3.46	100
504	4	39.8	40.16	W	.73	12.87	25.98	60.42	a.a	7205	1.68	81.74
601	4	21.72	22.8	R	1.44	10.85	00	00	a.a	00000	1.85	77
601	4	21.72	22.8	W	1.86	8.43	27.29	62.42	a.a	7458	1.25	93.34
601	4	23.28	24.4	R	1.76	19.62	00	00	a.a	00000	1.58	100
601	4	23.28	24.4	W	1.57	12.49	25.91	60.03	a.a	7125	.79	78.69
604	4	53.93	55.05	R	1.14	16.7	00	00	a.a	0000	2.33	100
604	4	53.93	55.05	W	1.0	9.97	26.8	62.23	a.a	7448	1.37	86.4
604	4	55.81	56.23	R	1.07	17.75	00	00	a.a	00000	2.23	100
604	4	55.81	56.23	W	.92	10.67	28.61	59.8	a.a	7406	1.64	77.74

MASTER FILE SORT PROGRAM 8/1/87

telkwa north seam 5 file is c:hold 8/1/87

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
216	5	27.66	29.50	R	.98	12.12	28.67	58.23	a.a	7160	.00	77
216	5	27.66	29.50	W	1.05	6.66	29.01	63.28	3.5	7681	.00	86.00
440	5	82.76	86.83	R	.97	17.09	.00	.00	a.a	0	.49	94.00
440	5	82.76	86.83	W	2.30	11.84	26.85	59.01	a.a	7103	.50	90.92
441	5	151.56	152.28	R	1.13	36.19	.00	.00	a.a	0	.40	00.00
441	5	151.56	152.28	W	1.34	20.43	24.15	54.08	a.a	6485	.47	60.31
441	5	154.40	154.96	R	1.18	39.96	.00	.00	a.a	0	.93	00.00
441	5	154.40	154.96	W	.85	21.37	27.79	49.99	a.a	6395	.41	52.57
441	5	157.56	159.56	R	1.34	33.39	.00	.00	a.a	0	.33	00.00
441	5	157.56	159.56	W	1.83	15.41	26.38	56.38	a.a	6804	.41	67.06
443	5	66.50	67.30	R	.88	32.45	.00	.00	a.a	0	.35	00.00
443	5	66.50	67.30	W	2.30	19.70	24.13	53.87	a.a	6428	.40	68.77
444	5	76.92	77.34	R	.72	29.94	.00	.00	a.a	0	.43	43.00
444	5	76.92	77.34	W	1.54	21.06	24.97	52.43	a.a	6372	.37	77.86
502	5	118.08	119.38	R	.38	19.08	0.0	0.0	a.a	0	.52	92.3
502	5	118.08	119.38	W	1.17	10.51	29.88	58.44	a.a	7401	.59	83.68
504	5	30.04	32.14	R	1.04	11.9	0.0	0.0	a.a	0	1.11	95.2
504	5	30.04	32.14	W	.7	6.9	31.13	61.27	a.a	7777	.77	88.51
601	5	18.5	20.18	R	2.23	14.93	00	00	a.a	0000	1.09	100
601	5	18.5	20.18	W	2.26	11.21	26.92	59.61	a.a	7177	.81	
604	5	40.49	42.34	R	1.36	9.63	00	00	a.a	00000	.51	100
604	5	40.49	42.34	W	1.41	7.57	27.71	63.31	a.a	7604	.53	94.24

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
604	5	47.36	49.28	R	1.24	9.47	00	00	a.a	00000	.84	100
604	5	47.36	49.28	W	1.14	5.67	28.44	64.75	a.a	7747	.72	91.27

MASTER FILE SORT PROGRAM 8/1/87

telkwa north seam 6 file is c:hold 8/1/87

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
214	6	224.50	228.40	R	.51	18.94	26.26	54.29	a.a	6695	.00	76
214	6	224.50	228.40	W	.67	6.22	30.06	63.05	5.5	7900	.00	74.00
216	6	21.64	25.55	R	1.05	18.36	27.10	53.49	a.a	6508	.00	96
216	6	21.64	25.55	W	1.21	6.86	28.30	63.63	2.5	7653	.00	72.00
218	6	35.15	35.72	R	.87	20.60	23.89	54.64	a.a	6407	.00	95
218	6	35.15	35.72	W	1.01	13.95	25.71	59.33	1.0	7018	.00	71.00
218	6	46.95	48.37	R	.91	9.03	25.77	64.29	a.a	7430	.00	74
218	6	46.95	48.37	W	.96	5.91	27.69	65.44	2.0	7702	.00	90.00
218	6	49.56	50.08	R	.73	21.00	26.84	51.43	a.a	6378	.00	80
218	6	49.56	50.08	W	.69	12.29	30.38	56.64	6.5	7249	.00	68.00
440	6	75.38	76.30	R	.82	25.19	.00	.00	a.a	0	1.89	90.00
440	6	75.38	76.30	W	1.17	10.89	32.27	55.67	a.a	7372	1.34	68.09
440	6	77.40	79.10	R	.95	28.92	.00	.00	a.a	0	1.78	00.00
440	6	77.40	79.10	W	1.45	7.88	29.43	61.24	a.a	7649	.85	65.07
440	6	80.05	80.42	R	1.37	65.45	.00	.00	a.a	0	.45	81.00
440	6	80.05	80.42	W	1.17	26.84	25.30	46.69	a.a	5863	.82	8.81
441	6	140.72	141.10	R	1.23	48.10	.00	.00	a.a	0	1.98	00.00
441	6	140.72	141.10	W	.72	25.18	28.81	45.29	a.a	6263	.91	44.81
441	6	141.64	142.84	R	1.38	39.21	.00	.00	a.a	0	.57	00.00
441	6	141.64	142.84	W	1.20	23.34	25.98	49.48	a.a	6272	.61	52.32
441	6	145.00	146.28	R	1.12	27.64	.00	.00	a.a	0	2.96	00.00
441	6	145.00	146.28	W	1.16	22.41	28.00	48.43	a.a	6368	2.31	82.10

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
441	6	147.32	147.64	R	1.03	50.96	.00	.00	a.a	0	4.48	00.00
441	6	147.32	147.64	W	.71	31.10	27.15	41.04	a.a	5572	2.42	24.01
443	6	49.36	50.00	R	.75	39.45	.00	.00	a.a	0	.37	00.00
443	6	49.36	50.00	W	1.67	20.96	24.15	53.33	a.a	6412	.51	53.29
443	6	50.68	51.39	R	.85	37.57	.00	.00	a.a	0	2.32	00.00
443	6	50.68	51.39	W	1.59	17.35	26.36	54.70	a.a	6735	.76	58.45
443	6	53.60	54.44	R	.80	42.03	.00	.00	a.a	0	.53	84.50
443	6	53.60	54.44	W	1.93	20.46	24.37	53.24	a.a	6478	.62	53.91
443	6	55.28	56.45	R	.81	30.18	.00	.00	a.a	0	1.43	00.00
443	6	55.28	56.45	W	1.68	17.55	25.29	55.48	a.a	6693	.68	70.78
444	6	67.47	68.84	R	.90	26.21	.00	.00	a.a	0	.48	54.00
444	6	67.47	68.84	W	1.73	15.51	25.09	57.67	a.a	6864	.55	77.83
501	6	6.83	11.76	R	.45	16.05	00.00	00.00	a.a	0.0	.67	70
501	6	6.83	11.76	W	.56	10.96	29.4	59.27	a.a	7437	.57	86.36
502	6	102.13	103.76	R	.38	13.86	0.0	0.0	a.a	0	1.77	100
502	6	102.12	103.76	W	.74	7.04	32.49	59.73	a.a	7779	1.17	86.77
502	6	103.76	104.28	R	.41	83.26	0.0	0.0	a.a	0	4.03	82.1
502	6	103.76	104.28	W	.88	42.99	25.6	30.53	a.a	4462	3.08	1.2
502	6	104.28	105.5	R	.31	8.01	0.0	0.0	a.a	0	.99	100
502	6	104.28	105.5	W	.8	5.92	30.2	63.08	a.a	7852	.82	95.43
502	6	106.68	107.46	R	.59	45.39	0.0	0.0	a.a	0	.65	100
502	6	106.68	107.46	W	1.0	20.78	24.93	53.29	a.a	6499	.98	35.84
502	6	109.63	110.3	R	.38	40.78	0.0	0.0	a.a	0	1.78	95.5

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
502	6	109.63	110.3	W	1.04	15.48	26.44	57.04	a.a	7029	1.39	48.43
502	6	111.42	116.08	R	.34	27.87	0.0	0.0	a.a	0	.8	99.35
502	6	111.42	116.08	W	.74	10.14	14.65	74.47	a.a	7518	.76	62.84
504	6	20.1	21.3	R	.43	13.82	0.0	0.0	a.a	0	2.63	100
504	6	20.1	21.3	W	.78	8.23	29.6	61.39	a.a	7626	.99	90.99
504	6	22.62	26.92	R	.74	13.03	0.0	0.0	a.a	0	1.36	100
504	6	22.62	26.92	W	.69	7.11	29.61	62.59	a.a	7717	.79	88.2
504	6	26.92	27.62	R	1.3	82.1	0.0	0.0	a.a	0	2.19	95.7
504	6	26.92	27.62	W	.42	27.7	27.66	44.22	a.a	5871	2.02	1.81
504	6	27.62	28.44	R	1.12	24.87	0.0	0.0	a.a	0	1.35	85.4
504	6	27.62	28.44	W	.74	15.56	30.1	53.6	a.a	6942	1.1	71.62
601	6	13.05	14.47	R	1.28	39.84	0.0	0.0	a.a	00000	1.85	100
601	6	13.05	14.47	W	1.22	13.64	27.58	57.56	a.a	6993	1.01	48.82
601	6	15.22	15.9	R	1.3	26.25	00	00	a.a	00000	1.33	94
601	6	15.22	15.9	W	1.06	17.25	27.25	54.44	a.a	6704	1.19	71.42
604	6	25.41	27.12	R	1.28	12.17	00	00	a.a	00000	2.67	84
604	6	25.41	27.12	W	1.61	6.7	29.02	62.67	a.a	7586	1.57	85.96
604	6	27.87	28.43	R	1.15	31.87	00	00	a.a	00000	2.41	100
604	6	27.87	28.43	W	1.24	11.24	27.1	60.42	a.a	7212	2.18	60.98
604	6	29.4	31.36	R	1.52	14.59	00	00	a.a	00000	1.3	100
604	6	29.4	31.36	W	1.31	9.63	25.82	63.24	a.a	7340	1.15	86.75
604	6	33.8	35.36	R	1.37	27.83	00	00	a.a	00000	1.91	97
604	6	33.8	35.36	W	1.84	8.98	26.6	62.58	a.a	7347	.65	65.57

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
604	6	36.06	36.68	R	.84	28.24	00	00	a.a	00000	1.8	94
604	6	36.06	36.68	W	1.62	16.02	24.83	57.57	a.a	6661	1.36	64.01

MASTER FILE SORT PROGRAM 8/1/87

telkwa north seam 7 file is c:hold 8/1/87

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
216	7	19.91	21.05	R	1.04	10.61	27.92	60.43	a.a	7359	.00	.00
216	7	19.91	21.05	W	1.05	6.50	29.03	63.42	2.0	7715	.00	90.00
440	7	70.88	71.33	R	.97	13.72	.00	.00	a.a	0	3.84	.00
440	7	70.88	71.33	W	1.12	10.43	28.56	59.89	a.a	7297	2.53	94.01
441	7	125.72	127.80	R	.82	15.34	.00	.00	a.a	0	.43	00.00
441	7	125.72	127.80	W	1.36	10.65	28.61	59.38	a.a	7248	.44	90.36
443	7	34.04	34.84	R	.54	26.87	.00	.00	a.a	0	3.73	92.50
443	7	34.04	34.84	W	1.26	17.44	28.12	53.18	a.a	6830	1.64	74.64
502	7	95.36	95.91	R	.27	23.79	0.0	0.0	a.a	0	3.11	100
502	7	95.36	95.91	W	.76	12.14	31.54	55.56	a.a	7283	2.07	70.03
504	7	13.84	17.17	R	.70	28.19	0.0	0.0	a.a	0	2.17	99.1
504	7	13.84	17.17	W	.85	8.03	31.8	59.32	a.a	7557	1.36	67.09

MASTER FILE SORT PROGRAM 8/1/87

telkwa north file is c:hold 8/1/87

SEAM 8

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
214	8	188.28	190.76	R	.67	35.09	21.20	43.04	a.a	5122	.00	52
214	8	188.28	190.76	W	.66	9.79	26.58	62.97	3.0	7493	.00	57.00
440	8	49.76	51.59	R	1.08	14.56	.00	.00	a.a	0	.75	00.00
440	8	49.76	51.59	W	2.01	9.65	28.14	60.20	a.a	7285	.71	92.36
441	8	101.08	103.24	R	.87	17.14	.00	.00	a.a	0	1.66	90.00
441	8	101.08	103.24	W	2.47	11.03	26.28	60.22	a.a	7281	1.19	87.07
443	8	13.83	15.01	R	.70	18.58	.00	.00	a.a	0	2.39	64.40
443	8	13.83	15.01	W	1.52	13.67	26.80	58.01	a.a	7096	1.94	88.21
502	8	73.9	74.48	R	.32	24.04	0.0	0.0	a.a	0	3.31	100
502	8	73.9	74.48	W	.78	18.32	29.34	51.56	a.a	6759	2.66	78.91

MASTER FILE SORT PROGRAM 8/1/87

telkwa north seam 9 file is c:hold 8/1/87

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
214	9	178.57	179.40	R	.80	12.02	30.52	56.66	a.a	7354	.00	86
214	9	178.57	179.40	W	.99	7.48	31.35	60.18	4.0	7770	.00	87.00
440	9	48.51	49.13	R	1.26	54.04	.00	.00	a.a	0	2.53	00.00
440	9	48.51	49.13	W	.98	10.98	33.48	54.56	a.a	7349	2.65	39.82
441	9	95.36	96.64	R	.68	9.08	.00	.00	a.a	0	2.61	70.00
441	9	95.36	96.64	W	1.08	7.94	32.39	58.59	a.a	7667	2.17	97.37

MASTER FILE SORT PROGRAM 8/1/87

telkwa north seam 10 file is c:hold 8/1/87

hole	sm	from	to	Rw/Wsh	moist	ash	vols	FC	FSI	cals	S%	R/yld
440	10	44.68	45.53	R	.92	13.03	.00	.00	a.a	0	3.35	00.00
440	10	44.68	45.53	W	1.26	9.08	34.68	54.98	a.a	7474	2.20	92.76
441	10	89.64	90.60	R	.82	17.98	.00	.00	a.a	0	1.10	90.00
441	10	89.64	90.60	W	1.51	12.42	26.84	59.23	a.a	7162	1.06	92.69