

ALBERTA GEOLOGICAL SURVEY - COAL GEOLOGY

COAL COMPILATION PROJECT - CARDINAL RIVER

NTS 83C/15

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Foreword

The prime objective of the three year pilot Coal Compilation Project (CCP), initiated in the 1989/90 fiscal year (FY), is to provide coal resource maps to stimulate and support industry exploration programs, and assist government in matters of resource management. An essential feature of the program is the use of cost effective Geoscience Information System (GSIS) technology that allows the database and various thematic maps to be analyzed, updated, and displayed with complete flexibility at any scale.

Each map is intended to be a stand alone, unique product contributing to an overall synthesis of information. Maps generated are at a regional or reconnaissance level. Collection of new data is limited. Data compiled and evaluated are based on Alberta and Federal government sources and unpublished corporate reports and data from the coal industry. The coal industry has cooperated and supported the CCP by providing numerous unpublished corporate reports to the Alberta Geological Survey (AGS). The availability of these reports has been an essential component toward the success of this project.

To the end of the 1991/92 FY, the CCP encompasses fifteen 1: 50 000 scale mapsheets. Four mapsheets were completed during the 1989/90 FY, five during the 1990/91 FY and an additional six during the past 1991/92 FY.

Custom maps and database searches can be obtained by contacting the Minerals and Coal Geoscience Section, Alberta Geological Survey, Alberta Research Council. Raw coal exploration data¹ that are in the 'public' domain can, for a nominal fee, be viewed in microfiche form at the Records Centre of the Energy Resources Conservation Board (ERCB) in Calgary, Alberta. Arrangements can also be made to acquire copies of all/selected data.

¹Specifically, the geophysical logs (and other associated data) of coal exploration drillholes and, as available, analytical data relating to coal quality.

Acknowledgments

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Introduction

Project Objective

The stated objective of the pilot Coal Compilation Project (CCP), initiated in the 1989/90 FY, is to provide coal resource maps on a 1: 50 000 scale, which would

- stimulate and support industry exploration programs, and
- assist government in matters of resource management (eg, Integrated Resource Plans) in areas that may have good coal development potential, but have a lack of data or understanding.

Background

The idea for a new coal geology map series spawned from a 1986 AGS questionnaire that was sent to the industry sector and government agencies in both Canada and the USA. Questionnaire responses identified the need to revamp the dated and/or complete lack of coal geology maps, particularly in the Mountains and Foothills regions of Alberta.

In 1989, the concept of merging resident computer mapping techniques with available Geographic Information System (GIS) technology, was successfully tested at the AGS during a pilot Geoscience Information System (GSIS) project. Current maps, costing much less than traditional mapping procedures, could be produced.

Commencing in the 1989/90 FY, the AGS' Coal Program Technical Advisory Committee (CPTAC) supported the concept, and a 3 year project with a sixteen map goal.

Process

The use of GIS technology and the focus on data compilation with only minimal field work, in opposition to traditional field work and data gathering, was a totally new and untried concept. Within industry and government files, there were many more data than initially expected. The data had been collected over many years and at different levels of precision, integrity and for a wide variety of purposes. Little of the data, excepting that within AGS and ERCB databases, was in an electronic format; further, most data had not been collected in consideration of modern database specifications. Limited budgets, field time and difficult terrain minimized 'ground truthing'. Staff training was required during the first two years of the program. In the early stages of the program, GIS platform limitations (hardware/software/connectivity) provided additional non-geological technical challenges.

Map areas were selected at the annual meeting of the CPTAC. As mapsheet areas were identified, data gathering commenced with a literature search and identification of possible data sources. AGS reports, internal files and electronic databases provide primary information. The ERCB is a major source of information for both coal and oil/gas data. Much of the fundamental geologic information used in the CCP maps comes from mapping by the Geological Survey of Canada. Information fundamental to the effectiveness of the CCP maps comes from industry reports and files. Every effort is made to acquire information from industry and to incorporate it into the CCP maps and reports in a way that does not compromise corporate confidentiality.

Due to tight schedules and limited budgets, time spent in the field, to gather new data and/or verify existing data, is minimal.

When available geologic information is combined with base map information² within a GIS, the generation of a product begins. In general both digital and hard copy data or graphic elements are entered into the GIS software product (ARC/INFO) where they are analyzed, displayed or plotted to hardcopy. Custom maps are produced from the various data and graphic elements in the information system.

The analytical power of GIS modelling is not extensively explored; the project's primary focus is on producing new maps as rapidly as possible. However, since the information is stored within a fully functional GIS, all modelling capabilities, beyond the scope of the Project, are available for the future. The GIS technology has been used, however, to produce a simple evaluation of the Coal Resource Development Potential of each mapsheet. The model, based on limited data, is a semiquantitative and subjective evaluation of the potential of coal development within a map area. The model is primarily based on geological criteria and does not take into account governmental restrictions and/or actual economic constraints on coal development.

Results

To the end of the 1991/92 FY the CCP encompasses fifteen NTS mapsheets from the Alberta Mountains and Foothills regions (Figure 1). For each mapsheet, the CCP product includes a coal

² Including digital map data from the Alberta Department of Forestry Lands and Wildlife.

resource map (scale 1:50 000), thematic snapshot maps (scale 1:250 000) and accompanying text. The snapshot maps depict data relating to differing subject areas, including coal exploration data, coal dispositions, coal development potential and an index to specific reference documents.

In 1989/90, the CCP focussed on the Hinton - Grande Cache Corridor, located in west-central Alberta. Four contiguous NTS mapsheets were completed. From southeast to northwest, they are 83F/5, 83E/9, 83E/14 and 83E/15. During 1990/91, the second year of the project, focus was on the area north of Grande Cache (83L/2, 83L/3, 83L/7, and 83L/10). An additional map, 83E/16, located east of Grande Cache, and in the Berland River area, was also completed. Six maps were completed during 1991 / 92; four maps (83F/4, 83C/9, 83C/15 and 83C/16) continue the coverage south from Hinton and two maps are in the Crowsnest Pass

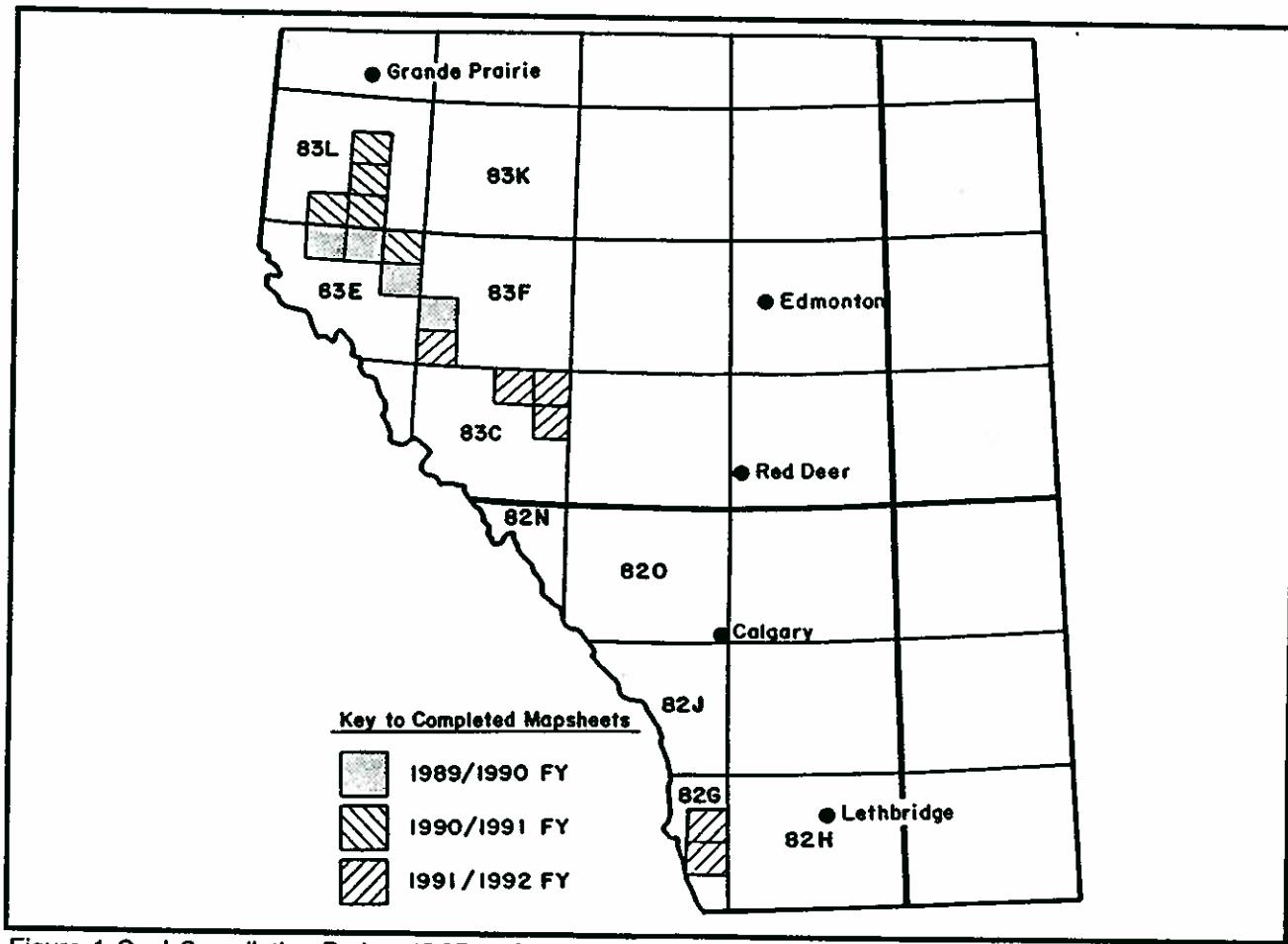


Figure 1 Coal Compilation Project (CCP) - Completed NTS Mapsheets

area (82G/8 and 82G/9).

Funding for the CCP will continue for the 1992/93 FY; an additional four mapsheets will be completed.

* * * *

Location and Access

The study area of mapsheet NTS 83C/15 (Cardinal River) is located in west-central Alberta between Latitudes 52° 45' and 53° 00' North, and Longitudes 116° 30' and 117° 00' West (between Townships 43 and 46 inclusive, and Ranges 18 to 21 inclusive, West of the 5th Meridian).

A Treaty Indian encampment, Small Boys Camp, is located along the Grave Flats road. Nordegg (83C/8) and Robb (83F/2) are the closest communities to the mapsheet area. Robb is located some 50 road-kilometres northwest of the mapsheet's north boundary; Nordegg is located some 60 road-kilometres southeast of the mapsheet's eastern boundary.

All-weather access, to and within the area, is provided by the Forestry Trunk Road (Secondary Highway 940). The secondary highway passes through the northeast quarter of the mapsheet. Additional secondary access, in part, seasonal, is provided by a network of wellsite and logging roads, trails and seismic lines.

There is no existing rail service within the mapsheet area; the closest in-service rail line is located some 10 kilometres northwest of the north boundary of the mapsheet. The existing rail service (Canadian National Railways) terminates at the Coal Valley Mine operated by Luscar Ltd.; the rail line has the capacity to accommodate coal unit trains. Coal ports at

- Vancouver are located some 1100 rail-kilometres west from the Coal Valley Mine
- Thunder Bay are located some 2280 rail-kilometres east from the Coal Valley Mine.

Geological Setting

Within the mapsheet 83C/15 (Cardinal River), coal measures are deposited within thick successions of primarily sandstones, siltstones and shales. Known coal-bearing sequences are

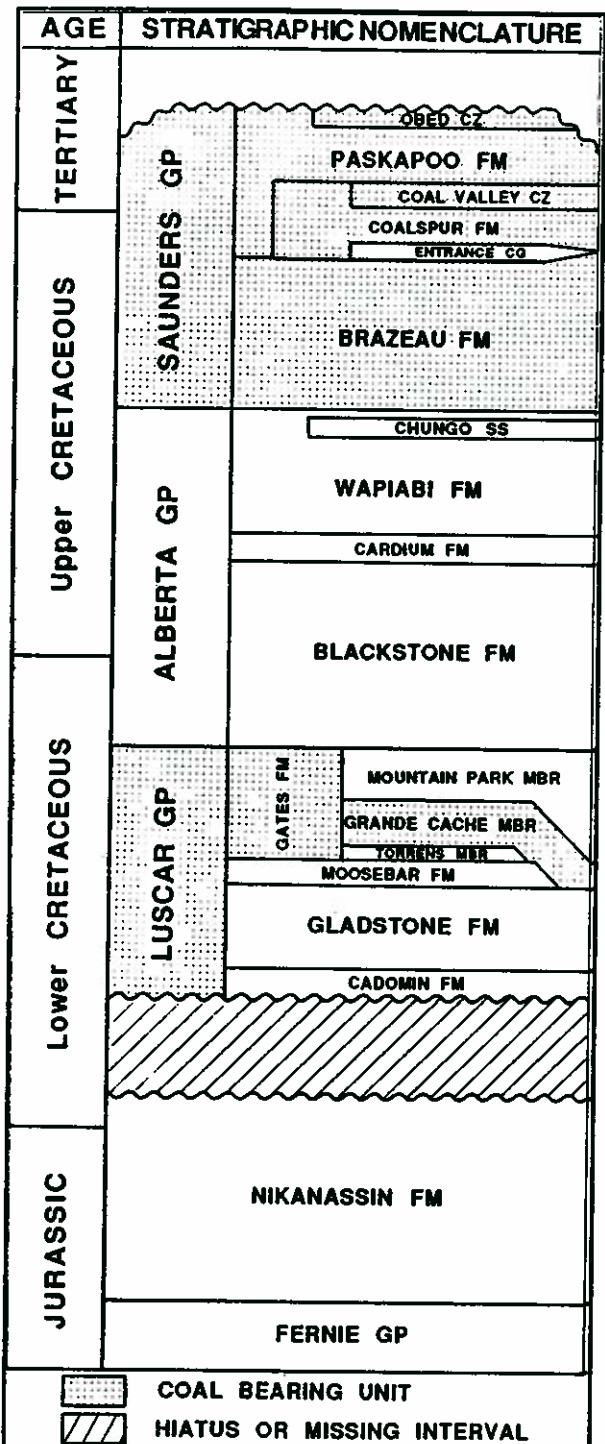


Figure 2 Stratigraphic Nomenclature for the Coal Compilation Project - Mountains and Foothills of North-Central Alberta (after ERCB ST 92-31)

contained within the Gates Formation of the Lower Cretaceous Luscar Group, and in the Brazeau and Coalspur formations of the Upper Cretaceous / Tertiary Saunders Group.

Stratigraphic nomenclature for the above strata is shown in Figure 2.

Stratigraphy of Coal-Bearing Units

Luscar Group - Gates Formation

The Luscar Group is some 400 to 600 metres thick and consists of sandstones, siltstones, shales, conglomerates and coals, predominantly deposited in nonmarine environments. Strata of the Luscar Group have been divided into four formations (Langenberg and McMechan, 1985). In ascending order, they are the:

- Cadomin Formation, alluvial conglomerates
- Gladstone Formation, predominantly alluvial sandstone, shale and minor coal
- Moosebar Formation, marine shale and minor sandstone
- Gates Formation, mainly nonmarine sandstones, shales and coals.

The Gates Formation is ~350 metres thick and can be divided into three members. In ascending order, they are the

- basal Torrens Member, shoreface sandstones
- Grande Cache Member, coastal plain sandstones, shales and major economic coal seams
- Mountain Park Member, fluvial sandstones, shales and minor coals.

Defining the upper and lower boundaries of the coal-bearing Grande Cache Member can be difficult within, and in close proximity to, the mapsheet area; the Grande Cache Member is believed to be some 110 metres thick and may contain in excess of 5 metres of coal in 4 main seams.

Brazeau Formation

The Brazeau Formation is ~1200 metres thick and consists of primarily nonmarine sandstone, conglomerate, shale and thin coal seams; it should be noted, however, that thicker coal zones (with as-drilled thicknesses to 13 metres) have also been recorded; these thicker Brazeau coal zones are located near the top of the Formation.

Coalspur Formation

The Coalspur Formation consists of ~600 metres of sandstones, shales and economic coals, predominantly deposited in nonmarine environments.

Structure

For most of the mapsheet, strata of the coal-bearing formations have been subjected to deformation which has produced northwesterly trending thrust faults and folds. As a result, the strata are exposed in a series of northwest trending thrust sheets.

In the southwest half of the mapsheet, strata of the coal-bearing Luscar Group are transected by a number of west dipping faults, including the Nikanassin and Grave Flats thrusts; in the northeast half of the mapsheet, strata of the coal-bearing Brazeau and Coalspur formations are transected by a number of faults, including the west dipping Brazeau and Ancona thrusts, and by the east dipping Pedley Thrust.

The axis of the (overturned) Brazeau Syncline traverses the mapsheet in a northwesterly / southeasterly trend; the axial trace, in part, is located very close to the northwest corner of the mapsheet.

Environmental Setting

Integrated Resource Plans (IRP's)

Mapsheet 83C/15 contains two existing Sub-Regional IRP's; they are the

- Coal Branch
- Nordegg - Red Deer River

Outlines of the two IRP's are presented on an inset on the enclosed map RCM13.

Resource Management

Coal Dispositions

The status of the rights_to_coal within an area can generally be categorized into one of the following

- Crown coal lease
- Crown coal lease under application
- Areas with registered right of first refusal
- Freehold coal rights
- Coal withdrawn from disposition.

According to a recent (1990-03-30) Alberta Energy Coal Disposition Map, there are substantial corporate coal land holdings on the 83C/15 mapsheet.

Dentherm Resources Limited holds coal leases. Luscar Ltd. holds coal leases and coal lease applications; Shell Canada Limited holds only coal lease applications.

There are also freehold land parcels and areas with registered right of first refusal.

Established Coal Resources and Reserves

Coal reserves are calculated by the ERCB for the whole of Alberta. The mapsheet contains coal fields from both the ERCB-designated Mountains and Foothills regions.

In part, the Southesk River Coal Field is contained within the CCP mapsheet 83C/15. The coal field, containing coal of the Luscar Group, is part of the ERCB-designated 'Mountain Region'. The mapsheet also contains, within the Mountain Region, the Grave Flats and Muskiki Lake 'Coal Occurrences'. These coal occurrences are also part of the Luscar Group.

The Coalspur and McLeod River coal fields are, in part, also contained within the CCP mapsheet 83C/15 (Cardinal River). The coal fields, containing coal of the Coalspur Formation, are part of the ERCB-designated 'Foothills Region'.

Only the Coal Field outlines have been shown on the GIS plot.

Exploration History

Coal

Coal Exploration Drillholes

Some 489 coal exploration holes³ have been drilled by 6 companies. Of the holes drilled, 296 holes (61%) contain recorded coal intersections on the AGS Coal Database (these are picks as recorded by ERCB staff); it follows that 193 holes (39%) did not intersect coal. Hole depths varied from 8 metres to a maximum of 168 metres.

A summary of the coal exploration drilling activities follows:

Company	Number of Coal Drillholes
Consolidation Coal Company of Canada	157
Denison Mines Limited	17
Lexco Testing Ltd.	255
Luscar Ltd.	35
Shell Canada Resources Ltd.	21
Sterling Coal Valley Mining Co. Ltd.	4

³Information, concerning coal exploration drillholes, is based on the AGS Coal Database, April, 1989 version of the ERCB Coal Hole File. It is planned, in the next fiscal year, to upgrade the AGS Coal Database with the April, 1992 version of the ERCB Coal Hole File.

Based on the April, 1989 version of the ERCB Coal Hole File, details of the coal exploration drillholes are given in Appendix 1; the data listing includes the following information:

- sitid; the assigned Site Identification Number within the AGS Coal Database
- cat_id; the assigned Catalogue Identification Number within the ERCB Coal Hole File (April, 1989 version)
- orig; the original identification number of the datapoint (ie, drillhole number); this item may have been edited, in some instances, by the ERCB to allow the 'orig' to be accommodated by the existing format of the ERCB Coal file
- c; a Yes/No _toggle to denote whether or not the datapoint, as stored on the AGS Coal Database, contains coal intersections
- q; a Yes/No _toggle to denote whether or not the datapoint, as stored on the AGS Coal Database, contains coal quality data
- m; meridian
- twp; township
- rg; range
- s; section
- rs; reference section
- rc; reference corner
- metn; metres north or south from the reference corner
- mete; metres east or west from the reference corner
- elev; ground or surface elevation of the datapoint (drillhole)
- td; total depth of drillhole reported in metres
- cpdt; completion date of the datapoint (drillhole); date coded as yyymmdd
- drld; data_release date of the datapoint (drillhole); date coded as yyymmdd
- cor; the assigned corporation number within the AGS Coal Database
- company; identifies the company that generated the datapoint (drillhole).

Oil and Gas

The CCP mapsheet 83C/15 contains, in part, the following three Gas Fields

- Lovett River
- Opabin
- Voyager

Field outlines, as they apply to the mapsheet, are shown on the GIS plot.

Within the mapsheet area, 20 gas (and/or oil) wells have been drilled. Of the wells drilled,

- 10 have been abandoned
- 9 are capped gaswells
- 1 has been abandoned and reentered.

See Appendix 2 for additional data. The Appendix is based on queries from the ERCB oil and gas database (January, 1991 version).

Coal Occurrences

Coal Exploration Drillholes

Coal intersections, per coal exploration drillhole, have been included in Appendix 3. Each drillhole is a self-contained data set and includes the following information:

- sitid; the assigned Site Identification Number within the AGS Coal Database
- cat_id; the assigned Catalogue Identification Number within the ERCB Coal Hole File (April, 1989 version)
- m; meridian
- twp; township
- rg; range
- s; section
- rs; reference section
- rc; reference corner
- metn; metres north or south from the reference corner
- mete; metres east or west from the reference corner
- nts; identifies the 1: 50000 NTS mapsheet which contains the datapoint
- orig; the original identification number of the datapoint (ie, drillhole number); this item may have been edited, in some instances, by the ERCB to allow the 'orig' to be accommodated by the existing format of the ERCB Coal file
- name of the corporation that generated the datapoint (drillhole)
- elev; ground or surface elevation of the datapoint (drillhole)
- td; total depth of drillhole reported in metres
- dep_log; bottom depth, in metres, of the logged interval; this field has a default value of zero
- rego; thickness, in metres, of the regolith this field has a default value of zero

- cpdt; completion date of the datapoint (drillhole) date coded as yymmdd
- drld; data_release date of the datapoint (drillhole) date coded as yymmdd
- qual; a Yes/No _toggle to denote whether or not the datapoint, as stored on the AGS Coal Database, contains coal quality data
- piktyp; the type of geological pick, as identified in the AGS Coal Database; for this Appendix, all piktyp's are 1, ie, coal seam
- piknum; the geological pick identification number as stored in the AGS Coal Database
- dtop; depth to top of coal in metres
- dbase; depth to bottom of coal in metres
- thick; thickness (ie, dbase - dtop) of the coal seam in metres
- seamno; the ERCB_Designated Coal Seam Name/Number (if assigned/known); this field has a default value of zero
- min; mineral matter content of the coal (usually an ERCB estimate from the interpretation of geophysical logs); this field has a default value of zero
- cnt_mkr; the ERCB_Designated Geologic Group/Formations (if assigned/known).

While most coals intersected in the drillholes are from within the Coalspur Formation, coals from the Brazeau Formation, as well as coals from the Luscar Group, have also been intersected.

Coal Outcrops

Within the mapsheet, a number of coal outcrops have been documented by the Alberta Geological Survey of the Alberta Research Council and by the Geological Survey of Canada. Known coal outcrops are contained within the Luscar Group, and within the Brazeau and Coalspur formations. Description details, including seam thicknesses, of the coal outcrops and/or seam projections are, in many instances, not known.

Locations of the noted coal outcrops are shown on the enclosed map RCM13.

Palynology

In 1993, two Brazeau shale samples were described and sampled by AGS staff. Locations of the two shale outcrops are shown on map RCM13. The outcrops are located in Sections 20 and 29,

Township 46, Range 18 West 5th Meridian. Results of the palynological analysis of the two samples, RC93-7 and RC93-8, are contained within Appendix 4.

Coal Quality Summary

Coal Rank

For the mapsheet area, there is very little coal quality data.

Within the area of 83C/15 (Cardinal River), coals of the Brazeau Formation have a rank of high volatile C bituminous. No coal quality data is available for coals of the

- Coalspur Formation; the rank of the coal is probably high volatile C bituminous
- Luscar Group ; the rank of the coal is probably medium volatile bituminous.

Coal Exploration Drillholes

Only one coal drillhole, originated by Shell Canada Resources Ltd. contains raw coal quality information. All samples pertain to the Brazeau Formation coals. Available coal quality information, from the drillhole, includes

- 11 complete Proximate Analyses (as-received basis)
- 11 analyses of Heating Value (as-received basis)
- 11 analyses of Ash (dry basis)
- 11 analyses of Sulphur (dry basis).

Operating and Abandoned Coal Mines

In 1992, the size of the mine permit area of Mine No. 1778 was increased, with an extension to the southwest; the revamped mine permit area is located, in part, within mapsheet 83C/15 (see map RCM13). Mine No. 1778, an active surface coal mine designated as the Coal Valley Mine, is owned and operated by Luscar Ltd.

There are no other operating or abandoned coal mine workings within the mapsheet area.

Coal Bed Methane (CBM) Resource Potential

During coalification, large amounts of methane may be produced. Reserves/resources of in-place gas depends on a number of factors including rank (Figure 3), volume of coal, depth of burial and methane retention.

The volume of in-place coal (ie, size of the potential reservoir) can be calculated. Within the mapsheet, past coal exploration/development activities focussed on near-surface coals of the Luscar Group, the Brazeau Formation and the Coalspur Formation; generated data points established coal thickness(es) within the stratigraphic sequence. One coal exploration drillhole was cored and sampled to generate initial coal quality information for Brazeau Formation coals. Little is known, within the mapsheet area, concerning the retention of CBM within a reservoir, and/or production of CBM from within a reservoir.

Considering only coal quality, the (presumed) medium volatile coals of the Luscar Group provide the best CBM exploration/exploitation potential for the mapsheet. It should be noted, however, that data point distribution for Luscar Group coals is poor. Data occurs as either small isolated

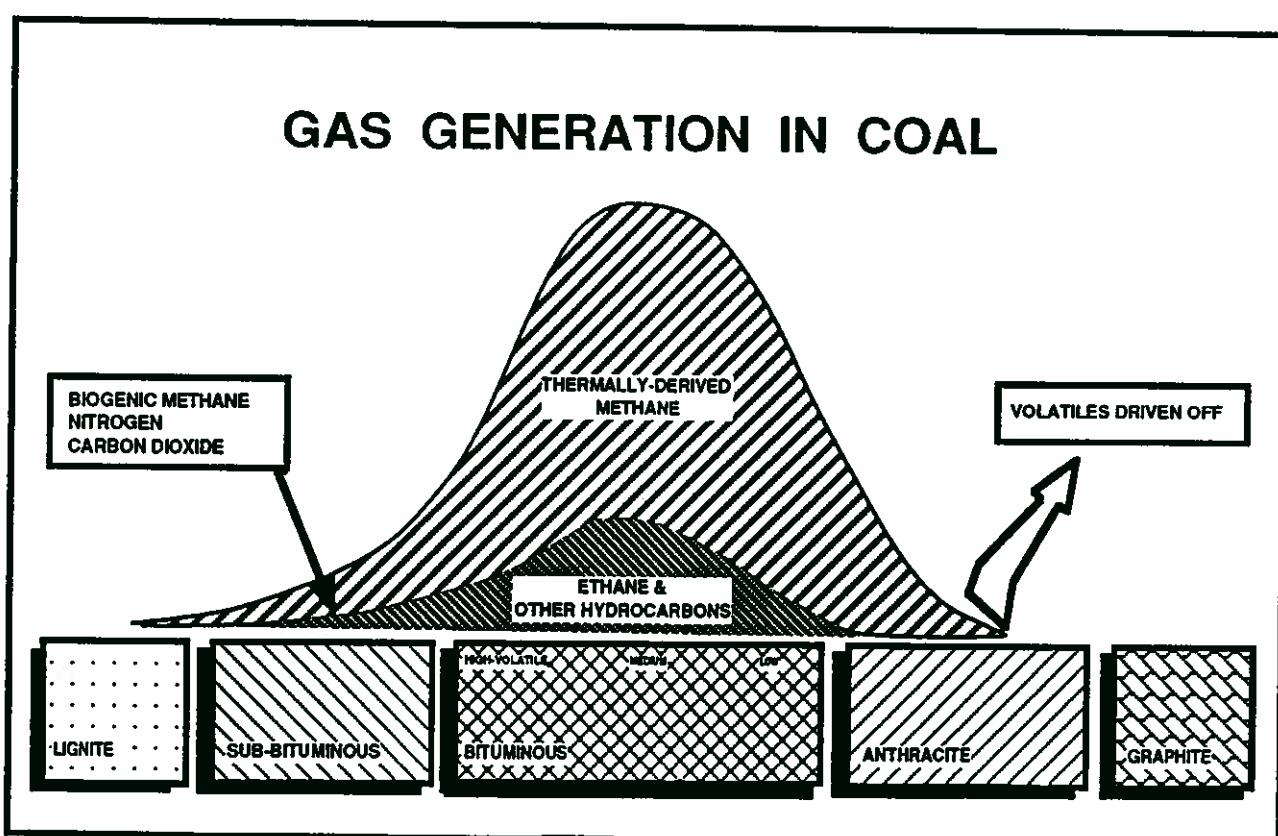


Figure 1 Gas Generation in Coal

clusters (drillholes) or widely spread individual points (oil/gas wells).

The (anticipated) high volatile coals of the Coalspur Formation probably contain favourable CBM potential. Even though there may be some uncertainty concerning thickness(es) and/or lateral extent and/or continuity of the high volatile bituminous coals of the Brazeau Formation, they too should be considered for their CBM potential .

Based on the above data, and/or the lack of, a (cursory) assessment of the CBM resource potential has been completed for the mapsheet. Economic and/or social factors were not included as part of the evaluation criteria.

Results have been graphically presented on a 'Coal Bed Methane Resource Potential' inset map of the accompanying RCM13. Five categories of CBM resource potentials were established, ie, Excellent, Very Good, Good, Fair to Poor, and Poor to Nil. On mapsheet 83C/15 (Cardinal River), only 3 categories have been utilized. The 'Good' sector on the companion map identifies those areas, where coal deposition, including quantity, quality and structural setting, may be favourable for the exploration/exploitation of a CBM reservoir. 'Fair to Poor' areas indicate

- existing commitments regarding the utilization of the coal; eg, coal reserves/resources may be contained within and/or, in close proximity, to approved and/or existing surface mining operations
- a lower knowledge level, ie, more data is needed to properly evaluate a coal's character, and/or
- coals of only secondary interest, as it applies to CBM reservoir exploration/exploitation; ie, the targeted coal is 'much less than ideal', with regard to quantity, quality and structural setting.

'Poor to Nil' areas are either

- non coal-bearing or
- underlain by coal that has little to no likelihood of being subjected to CBM exploration/exploitation ventures; the coal is generally lacking in either quantity and/or quality; further, depth of burial and structural complexities may also have contributed to the coal's low ranking.

Coal Resource Development Potential

A semiquantitative and subjective evaluation of the potential of coal development in the map area is based on limited data. It is based on mainly geological criteria and does not take into account governmental restrictions on coal development or evaluate actual economic constraints to development now or in the future. The three criteria that have been used are Coal Potential, Mining Potential, and Data Availability (discussed in more detail below). Areas in Green on the companion map (thematic inset 'Coal Development Potential') reflect higher level of knowledge and potential for development of coal than the blue (medium) or red areas (low). Areas rated in blue indicate more information is needed to determine the coal development potential. Areas coloured red indicate some potential for development. The remaining uncoloured areas have no data available often because the coal, if present, is at depth under non coal-bearing rocks.

Coal Potential

Resources

For much of the mapsheet area, the amount of available data is insufficient for a quantitative evaluation of coal resources. Where sufficient coal drillholes and/or coal outcrops exist, the ERCB (1991) has calculated estimates of in-place and recoverable established resources for the Southesk River, Coalspur and McLeod River coal fields.

Coal Quality

Very little coal quality data is available but where test results are present, the potential of the coal for development is strengthened.

Mining Potential

Overburden

An evaluation of overburden for surface mining and depth for underground mining has been made. (The 'Mining Potential' criteria did not take into account governmental restrictions on coal development or evaluate actual economic constraints to development now or in the future.)

Geotechnical

Geotechnical considerations included an evaluation of structural setting. Consideration was given to infrastructural concerns related to site, environment and potential mining problems.

Data Availability

Little coal data is available for the entire map area but where present the potential of the coal for development is strengthened. In general, where coal has been documented, it has an increased development potential. Some value was given to areas containing sediments that typically include coal.

Future Work

The mapsheet has only been superficially examined from a coal resource/exploration point of view. Past coal exploration activity has been confined to the southwest and northeast quadrants of the mapsheet. Additional data regarding coal presence has been interpreted from selected oil/gas well logs. The coal development potential of the mapsheet, except for the area of the mine permit area of the Luscar Ltd. - Coal Valley Mine, is uncertain; almost 40% of the coal exploration holes drilled within the mapsheet area did not intersect coal. Additional coal quality data needs to be collected; to date coal quality data is limited to eleven samples from one coal exploration drillhole. Detailed stratigraphic and/or structural studies are also needed in the less explored areas.

The high volatile bituminous coals of the Coalspur and Brazeau formations may provide potential reservoirs for CBM exploration/exploitation. Coals of the Luscar Group are probably medium volatile bituminous and could/should also be evaluated to identify potential CBM targets. Additional work is required to establish and evaluate the coalbed methane resources of the mapsheet area.

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* Confidential corporate documentation/report on loan to the Alberta Geological Survey.

Appendix 1, 83C/15 - Coal Drillholes

Appendix 2. 83C/15 - Oil and Gas Wells; Status and Formation Tops

Site ID: 61046

Source ID: 00/11-07-044-18W5/0

Latitude: 052.782463

Well Length: 4811.000

Longitude: 116.598493

KB Elevation: 1575.100

Status: Capped Gaswell

Well Name: CHEVRON ET AL BLACKSTONE 11-7-44-18

NOTE: Data lines, in 'bold text', represent true vertical depths.
Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
981.500	3220.145	WAPIABI FM	WPBI
985.000	3231.627	WAPIABI FM	WPBI
1511.900	4960.302	CARDIUM FM	CARD
1532.000	5026.247	CARDIUM FM	CARD
1533.800	5032.152	FAULT	FLT
1533.900	5032.480	CARDIUM FM	CARD
1534.000	5032.809	FAULT	FLT
1534.100	5033.137	WAPIABI FM	WPBI
1555.000	5101.706	FAULT	FLT
1555.100	5102.034	CARDIUM FM	CARD
1555.700	5104.002	CARDIUM FM	CARD
1565.000	5134.515	FAULT	FLT
1565.100	5134.843	WAPIABI FM	WPBI
1578.000	5177.166	CARDIUM FM	CARD
1627.800	5340.551	BLACKSTONE FM	BKST
1654.000	5426.509	BLACKSTONE FM	BKST
2154.300	7067.914	FAULT	FLT
2154.400	7068.241	BLACKSTONE FM	BKST
2241.000	7352.362	FAULT	FLT
2241.100	7352.691	BLACKSTONE FM	BKST
2267.100	7437.993	FAULT	FLT
2267.200	7438.320	BLACKSTONE FM	BKST
2375.000	7791.995	FAULT	FLT
2375.100	7792.323	BLACKSTONE FM	BKST
2413.300	7917.651	BLAIRMORE GRP	BL
2553.000	8375.984	BLAIRMORE GRP	BL
2892.200	9488.846	LOWER BLAIRMORE	L BL
2921.600	9585.303	FAULT	FLT
2921.700	9585.630	BLAIRMORE GRP	BL
2957.100	9701.772	LOWER BLAIRMORE	L BL
3143.000	10311.680	LOWER BLAIRMORE	L BL
3180.000	10433.071	FAULT	FLT
3180.100	10433.399	BLAIRMORE GRP	BL
3225.000	10580.709	LOWER BLAIRMORE	L BL
3396.100	11142.062	CADOMIN FM	CADM
3407.800	11180.446	NIKANASSIN FM	NIKA
3439.500	11284.449	FAULT	FLT
3439.600	11284.777	CADOMIN FM	CADM

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
3454.900	11334.974	NIKANASSIN FM	NIKA
3523.400	11559.711	ROCK CREEK MBR	RKCK
3545.800	11633.202	POKER CHIP SH	PK C SH
3586.400	11766.404	NORDEGG MBR	NORD
3612.700	11852.690	SULPHUR MOUNTAIN FM	SUL MT
3624.300	11890.749	TURNER VALLEY FM	TV
3705.600	12157.481	SHUNDA FM	SHUN
3795.400	12452.100	PEKISKO FM	PEK
3798.000	12460.630	CADOMIN FM	CADM
3814.000	12513.124	NIKANASSIN FM	NIKA
3840.300	12599.410	BANFF FM	BNFF
3855.000	12647.639	FAULT	FLT
3855.100	12647.967	CADOMIN FM	CADM
3874.000	12709.975	NIKANASSIN FM	NIKA
3954.000	12972.441	ROCK CREEK MBR	RKCK
3980.000	13057.743	POKER CHIP SH	PK C SH
4002.800	13132.547	EXSHAW FM	EX
4008.700	13151.903	WABAMUN GRP	WAB
4027.000	13211.942	NORDEGG MBR	NORD
4057.000	13310.368	SULPHUR MOUNTAIN FM	SUL MT
4066.400	13341.207	FAULT	FLT
4066.500	13341.536	BANFF FM	BNFF
4070.300	13354.003	TURNER VALLEY FM	TV
4158.200	13642.390	SHUNDA FM	SHUN
4159.900	13647.966	FAULT	FLT
4160.000	13648.294	SHUNDA FM	SHUN
4209.700	13811.353	FAULT	FLT
4209.800	13811.680	BLAIRMORE GRP	BL
4251.000	13946.851	PEKISKO FM	PEK
4297.000	14097.770	BANFF FM	BNFF
4462.000	14639.108	EXSHAW FM	EX
4468.000	14658.793	WABAMUN GRP	WAB
4526.000	14849.082	FAULT	FLT
4526.100	14849.410	BANFF FM	BNFF
4620.000	15157.480	FAULT	FLT
4670.100	15321.852	BLAIRMORE GRP	BL

Site ID: 61047

Source ID: 00/07-23-044-19W5/0

Latitude: 052.805317

Well Length: 2776.700

Longitude: 116.645961

KB Elevation: 1557.200

Status: Abandoned

Well Name: PLATEAU-CHUNGA NO. 1 WELL

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
335.300	1100.066	CARDIUM SD	CARD SD
469.400	1540.026	CARDIUM SD	CARD SD
469.400	1540.026	FAULT	FLT
597.400	1959.974	BLACKSTONE FM	BKST
1472.200	4830.052	BLAIRMORE GRP	BL
2097.000	6879.921	BLACKSTONE FM	BKST
2097.000	6879.921	FAULT	FLT
2548.100	8359.909	BLAIRMORE GRP	BL

Site ID: 61048

Source ID: 00/03-27-044-19W5/0

Latitude: 052.827447
 Longitude: 116.682434
 KB Elevation: 1578.200

Well Length: 4297.000
 Status: Capped Gaswell

Well Name: CHEVRON ET AL BLACKSTONE 3-27-44-19

NOTE: Data lines, in 'bold text', represent true vertical depths.
Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
511.900	1679.462	WAPIABI FM	WPBI
512.000	1679.790	WAPIABI FM	WPBI
917.500	3010.171	BADHEART FM	BADH
917.600	3010.499	BADHEART FM	BADH
1074.400	3524.935	CARDIUM FM	CARD
1076.800	3532.809	CARDIUM FM	CARD
1138.400	3734.908	CARDIUM SD	CARD SD
1142.900	3749.672	CARDIUM SD	CARD SD
1167.000	3828.740	BLACKSTONE FM	BKST
1172.100	3845.472	BLACKSTONE FM	BKST
1487.200	4879.265	FAULT	FLT
1487.500	4880.250	BLACKSTONE FM	BKST
1500.000	4921.260	FAULT	FLT
1500.300	4922.245	BLACKSTONE FM	BKST
1722.900	5652.559	BLAIRMORE GRP	BL
1742.500	5716.864	BLAIRMORE GRP	BL
2143.100	7031.168	FAULT	FLT
2143.400	7032.152	BLAIRMORE GRP	BL
2168.000	7112.861	FAULT	FLT
2168.300	7113.846	BLAIRMORE GRP	BL
2346.600	7698.819	FAULT	FLT
2346.900	7699.803	BANFF FM	BNFF
2372.000	7782.152	FAULT	FLT
2372.300	7783.137	BANFF FM	BNFF
2459.100	8067.914	FAULT	FLT
2459.400	8068.897	BLAIRMORE GRP	BL
2476.000	8123.360	FAULT	FLT
2476.300	8124.344	BLAIRMORE GRP	BL
2965.500	9729.331	FAULT	FLT
2965.800	9730.315	BANFF FM	BNFF
2993.000	9819.554	FAULT	FLT
2993.300	9820.538	BANFF FM	BNFF
3145.200	10318.897	FAULT	FLT
3145.300	10319.227	BLAIRMORE GRP	BL
3164.000	10380.578	FAULT	FLT
3164.300	10381.563	BLAIRMORE GRP	BL
3547.400	11638.451	CADOMIN FM	CADM
3565.900	11699.147	NIKANASSIN FM	NIKA

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
3582.800	11754.594	CADOMIN FM	CADM
3602.000	11817.586	NIKANASSIN FM	NIKA
3682.600	12082.021	ROCK CREEK MBR	RKCK
3707.300	12163.059	POKER CHIP SH	PK C SH
3721.000	12208.006	ROCK CREEK MBR	RKCK
3746.000	12290.026	POKER CHIP SH	PK C SH
3752.800	12312.337	NORDEGG MBR	NORD
3784.300	12415.683	RUNDLE GRP	RUND
3791.800	12440.289	NORDEGG MBR	NORD
3823.000	12542.651	RUNDLE GRP	RUND
3895.300	12779.856	SHUNDA FM	SHUN
3935.000	12910.105	SHUNDA FM	SHUN
3966.200	13012.468	PEKISKO FM	PEK
4005.900	13142.717	PEKISKO FM	PEK
4019.200	13186.352	BANFF FM	BNFF
4059.000	13316.930	BANFF FM	BNFF
4187.900	13739.829	EXSHAW FM	EX
4188.900	13743.110	WABAMUN GRP	WAB
4199.800	13778.871	FAULT	FLT
4200.100	13779.856	BANFF FM	BNFF
4228.000	13871.392	EXSHAW FM	EX
4229.000	13874.672	WABAMUN GRP	WAB
4240.000	13910.762	FAULT	FLT
4240.100	13911.090	BANFF FM	BNFF

Site ID: 61049 Source ID: 00/10-31-044-19W5/0
 Latitude: 052.837784 Well Length: 4008.100
 Longitude: 116.744341
 KB Elevation: 1426.200 Status: Abandoned
 Well Name: IMP ET AL CHUNGO 10-31-44-19

NOTE: Data lines, in 'bold text', represent true vertical depths.
 Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
259.100	850.066	WAPIABI FM	WPBI
818.400	2685.040	UPPER CARDIUM	U CARD
883.000	2896.982	LOWER CARDIUM	L CARD
907.400	2977.034	BLACKSTONE FM	BKST
1649.000	5410.105	GRIT BEDS	GRBD
1682.500	5520.013	BLAIRMORE GRP	BL
2200.700	7220.145	BLACKSTONE FM	BKST
2200.700	7220.145	FAULT	FLT
2395.700	7859.908	BLAIRMORE GRP	BL
2879.800	9448.163	CADOMIN FM	CADM
2900.500	9516.076	NIKANASSIN FM	NIKA
2926.100	9600.066	BLAIRMORE GRP	BL
2926.100	9600.066	FAULT	FLT
2950.800	9681.103	CADOMIN FM	CADM
2958.700	9707.021	NIKANASSIN FM	NIKA
3230.000	10597.113	PASSAGE BEDS	PAS BD
3294.900	10810.039	GREEN BEDS	GN BD
3304.000	10839.896	ROCK CREEK MBR	RKCK
3315.900	10878.938	NORDEGG MBR	NORD
3345.500	10976.050	TRIASSIC SYSTEM	TRIA SYS
3393.300	11132.875	RUNDLE GRP	RUND
3602.700	11819.882	BLAIRMORE GRP	BL
3602.700	11819.882	FAULT	FLT
3637.500	11934.056	CADOMIN FM	CADM
3669.800	12040.026	NIKANASSIN FM	NIKA
3754.500	12317.914	PASSAGE BEDS	PAS BD
3803.300	12478.019	GREEN BEDS	GN BD
3819.800	12532.152	ROCK CREEK MBR	RKCK
3838.700	12594.160	NORDEGG MBR	NORD
3886.200	12750.000	TRIASSIC SYSTEM	TRIA SYS
3910.000	12828.084	RUNDLE GRP	RUND

Site ID: 61050 Source ID: 00/10-32-044-19W5/0
 Latitude: 052.835738 Well Length: 5667.000
 Longitude: 116.726980
 KB Elevation: 1415.800 Status: Abandoned
 Well Name: SHELL LOVETTR 10-32-44-19

NOTE: Data lines, in 'bold text', represent true vertical depths.
 Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
796.600	2613.517	BADHEART FM	BADH
920.000	3018.373	CARDIUM FM	CARD
977.400	3206.693	CARDIUM SD	CARD SD
977.500	3207.021	CARDIUM SD	CARD SD
1009.900	3313.320	BLACKSTONE FM	BKST
1010.000	3313.648	BLACKSTONE FM	BKST
1226.800	4024.935	FAULT	FLT
1227.000	4025.591	FAULT	FLT
1227.100	4025.919	BLACKSTONE FM	BKST
1227.300	4026.575	BLACKSTONE FM	BKST
1416.000	4645.669	FAULT	FLT
1416.300	4646.654	BLACKSTONE FM	BKST
1417.000	4648.950	FAULT	FLT
1417.300	4649.935	BLACKSTONE FM	BKST
1507.100	4944.554	BLAIRMORE GRP	BL
1508.800	4950.131	BLAIRMORE GRP	BL
1691.600	5549.869	FAULT	FLT
1691.900	5550.854	BLAIRMORE GRP	BL
1695.000	5561.024	FAULT	FLT
1695.300	5562.008	BLAIRMORE GRP	BL
2073.300	6802.166	FAULT	FLT
2073.600	6803.150	BLAIRMORE GRP	BL
2081.000	6827.428	FAULT	FLT
2081.300	6828.413	BLAIRMORE GRP	BL
2303.800	7558.399	FAULT	FLT
2304.100	7559.384	BLAIRMORE GRP	BL
2316.000	7598.425	FAULT	FLT
2316.300	7599.410	BLAIRMORE GRP	BL
2533.500	8312.008	FAULT	FLT
2533.800	8312.992	ROCK CREEK MBR	RKCK
2553.000	8375.984	FAULT	FLT
2553.300	8376.969	ROCK CREEK MBR	RKCK
2562.800	8408.137	POKER CHIP SH	PK C SH
2583.700	8476.706	POKER CHIP SH	PK C SH
2607.000	8553.149	NORDEGG MBR	NORD
2629.500	8626.969	SPRAY RIVER GRP	SPRY R
2630.500	8630.250	NORDEGG MBR	NORD
2654.500	8708.990	SPRAY RIVER GRP	SPRY R

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
2669.500	8758.202	RUNDLE GRP	RUND
2697.000	8848.426	RUNDLE GRP	RUND
2729.000	8953.412	FAULT	FLT
2729.300	8954.396	BLAIRMORE GRP	BL
2760.000	9055.118	FAULT	FLT
2760.300	9056.103	BLAIRMORE GRP	BL
3435.400	11270.997	CADOMIN FM	CADM
3467.600	11376.641	NIKANASSIN FM	NIKA
3496.400	11471.129	FERNIE GRP	FERN
3515.000	11532.152	CADOMIN FM	CADM
3527.600	11573.491	NIKANASSIN FM	NIKA
3548.700	11642.717	ROCK CREEK MBR	RKCK
3556.900	11669.619	FERNIE GRP	FERN
3567.400	11704.068	POKER CHIP SH	PK C SH
3610.000	11843.832	ROCK CREEK MBR	RKCK
3615.400	11861.549	NORDEGG MBR	NORD
3629.000	11906.168	POKER CHIP SH	PK C SH
3646.000	11961.942	SPRAY RIVER GRP	SPRY R
3676.100	12060.696	RUNDLE GRP	RUND
3677.300	12064.633	NORDEGG MBR	NORD
3708.000	12165.354	SPRAY RIVER GRP	SPRY R
3709.500	12170.276	FAULT	FLT
3709.800	12171.261	NORDEGG MBR	NORD
3737.300	12261.483	SPRAY RIVER GRP	SPRY R
3738.200	12264.436	RUNDLE GRP	RUND
3767.700	12361.221	RUNDLE GRP	RUND
3771.700	12374.344	FAULT	FLT
3772.000	12375.328	NORDEGG MBR	NORD
3799.500	12465.552	SPRAY RIVER GRP	SPRY R
3830.000	12565.617	RUNDLE GRP	RUND
3839.900	12598.098	SHUNDA FM	SHUN
3902.400	12803.149	SHUNDA FM	SHUN
3943.800	12938.977	FAULT	FLT
3944.100	12939.961	SHUNDA FM	SHUN
3977.100	13048.229	PEKISKO FM	PEK
4008.000	13149.606	FAULT	FLT
4008.300	13150.591	SHUNDA FM	SHUN
4018.600	13184.384	FAULT	FLT
4018.900	13185.367	BLAIRMORE GRP	BL
4040.200	13255.250	PEKISKO FM	PEK
4070.200	13353.675	CADOMIN FM	CADM
4082.000	13392.389	FAULT	FLT
4082.300	13393.373	BLAIRMORE GRP	BL
4085.400	13403.543	NIKANASSIN FM	NIKA
4133.900	13562.664	CADOMIN FM	CADM
4149.200	13612.862	NIKANASSIN FM	NIKA
4153.100	13625.657	ROCK CREEK MBR	RKCK
4160.800	13650.918	FERNIE GRP	FERN
4181.100	13717.521	POKER CHIP SH	PK C SH
4217.000	13835.303	ROCK CREEK MBR	RKCK
4219.000	13841.864	NORDEGG MBR	NORD

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
4245.000	13927.166	POKER CHIP SH	PK C SH
4247.100	13934.056	SPRAY RIVER GRP	SPRY R
4270.600	14011.155	RUNDLE GRP	RUND
4283.000	14051.838	NORDEGG MBR	NORD
4311.100	14144.029	SPRAY RIVER GRP	SPRY R
4334.600	14221.129	RUNDLE GRP	RUND
4362.900	14313.977	SHUNDA FM	SHUN
4427.000	14524.278	SHUNDA FM	SHUN
4427.400	14525.591	PEKISKO FM	PEK
4484.500	14712.927	BANFF FM	BNFF
4491.500	14735.893	PEKISKO FM	PEK
4548.700	14923.558	BANFF FM	BNFF
4653.300	15266.732	EXSHAW FM	EX
4658.700	15284.450	WABAMUN GRP	WAB
4717.600	15477.691	EXSHAW FM	EX
4723.000	15495.407	WABAMUN GRP	WAB
4839.600	15877.953	FAULT	FLT
4839.900	15878.938	WABAMUN GRP	WAB
4904.000	16089.239	FAULT	FLT
4904.300	16090.223	WABAMUN GRP	WAB
5081.500	16671.588	WINTERBURN GRP	WINT
5146.000	16883.203	WINTERBURN GRP	WINT
5156.100	16916.340	IRETON FM	IRE
5177.600	16986.877	LEDUC FM	LED
5220.900	17128.938	IRETON FM	IRE
5242.400	17199.475	LEDUC FM	LED
5248.800	17220.473	BEAVERHILL LAKE FM	BH LK
5314.000	17434.383	BEAVERHILL LAKE FM	BH LK

Site ID: 61051 Source ID: 00/08-07-044-20W5/0

Latitude: 052.771768 Well Length: 3054.100
Longitude: 116.886412
KB Elevation: 1629.800 Status: Abandoned

Well Name: TEXAS GULF ET AL MUSKIKI 8-7-44-20

NOTE: Data lines, in 'bold text', represent true vertical depths.
Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
22.300	73.163	MOUNTAIN PARK FM	MTN PK
591.900	1941.929	LUSCAR FM	LUSK
592.500	1943.898	LUSCAR FM	LUSK
1091.800	3582.021	CADOMIN FM	CADM
1093.000	3585.958	CADOMIN FM	CADM
1105.800	3627.953	NIKANASSIN FM	NIKA
1107.000	3631.890	NIKANASSIN FM	NIKA
1630.400	5349.082	FERNIE GRP	FERN
1636.800	5370.079	FERNIE GRP	FERN
1713.600	5622.047	GREEN BEDS	GN BD
1722.100	5649.935	GREENBEDS	GN BD
1749.200	5738.845	ROCK CREEK MBR	RKCK
1758.700	5770.013	ROCK CREEK MBR	RKCK
1835.800	6022.966	NORDEGG MBR	NORD
1848.000	6062.992	NORDEGG MBR	NORD
1853.200	6080.053	WHITEHORSE FM	WTHR
1866.000	6122.047	WHITEHORSE FM	WTHR
1923.000	6309.055	SULPHUR MOUNTAIN FM	SUL MT
1938.500	6359.908	SULPHUR MOUNTAIN FM	SUL MT
2033.000	6669.948	TURNER VALLEY FM	TV
2053.100	6735.893	TURNER VALLEY FM	TV
2124.800	6971.129	SHUNDA FM	SHUN
2148.200	7047.900	SHUNDA FM	SHUN
2194.900	7201.115	PEKISCO FM	PEK
2221.400	7288.058	PEKISCO FM	PEK
2234.500	7331.037	BANFF FM	BNFF
2262.200	7421.916	BANFF FM	BNFF
2389.300	7838.911	EXSHAW FM	EX
2392.400	7849.081	PALLISER FM	PALL
2424.100	7953.084	EXSHAW FM	EX
2427.400	7963.911	PALLISER FM	PALL
2593.800	8509.843	ALEXO FM	ALEX
2638.700	8657.152	ALEXO FM	ALEX
2639.000	8658.137	FAULT	FLT
2639.000	8658.137	PALLISER FM	PALL
2684.100	8806.103	EXSHAW FM	EX
2685.900	8812.008	FAULT	FLT
2685.900	8812.008	PALLISER FM	PALL

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
2687.400	8816.929	BANFF FM	BNFF
2733.100	8966.864	EXSHAW FM	EX
2736.800	8979.003	BANFF FM	BNFF
2834.000	9297.900	PEKISCO FM	PEK
2883.700	9460.958	FAULT	FLT
2883.700	9460.958	PEKISCO FM	PEK
2894.400	9496.063	PEKISCO FM	PEK
2916.000	9566.930	FAULT	FLT
2916.000	9566.930	PEKISCO FM	PEK
2948.900	9674.869	FAULT	FLT
2948.900	9674.869	PEKISCO FM	PEK
2955.000	9694.882	SHUNDA FM	SHUN
2984.000	9790.026	FAULT	FLT
2984.000	9790.026	PEKISCO FM	PEK
3026.100	9928.150	SHUNDA FM	SHUN

Site ID: 61052 Source ID: 00/03-17-044-20W5/0

Latitude: 052.785594 Well Length: 4032.500
Longitude: 116.877623
KB Elevation: 1610.600 Status: Abandoned

Well Name: IMP ET AL MUSKIKI 4-17-44-20

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
216.400	709.974	BLAIRMORE GRP	BL
823.000	2700.131	CADOMIN FM	CADM
847.300	2779.856	NIKANASSIN FM	NIKA
1449.900	4756.890	FERNIE GRP	FERN
1559.400	5116.142	ROCK CREEK MBR	RKCK
1746.500	5729.987	FAULT	FLT
1746.800	5730.972	ROCK CREEK MBR	RKCK
1752.600	5750.000	FAULT	FLT
1752.900	5750.984	ROCK CREEK MBR	RKCK
1894.000	6213.911	FAULT	FLT
1894.300	6214.896	FERNIE GRP	FERN
1902.000	6240.158	FAULT	FLT
1902.300	6241.142	FERNIE GR	FERN
1950.700	6399.935	FAULT	FLT
1951.000	6400.919	BLAIRMORE GRP	BL
1959.900	6430.118	FAULT	FLT
1960.200	6431.103	BLAIRMORE GRP	BL
2895.000	9498.032	CADOMIN FM	CADM
2913.600	9559.056	NIKANASSIN FM	NIKA
2968.800	9740.158	CADOMIN FM	CADM
2990.100	9810.040	NIKANASSIN FM	NIKA
3048.600	10001.969	FAULT	FLT
3048.900	10002.953	BLAIRMORE GRP	BL
3120.200	10236.877	CADOMIN FM	CADM
3130.900	10271.981	NIKANASSIN FM	NIKA
3144.000	10314.961	FAULT	FLT
3144.300	10315.945	BLAIRMORE GRP	BL
3226.300	10584.975	CADOMIN FM	CADM
3238.800	10625.984	NIKANASSIN FM	NIKA

Site ID: 61053

Source ID: 00/06-21-044-20W5/0

Latitude: 052.804555

Well Length: 4409.200

Longitude: 116.850102

KB Elevation: 1628.500

Status: Abandoned and Re-entered

Well Name: CPOG THISTLE 6-21-44-20

NOTE: Data lines, in 'bold text', represent true vertical depths.
Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
941.500	3088.911	CARDIUM SD	CARD SD
941.800	3089.895	CARDIUM SD	CARD SD
1021.700	3352.034	LOWER CARDIUM	L CARD
1022.300	3354.003	LOWER CARDIUM	L CARD
1036.000	3398.950	BLACKSTONE FM	BKST
1036.600	3400.919	BLACKSTONE FM	BKST
1664.800	5461.942	BLAIRMORE GRP	BL
1667.000	5469.160	BLAIRMORE GRP	BL
2781.600	9125.985	CADOMIN FM	CADM
2786.500	9142.061	CADOMIN FM	CADM
2801.100	9189.961	NIKANASSIN FM	NIKA
2806.300	9207.021	NIKANASSIN FM	NIKA
3504.900	11499.016	PASSAGE BEDS	PAS BD
3519.800	11547.900	PASSAGE BEDS	PAS BD
3559.800	11679.135	ROCK CREEK MBR	RKCK
3572.300	11720.145	NORDEGG MBR	NORD
3576.200	11732.939	ROCK CREEK MBR	RKCK
3588.700	11773.950	NORDEGG MBR	NORD
3591.500	11783.137	TRIASSIC SYSTEM	TRIA SYS
3608.500	11838.911	TRIASSIC SYSTEM	TRIA SYS
3646.900	11964.896	TURNER VALLEY FM	TV
3665.500	12025.919	TURNER VALLEY FM	TV
3710.600	12173.885	SHUNDA FM	SHUN
3730.800	12240.158	SHUNDA FM	SHUN
3767.000	12358.924	FAULT	FLT
3767.000	12358.924	NIKANASSIN FM	NIKA
3788.400	12429.134	FAULT	FLT
3788.700	12430.118	NIKANASSIN FM	NIKA

Site ID: 61054

Source ID: 00/06-21-044-20W5/2

Latitude: 052.805448
 Longitude: 116.845968
 KB Elevation: 1628.500

Well Length: 4409.200
 Status: Abandoned

Well Name: CANHUNTER THISTLE 6-21-44-20

NOTE: Data lines, in 'bold text', represent true vertical depths.
Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
941.500	3088.911	CARDIUM SD	CARD SD
941.800	3089.895	CARDIUM SD	CARD SD
1021.700	3352.034	LOWER CARDIUM	L CARD
1022.300	3354.003	LOWER CARDIUM	L CARD
1036.000	3398.950	BLACKSTONE FM	BKST
1036.600	3400.919	BLACKSTONE FM	BKST
1664.800	5461.942	BLAIRMORE GRP	BL
1666.900	5468.833	BLAIRMORE GRP	BL
2781.600	9125.985	CADOMIN FM	CADM
2786.500	9142.061	CADOMIN FM	CADM
2801.100	9189.961	NIKANASSIN FM	NIKA
2806.300	9207.021	NIKANASSIN FM	NIKA
3504.900	11499.016	PASSAGE BEDS	PAS BD
3519.500	11546.916	PASSAGE BEDS	PAS BD
3559.800	11679.135	ROCK CREEK MBR	RKCK
3572.300	11720.145	NORDEGG MBR	NORD
3575.900	11731.955	ROCK CREEK MBR	RKCK
3588.700	11773.950	NORDEGG MBR	NORD
3591.500	11783.137	TRIASSIC SYSTEM	TRIA SYS
3608.200	11837.927	TRIASSIC SYSTEM	TRIA SYS
3646.900	11964.896	TURNER VALLEY FM	TV
3665.200	12024.935	TURNER VALLEY FM	TV
3710.600	12173.885	SHUNDA FM	SHUN
3730.700	12239.830	SHUNDA FM	SHUN
3767.000	12358.924	FAULT	FLT
3767.300	12359.909	NIKANASSIN FM	NIKA
3788.700	12430.118	FAULT	FLT
3789.000	12431.103	NIKANASSIN FM	NIKA
4378.300	14364.501	TOTAL DEPTH	TD
4409.200	14465.880	TOTAL DEPTH	TD

Site ID: 63197

Source ID: 00/04-03-045-18W5/0

Latitude: 052.846337

Well Length: 4245.000

Longitude: 116.539535

KB Elevation: 1477.000

Status: Capped Gaswell

Well Name: CHEVRON ET AL BROWN CREEK 4-3-45-18

NOTE: Data lines, in 'bold text', represent true vertical depths.
 Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
2036.200	6680.446	WAPIABI FM	WPBI
2036.500	6681.431	WAPIABI FM	WPBI
2377.500	7800.197	BADHEART FM	BADH
2378.000	7801.837	BADHEART FM	BADH
2474.500	8118.438	CARDIUM FM	CARD
2475.000	8120.079	CARDIUM FM	CARD
2529.400	8298.557	CARDIUM SD	CARD SD
2530.000	8300.525	CARDIUM SD	CARD SD
2542.400	8341.207	BLACKSTONE FM	BKST
2543.000	8343.176	BLACKSTONE FM	BKST
3001.800	9848.426	BASE FISH SCALES ZONE	BFSC
3004.000	9855.644	BASE FISH SCALES ZONE	BFSC
3035.700	9959.646	BLAIRMORE GRP	BL
3038.000	9967.192	BLAIRMORE GRP	BL
3306.000	10846.457	CADOMIN FM	CADM
3308.500	10854.659	CADOMIN FM	CADM
3324.500	10907.152	NIKANASSIN FM	NIKA
3327.000	10915.354	NIKANASSIN FM	NIKA
3441.400	11290.683	PASSAGE BEDS	PAS BD
3444.000	11299.213	PASSAGE BEDS	PAS BD
3459.400	11349.737	GREEN BEDS	GN BD
3462.000	11358.269	GREEN BEDS	GN BD
3489.900	11449.803	ROCK CREEK MBR	RKCK
3492.500	11458.334	ROCK CREEK MBR	RKCK
3522.300	11556.103	POKER CHIP SH	PK C SH
3525.000	11564.961	POKER CHIP SH	PK C SH
3549.200	11644.357	NORDEGG MBR	NORD
3552.000	11653.544	NORDEGG MBR	NORD
3586.600	11767.062	TRIASSIC SYSTEM	TRIA SYS
3589.500	11776.575	TRIASSIC SYSTEM	TRIA SYS
3592.100	11785.105	TURNER VALLEY FM	TV
3595.000	11794.620	TURNER VALLEY FM	TV
3661.400	12012.467	SHUNDA FM	SHUN
3664.500	12022.638	SHUNDA FM	SHUN
3766.300	12356.628	PEKISCO FM	PEK
3770.000	12368.767	PEKISCO FM	PEK
3824.400	12547.244	BANFF FM	BNFF
3828.500	12560.696	BANFF FM	BNFF

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
4018.600	13184.384	EXSHAW FM	EX
4020.600	13190.945	WABAMUN GRP	WAB
4024.000	13202.101	EXSHAW FM	EX
4026.000	13208.662	WABAMUN GRP	WAB
4040.400	13255.905	FAULT	FLT
4040.500	13256.234	BANFF FM	BNFF
4045.900	13273.950	FAULT	FLT
4046.000	13274.278	BANFF FM	BNFF
4089.200	13416.011	FAULT	FLT
4089.300	13416.339	BANFF FM	BNFF
4094.900	13434.711	FAULT	FLT
4095.000	13435.040	BANFF FM	BNFF
4135.200	13566.931	EXSHAW FM	EX
4137.700	13575.132	WABAMUN GRP	WAB
4141.000	13585.958	EXSHAW FM	EX
4143.500	13594.160	WABAMUN GRP	WAB
4155.100	13632.219	FAULT	FLT
4155.200	13632.547	BANFF FM	BNFF
4160.900	13651.247	FAULT	FLT
4161.000	13651.575	BANFF FM	BNFF

Site ID: 63199

Source ID: 00/11-13-045-19W5/0

Latitude: 052.878237

Well Length: 4581.500

Longitude: 116.628492

KB Elevation: 1461.200

Status: Capped Gaswell

Well Name: SHELL ETAL CARDR 11-13-45-19

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
487.700	1600.066	WAPIABI FM	WPBI
517.800	1698.819	FAULT	FLT
517.900	1699.147	BRAZEAU FM	BRAZ
2290.600	7515.092	BADHEART FM	BADH
2391.200	7845.145	CARDIUM SD	CARD SD
2459.700	8069.882	BLACKSTONE FM	BKST
2949.800	9677.822	BASE FISH SCALES ZONE	BFSC
2975.800	9763.124	BLAIRMORE GRP	BL
3215.600	10549.869	GLAUCONITIC SS	GLC SS
3232.100	10604.003	OSTRACOD ZONE	OST
3380.200	11089.896	CADOMIN FM	CADM
3394.800	11137.796	FERNIE GRP	FERN
3435.100	11270.014	ROCK CREEK MBR	RKCK
3460.400	11353.019	FAULT	FLT
3460.500	11353.347	FERNIE GRP	FERN
3499.100	11479.987	NORDEGG MBR	NORD
3535.700	11600.065	TURNER VALLEY FM	TV
3599.700	11810.040	SHUNDA FM	SHUN
3678.900	12069.882	PEKISKO FM	PEK
3724.600	12219.817	BANFF FM	BNFF
3902.900	12804.790	WABAMUN GRP	WAB
4273.000	14019.029	FAULT	FLT
4273.100	14019.357	FERNIE GRP	FERN
4286.400	14062.992	NORDEGG MBR	NORD
4339.700	14237.862	TURNER VALLEY FM	TV
4433.600	14545.933	SHUNDA FM	SHUN
4567.400	14984.908	BANFF FM	BNFF

Site ID: 63200

Source ID: 00/03-24-045-21W5/0

Latitude: 052.893860

Well Length: 4810.000

Longitude: 116.923295

KB Elevation: 1560.400

Status: Abandoned

Well Name: GULF ET AL CARDR 3-24-45-21

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
1747.000	5731.627	BADHEART FM	BADH
1807.000	5928.478	CARDIUM FM	CARD
1837.500	6028.543	CARDIUM SD	CARD SD
1930.000	6332.021	BLACKSTONE FM	BKST
2930.000	9612.861	MOUNTAIN PARK FM	MTN PK
3165.000	10383.858	LUSCAR FM	LUSK
3868.000	12690.289	CADOMIN FM	CADM
3886.000	12749.345	NIKANASSIN FM	NIKA
3972.000	13031.496	ROCK CREEK MBR	RKCK
4000.000	13123.360	POKER CHIP SH	PK C SH
4072.500	13361.221	NORDEGG MBR	NORD
4104.000	13464.567	TRIASSIC SYSTEM	TRIA SYS
4190.000	13746.720	TURNER VALLEY FM	TV
4276.000	14028.872	SHUNDA FM	SHUN
4387.000	14393.045	PEKISKO FM	PEK
4435.000	14550.525	BANFF FM	BNFF
4595.000	15075.460	EXSHAW FM	EX
4600.000	15091.864	WABAMUN GRP	WAB

Site ID: 63201 Source ID: 00/12-25-045-21W5/0

Latitude: 052.906358 Well Length: 4657.600
Longitude: 116.905681
KB Elevation: 1604.500 Status: Abandoned

Well Name: GULF UNION POC CARDR 12-25-45-21

NOTE: Data lines, in 'bold text', represent true vertical depths.
Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
824.200	2704.068	CARDIUM FM	CARD
824.500	2705.052	CARDIUM FM	CARD
860.500	2823.163	CARDIUM SD	CARD SD
860.800	2824.147	CARDIUM SD	CARD SD
959.500	3147.966	BLACKSTONE FM	BKST
960.100	3149.934	BLACKSTONE FM	BKST
974.800	3198.163	FAULT	FLT
974.900	3198.491	WAPIABI FM	WPBI
975.400	3200.131	FAULT	FLT
975.500	3200.459	WAPIABI FM	WPBI
1237.800	4061.024	CARDIUM SD	CARD SD
1238.700	4063.976	CARDIUM SD	CARD SD
1328.300	4357.940	BLACKSTONE FM	BKST
1329.800	4362.861	BLACKSTONE FM	BKST
1944.900	6380.906	MOUNTAIN PARK FM	MTN PK
1957.100	6420.932	MOUNTAIN PARK FM	MTN PK
2424.100	7953.084	FAULT	FLT
2424.200	7953.412	LUSCAR FM	LUSK
2447.500	8029.856	FAULT	FLT
2447.600	8030.184	LUSCAR FM	LUSK
2521.000	8270.998	FAULT	FLT
2521.100	8271.326	LUSCAR FM	LUSK
2578.900	8460.958	FAULT	FLT
2579.000	8461.286	LUSCAR FM	LUSK
2606.000	8549.869	FAULT	FLT
2606.100	8550.197	LUSCAR FM	LUSK
2664.000	8740.158	FAULT	FLT
2664.300	8741.143	LUSCAR FM	LUSK
3020.000	9908.137	CADOMIN FM	CADM
3044.600	9988.846	NIKANASSIN FM	NIKA
3057.100	10029.856	CADOMIN FM	CADM
3083.400	10116.142	NIKANASSIN FM	NIKA
3253.700	10674.869	ROCK CREEK MBR	RKCK
3268.700	10724.082	POKER CHIP SH	PK C SH
3304.900	10842.848	ROCK CREEK MBR	RKCK
3310.700	10861.877	NORDEGG MBR	NORD
3322.300	10899.935	POKER CHIP SH	PK C SH
3341.200	10961.942	TRIASSIC SYSTEM	TRIA SYS

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
3369.600	11055.119	NORDEGG MBR	NORD
3399.400	11152.887	TURNER VALLEY FM	TV
3404.300	11168.964	TRIASSIC SYSTEM	TRIA SYS
3468.600	11379.922	TURNER VALLEY FM	TV
3504.600	11498.032	SHUNDA FM	SHUN
3513.700	11527.888	FAULT	FLT
3513.800	11528.216	ROCK CREEK MBR	RKCK
3529.000	11578.084	POKER CHIP SH	PK C SH
3570.100	11712.927	NORDEGG MBR	NORD
3582.600	11753.938	SHUNDA FM	SHUN
3593.000	11788.059	FAULT	FLT
3593.100	11788.387	ROCK CREEK MBR	RKCK
3601.800	11816.930	TRIASSIC SYSTEM	TRIA SYS
3609.400	11841.863	POKER CHIP SH	PK C SH
3652.700	11983.924	NORDEGG MBR	NORD
3668.900	12037.073	TURNER VALLEY FM	TV
3688.700	12102.034	TRIASSIC SYSTEM	TRIA SYS
3760.900	12338.911	SHUNDA FM	SHUN
3761.800	12341.864	TURNER VALLEY FM	TV
3844.700	12613.846	PEKISKO FM	PEK
3859.400	12662.073	SHUNDA FM	SHUN
3891.400	12767.061	BANFF FM	BNFF
3947.200	12950.132	PEKISKO FM	PEK
3995.600	13108.925	BANFF FM	BNFF
4033.400	13232.939	EXSHAW FM	EX
4037.400	13246.063	PALLISER FM	PALL
4142.200	13589.896	EXSHAW FM	EX
4145.900	13602.034	PALLISER FM	PALL
4200.800	13782.152	FAULT	FLT
4200.900	13782.480	BANFF FM	BNFF
4237.000	13900.919	FAULT	FLT
4237.100	13901.247	TURNER VALLEY FM	TV
4288.500	14069.883	SHUNDA FM	SHUN
4312.900	14149.935	FAULT	FLT
4313.000	14150.263	BANFF FM	BNFF
4326.300	14193.897	FAULT	FLT
4326.400	14194.226	CADOMIN FM	CADM
4342.200	14246.064	NIKANASSIN FM	NIKA
4349.800	14270.997	FAULT	FLT
4349.900	14271.325	TURNER VALLEY FM	TV
4401.300	14439.961	SHUNDA FM	SHUN
4438.800	14562.992	FAULT	FLT
4438.900	14563.320	CADOMIN FM	CADM
4454.700	14615.158	NIKANASSIN FM	NIKA
4499.800	14763.123	ROCK CREEK MBR	RKCK
4525.400	14847.113	POKER CHIP SH	PK C SH
4613.800	15137.139	ROCK CREEK MBR	RKCK
4639.100	15220.146	POKER CHIP SH	PK C SH

Site ID: 64915

Source ID: 00/16-19-046-18W5/0

Latitude: 052.985030

Well Length: 3801.000

Longitude: 116.594558

KB Elevation: 1353.400

Status: Capped Gaswell

Well Name: GULF ET AL LOVETTR 16-19-46-18

NOTE: Data lines, in 'bold text', represent true vertical depths.
 Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
884.400	2901.575	EDMONTON GRP	EDM
885.000	2903.543	EDMONTON GRP	EDM
1611.400	5286.746	BELLY RIVER GRP	BR
1612.500	5290.354	BELLY RIVER GRP	BR
1985.500	6514.108	WAPIABI FM	WPBI
1987.700	6521.326	WAPIABI FM	WPBI
2345.800	7696.195	BADHEART FM	BADH
2353.000	7719.816	BADHEART FM	BADH
2411.200	7910.761	CARDIUM FM	CARD
2420.000	7939.633	CARDIUM FM	CARD
2439.400	8003.281	CARDIUM SD	CARD SD
2449.000	8034.777	CARDIUM SD	CARD SD
2543.500	8344.816	BLACKSTONE FM	BKST
2556.000	8385.827	BLACKSTONE FM	BKST
2730.300	8957.678	SECOND WHITE SPECK	H2WS
2751.000	9025.591	SECOND WHITE SPECK	H2WS
2873.000	9425.854	BASE FISH SCALES ZONE	BFSC
2902.000	9520.998	BASE FISH SCALES ZONE	BFSC
3079.400	10103.019	LUSCAR FM	LUSK
3118.300	10230.644	LUSCAR FM	LUSK
3444.600	11301.182	CADOMIN FM	CADM
3463.200	11362.205	FERNIE GRP	FERN
3484.400	11431.759	ROCK CREEK MBR	RKCK
3493.000	11459.974	CADOMIN FM	CADM
3504.000	11496.063	POKER CHIP SH	PK C SH
3512.500	11523.950	FERNIE GRP	FERN
3530.400	11582.677	NORDEGG MBR	NORD
3533.600	11593.177	ROCK CREEK MBR	RKCK
3553.500	11658.465	POKER CHIP SH	PK C SH
3570.000	11712.599	TURNER VALLEY FM	TV
3580.400	11746.719	NORDEGG MBR	NORD
3617.400	11868.110	SHUNDA FM	SHUN
3620.500	11878.281	TURNER VALLEY FM	TV
3642.300	11949.804	FAULT	FLT
3642.800	11951.444	NORDEGG MBR	NORD
3668.500	12035.762	SHUNDA FM	SHUN
3691.800	12112.205	FAULT	FLT
3692.300	12113.846	LUSCAR FM	LUSK

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
3693.200	12116.798	FAULT	FLT.
3693.700	12118.438	NORDEGG MBR	NORD
3743.700	12282.480	FAULT	FLT
3744.200	12284.121	LUSCAR FM	LUSK

Site ID: 64916

Source ID: 00/12-30-046-18W5/0

Latitude: 052.997879
 Longitude: 116.609575
 KB Elevation: 1387.100

Well Length: 3810.000
 Status: Capped Gaswell

Well Name: B. A. TRIAD ET AL LOVETT RIVER 12-30

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
874.800	2870.079	EDMONTON GRP	EDM
928.700	3046.916	KNEEHILLS TUFF ZONE	KHL TF
1630.100	5348.097	BELLY RIVER GRP	BR
1963.800	6442.914	WAPIABI FM	WPBI
2358.200	7736.877	BADHEART FM	BADH
2451.500	8042.979	CARDIUM FM	CARD
2502.100	8208.990	CARDIUM SD	CARD SD
2579.500	8462.927	BLACKSTONE FM	BKST
2694.700	8840.879	SECOND WHITE SPECKLED S	H2WS
2932.800	9622.048	BASE FISH SCALES ZONE	BFSC
2959.600	9709.975	LUSCAR FM	LUSK
3418.300	11214.896	CADOMIN FM	CADM
3441.200	11290.026	ROCK CREEK MBR	RKCK
3512.500	11523.950	NORDEGG MBR	NORD
3551.800	11652.888	TURNER VALLEY FM	TV
3608.200	11837.927	SHUNDA FM	SHUN
3623.500	11888.124	NORDEGG MBR	NORD
3643.600	11954.069	TURNER VALLEY FM	TV
3705.100	12155.841	SHUNDA FM	SHUN
3757.000	12326.116	FAULT	FLT
3757.000	12326.116	NORDEGG MBR	NORD
3771.900	12375.000	FAULT	FLT
3771.900	12375.000	LUSCAR FM	LUSK

Site ID: 64917

Source ID: 00/11-21-046-19W5/0

Latitude: 052.977257

Well Length: 4378.000

Longitude: 116.703743

KB Elevation: 1387.300

Status: Capped Gaswell

Well Name: GULF ET AL REDCAP 11-21-46-19

NOTE: Data lines, in 'bold text', represent true vertical depths.
Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
2175.600	7137.796	WAPIABI FM	WPBI
2182.700	7161.089	WAPIABI FM	WPBI
2529.400	8298.557	BADHEART FM	BADH
2557.500	8390.748	BADHEART FM	BADH
2629.600	8627.297	CARDIUM FM	CARD
2665.000	8743.438	CARDIUM FM	CARD
2682.000	8799.213	CARDIUM SD	CARD SD
2706.500	8879.594	BLACKSTONE FM	BKST
2721.300	8928.150	CARDIUM SD	CARD SD
2748.000	9015.748	BLACKSTONE FM	BKST
3152.100	10341.536	BASE FISH SCALES ZONE	BFSC
3182.200	10440.289	BLAIRMORE GRP	BL
3232.000	10603.675	BASE FISH SCALES ZONE	BFSC
3265.000	10711.942	BLAIRMORE GRP	BL
3407.600	11179.791	FAULT	FLT
3408.500	11182.743	BLAIRMORE GRP	BL
3510.000	11515.748	FAULT	FLT
3511.000	11519.029	BLAIRMORE GRP	BL
3553.400	11658.137	FAULT	FLT
3554.300	11661.090	BLAIRMORE GRP	BL
3666.200	12028.216	CADOMIN FM	CADM
3670.000	12040.683	FAULT	FLT
3671.000	12043.964	BLAIRMORE GRP	BL
3672.600	12049.213	FAULT	FLT
3673.500	12052.166	BLAIRMORE GRP	BL
3716.200	12192.258	CADOMIN FM	CADM
3725.300	12222.113	FAULT	FLT
3726.200	12225.065	BLAIRMORE GRP	BL
3741.500	12275.263	CADOMIN FM	CADM
3753.900	12315.945	FERNIE GRP	FERN
3784.300	12415.683	ROCK CREEK MBR	RKCK
3793.000	12444.227	CADOMIN FM	CADM
3800.000	12467.192	FAULT	FLT
3801.000	12470.473	BLAIRMORE GRP	BL
3809.300	12497.704	POKER CHIP SH	PK C SH
3837.900	12591.535	NORDEGG MBR	NORD
3848.000	12624.672	CADOMIN FM	CADM
3858.000	12657.480	FAULT	FLT

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
3859.000	12660.762	BLAIRMORE GRP	BL
3871.200	12700.788	DEBOLT FM	DBLT
3875.800	12715.880	CADOMIN FM	CADM
3889.500	12760.827	FERNIE GRP	FERN
3922.500	12869.095	ROCK CREEK MBR	RKCK
3941.400	12931.103	SHUNDA FM	SHUN
3949.500	12957.678	POKER CHIP SH	PK C SH
3952.800	12968.505	FAULT	FLT
3953.700	12971.457	DEBOLT FM	DBLT
3974.700	13040.354	FAULT	FLT
3975.700	13043.636	DEBOLT FM	DBLT
3980.000	13057.743	NORDEGG MBR	NORD
4015.500	13174.213	DEBOLT FM	DBLT
4076.000	13372.704	SHUNDA FM	SHUN
4088.000	13412.074	FAULT	FLT
4089.000	13415.354	DEBOLT FM	DBLT
4110.000	13484.252	FAULT	FLT
4111.000	13487.533	DEBOLT FM	DBLT

Site ID: 64918 Source ID: 00/15-01-046-20W5/0

Latitude: 052.937776 Well Length: 4621.100
Longitude: 116.768392
KB Elevation: 1500.500 Status: Capped Gaswell

Well Name: ESSO HANSON 15-1-46-20

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
1303.000	4274.935	WAPIABI FM	WPBI
1663.000	5456.037	BADHEART FM	BADH
1768.100	5800.853	CARDIUM FM	CARD
1813.600	5950.131	CARDIUM SD	CARD SD
1836.400	6024.935	BLACKSTONE FM	BKST
2670.400	8761.155	BLAIRMORE GRP	BL
2721.900	8930.118	FAULT	FLT
2722.000	8930.446	BLACKSTONE FM	BKST
2828.500	9279.855	FAULT	FLT
2828.600	9280.185	BLAIRMORE GRP	BL
3436.000	11272.966	CADOMIN FM	CADM
3453.400	11330.053	FERNIE GRP	FERN
3530.500	11583.006	ROCK CREEK MBR	RKCK
3560.700	11682.087	POKER CHIP SH	PK C SH
3595.400	11795.932	NORDEGG MBR	NORD
3625.600	11895.014	SPRAY RIVER GRP	SPRY R
3643.600	11954.069	TURNER VALLEY FM	TV
3721.300	12208.990	SHUNDA FM	SHUN
3801.200	12471.129	PEKISKO FM	PEK
3844.400	12612.861	BANFF FM	BNFF
4008.700	13151.903	EXSHAW FM	EX
4016.000	13175.854	PALLISER FM	PALL
4074.000	13366.143	FAULT	FLT
4074.100	13366.471	FERNIE GRP	FERN
4080.700	13388.124	ROCK CREEK MBR	RKCK
4093.200	13429.134	POKER CHIP SH	PK C SH
4105.000	13467.849	NORDEGG MBR	NORD
4123.900	13529.855	FAULT	FLT
4124.000	13530.185	CADOMIN FM	CADM
4126.700	13539.043	FERNIE GRP	FERN
4209.600	13811.024	ROCK CREEK MBR	RKCK
4237.600	13902.888	POKER CHIP SH	PK C SH
4273.300	14020.013	NORDEGG MBR	NORD
4300.700	14109.909	TRIASSIC SYSTEM	TRIA SYS
4316.000	14160.105	TURNER VALLEY FM	TV
4393.100	14413.059	SHUNDA FM	SHUN
4502.800	14772.966	PEKISKO FM	PEK
4550.100	14928.150	BANFF FM	BNFF

Site ID: 64919

Source ID: 00/02-20-046-20W5/0

Latitude: 052.975252

Well Length: 4365.000

Longitude: 116.867866

KB Elevation: 1450.100

Status: Capped Gaswell

Well Name: GULF ET AL HANSON 2-20-46-20

NOTE: Data lines, in 'bold text', represent true vertical depths.
 Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
454.800	1492.126	WAPIABI FM	WPBI
455.000	1492.782	WAPIABI FM	WPBI
614.700	2016.732	CARDIUM FM	CARD
615.000	2017.717	CARDIUM FM	CARD
677.600	2223.097	CARDIUM SD	CARD SD
678.000	2224.409	CARDIUM SD	CARD SD
703.100	2306.759	BLACKSTONE FM	BKST
703.500	2308.071	BLACKSTONE FM	BKST
951.300	3121.063	FAULT	FLT
951.400	3121.391	CARDIUM FM	CARD
952.900	3126.313	FAULT	FLT
953.000	3126.641	CARDIUM FM	CARD
1017.100	3336.942	CARDIUM SD	CARD SD
1021.000	3349.738	CARDIUM SD	CARD SD
1050.000	3444.882	BLACKSTONE FM	BKST
1052.500	3453.084	BLACKSTONE FM	BKST
1162.300	3813.321	FAULT	FLT
1162.400	3813.648	CARDIUM FM	CARD
1164.900	3821.851	FAULT	FLT
1165.000	3822.179	CARDIUM FM	CARD
1224.100	4016.076	FAULT	FLT
1224.200	4016.404	CARDIUM FM	CARD
1226.900	4025.263	FAULT	FLT
1227.000	4025.591	CARDIUM FM	CARD
1276.600	4188.320	CARDIUM SD	CARD SD
1278.500	4194.554	CARDIUM SD	CARD SD
1316.000	4317.585	BLACKSTONE FM	BKST
1319.000	4327.428	BLACKSTONE FM	BKST
1433.800	4704.068	FAULT	FLT
1433.900	4704.396	WAPIABI FM	WPBI
1436.900	4714.239	FAULT	FLT
1437.000	4714.567	WAPIABI FM	WPBI
1448.700	4752.953	CARDIUM FM	CARD
1451.800	4763.124	CARDIUM FM	CARD
1519.900	4986.549	CARDIUM SD	CARD SD
1523.000	4996.719	CARDIUM SD	CARD SD
1536.800	5041.995	FAULT	FLT
1536.900	5042.323	CARDIUM FM	CARD

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
1539.900	5052.166	FAULT	FLT
1540.000	5052.494	CARDIUM FM	CARD
1554.900	5101.378	CARDIUM SD	CARD SD
1558.000	5111.549	CARDIUM SD	CARD SD
1596.800	5238.846	BLACKSTONE FM	BKST
1600.000	5249.344	BLACKSTONE FM	BKST
1789.200	5870.079	FAULT	FLT
1789.300	5870.407	CARDIUM FM	CARD
1792.900	5882.218	FAULT	FLT
1793.000	5882.546	CARDIUM FM	CARD
1856.200	6089.895	CARDIUM SD	CARD SD
1860.000	6102.362	CARDIUM SD	CARD SD
1900.000	6233.596	FAULT	FLT
1900.100	6233.924	CARDIUM SD	CARD SD
1903.900	6246.391	FAULT	FLT
1904.000	6246.719	CARDIUM SD	CARD SD
1944.000	6377.953	CARDIUM FM	CARD
1948.000	6391.076	CARDIUM FM	CARD
2035.900	6679.462	WAPIABI FM	WPBI
2040.000	6692.914	WAPIABI FM	WPBI
2132.700	6997.047	FAULT	FLT
2132.800	6997.375	CARDIUM FM	CARD
2136.900	7010.827	FAULT	FLT
2137.000	7011.155	CARDIUM FM	CARD
2191.800	7190.945	CARDIUM SD	CARD SD
2196.000	7204.725	CARDIUM SD	CARD SD
2221.800	7289.371	BLACKSTONE FM	BKST
2226.000	7303.150	BLACKSTONE FM	BKST
2843.700	9329.725	BLAIRMORE GRP	BL
2853.000	9360.236	BLAIRMORE GRP	BL
3095.100	10154.528	FAULT	FLT
3095.200	10154.855	BLAIRMORE GRP	BL
3109.900	10203.084	FAULT	FLT
3110.000	10203.412	BLAIRMORE GRP	BL
3466.300	11372.376	CADOMIN FM	CADM
3490.100	11450.460	FERNIE GRP	FERN
3491.500	11455.053	CADOMIN FM	CADM
3516.000	11535.434	FERNIE GRP	FERN
3567.600	11704.726	ROCK CREEK MBR	RKCK
3595.000	11794.620	ROCK CREEK MBR	RKCK
3612.100	11850.723	POKER CHIP SH	PK C SH
3630.800	11912.074	NORDEGG MBR	NORD
3640.000	11942.258	POKER CHIP SH	PK C SH
3659.000	12004.594	NORDEGGMBR	NORD
3661.400	12012.467	TRIASSIC SYSTEM	TRIA SYS
3690.000	12106.300	TRIASSIC SYSTEM	TRIA SYS
3711.800	12177.822	TURNER VALLEY FM	TV
3741.000	12273.622	TURNER VALLEY FM	TV
3793.200	12444.882	SHUNDA FM	SHUN
3823.000	12542.651	SHUNDA FM	SHUN
3859.400	12662.073	PEKISKO FM	PEK

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
3889.500	12760.827	PEKISKO FM	PEK
3910.700	12830.381	BANFF FM	BNFF
3941.000	12929.790	BANFF FM	BNFF
4043.100	13264.765	FAULT	FLT
4043.200	13265.092	PEKISKO FM	PEK
4055.100	13304.135	BANFF FM	BNFF
4073.900	13365.813	FAULT	FLT
4074.000	13366.143	PEKISKO FM	PEK
4086.000	13405.513	BANFF FM	BNFF
4213.400	13823.491	FAULT	FLT
4213.500	13823.819	FERNIE GRP	FERN
4235.300	13895.341	ROCK CREEK MBR	RKCK
4245.400	13928.478	FAULT	FLT
4245.500	13928.807	FERNIE GRP	FERN
4259.500	13974.738	FAULT	FLT
4259.600	13975.066	TRIASSIC SYSTEM	TRIA SYS
4267.500	14000.984	ROCK CREEK MBR	RKCK
4285.800	14061.023	TURNER VALLEY FM	TV
4291.900	14081.037	FAULT	FLT
4292.000	14081.365	TRIASSIC SYSTEM	TRIA SYS
4318.500	14168.308	TURNER VALLEY FM	TV

Site ID: 64920 Source ID: 00/15-25-046-20W5/0

Latitude: 052.997818 Well Length: 4445.500
Longitude: 116.772585
KB Elevation: 1433.500 Status: Abandoned

Well Name: TPOC ET AL REDCAP 15-25-46-20

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
3884.100	12743.111	CADOMIN FM	CADM
3901.400	12799.869	FERNIE GRP	FERN
3947.500	12951.116	ROCK CREEK MBR	RKCK
3963.900	13004.921	POKER CHIP SH	PK C SH
4001.400	13127.953	NORDEGG MBR	NORD
4003.200	13133.858	CADOMIN FM	CADM
4020.900	13191.930	FERNIE GRP	FERN
4034.000	13234.908	TRIASSIC SYSTEM	TRIA SYS
4053.800	13299.869	ELKTON MBR	ELTN
4068.500	13348.098	ROCK CREEK MBR	RKCK
4086.100	13405.841	POKER CHIP SH	PK C SH
4109.000	13480.972	SHUNDA FM	SHUN
4123.300	13527.887	NORDEGG MBR	NORD
4157.500	13640.093	TRIASSIC SYSTEM	TRIA SYS
4177.300	13705.053	ELKTON MBR	ELTN
4186.700	13735.894	PEKISKO FM	PEK
4232.500	13886.155	BANFF FM	BNFF
4232.500	13886.155	SHUNDA FM	SHUN
4310.200	14141.077	PEKISKO FM	PEK
4355.900	14291.011	BANFF FM	BNFF

Site ID: 137232 Source ID: 00/15-03-046-21W5/0
 Latitude: 052.936469 Well Length: 4402.000
 Longitude: 116.966833
 KB Elevation: 1687.900 Status: Abandoned
 Well Name: GULF AEC MOUNTAIN 15-3-46-21

NOTE: Data lines, in 'bold text', represent true vertical depths.
 Data lines, in 'normal text', represent as-drilled depths.

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
733.000	2404.856	CARDIUM SD	CARD SD
734.000	2408.136	CARDIUM SD	CARD SD
832.400	2730.971	BLACKSTONE FM	BKST
834.000	2736.220	BLACKSTONE FM	BKST
1177.900	3864.501	FAULT	FLT
1178.200	3865.486	CARDIUM SD	CARD SD
1184.000	3884.515	FAULT	FLT
1184.300	3885.499	CARDIUM SD	CARD SD
1228.000	4028.872	BLACKSTONE FM	BKST
1260.300	4134.843	BLACKSTONE FM	BKST
2175.000	7135.827	MOUNTAIN PARK FM	MTN PK
2197.000	7208.005	MOUNTAIN PARK FM	MTN PK
2540.100	8333.662	LUSCAR FM	LUSK
2575.000	8448.163	LUSCAR FM	LUSK
2955.100	9695.211	CADOMIN FM	CADM
2999.200	9839.896	NIKANASSIN FM	NIKA
3005.000	9858.924	CADOMIN FM	CADM
3051.000	10009.843	NIKANASSIN FM	NIKA
3113.400	10214.567	FERNIE GRP	FERN
3171.000	10403.544	FERNIE GRP	FERN
3260.400	10696.851	ROCK CREEK MBR	RKCK
3324.000	10905.512	ROCK CREEK MBR	RKCK
3335.100	10941.930	NORDEGG MBR	NORD
3401.000	11158.137	NORDEGG MBR	NORD
3435.600	11271.654	TRIASSIC SYSTEM	TRIA SYS
3498.400	11477.690	FAULT	FLT
3500.800	11485.564	TRIASSIC SYSTEM	TRIA SYS
3505.000	11499.344	TRIASSIC SYSTEM	TRIA SYS
3525.400	11566.273	FAULT	FLT
3525.900	11567.913	NORDEGG MBR	NORD
3541.700	11619.751	FAULT	FLT
3541.900	11620.407	NORDEGG MBR	NORD
3570.000	11712.599	FAULT	FLT
3572.500	11720.801	TRIASSIC SYSTEM	TRIA SYS
3574.400	11727.034	FAULT	FLT
3574.700	11728.019	FERNIE GRP	FERN
3598.000	11804.462	FAULT	FLT

Depth Metres	Depth Feet	Horizon Name	Horizon Name Abbreviation
3598.500	11806.103	NORDEGG MBR	NORD
3601.300	11815.289	ROCK CREEK MBR	RKCK
3615.000	11860.236	FAULT	FLT
3615.300	11861.221	NORDEGG MBR	NORD
3626.800	11898.950	FAULT	FLT
3627.200	11900.263	ROCK CREEK MBR	RKCK
3633.900	11922.244	FAULT	FLT
3634.200	11923.229	NIKANASSIN FM	NIKA
3649.000	11971.785	FAULT	FLT
3649.300	11972.770	FERNIE GRP	FERN
3677.000	12063.648	ROCK CREEK MBR	RKCK
3703.500	12150.591	FAULT	FLT
3704.000	12152.231	ROCK CREEK MBR	RKCK
3711.000	12175.197	FAULT	FLT
3711.300	12176.182	NIKANASSIN FM	NIKA
3812.400	12507.874	FAULT	FLT
3812.700	12508.858	LUSCAR FM	LUSK
3839.300	12596.129	CADOMIN FM	CADM
3858.400	12658.793	NIKANASSIN FM	NIKA
3901.000	12798.557	FAULT	FLT
3901.300	12799.541	LUSCAR FM	LUSK
3904.700	12810.695	FERNIE GRP	FERN
3930.000	12893.701	CADOMIN FM	CADM
3950.000	12959.318	NIKANASSIN FM	NIKA
3996.200	13110.893	ROCK CREEK MBR	RKCK
3998.500	13118.438	FERNIE GRP	FERN
4061.900	13326.443	NORDEGG MBR	NORD
4094.500	13433.399	TRIASSIC SYSTEM	TRIA SYS
4096.500	13439.961	ROCK CREEK MBR	RKCK
4160.900	13651.247	FAULT	FLT
4161.200	13652.232	TRIASSIC SYSTEM	TRIA SYS
4164.000	13661.418	NORDEGG MBR	NORD
4197.700	13771.982	TRIASSIC SYSTEM	TRIA SYS
4217.400	13836.614	TURNER VALLEY FM	TV
4263.500	13987.861	FAULT	FLT
4263.800	13988.845	TRIASSIC SYSTEM	TRIA SYS
4293.200	14085.303	TOTAL DEPTH	TD
4325.000	14189.633	TURNER VALLEY FM	TV
4402.000	14442.258	TOTAL DEPTH	TD

Appendix 3. 83C/15 - Coal Intersections of the Coal Drillholes

Coal seam depths in Coal Database
 MTB map sheet 03c15
 (Date current to April 1989)
 October 11, 1991

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oild_id	cat_id	n_twp	rg	s	re	note	note	nts	orig		
1023212	242661	5	43	20	33	33	NE	-571.0	-71.6	03el15	000040
CONSOLIDATION COAL COMPANY OF CANAD 34											
slv	td	dep_lev	reps	epdc	drid	drld	qual				
1491.1	91.1	91.4	10.6	710200	000100	N					
pittyp	pitnum	stop	phase	thick	seamno	min					
1	131315	20.45	71.93	0.41			0	0	UNDEFINED		

oild_id	cat_id	n_twp	rg	s	re	note	note	nts	orig		
1023213	242669	5	43	20	33	33	NE	-618.7	-103.7	03el15	000041
CONSOLIDATION COAL COMPANY OF CANAD 34											
slv	td	dep_lev	reps	epdc	drid	drld	qual				
1491.7	91.1	97.1	7.6	710200	000100	N					
pittyp	pitnum	stop	phase	thick	seamno	min					
1	131317	37.61	38.40	0.70			0	0	UNDEFINED		

oild_id	cat_id	n_twp	rg	s	re	note	note	nts	orig		
1023219	242691	5	43	20	33	33	NE	-520.6	-20.7	03el15	000044
CONSOLIDATION COAL COMPANY OF CANAD 34											
slv	td	dep_lev	reps	epdc	drid	drld	qual				
1494.0	99.1	92.4	9.6	710200	000100	N					
pittyp	pitnum	stop	phase	thick	seamno	min					
1	131320	42.37	43.89	1.42	000	10	0	0	UNDEFINED		
1	131321	43.69	43.91	1.42	000	10	0	0	UNDEFINED		
1	131322	43.64	43.91	1.37	000	10	0	0	UNDEFINED		

oild_id	cat_id	n_twp	rg	s	re	note	note	nts	orig		
1023220	242703	5	43	20	33	33	NE	-493.0	-6.2	03el15	000045
CONSOLIDATION COAL COMPANY OF CANAD 34											
slv	td	dep_lev	reps	epdc	drid	drld	qual				
1495.7	79.2	79.2	6.7	710200	000100	N					
pittyp	pitnum	stop	phase	thick	seamno	min					
1	131323	27.42	28.94	1.42	000	10	0	0	UNDEFINED		
1	131324	29.58	29.86	0.20	000	35	0	0	UNDEFINED		
1	131325	29.58	29.86	0.20	000	35	0	0	UNDEFINED		
1	131326	32.00	32.61	0.41	000	35	0	0	UNDEFINED		
1	131327	32.41	34.44	1.03	000	11	0	0	UNDEFINED		
1	131328	39.59	39.59	0.40	0	0	0	0	UNDEFINED		
1	131329	39.76	39.76	1.31	000	15	0	0	UNDEFINED		

oild_id	cat_id	n_twp	rg	s	re	note	note	nts	orig		
1023221	242711	5	43	20	33	33	NE	-36.6	-252.3	03el15	000046
CONSOLIDATION COAL COMPANY OF CANAD 34											
slv	td	dep_lev	reps	epdc	drid	drld	qual				
1496.0	91.4	90.0	23.9	710200	000100	N					
pittyp	pitnum	stop	phase	thick	seamno	min					
1	131329	32.00	32.62	1.42	000	10	0	0	UNDEFINED		
1	131330	33.62	34.19	0.41	000	35	0	0	UNDEFINED		
1	131331	34.14	34.50	0.41	000	35	0	0	UNDEFINED		
1	131332	34.14	34.50	0.41	000	35	0	0	UNDEFINED		
1	131333	37.49	37.61	0.25	000	15	0	0	UNDEFINED		
1	131334	46.67	46.39	1.32	000	15	0	0	UNDEFINED		

oild_id	cat_id	n_twp	rg	s	re	note	note	nts	orig		
1023222	242723	5	43	20	33	33	NE	-134.2	-335.3	03el15	000047
CONSOLIDATION COAL COMPANY OF CANAD 34											
slv	td	dep_lev	reps	epdc	drid	drld	qual				
1495.4	137.2	137.2	5.0	710200	000100	N					
pittyp	pitnum	stop	phase	thick	seamno	min					
1	131335	66.21	66.22	0.41			0	0	UNDEFINED		
1	131336	66.22	66.22	0.41			0	0	UNDEFINED		

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1 133230 50.00 50.22 0.13 050 10 GATES FM
 1 133240 50.22 50.48 0.46 050 10 GATES FM
 1 133241 50.48 50.65 1.23 050 10 GATES FM
 1 133242 50.65 130.76 1.32 050 10 GATES FM

.....
 pitid cat_id a ttyp rge a re re meto meto mto orig
 1025222 262323 5 12 20 22 23 ME -196.0 -299.0 03e15 088232

CONSOLIDATION COAL COMPANY OF CANAD 34

elev td dep_log rgeo spot drid qual

1511.5 67.1 62.1 1.4 710200 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133243 27.07 17.98 6.31 0 10 UNDEFINED

.....
 pitid cat_id a ttyp rge a re re meto meto mto orig
 1025223 262323 5 12 20 22 23 ME -196.0 -197.2 03e15 088233

CONSOLIDATION COAL COMPANY OF CANAD 34

elev td dep_log rgeo spot drid qual

1449.0 65.0 60.7 1.4 710200 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133247 27.19 20.71 1.12 050 10 GATES FM

1 133250 55.13 55.74 6.61 0 10 UNDEFINED

.....
 pitid cat_id a ttyp rge a re re meto meto mto orig
 1025224 262323 5 12 20 22 23 ME -191.4 -420.2 03e15 76-24

LENCO TESTING LTD. 62

elev td dep_log rgeo spot drid qual

1472.0 150.5 90.0 20.2 710200 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133257 65.20 60.59 6.39 0 10 UNDEFINED

1 133258 70.65 70.54 6.36 0 10 UNDEFINED

1 133259 70.65 70.54 6.36 0 10 UNDEFINED

1 133277 166.92 167.03 6.31 0 10 UNDEFINED

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pitid cat_id a ttyp rge a re re meto meto mto orig
 1025225 262323 5 12 20 21 23 ME -1144.3 -270.1 03e15 076-24

LENCO TESTING LTD. 62

elev td dep_log rgeo spot drid qual

1472.1 167.0 90.0 20.2 710200 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133276 55.70 50.94 6.35 0 10 UNDEFINED

1 133278 76.30 76.81 6.33 0 10 UNDEFINED

1 133280 103.30 107.61 6.31 0 10 GATES FM

1 133281 133.30 133.81 6.31 0 10 UNDEFINED

.....
 pitid cat_id a ttyp rge a re re meto meto mto orig
 1025226 262323 5 12 20 21 23 ME -1274.4 -676.0 03e15 088234

CONSOLIDATION COAL COMPANY OF CANAD 34

elev td dep_log rgeo spot drid qual

1522.0 78.3 77.4 1.4 710200 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133282 56.30 57.00 6.31 0 10 UNDEFINED

.....
 pitid cat_id a ttyp rge a re re meto meto mto orig
 1025227 262323 5 12 20 21 23 ME -1211.9 -516.6 03e15 088235

CONSOLIDATION COAL COMPANY OF CANAD 34

elev td dep_log rgeo spot drid qual

1522.0 65.3 62.0 21.0 710100 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133283 61.43 62.27 6.32 0 10 GATES FM

1 133284 61.37 62.64 6.37 0 10 GATES FM

1 133285 63.64 62.99 6.48 0 10 GATES FM

1 133286 63.64 62.23 6.31 0 10 GATES FM

1 133287 63.64 62.99 6.48 0 10 GATES FM

1 133288 65.00 66.39 6.34 0 10 GATES FM

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pitid cat_id a ttyp rge a re re meto meto mto orig
 1025228 262323 5 12 20 21 23 ME -590.3 -630.4 03e15 088232

CONSOLIDATION COAL COMPANY OF CANAD 34

elev td dep_log rgeo spot drid qual

1524.1 67.1 66.8 1.4 710100 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133289 22.10 22.32 1.22 050 10 GATES FM

1 133290 22.10 22.77 0.45 050 10 GATES FM

1 133291 22.10 22.77 1.33 050 10 GATES FM

1 133292 22.10 22.66 0.30 050 10 GATES FM

1 133293 22.10 22.13 1.53 050 10 GATES FM

.....
 pitid cat_id a ttyp rge a re re meto meto mto orig
 1025229 262323 5 12 20 21 23 ME -593.3 -631.3 03e15 088233

CONSOLIDATION COAL COMPANY OF CANAD 34

elev td dep_log rgeo spot drid qual

1524.1 50.5 48.0 3.7 710100 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133294 22.44 22.16 0.49 050 10 GATES FM

1 133295 22.44 22.16 1.33 050 10 GATES FM

1 133296 22.44 22.13 1.22 050 10 GATES FM

.....
 pitid cat_id a ttyp rge a re re meto meto mto orig
 1025230 262323 5 12 20 21 23 ME -526.7 -502.2 03e15 088234

CONSOLIDATION COAL COMPANY OF CANAD 34

elev td dep_log rgeo spot drid qual

1517.3 61.0 60.8 3.4 710100 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133297 3.44 4.00 1.22 0 10 UNDEFINED

1 133298 44.50 45.36 0.76 050 10 GATES FM

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pitid cat_id a ttyp rge a re re meto meto mto orig
 1025231 262323 5 12 20 21 23 ME -476.7 -845.0 03e15 088235

CONSOLIDATION COAL COMPANY OF CANAD 34

elev td dep_log rgeo spot drid qual

1517.4 67.1 66.8 1.4 710100 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133299 27.10 28.50 1.37 050 10 GATES FM

.....
 pitid cat_id a ttyp rge a re re meto meto mto orig
 1025232 262323 5 12 20 21 23 ME -413.3 -493.3 03e15 088236

CONSOLIDATION COAL COMPANY OF CANAD 34

elev td dep_log rgeo spot drid qual

1521.6 67.1 66.8 1.4 710100 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133300 28.22 45.04 1.32 050 10 GATES FM

1 133301 61.00 61.30 0.31 0 10 UNDEFINED

.....
 pitid cat_id a ttyp rge a re re meto meto mto orig
 1025233 262323 5 12 20 21 23 ME -409.7 -484.4 03e15 088237

CONSOLIDATION COAL COMPANY OF CANAD 34

elev td dep_log rgeo spot drid qual

1521.6 67.1 66.8 1.4 710100 040100 8

pittyp pitnum drop phase thick seamno min cat_mtr

1 133302 34.50 37.00 1.32 050 10 GATES FM

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select cat_id a top rg e re ro data note nco orig
 1025260 203087 5 44 20 4 4 HE -100.1 -69.4 03e15 000236
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1043.2 61.6 1.4 710100 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131403 44.65 27.55 2.90 010 15 GATES FN
 1 131404 44.70 27.55 0.30 010 35 GATES FN
 1 131405 47.00 27.50 1.30 010 20 GATES FN

 select cat_id a top rg e re ro data note nco orig
 1025261 203088 5 44 20 4 4 HE -115.5 -69.2 03e15 000237
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1053.1 62.0 19.0 710200 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131406 59.35 44.85 0.91 0 20 UNDEFINED

 select cat_id a top rg e re ro data note nco orig
 1025262 203089 5 44 20 4 4 HE -1092.1 -62.4 03e15 000238
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1052.2 66.5 84.0 710200 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131407 36.85 38.40 1.52 0 20 UNDEFINED

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select cat_id a top rg e re ro data note nco orig
 1025263 203091 5 44 20 4 4 HE -1091.8 -774.4 03e15 000239
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1052.0 67.1 66.1 16.0 710200 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131408 30.10 30.30 0.76 0 20 UNDEFINED

select cat_id a top rg e re ro data note nco orig
 1025265 203094 5 44 20 3 3 HE -1371.5 -729.1 03e15 000242
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1052.0 67.2 67.1 6.0 710100 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131409 57.05 57.01 1.33 010 10 GATES FN
 1 131410 57.01 56.35 1.33 010 10 GATES FN
 1 131411 56.35 51.57 1.33 010 10 GATES FN
 1 131412 51.57 44.31 0.76 010 10 GATES FN

select cat_id a top rg e re ro data note nco orig
 1025266 203092 5 44 20 3 3 HE -1007.8 -603.7 03e15 000243
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1052.1 60.6 44.5 0.6 710100 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131413 43.55 40.77 1.22 010 10 GATES FN
 1 131414 40.77 39.12 1.22 010 10 GATES FN
 1 131415 39.12 35.22 1.22 010 10 GATES FN
 1 131416 35.22 31.63 1.22 010 10 GATES FN

select cat_id a top rg e re ro data note nco orig
 1025267 203090 5 44 20 3 3 HE -1355.4 -69.0 03e15 000244
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1052.1 105.0 6.1 710100 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131417 47.35 48.45 1.22 010 10 GATES FN
 1 131418 48.45 51.25 2.17 010 10 GATES FN
 1 131419 51.25 55.12 2.17 010 10 GATES FN
 1 131420 55.12 52.15 1.22 010 10 GATES FN
 1 131421 52.15 47.35 1.22 010 10 GATES FN

 select cat_id a top rg e re ro data note nco orig
 1025269 203093 5 44 20 3 3 HE -1218.0 -571.0 03e15 000245
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1050.2 73.2 60.0 1.4 710100 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131422 26.95 26.95 0.22 0 20 UNDEFINED
 1 131423 62.75 62.75 0.22 0 20 UNDEFINED
 1 131424 64.61 64.61 1.22 0 10 UNDEFINED

select cat_id a top rg e re ro data note nco orig
 1025270 203071 5 44 20 3 3 HE -736.0 -661.7 03e15 000246
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1021.0 65.0 65.0 12.0 710100 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131425 28.00 30.71 0.21 0 20 UNDEFINED

select cat_id a top rg e re ro data note nco orig
 1025280 203070 5 44 20 3 3 HE -1071.0 -664.1 03e15 000247
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1022.1 61.1 60.1 5.0 710100 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131426 35.15 35.45 1.22 0 10 UNDEFINED
 1 131427 35.45 44.32 1.22 0 10 UNDEFINED
 1 131428 44.32 50.30 2.13 010 10 GATES FN
 1 131429 50.30 55.25 2.13 010 10 GATES FN
 1 131430 55.25 57.35 1.22 010 10 GATES FN
 1 131431 57.35 61.40 1.22 010 10 GATES FN

select cat_id a top rg e re ro data note nco orig
 1025291 203065 5 44 20 3 3 HE -1070.0 -547.6 03e15 000248
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1052.2 67.1 66.1 17.0 710100 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131432 36.00 37.40 0.41 0 40 UNDEFINED

select cat_id a top rg e re ro data note nco orig
 1025275 203062 5 44 20 3 3 HE -101.0 -601.0 03e15 000249
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc dldd qual
 1050.2 67.0 6.6 710100 000100 n
 pittyp pitnum depd shanw thick seamm min ent_nhr
 1 131433 22.25 24.25 0.22 0 20 UNDEFINED
 1 131434 35.15 35.25 0.22 0 20 UNDEFINED
 1 131435 46.62 46.33 0.22 0 20 UNDEFINED

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SELECT cat_id a twp rg s re re meta note nts orig
1025286 243352 S 44 20 33 33 NE -378.0 -745.0 83c15 MLS-36
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log rege opdt drid qual
1442.0 91.7 91.6 7.6 7103000 8401000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311325 31.30 51.51 2.19 0 0 UNDEFINED
1 1311326 31.31 52.44 1.41 0 0 UNDEFINED
1 1311327 31.32 52.24 1.76 0 0 UNDEFINED

SELECT cat_id a twp rg s re re meta note nts orig
1025287 243350 S 44 20 33 33 NE -378.0 -745.0 83c15 MLS-37
CONSOLIDATION COAL COMPANY OF CANAD 36
elev td dep_log rege opdt drid qual
1438.0 126.4 121.9 7.6 7103000 8401000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311328 17.27 17.66 0.31 0 0 UNDEFINED
1 1311329 118.81 115.02 0.31 0 0 UNDEFINED

SELECT cat_id a twp rg s re re meta note nts orig
1025288 243378 S 44 20 33 33 NE -383.0 -666.0 83c15 MLS-38
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log rege opdt drid qual
1466.0 121.0 121.0 8.0 7103000 8401000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311440 28.71 39.55 0.31 0 0 UNDEFINED
1 1311441 121.00 121.02 0.31 0 0 UNDEFINED
1 1311442 166.55 166.56 0.31 0 0 UNDEFINED

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SELECT cat_id a twp rg s re re meta note nts orig
1025300 245142 S 45 18 8 8 NE -804.0 -1408.0 83c15 980350
LUSCAR LTD. 69
elev td dep_log rege opdt drid qual
1260.0 31.0 6.0 12.0 7202000 8401000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311316 36.21 37.19 0.32 0 0 UNDEFINED

SELECT cat_id a twp rg s re re meta note nts orig
1025307 428342 S 45 18 29 29 NE -753.0 -1259.0 83c15 980200
LEXCO TESTING LTD. 62
elev td dep_log rege opdt drid qual
1337.0 121.0 83.0 18.0 8203000 8401000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311311 31.35 32.31 0.33 27 27 FASKAPOO FM
1 1311312 32.21 32.30 0.33 27 27 FASKAPOO FM

SELECT cat_id a twp rg s re re meta note nts orig
1025308 428350 S 45 18 29 29 NE -661.0 -1142.0 83c15 980201
LEXCO TESTING LTD. 63
elev td dep_log rege opdt drid qual
1337.0 121.0 120.0 14.0 8203000 8701000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311520 38.29 39.34 0.35 0 35 UNDEFINED
1 1311521 39.03 39.35 0.35 39 39 FASKAPOO FM
1 1311522 39.77 39.34 0.37 39 39 FASKAPOO FM
1 1311523 41.14 39.33 0.37 39 39 FASKAPOO FM
1 1311524 40.19 39.32 1.22 100 100 COAL VALLEY CL

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SELECT cat_id a twp rg s re re meta note nts orig
1025289 428357 S 45 18 29 29 NE -308.0 -1410.0 83c15 980202
LEXCO TESTING LTD. 62
elev td dep_log rege opdt drid qual
1356.0 121.2 120.1 21.9 8203000 8701000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311325 38.55 39.05 0.35 75 45 FASKAPOO FM
1 1311326 39.05 39.55 0.35 75 45 FASKAPOO FM
1 1311327 39.55 39.05 0.35 75 45 FASKAPOO FM
1 1311328 40.43 39.74 0.31 77 39 FASKAPOO FM

SELECT cat_id a twp rg s re re meta note nts orig
1025290 428358 S 45 18 29 29 NE -37.0 -976.0 83c15 980204
LEXCO TESTING LTD. 62
elev td dep_log rege opdt drid qual
1320.0 121.0 99.1 9.1 8203000 8401000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311329 57.30 57.61 0.31 0 45 UNDEFINED

SELECT cat_id a twp rg s re re meta note nts orig
1025291 428357 S 45 18 31 31 NE -10.0 -781.0 83c15 980203
LEXCO TESTING LTD. 62
elev td dep_log rege opdt drid qual
1344.0 40.0 38.2 6.0 8203000 8401000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311320 34.78 35.00 0.32 0 45 UNDEFINED
1 1311321 35.38 36.75 0.32 75 35 FASKAPOO FM
1 1311322 36.38 36.75 0.32 75 35 FASKAPOO FM
1 1311323 38.74 39.24 0.32 75 35 FASKAPOO FM
1 1311324 39.26 39.31 0.35 75 25 FASKAPOO FM
1 1311325 39.51 39.31 0.35 75 25 FASKAPOO FM
1 1311326 40.51 39.31 0.35 75 25 FASKAPOO FM
1 1311327 40.60 40.78 0.38 75 25 FASKAPOO FM
1 1311328 40.70 40.61 0.33 75 15 FASKAPOO FM
1 1311329 41.61 41.31 0.24 75 20 FASKAPOO FM
1 1311330 41.71 41.31 0.24 75 20 FASKAPOO FM
1 1311331 42.37 42.93 0.30 75 35 FASKAPOO FM

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SELECT cat_id a twp rg s re re meta note nts orig
1025310 428359 S 45 18 31 31 NE -1879.0 -359.0 83c15 980272
LEXCO TESTING LTD. 62
elev td dep_log rege opdt drid qual
1339.0 10.0 10.0 10.0 8203000 8701000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311603 55.31 55.50 0.27 75 10 FASKAPOO FM
1 1311604 55.31 55.31 0.27 75 10 FASKAPOO FM
1 1311605 55.31 55.31 0.27 75 10 FASKAPOO FM
1 1311606 55.31 55.31 0.27 75 10 FASKAPOO FM
1 1311607 55.31 55.31 0.27 75 10 FASKAPOO FM

SELECT cat_id a twp rg s re re meta note nts orig
1025311 428358 S 45 18 31 31 NE -1831.0 -271.0 83c15 980274
LEXCO TESTING LTD. 63
elev td dep_log rege opdt drid qual
1336.0 32.1 32.1 7.0 8203000 8701000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311610 25.02 27.07 2.05 75 15 FASKAPOO FM
1 1311611 27.07 27.05 2.05 75 15 FASKAPOO FM
1 1311612 27.07 27.05 2.05 75 15 FASKAPOO FM
1 1311613 27.07 27.05 2.05 75 15 FASKAPOO FM

SELECT cat_id a twp rg s re re meta note nts orig
1025317 428324 S 45 18 31 31 NE -957.0 -217.0 83c15 98279C
LEXCO TESTING LTD. 62
elev td dep_log rege opdt drid qual
1333.0 21.0 21.0 10.0 8203000 8701000 N
piktyp platum deep dbase thick seanno min ent_ntr
1 1311612 15.20 15.44 0.34 75 15 FASKAPOO FM
1 1311613 15.21 15.31 0.33 75 15 FASKAPOO FM
1 1311614 15.21 15.40 0.34 75 15 FASKAPOO FM
1 1311615 15.21 15.32 0.33 75 15 FASKAPOO FM

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select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245043 5 45 10 33 33 HE -1016.1-362.2 03c15 000110
 SHELL CANADA RESOURCES LIMITED 66
 elev td dep_log rege opdc drid qual
 1312.0 91.4 0.0 15.0 761200 010100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131561 41.73 42.06 0.33 0 0 UNDEFINED
 1 131562 47.02 48.97 0.25 0 0 UNDEFINED
 1 131563 49.60 50.50 0.32 0 0 UNDEFINED
 select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245124 5 45 10 33 33 HE -1020.0-452.4 03c15 000209
 LURON LTD. 66
 elev td dep_log rege opdc drid qual
 1310.0 49.6 0.0 15.0 762200 040100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131564 35.97 36.73 0.76 0 0 UNDEFINED
 select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245215 5 45 10 33 33 HE -1276.0-1619.0 03c15 000209
 LEXCO THERMO LTD. 66
 elev td dep_log rege opdc drid qual
 1312.0 131.0 17.3 320300 070100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131565 40.84 40.78 0.25 0 25 UNDEFINED
 1 131566 40.78 41.98 0.22 0 25 UNDEFINED

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select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245445 5 45 20 4 4 HE -261.0 -1395.0 03c15 HLE-10
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege opdc drid qual
 1497.0 47.2 0.0 762000 040100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131567 39.32 41.91 2.39 0 10 UNDEFINED
 select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245461 5 45 20 4 4 HE -102.0 -1623.0 03c15 HLE-10
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege opdc drid qual
 1497.0 91.4 0.0 762000 040100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131569 41.46 43.76 2.39 0 10 UNDEFINED
 1 131570 46.23 46.16 0.31 0 10 UNDEFINED
 select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245485 5 45 20 4 4 HE -1501.0-1975.0 03c15 HLE-15
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege opdc drid qual
 1516.0 82.3 79.2 0.0 762000 040100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131570 47.79 48.26 1.44 0 0 UNDEFINED
 1 131571 50.80 51.33 4.83 0 0 UNDEFINED

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select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245491 5 45 20 4 4 HE -1623.0-1158.0 03c15 HLE-15
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege opdc drid qual
 1503.0 91.4 3.0 762000 040100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131572 41.42 41.85 1.42 0 0 UNDEFINED
 select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245509 5 45 20 5 5 HE -1391.0-332.0 03c15 HML-2
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege opdc drid qual
 1490.0 113.8 115.0 21.5 762200 040100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131573 61.48 61.39 0.31 0 10 UNDEFINED
 select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245517 5 45 20 5 5 HE -1380.0-313.0 03c15 HML-2
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege opdc drid qual
 1490.0 110.0 117.0 12.0 762200 040100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131574 74.93 75.39 0.46 0 0 UNDEFINED
 1 131575 111.14 111.95 1.10 0 0 UNDEFINED
 1 131576 112.39 112.93 0.36 0 0 UNDEFINED
 1 131577 114.03 114.73 0.70 0 0 UNDEFINED
 select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245623 5 45 20 5 5 HE -1177.0-234.0 03c15 HLE-11
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege opdc drid qual
 1497.0 91.4 0.0 762000 040100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131581 19.94 23.16 2.62 0 0 UNDEFINED
 select cat_id, top, re, ro, re, note, note, msc, orig
 1025320 245646 5 45 20 5 5 HE -1147.0-214.0 03c15 HLE-12
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege opdc drid qual
 1492.0 121.0 121.0 0.1 762000 040100 x
 pittyp pitnum depch dthick seconmin enc_skr
 1 131582 51.54 52.36 0.70 0 0 UNDEFINED
 1 131583 58.06 58.57 0.31 0 0 UNDEFINED

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0111d cat_id a tnp rg e re re meta note nro orig
 1025341 244636 5 45 20 5 5 HE -1100.0-100.0 03c15 HLD-13
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1380.0 91.1 86.9 1.0 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131504 17.62 17.89 0.36 0 0 UNDEFINED

0111d cat_id a tnp rg e re re meta note nro orig
 1025342 244632 5 45 20 5 5 HE -1076.0-124.0 03c15 HLD-14
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1393.0 93.6 81.0 2.0 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131505 12.11 13.70 0.70 0 0 UNDEFINED
 1 131506 12.11 13.70 0.70 0 0 UNDEFINED
 1 131507 27.12 27.30 0.61 0 0 UNDEFINED

0111d cat_id a tnp rg e re re meta note nro orig
 1025344 244637 5 45 20 5 5 HE -972.0 -33.0 03c15 HLD-15
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1407.0 91.4 89.0 0.0 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131508 26.49 27.61 1.00 0 0 UNDEFINED
 1 131509 27.42 27.62 1.00 0 0 UNDEFINED
 1 131510 27.42 27.62 1.00 0 0 UNDEFINED
 1 131511 27.42 27.62 1.00 0 0 UNDEFINED
 1 131512 27.42 27.62 1.00 0 0 UNDEFINED

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0111d cat_id a tnp rg e re re meta note nro orig
 1025345 244638 5 45 20 5 5 HE -240.0 -954.0 03c15 HLD-22
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1470.0 91.1 89.0 0.0 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131503 11.60 12.10 0.61 0 0 UNDEFINED
 1 131504 12.76 13.26 0.66 0 0 UNDEFINED
 1 131505 12.76 13.26 0.66 0 0 UNDEFINED
 1 131506 44.01 44.07 0.06 0 0 UNDEFINED

0111d cat_id a tnp rg e re re meta note nro orig
 1025346 244639 5 45 20 5 5 HE -1035.0 1035.0 03c15 HLD-23
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1494.0 91.4 89.0 0.0 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131507 51.65 52.73 0.68 0 0 UNDEFINED

0111d cat_id a tnp rg e re re meta note nro orig
 1025347 244716 5 45 20 5 5 HE -310.0 -1066.0 03c15 HLD-24
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1490.0 91.4 89.0 1.2 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131508 10.90 10.95 1.06 0 0 GATES FN
 1 131509 10.95 10.95 1.06 0 0 GATES FN
 1 131510 20.42 20.48 1.00 0 0 GATES FN
 1 131511 20.42 20.48 1.00 0 0 GATES FN
 1 131506 77.97 78.23 1.06 0 0 GATES FN

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0111d cat_id a tnp rg e re re meta note nro orig
 1025348 244723 5 45 20 5 5 HE -197.0 -921.0 03c15 HLD-25
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1401.0 121.9 121.6 2.4 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131502 76.59 76.91 1.22 0 0 UNDEFINED

0111d cat_id a tnp rg e re re meta note nro orig
 1025349 244732 5 45 20 5 5 HE -1181.0-261.0 03c15 HLD-26
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1480.0 122.0 109.1 3.4 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131504 22.61 22.17 1.02 0 0 UNDEFINED
 1 131505 22.61 22.17 1.02 0 0 UNDEFINED

0111d cat_id a tnp rg e re re meta note nro orig
 1025350 244733 5 45 20 5 5 HE -1181.0-261.0 03c15 HLD-27
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1491.0 106.7 103.0 3.1 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131506 27.00 28.10 0.30 0 0 UNDEFINED
 1 131507 28.71 29.23 1.02 0 0 UNDEFINED
 1 131508 49.63 49.43 0.76 0 0 UNDEFINED
 1 131509 76.21 76.95 0.61 0 0 UNDEFINED
 1 131510 76.21 76.95 0.61 0 0 UNDEFINED

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0111d cat_id a tnp rg e re re meta note nro orig
 1025351 244734 5 45 20 5 5 HE -16.0 -607.0 03c15 HLD-28
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1470.0 91.1 89.0 6.1 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131511 26.45 29.02 0.37 0 0 UNDEFINED

0111d cat_id a tnp rg e re re meta note nro orig
 1025352 244761 5 45 20 5 5 HE -1603.0-651.0 03c15 HLD-29
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1472.0 90.2 89.7 6.1 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131512 14.65 15.26 0.47 0 0 UNDEFINED
 1 131513 14.65 15.26 0.47 0 0 UNDEFINED
 1 131514 14.65 15.26 0.47 0 0 UNDEFINED
 1 131515 15.44 15.26 0.76 0 0 UNDEFINED
 1 131516 22.16 22.38 2.10 0 0 UNDEFINED
 1 131517 22.16 22.38 2.10 0 0 UNDEFINED
 1 131518 36.59 36.31 1.27 0 0 UNDEFINED
 1 131519 36.59 37.09 0.63 0 0 UNDEFINED
 1 131520 37.39 37.50 0.70 0 0 UNDEFINED
 1 131521 37.39 37.50 0.70 0 0 UNDEFINED
 1 131522 38.01 41.91 2.30 0 0 UNDEFINED

0111d cat_id a tnp rg e re re meta note nro orig
 1025353 244766 5 45 20 5 5 HE -1613.0-972.0 03c15 HLD-30
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdt drid qual
 1491.0 47.1 64.0 3.0 710300 040100 N
 pittyp pitnum stop dbase thick seammin min em_nar
 1 131523 21.70 28.16 0.66 0 0 UNDEFINED

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select cat_id = top rg c re re note note nts orig
 1023358 244790 3 45 20 0 0 NE -1438.0 -466.0 03e15 HNL-32
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege spot deld qual
 1463.0 67.1 56.4 11.3 710200 040100 0
 pittyp pihnm depa dhaso thick seammin min em_nar
 1 131426 11.20 22.19 0.31 0 0 UNDEFINED
 1 131426 22.47 22.59 0.30 0 0 UNDEFINED

select cat_id = top rg c re re note note nts orig
 1023361 244905 3 45 20 0 0 NE -1435.0 -452.0 03e15 HNL-34
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege spot deld qual
 1475.0 126.0 126.0 0.0 710200 040100 0
 pittyp pihnm depa dhaso thick seammin min em_nar
 1 131426 22.40 22.47 1.07 0 0 UNDEFINED

select cat_id = top rg c re re note note nts orig
 1023362 244912 3 45 21 13 13 NE -27.0 -450.0 03e15 HNL-33
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege spot deld qual
 1570.0 96.6 97.2 6.0 710200 040100 0
 pittyp pihnm depa dhaso thick seammin min em_nar
 1 131427 21.95 22.22 1.31 0 0 UNDEFINED

select cat_id = top rg c re re note note nts orig

1023363 244913 3 45 21 13 13 NE -27.0 -450.0 03e15 HNL-33

CONSOLIDATION COAL COMPANY OF CANADA 34

elev td dep_log rege spot deld qual

1570.0 96.6 97.2 6.0 710200 040100 0

pittyp pihnm depa dhaso thick seammin min em_nar

1 131427 21.95 22.22 1.31 0 0 UNDEFINED

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select cat_id = top rg c re re note note nts orig
 1023367 244942 3 45 21 14 14 NE -27.0 -346.0 03e15 HNL-72
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege spot deld qual
 1495.0 39.0 39.0 1.0 710200 040100 0
 pittyp pihnm depa dhaso thick seammin min em_nar
 1 131427 29.44 30.30 0.76 0 0 UNDEFINED
 1 131428 32.61 33.55 1.30 0 0 UNDEFINED

select cat_id = top rg c re re note note nts orig

1023370 245002 3 45 21 22 22 NE -291.0 -363.0 03e15 HN-1

CONSOLIDATION COAL COMPANY OF CANADA 34

elev td dep_log rege spot deld qual

1556.0 121.0 121.0 0.0 710200 040100 0

pittyp pihnm depa dhaso thick seammin min em_nar

1 131429 23.59 25.64 1.05 0 0 UNDEFINED

1 131430 23.59 25.64 1.05 0 0 UNDEFINED

1 131431 26.27 26.27 0.00 0 0 UNDEFINED

1 131432 26.57 27.24 0.67 0 0 UNDEFINED

1 131433 46.46 51.15 2.58 0 0 UNDEFINED

select cat_id = top rg c re re note note nts orig

1023371 245012 3 45 21 22 22 NE -290.0 -373.0 03e15 HNL-3

CONSOLIDATION COAL COMPANY OF CANADA 34

elev td dep_log rege spot deld qual

1555.0 91.0 91.0 1.2 710200 040100 0

pittyp pihnm depa dhaso thick seammin min em_nar

1 131444 29.91 30.02 0.31 0 0 UNDEFINED

1 131445 42.34 43.20 0.31 0 0 UNDEFINED

1 131447 51.51 51.62 0.31 0 0 UNDEFINED

1 131448 53.94 53.49 0.40 0 0 UNDEFINED

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select cat_id = top rg c re re note note nts orig
 1023374 245127 3 45 21 13 13 NE -4.0 -393.0 03e15 HNL-10
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege spot deld qual
 1535.0 92.0 97.0 7.0 710200 040100 0
 pittyp pihnm depa dhaso thick seammin min em_nar
 1 131428 10.56 10.88 0.10 0 0 UNDEFINED

select cat_id = top rg c re re note note nts orig

1023375 245232 3 45 21 13 13 NE -61.0 -392.0 03e15 HNL-17

CONSOLIDATION COAL COMPANY OF CANADA 34

elev td dep_log rege spot deld qual

1588.0 92.0 92.0 0.0 710200 040100 0

pittyp pihnm depa dhaso thick seammin min em_nar

1 131429 7.32 7.32 0.00 0 0 UNDEFINED

1 131429 9.15 10.00 0.01 0 0 UNDEFINED

1 131429 10.00 11.15 0.01 0 0 UNDEFINED

1 131429 23.19 23.37 0.00 0 0 UNDEFINED

select cat_id = top rg c re re note note nts orig

1023376 245420 3 45 21 14 14 NE -57.0 -274.0 03e15 HNL-71

CONSOLIDATION COAL COMPANY OF CANADA 34

elev td dep_log rege spot deld qual

1701.0 110.0 110.0 1.0 710200 040100 0

pittyp pihnm depa dhaso thick seammin min em_nar

1 131429 12.19 17.67 0.00 0 0 UNDEFINED

1 131429 56.41 57.35 0.00 0 0 UNDEFINED

1 131429 59.05 59.35 0.01 0 0 UNDEFINED

1 131429 110.00 113.00 0.01 0 0 UNDEFINED

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select cat_id = top rg c re re note note nts orig
 1023378 245523 3 45 21 22 22 NE -122.0 -104.0 03e15 HNL-4
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rege spot deld qual
 1699.0 92.0 92.0 13.7 710200 040100 0
 pittyp pihnm depa dhaso thick seammin min em_nar
 1 131429 23.47 24.99 0.76 0 0 UNDEFINED
 1 131429 24.99 25.49 0.40 0 0 UNDEFINED
 1 131429 26.25 26.37 0.00 0 0 UNDEFINED
 1 131430 29.72 30.30 0.46 0 0 UNDEFINED
 1 131430 42.21 42.21 0.15 0 0 UNDEFINED
 1 131430 42.21 42.21 0.15 0 0 UNDEFINED
 1 131430 47.39 47.56 0.16 0 0 UNDEFINED

select cat_id = top rg c re re note note nts orig

1023379 245523 3 45 21 22 22 NE -103.0 -95.0 03e15 HNL-5

CONSOLIDATION COAL COMPANY OF CANADA 34

elev td dep_log rege spot deld qual

1612.0 76.0 76.0 13.0 710200 040100 0

pittyp pihnm depa dhaso thick seammin min em_nar

1 131429 17.67 17.99 0.01 0 0 UNDEFINED

1 131429 44.49 44.49 0.01 0 0 UNDEFINED

1 131429 66.43 66.43 0.01 0 0 UNDEFINED

select cat_id = top rg c re re note note nts orig

1023376 245612 3 45 21 22 22 NE -234.0 -377.0 03e15 HNL-28

CONSOLIDATION COAL COMPANY OF CANADA 34

elev td dep_log rege spot deld qual

1570.0 107.0 106.7 10.0 710200 040100 0

pittyp pihnm depa dhaso thick seammin min em_nar

1 131429 59.31 59.56 0.26 0 0 UNDEFINED

1 131429 59.31 59.56 0.26 0 0 UNDEFINED

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oicid oic_id n tnp rq s ro re meta note nro orig
1025377 241070 5 45 21 23 23 HE -286.0 -238.0 03e15 OML-26
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1355.0 125.6 123.6 21.6 710200 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131663 18.31 19.25 0.61 0 0 UNDEFINED
1 131664 18.31 19.25 0.61 0 0 UNDEFINED
1 131665 22.10 23.62 1.22 0 0 UNDEFINED
1 131666 22.77 25.38 1.53 0 0 UNDEFINED
1 131667 22.77 25.38 1.53 0 0 UNDEFINED
1 131668 22.77 25.38 1.53 0 0 UNDEFINED
1 131669 22.77 25.38 1.53 0 0 UNDEFINED
1 131670 44.59 44.81 0.31 0 0 UNDEFINED
1 131671 44.59 44.81 0.31 0 0 UNDEFINED
1 131672 112.35 112.78 1.22 0 0 UNDEFINED
1 131673 114.00 116.60 0.68 0 0 UNDEFINED
1 131674 116.01 116.19 0.68 0 0 UNDEFINED

oicid oic_id n tnp rq s ro re meta note nro orig
1025378 241070 5 45 21 23 23 HE -286.0 -238.0 03e15 OML-27
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1355.0 91.4 98.2 9.8 710200 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131675 37.49 48.29 2.74 0 0 UNDEFINED

oicid oic_id n tnp rq s ro re meta note nro orig
1025379 241070 5 45 21 23 23 HE -119.0 -24.0 03e15 OML-21
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1411.0 98.5 125.0 12.2 710200 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131676 23.71 24.65 0.35 0 0 UNDEFINED
1 131677 38.71 48.23 1.03 0 0 UNDEFINED
1 131678 43.05 44.81 0.32 0 0 UNDEFINED

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oicid oic_id n tnp rq s ro re meta note nro orig
1025380 241070 5 45 21 23 23 HE -286.0 -238.0 03e15 OML-28
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1355.0 106.3 126.0 16.4 710200 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131679 81.69 83.84 1.37 0 0 UNDEFINED

oicid oic_id n tnp rq s ro re meta note nro orig
1025381 241070 5 45 21 23 23 HE -286.0 -238.0 03e15 OML-29
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1355.1 98.4 106.3 21.20 710200 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131680 81.69 83.84 1.37 0 0 UNDEFINED

oicid oic_id n tnp rq s ro re meta note nro orig
1025382 241070 5 45 21 23 23 HE -286.0 -238.0 03e15 OML-30
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1355.0 106.3 126.0 16.4 710200 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131681 79.95 80.84 1.22 0 0 UNDEFINED
1 131682 79.95 80.84 1.22 0 0 UNDEFINED
1 131683 79.95 80.84 0.63 0 0 UNDEFINED
1 131684 80.47 81.20 0.72 0 0 UNDEFINED
1 131685 80.47 81.20 0.72 0 0 UNDEFINED
1 131686 80.47 81.20 0.72 0 0 UNDEFINED
1 131687 119.57 120.48 0.91 0 0 UNDEFINED
1 131688 121.12 123.70 0.62 0 0 UNDEFINED

oicid oic_id n tnp rq s ro re meta note nro orig
1025383 241070 5 45 21 23 23 HE -1466.0 -137.0 03e15 OML-31
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1652.0 128.0 0.0 11.2 710300 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131689 111.20 121.12 1.02 0 0 UNDEFINED
1 131690 111.20 121.12 0.44 0 0 UNDEFINED
1 131691 112.93 113.73 0.79 0 0 UNDEFINED
1 131692 113.63 116.13 0.33 0 0 UNDEFINED

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oicid oic_id n tnp rq s ro re meta note nro orig
1025385 241070 5 45 21 23 23 HE -1691.0 -169.0 03e15 OML-32
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1550.0 119.4 119.0 2.1 710300 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131693 45.70 46.62 0.32 0 0 UNDEFINED
1 131694 45.70 46.62 0.32 0 0 UNDEFINED
1 131695 65.16 66.26 1.10 0 0 UNDEFINED
1 131696 105.77 106.69 0.31 0 0 UNDEFINED
1 131697 119.73 119.78 1.00 0 0 UNDEFINED
1 131698 119.73 119.78 1.00 0 0 UNDEFINED

oicid oic_id n tnp rq s ro re meta note nro orig
1025386 241070 5 45 21 23 23 HE -264.0 -242.0 03e15 OML-43
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1454.0 132.1 132.0 16.2 710200 040100 S
pittyp pitnum depd dname thick seame min cat_nir
1 131699 55.47 56.17 0.70 0 20 UNDEFINED
1 131700 58.05 58.65 0.76 0 20 UNDEFINED
1 131701 59.46 59.46 0.34 0 10 UNDEFINED
1 131702 59.46 59.46 0.34 0 10 UNDEFINED
1 131703 59.79 59.91 1.23 0 25 UNDEFINED
1 131704 112.17 113.39 1.23 0 25 UNDEFINED
1 131705 115.38 116.59 1.21 0 10 UNDEFINED

oicid oic_id n tnp rq s ro re meta note nro orig
1025387 241070 5 45 21 23 23 HE -1459.0 -124.0 03e15 OML-44
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1455.0 121.9 120.0 10.1 710300 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131706 55.75 56.63 0.31 0 0 UNDEFINED
1 131707 57.25 58.23 0.33 0 0 UNDEFINED
1 131708 109.93 110.64 0.67 0 0 UNDEFINED

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oicid oic_id n tnp rq s ro re meta note nro orig
1025388 241070 5 45 21 23 23 HE -1330.0 -30.0 03e15 OML-45
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1652.0 128.0 128.0 3.0 710300 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131709 57.97 59.12 1.15 0 20 UNDEFINED
1 131710 57.93 58.65 0.76 0 20 UNDEFINED

oicid oic_id n tnp rq s ro re meta note nro orig
1025389 241070 5 45 21 23 23 HE -1866.0 -352.0 03e15 OML-70
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1602.0 110.0 110.0 3.0 710300 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131711 65.51 67.39 0.79 0 10 UNDEFINED
1 131712 65.62 66.31 1.16 0 10 UNDEFINED
1 131713 65.27 69.74 0.37 0 10 UNDEFINED
1 131714 71.95 71.95 1.35 0 10 UNDEFINED
1 131715 85.35 85.35 1.20 0 10 UNDEFINED
1 131716 89.46 90.14 1.10 0 10 UNDEFINED

oicid oic_id n tnp rq s ro re meta note nro orig
1025390 241070 5 45 21 23 23 HE -1515.0 -150.0 03e15 OML-74
CONSOLIDATION COAL COMPANY OF CANAD 34
elev td dep_log topo spot drild qual
1676.0 116.3 116.3 3.5 710300 040100 N
pittyp pitnum depd dname thick seame min cat_nir
1 131717 47.55 48.82 0.97 0 20 UNDEFINED
1 131718 47.04 49.35 2.05 0 20 UNDEFINED
1 131719 74.42 74.39 1.15 0 20 UNDEFINED
1 131720 104.55 105.21 0.76 0 20 UNDEFINED

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select cat_id a tnp rg s re ve note note nte orig
 1025391 314475 5 45 21 23 23 HE -1323.0-219.0 03e15 0NL-75
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1678.0 82.0 92.0 1.0 710200 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131721 46.43 17.05 1.22 810 15 GATES FN
 1 131722 46.43 17.05 1.22 810 25 GATES FN
 1 131723 46.43 17.05 1.22 810 35 GATES FN
 1 131724 46.43 17.05 0.61 810 35 GATES FN

select cat_id a tnp rg s re ve note note nte orig
 1025392 261697 5 45 21 23 23 HE -800.0 -501.0 03e15 0NL-2
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1608.0 91.0 91.0 7.2 710100 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131725 11.89 12.00 0.91 0 0 UNDEFINED
 1 131726 12.21 12.23 0.92 0 0 UNDEFINED
 1 131727 12.21 12.23 0.92 0 0 UNDEFINED
 1 131728 30.04 30.05 0.91 0 0 UNDEFINED
 1 131729 32.00 32.61 0.61 0 0 UNDEFINED

select cat_id a tnp rg s re ve note note nte orig
 1025395 244922 5 45 21 23 23 HE -800.0 -610.0 03e15 0NL-14
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1647.0 91.0 90.2 0.8 710200 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131730 10.10 19.25 9.15 810 15 GATES FN
 1 131731 85.34 16.56 1.22 810 35 GATES FN

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select cat_id a tnp rg s re ve note note nte orig
 1025398 261694 5 45 21 23 23 HE -702.0 -644.0 03e15 0NL-19
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1625.0 91.0 92.0 19.4 710200 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131732 46.43 17.05 1.22 810 15 GATES FN
 1 131733 46.43 17.05 1.22 810 25 GATES FN
 1 131734 46.43 17.05 1.22 810 35 GATES FN

select cat_id a tnp rg s re ve note note nte orig
 1025400 263360 5 45 21 24 24 HE -30.0 -1574.0 03e15 0NL-17
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1612.0 90.4 90.4 12.1 710100 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131734 46.43 16.14 0.66 0 0 UNDEFINED

select cat_id a tnp rg s re ve note note nte orig
 1025402 244902 5 45 21 23 24 HE -71.0 -1681.0 03e15 0NL-30
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1609.0 91.5 90.2 12.0 710200 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131735 16.11 50.19 2.00 0 0 UNDEFINED

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select cat_id a tnp rg s re ve note note nte orig
 1025410 216070 5 45 21 24 24 HE -950.0 -1135.0 03e15 0NL-32
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1590.0 92.3 91.4 13.7 710200 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131736 41.46 42.67 1.22 0 0 UNDEFINED

select cat_id a tnp rg s re ve note note nte orig
 1025412 246095 5 45 21 24 24 HE -726.0 -808.0 03e15 0NL-35
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1592.0 91.4 90.6 4.2 710200 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131737 5.10 6.10 1.22 0 35 UNDEFINED
 1 131738 29.36 30.00 1.22 0 35 UNDEFINED

select cat_id a tnp rg s re ve note note nte orig
 1025413 244165 5 45 21 24 24 HE -725.0 -827.0 03e15 0NL-36
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1593.0 110.0 110.0 0.0 710200 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131739 61.69 37.17 3.40 0 35 UNDEFINED

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select cat_id a tnp rg s re ve note note nte orig
 1025414 245116 5 45 21 24 24 HE -1585.0-235.0 03e15 0NL-41
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1524.0 123.9 121.9 6.4 710200 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131740 25.05 26.04 0.79 0 45 UNDEFINED
 1 131741 70.07 61.09 3.16 0 35 GATES FN

select cat_id a tnp rg s re ve note note nte orig
 1025415 245162 5 45 21 24 24 HE -1680.0-335.0 03e15 0NL-42
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1524.0 122.3 121.9 6.4 710200 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131742 46.79 48.44 1.47 0 35 UNDEFINED

select cat_id a tnp rg s re ve note note nte orig
 1025416 245186 5 45 21 24 24 HE -1110.0-285.0 03e15 0NL-46
 CONSOLIDATION COAL COMPANY OF CANAD 34
 elev td dep_log rogo epdc deld qual
 1491.0 126.2 121.9 13.7 710200 000100 N
 pittyp plnum dtop dbase thick seamno min emr_mkr
 1 131743 21.12 22.77 1.65 0 35 UNDEFINED

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 select cat_id a top rg a ro ro meta note nro orig
 1023110 244210 5 45 21 24 24 HE -307.0 -3100.0 82e15 806-63
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rogo epdt deld qual
 1591.0 121.9 126.4 14.1 710200 800100 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 121765 37.00 28.71 0.31 0 15 UNDEFINED
 1 121765 36.95 28.71 2.20 0 15 UNDEFINED

select cat_id a top rg a ro ro meta note nro orig
 1023110 244220 5 45 21 24 24 HE -3080.0 -3132.0 82e15 806-64
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rogo epdt deld qual
 1591.1 121.8 121.4 14.1 710200 800100 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 121765 34.25 35.02 0.77 0 15 UNDEFINED
 1 121767 35.92 35.17 0.16 0 15 UNDEFINED
 1 121768 35.13 35.93 0.16 0 15 UNDEFINED
 1 121769 35.00 35.00 0.16 0 15 UNDEFINED

select cat_id a top rg a ro ro meta note nro orig
 1023121 244211 5 45 21 24 24 HE -3062.0 -3120.0 82e15 806-62
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rogo epdt deld qual
 1591.0 121.9 121.6 8.1 710200 800100 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 121765 109.42 120.38 1.16 0 15 UNDEFINED

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 select cat_id a top rg a ro ro meta note nro orig
 1023121 244211 5 45 21 24 24 HE -3062.0 -3120.0 82e15 806-62
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rogo epdt deld qual
 1591.0 121.9 121.6 8.1 710200 800100 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 121765 109.42 120.38 1.16 0 15 UNDEFINED
 1 121766 110.00 120.38 1.16 0 15 UNDEFINED
 1 121767 110.00 120.38 1.16 0 15 UNDEFINED
 1 121768 110.00 120.38 1.16 0 15 UNDEFINED
 1 121769 110.00 120.38 1.16 0 15 UNDEFINED
 1 121770 110.00 120.38 1.16 0 15 UNDEFINED
 1 121771 110.00 120.38 1.16 0 15 UNDEFINED

 select cat_id a top rg a ro ro meta note nro orig
 1023121 244220 5 45 21 24 24 HE -3045.0 -3128.0 82e15 806-62
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rogo epdt deld qual
 1591.0 92.3 92.3 0.0 710200 800100 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 121765 10.00 10.00 0.00 0 15 UNDEFINED
 1 121766 10.00 10.00 0.00 0 15 UNDEFINED
 1 121767 10.00 10.00 0.00 0 15 UNDEFINED
 1 121768 10.00 10.00 0.00 0 15 UNDEFINED
 1 121769 10.00 10.00 0.00 0 15 UNDEFINED
 1 121770 10.00 10.00 0.00 0 15 UNDEFINED
 1 121771 10.00 10.00 0.00 0 15 UNDEFINED
 1 121772 10.00 10.00 0.00 0 15 UNDEFINED

 select cat_id a top rg a ro ro meta note nro orig
 1023121 244220 5 45 21 24 24 HE -3045.0 -3128.0 82e15 806-62
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rogo epdt deld qual
 1591.0 92.3 92.3 0.0 710200 800100 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 121765 10.00 10.00 0.00 0 15 UNDEFINED
 1 121766 10.00 10.00 0.00 0 15 UNDEFINED
 1 121767 10.00 10.00 0.00 0 15 UNDEFINED
 1 121768 10.00 10.00 0.00 0 15 UNDEFINED
 1 121769 10.00 10.00 0.00 0 15 UNDEFINED
 1 121770 10.00 10.00 0.00 0 15 UNDEFINED
 1 121771 10.00 10.00 0.00 0 15 UNDEFINED
 1 121772 10.00 10.00 0.00 0 15 UNDEFINED

 select cat_id a top rg a ro ro meta note nro orig
 1023121 244220 5 45 21 24 24 HE -3045.0 -3128.0 82e15 806-62
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rogo epdt deld qual
 1591.0 92.3 92.3 0.0 710200 800100 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 121765 10.00 10.00 0.00 0 15 UNDEFINED

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 select cat_id a top rg a ro ro meta note nro orig
 1023131 244230 5 45 21 24 24 HE -3114.0 -3177.0 82e15 806-63
 CONSOLIDATION COAL COMPANY OF CANADA 34
 elev td dep_log rogo epdt deld qual
 1492.0 93.2 93.0 4.6 710200 800100 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 121764 32.92 34.14 1.23 0 15 UNDEFINED

 select cat_id a top rg a ro ro meta note nro orig
 1023130 244231 5 45 18 10 2 2 HE -475.0 -1175.0 82e15 326666
 SHELL CANADA RESOURCES LIMITED 69
 elev td dep_log rogo epdt deld qual
 1299.0 110.0 110.0 13.0 700200 800300 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 121762 105.40 107.00 0.00 0 0 UNDEFINED

 select cat_id a top rg a ro ro meta note nro orig
 1023130 244232 5 45 18 10 2 2 HE -295.0 -1181.0 82e15 326140
 LEMCO TESTING LTD. 62
 elev td dep_log rogo epdt deld qual
 1299.0 122.0 121.2 17.7 810200 800300 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 122205 112.57 112.75 0.10 0 25 UNDEFINED
 1 122207 116.00 116.90 0.10 0 25 UNDEFINED

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 select cat_id a top rg a ro ro meta note nro orig
 1023130 244232 5 45 18 10 2 2 HE -295.0 -1181.0 82e15 326666
 SHELL CANADA RESOURCES LIMITED 69
 elev td dep_log rogo epdt deld qual
 1297.2 115.0 115.0 16.0 700200 800300 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 122206 77.40 78.40 1.00 0 0 UNDEFINED

 select cat_id a top rg a ro ro meta note nro orig
 1023130 244231 5 45 18 10 2 2 HE -475.0 -1175.0 82e15 326140
 LEMCO TESTING LTD. 62
 elev td dep_log rogo epdt deld qual
 1297.0 41.1 40.3 22.0 810200 800300 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 122205 22.00 22.77 0.10 0 10 UNDEFINED
 1 122206 22.00 22.77 0.10 0 10 UNDEFINED
 1 122207 21.00 21.22 0.10 0 10 UNDEFINED
 1 122208 21.00 21.22 0.10 0 10 UNDEFINED
 1 122209 21.00 21.44 0.10 0 10 UNDEFINED
 1 122210 21.00 21.44 0.10 0 10 UNDEFINED
 1 122211 21.00 21.44 0.10 0 10 UNDEFINED
 1 122212 21.00 21.44 0.10 0 10 UNDEFINED
 1 122213 21.00 21.44 0.10 0 10 UNDEFINED
 1 122214 21.00 21.44 0.10 0 10 UNDEFINED
 1 122215 21.00 21.44 0.10 0 10 UNDEFINED
 1 122216 21.00 21.44 0.10 0 10 UNDEFINED
 1 122217 21.00 21.44 0.10 0 10 UNDEFINED
 1 122218 21.00 21.44 0.10 0 10 UNDEFINED

 select cat_id a top rg a ro ro meta note nro orig
 1023130 244230 5 45 18 10 2 2 HE -475.0 -1175.0 82e15 326140
 LEMCO TESTING LTD. 62
 elev td dep_log rogo epdt deld qual
 1297.2 34.1 34.1 27.4 810200 800300 N
 pittyp pitnum dep drop thick seammin min cnc_nhr
 1 122216 30.49 32.67 0.10 0 0 UNDEFINED
 1 122217 32.67 33.99 1.32 0 0 UNDEFINED
 1 122218 34.27 36.38 0.00 0 0 UNDEFINED

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aitid cat_id a tdp rq o ro re note note nro orig
 1025513 023340 5 46 10 3 3 HE -335.0 -895.0 03el15 020106
 LEXCO TESTING LTD. 62
 elev td dep_lev roro updt deld qual
 1296.0 121.0 121.0 12.0 010000 000100 N
 pickup pilnum drop chance thick secname min emc_pkr
 1 132221 26.35 26.42 0.21 0 25 UNDEFINED

 aitid cat_id a tdp rq o ro re note note nro orig
 1025514 023342 5 46 10 3 3 HE -860.0 -427.0 03el15 020107
 LEXCO TESTING LTD. 62
 elev td dep_lev roro updt deld qual
 1296.0 121.0 121.0 21.0 010000 000100 N
 pickup pilnum drop chance thick secname min emc_pkr
 1 132222 23.22 23.31 0.20 0 25 UNDEFINED
 1 132221 31.92 30.40 0.20 0 25 UNDEFINED
 1 132222 40.49 40.46 0.20 0 25 UNDEFINED
 1 132223 49.06 49.05 0.20 0 25 UNDEFINED
 1 132224 57.37 57.44 0.20 0 25 UNDEFINED
 1 132225 67.31 68.16 0.20 0 25 UNDEFINED
 1 132226 75.74 76.14 0.20 0 25 UNDEFINED
 1 132227 84.74 85.77 0.20 0 25 UNDEFINED
 1 132228 93.71 96.16 0.20 0 25 UNDEFINED
 1 132229 102.73 109.26 0.20 0 25 UNDEFINED
 1 132230 111.75 119.23 0.20 0 25 UNDEFINED
 1 132231 120.78 129.20 0.20 0 25 UNDEFINED
 1 132232 129.82 139.23 0.20 0 25 UNDEFINED
 1 132233 138.85 149.23 0.20 0 25 UNDEFINED
 1 132234 147.88 159.23 0.20 0 25 UNDEFINED
 1 132235 156.91 169.23 0.20 0 25 UNDEFINED
 1 132236 165.94 180.23 0.20 0 25 UNDEFINED
 1 132237 174.97 190.23 0.20 0 25 UNDEFINED
 1 132238 183.00 199.49 0.20 0 25 UNDEFINED

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aitid cat_id a tdp rq o ro re note note nro orig
 1025520 023340 5 46 10 3 3 HE -1105.4 -301.0 03el15 000102
 LUSCAR LTD. 61
 elev td dep_lev roro updt deld qual
 1296.0 46.0 46.0 3.0 021000 000100 N
 pickup pilnum drop chance thick secname min emc_pkr
 1 132227 5.79 25.97 26.10 0 9 UNDEFINED

 aitid cat_id a tdp rq o ro re note note nro orig
 1025521 023340 5 46 10 4 6 HE -1104.4 -301.0 03el15 000103
 LUSCAR LTD. 61
 elev td dep_lev roro updt deld qual
 1296.0 46.0 46.0 3.0 021000 000100 N
 pickup pilnum drop chance thick secname min emc_pkr
 1 132228 29.61 31.67 0.20 0 25 UNDEFINED
 1 132229 38.61 38.61 0.20 0 25 UNDEFINED

 aitid cat_id a tdp rq o ro re note note nro orig
 1025527 023343 5 46 10 4 6 HE -861.7 -100.4 03el15 000104
 LUSCAR LTD. 61
 elev td dep_lev roro updt deld qual
 1297.0 46.0 46.0 3.0 021000 000100 N
 pickup pilnum drop chance thick secname min emc_pkr
 1 132229 2.93 2.95 0.20 0 9 UNDEFINED
 1 132230 27.96 27.97 0.20 0 25 UNDEFINED

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aitid cat_id a tdp rq o ro re note note nro orig
 1025532 023169 5 46 10 4 6 HE -1623.0 -781.0 03el15 020202
 LEXCO TESTING LTD. 62
 elev td dep_lev roro updt deld qual
 1297.0 215.0 211.0 7.0 020000 070000 N
 pickup pilnum drop chance thick secname min emc_pkr
 1 132241 22.61 22.16 0.22 75 25 PASHAPOO FN
 1 132242 22.14 22.77 0.21 75 25 PASHAPOO FN
 1 132243 22.67 23.30 0.20 75 25 PASHAPOO FN
 1 132244 23.15 23.45 0.20 75 25 PASHAPOO FN
 1 132245 23.63 23.45 0.20 75 25 PASHAPOO FN
 1 132246 25.45 25.78 0.20 75 25 PASHAPOO FN
 1 132247 26.95 26.12 0.20 75 25 PASHAPOO FN
 1 132248 27.48 27.05 0.20 75 25 PASHAPOO FN
 1 132249 28.02 27.95 0.20 75 25 PASHAPOO FN
 1 132250 28.55 27.95 0.20 75 25 PASHAPOO FN
 1 132251 29.09 27.94 0.20 75 25 PASHAPOO FN
 1 132252 29.63 28.21 0.20 75 25 PASHAPOO FN
 1 132253 29.65 28.21 0.20 75 25 PASHAPOO FN
 1 132254 29.89 29.62 0.20 75 25 PASHAPOO FN
 1 132255 30.31 29.95 0.20 75 25 PASHAPOO FN
 1 132256 30.31 29.95 0.20 75 25 UNDEFINED

 aitid cat_id a tdp rq o ro re note note nro orig
 1025533 023169 5 46 10 6 6 HE -1451.0 -595.0 03el15 020204
 LEXCO TESTING LTD. 62
 elev td dep_lev roro updt deld qual
 1298.0 65.0 64.1 6.1 020000 070000 N
 pickup pilnum drop chance thick secname min emc_pkr
 1 132257 9.20 9.01 0.61 75 25 PASHAPOO FN
 1 132258 9.82 11.98 2.10 75 15 PASHAPOO FN
 1 132259 11.52 12.30 0.20 75 25 PASHAPOO FN
 1 132260 12.31 12.56 0.20 75 25 PASHAPOO FN
 1 132261 13.11 13.61 0.20 75 25 PASHAPOO FN
 1 132262 13.26 13.97 0.20 75 25 PASHAPOO FN
 1 132263 15.70 16.91 0.77 0 30 UNDEFINED

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aitid cat_id a tdp rq o ro re note note nro orig
 1025537 023210 5 46 10 6 7 HE -1132.0 -300.0 03el15 020207
 LEXCO TESTING LTD. 62
 elev td dep_lev roro updt deld qual
 1296.0 46.0 46.0 3.0 021000 000100 N
 pickup pilnum drop chance thick secname min emc_pkr
 1 132264 20.91 21.21 0.20 0 25 UNDEFINED
 1 132265 21.20 21.20 0.20 0 25 UNDEFINED
 1 132266 22.09 22.09 0.20 0 25 UNDEFINED

 aitid cat_id a tdp rq o ro re note note nro orig
 1025539 023210 5 46 10 7 7 HE -379.0 -1294.0 03el15 020216
 LEXCO TESTING LTD. 62
 elev td dep_lev roro updt deld qual
 1296.0 120.0 120.0 6.1 020000 070000 N
 pickup pilnum drop chance thick secname min emc_pkr
 1 132267 90.31 90.66 0.40 0 20 UNDEFINED

 aitid cat_id a tdp rq o ro re note note nro orig
 1025540 023210 5 46 10 7 7 HE -260.0 -1190.0 03el15 020217
 LEXCO TESTING LTD. 62
 elev td dep_lev roro updt deld qual
 1296.0 121.0 121.0 6.0 020000 070000 N
 pickup pilnum drop chance thick secname min emc_pkr
 1 132268 35.97 35.36 0.39 0 25 UNDEFINED
 1 132269 109.27 109.65 0.39 0 25 UNDEFINED
 1 132270 109.56 109.94 0.39 0 25 UNDEFINED
 1 132271 109.94 110.32 0.39 0 25 UNDEFINED
 1 132272 110.35 110.35 0.39 0 25 UNDEFINED

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1 1322775 89.67 20.10 4.49 39 38 OMED CS
 1 1322776 91.87 21.59 6.21 39 38 OMED CS
 1 1322777 102.21 102.10 6.21 0 0 UNDEFINED

 select cat_id = top re a re re note note note orig
 1022590 421790 5 46 10 10 10 HE -287.0 -230.0 02e15 02e042
 LEMCO TESTING LTD. 62
 elev td dep_log rege opdt drid qual
 13231.5 36.6 33.8 9.8 001200 031100 n
 pittyp pitnum stop phase thick secnum min ent_nhr
 1 1322778 16.76 17.01 0.23 0 19 UNDEFINED

 select cat_id = top re a re re note note note orig
 1022590 421794 5 46 10 10 10 HE -205.0 -233.0 02e15 02e042
 LEMCO TESTING LTD. 62
 elev td dep_log rege opdt drid qual
 13270.7 41.0 41.0 12.2 001200 031100 n
 pittyp pitnum stop phase thick secnum min ent_nhr
 1 1322779 28.36 29.49 1.12 0 0 UNDEFINED
 1 1322780 41.72 41.52 0 0 UNDEFINED
 1 1322781 47.05 49.10 1.03 0 0 UNDEFINED

 select cat_id = top re a re re note note note orig
 1022590 421794 5 46 10 10 10 HE -250.0 -151.0 02e15 02e042
 LEMCO TESTING LTD. 62
 elev td dep_log rege opdt drid qual
 13112.6 121.0 110.6 9.6 000900 031100 n
 pittyp pitnum stop phase thick secnum min ent_nhr
 1 1322782 12.25 12.10 0.10 0 16 UNDEFINED
 1 1322783 12.20 12.11 0.10 0 16 UNDEFINED
 1 1322784 22.13 22.92 0.10 0 16 UNDEFINED
 1 1322785 36.16 36.94 0.10 0 16 UNDEFINED
 1 1322786 46.02 46.86 0.10 0 16 UNDEFINED
 1 1322787 47.22 47.40 0.10 0 16 UNDEFINED
 1 1322788 47.43 48.46 0.11 0 16 UNDEFINED
 1 1322789 47.47 48.56 0.10 0 16 UNDEFINED
 1 1322790 49.16 49.76 0.10 0 16 UNDEFINED

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1 1322791 37.92 40.35 1.04 0 25 UNDEFINED
 1 1322792 52.93 52.50 0.21 0 25 UNDEFINED
 1 1322793 70.31 71.02 0.21 0 25 UNDEFINED
 1 1322794 82.76 82.22 0.25 0 25 UNDEFINED

 select cat_id = top re a re re note note note orig

1022592 421642 5 46 10 10 10 HE -1277.0 -835.0 02e15 02e042
 LEMCO TESTING LTD. 62

elev td dep_log rege opdt drid qual
 13112.6 115.0 100.0 9.1 001000 031100 n
 pittyp pitnum stop phase thick secnum min ent_nhr
 1 1322795 18.04 18.10 0.11 0 25 UNDEFINED
 1 1322796 25.84 25.82 0.24 0 25 UNDEFINED
 1 1322797 26.25 26.20 0.24 0 25 UNDEFINED
 1 1322798 37.00 37.04 0.24 0 25 UNDEFINED

select cat_id = top re a re re note note note orig

1022593 421642 5 46 10 10 10 HE -1214.0 -832.0 02e15 02e042

LEMCO TESTING LTD. 62
 elev td dep_log rege opdt drid qual
 13112.6 61.0 61.0 9.1 001000 031100 n
 pittyp pitnum stop phase thick secnum min ent_nhr
 1 1322799 16.45 16.76 0.21 75 25 PASHAFOO FH
 1 1322800 16.42 16.42 0.21 75 25 PASHAFOO FH
 1 1322801 25.00 25.01 0.21 75 25 PASHAFOO FH
 1 1322802 25.01 25.27 0.21 75 25 PASHAFOO FH
 1 1322803 25.01 25.27 0.21 75 25 PASHAFOO FH
 1 1322804 27.04 27.04 0.21 75 25 PASHAFOO FH
 1 1322805 27.04 27.21 0.21 75 25 PASHAFOO FH
 1 1322806 27.07 28.16 0.21 75 25 PASHAFOO FH
 1 1322807 49.60 49.39 0.21 75 25 PASHAFOO FH

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select cat_id = top re a re re note note note orig
 1022594 421642 5 46 10 10 10 HE -1894.0 -871.0 02e15 02e042
 LEMCO TESTING LTD. 62
 elev td dep_log rege opdt drid qual
 13112.6 132.4 132.4 4.1 001000 031100 n
 pittyp pitnum stop phase thick secnum min ent_nhr
 1 1322808 10.07 10.20 0.62 0 19 UNDEFINED
 1 1322809 10.20 10.31 0.62 0 19 UNDEFINED
 1 1322810 10.35 10.34 0.62 0 19 UNDEFINED
 1 1322811 10.35 10.34 0.62 0 19 UNDEFINED
 1 1322812 10.35 10.34 0.62 0 19 UNDEFINED

 select cat_id = top re a re re note note note orig

1022595 421642 5 46 10 10 10 HE -1301.0 -839.0 02e15 02e042

LEMCO TESTING LTD. 62

elev td dep_log rege opdt drid qual

13112.7 102.6 97.5 7.6 000900 031100 n

pittyp pitnum stop phase thick secnum min ent_nhr
 1 1322813 7.92 8.99 0.20 0 25 UNDEFINED
 1 1322814 10.05 10.99 0.20 0 25 UNDEFINED
 1 1322815 10.15 10.15 0.20 0 25 UNDEFINED
 1 1322816 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322817 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322818 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322819 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322820 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322821 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322822 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322823 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322824 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322825 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322826 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322827 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322828 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322829 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322830 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322831 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322832 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322833 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322834 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322835 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322836 10.21 10.21 0.20 0 25 UNDEFINED
 1 1322837 10.21 10.21 0.20 0 25 UNDEFINED

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1 1322838 67.22 65.60 5.27 25 18 OMED CS
 1 1322839 67.34 67.40 0.36 25 18 OMED CS

 select cat_id = top re a re re note note note orig

1022596 421642 5 46 10 10 10 HE -1179.0 -779.0 02e15 02e042

LEMCO TESTING LTD. 62
 elev td dep_log rege opdt drid qual
 13112.7 102.6 102.6 7.6 000900 031100 n
 pittyp pitnum stop phase thick secnum min ent_nhr
 1 1322840 69.05 69.42 0.37 0 16 UNDEFINED
 1 1322841 69.05 69.20 0.36 0 16 UNDEFINED
 1 1322842 69.10 69.18 0.36 0 16 UNDEFINED
 1 1322843 69.10 69.18 0.36 0 16 UNDEFINED
 1 1322844 69.10 69.18 0.36 0 16 UNDEFINED
 1 1322845 69.10 69.18 0.36 0 16 UNDEFINED
 1 1322846 70.55 70.55 0.36 0 16 UNDEFINED
 1 1322847 70.55 70.55 0.36 0 16 UNDEFINED

select cat_id = top re a re re note note note orig

1022597 421642 5 46 10 10 10 HE -1259.0 -810.0 02e15 02e042

LEMCO TESTING LTD. 62
 elev td dep_log rege opdt drid qual
 13112.7 97.6 96.9 6.7 001000 031100 n
 pittyp pitnum stop phase thick secnum min ent_nhr
 1 1322848 91.10 91.42 0.21 0 25 UNDEFINED
 1 1322849 91.42 91.10 0.21 0 25 UNDEFINED
 1 1322850 91.42 91.10 0.21 0 25 UNDEFINED
 1 1322851 91.42 91.10 0.21 0 25 UNDEFINED
 1 1322852 91.42 91.10 0.21 0 25 UNDEFINED
 1 1322853 91.42 91.10 0.21 0 25 UNDEFINED
 1 1322854 91.42 91.10 0.21 0 25 UNDEFINED
 1 1322855 91.42 91.10 0.21 0 25 UNDEFINED
 1 1322856 91.42 91.10 0.21 0 25 UNDEFINED
 1 1322857 91.42 91.10 0.21 0 25 UNDEFINED

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sitid sat_id = tvg rg e re re meta note nte orig
 1025491 026703 5 44 10 19 19 HE -837.0 -901.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 117.0 115.0 11.6 020200 070400 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132051 19.01 20.12 0.52 0 20 UNDEFINED
 1 132052 20.01 20.12 0.52 0 20 UNDEFINED
 1 132053 20.20 20.12 0.52 0 20 UNDEFINED
 1 132054 20.30 20.12 0.52 0 20 UNDEFINED
 1 132055 20.51 20.12 0.52 0 20 UNDEFINED
 1 132056 20.70 20.12 0.52 0 20 UNDEFINED
 1 132057 20.91 20.12 0.52 0 20 UNDEFINED
 1 132058 20.93 20.12 0.52 0 20 UNDEFINED
 1 132059 21.10 20.12 0.52 0 20 UNDEFINED

sitid sat_id = tvg rg e re re meta note nte orig
 1025492 026703 5 44 10 19 19 HE -832.0 -902.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 117.0 115.0 11.6 020200 070400 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132061 20.47 22.21 1.65 0 20 UNDEFINED
 1 132062 21.06 22.21 1.67 0 20 UNDEFINED
 1 132063 21.31 22.21 0.57 0 20 UNDEFINED

sitid sat_id = tvg rg e re re meta note nte orig
 1025493 026703 5 44 10 19 19 HE -766.0 -894.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 121.0 121.0 6.0 020200 070400 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132064 27.34 28.02 0.49 0 20 UNDEFINED

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1 132061 23.00 25.43 0.55 0 20 UNDEFINED
 1 132062 23.05 25.43 0.55 0 20 UNDEFINED
 1 132063 23.03 24.40 0.57 0 20 UNDEFINED

 sitid sat_id = tvg rg e re re meta note nte orig
 1025494 026703 5 44 10 19 19 HE -826.0 -1403.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 119.0 119.0 7.6 020200 080100 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132064 33.14 33.71 0.55 0 20 UNDEFINED

sitid sat_id = tvg rg e re re meta note nte orig
 1025495 026703 5 44 10 22 22 HE -138.0 -762.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 119.0 119.0 7.6 020200 080100 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132065 35.66 36.00 1.22 0 20 UNDEFINED

sitid sat_id = tvg rg e re re meta note nte orig
 1025496 026703 5 44 10 22 22 HE -205.0 -1111.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1270.0 109.7 111.4 9.1 001000 031000 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132066 22.01 22.34 0.33 0 20 UNDEFINED

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sitid sat_id = tvg rg e re re meta note nte orig
 1025497 026703 5 44 10 19 19 HE -1866.0 -864.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 106.7 106.1 14.9 020200 070400 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132061 18.35 18.35 0.40 0 20 UNDEFINED
 1 132062 20.54 20.70 0.32 0 20 UNDEFINED
 1 132063 21.02 20.45 0.42 0 20 UNDEFINED
 1 132064 21.24 20.45 0.32 0 20 UNDEFINED
 1 132065 21.52 20.15 0.43 0 20 UNDEFINED

sitid sat_id = tvg rg e re re meta note nte orig
 1025498 026703 5 44 10 19 19 HE -849.0 -1012.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 110.0 110.0 11.5 020200 070400 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132070 13.35 13.75 0.40 0 20 UNDEFINED
 1 132071 13.63 13.50 0.45 0 20 UNDEFINED
 1 132072 14.13 14.32 0.37 0 20 UNDEFINED
 1 132073 14.19 14.32 0.37 0 20 UNDEFINED
 1 132074 14.68 14.70 0.32 0 20 UNDEFINED
 1 132075 14.74 14.50 0.39 0 20 UNDEFINED
 1 132076 15.16 14.95 0.36 0 20 UNDEFINED
 1 132077 15.61 15.25 0.37 0 20 UNDEFINED
 1 132078 16.33 16.07 0.34 0 20 UNDEFINED

sitid sat_id = tvg rg e re re meta note nte orig
 1025499 026703 5 44 10 19 19 HE -495.0 -888.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 121.0 121.0 9.3 000800 040300 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132079 14.11 14.26 0.15 0 20 UNDEFINED
 1 132080 23.00 23.00 0.17 0 20 UNDEFINED

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sitid sat_id = tvg rg e re re meta note nte orig
 1025500 026703 5 44 10 19 19 HE -460.0 -1036.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 121.0 121.0 10.7 001000 031100 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132081 12.31 12.50 0.37 0 20 UNDEFINED

sitid sat_id = tvg rg e re re meta note nte orig
 1025501 026703 5 44 10 22 22 HE -18.0 -619.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 103.0 103.0 10.7 001000 031100 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132082 26.55 26.55 1.15 0 20 UNDEFINED
 1 132083 26.55 26.55 1.15 0 20 UNDEFINED
 1 132084 26.55 26.55 1.15 0 20 UNDEFINED
 1 132085 26.55 26.55 1.15 0 20 UNDEFINED
 1 132086 26.55 26.55 1.15 0 20 UNDEFINED

sitid sat_id = tvg rg e re re meta note nte orig
 1025502 026703 5 44 10 22 22 HE -209.0 -787.0 03e15 002108
 LEMCO TESTING LTD. 62
 elev td dep_log rgeo spdt drid qual
 1322.0 103.0 103.0 12.2 001000 031100 N
 pittyp pitnum depd dbase thick secanno min emc_ntr
 1 132087 34.41 34.20 0.34 0 20 PAKAROO FM
 1 132088 34.50 34.35 0.35 0 20 PAKAROO FM
 1 132089 34.55 34.35 0.35 0 20 PAKAROO FM
 1 132090 35.25 35.25 0.35 0 20 PAKAROO FM
 1 132091 35.25 35.25 0.35 0 20 PAKAROO FM
 1 132092 36.21 36.21 0.35 0 20 PAKAROO FM
 1 132093 36.21 36.21 0.35 0 20 PAKAROO FM
 1 132094 36.21 36.21 0.35 0 20 PAKAROO FM
 1 132095 36.21 36.21 0.35 0 20 PAKAROO FM

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oicid_cat_id = top rg_a rg_b rg_c metn meto ntc orig
1025623 425623 5 46 18 27 27 HE -1267.0-1156.7 02elis 000311

LUMCO LTD. 64

elev td dep_lev rope spot drild qual
1271.0 49.7 0.0 5.0 716100 001100 n

piktyp plnum drop shade thick secname min cat_ntr
1 1232025 39.10 36.40 0.42 0 0 UNDEFINED
1 1232027 32.22 34.44 1.22 0 0 UNDEFINED
1 1232029 35.95 36.23 3.38 0 0 UNDEFINED

oicid_cat_id = top rg_a rg_b rg_c metn meto ntc orig
1025626 425626 5 46 18 27 27 HE -1267.0-1055.0 02elis 000002

LUMCO TESTING LTD. 62

elev td dep_lev rope spot drild qual
1254.0 107.0 0.0 4.3 001000 001100 n

piktyp plnum drop shade thick secname min cat_ntr
1 1232029 7.01 7.22 0.31 0 0 UNDEFINED
1 1232030 71.32 71.43 0.31 0 0 UNDEFINED

oicid_cat_id = top rg_a rg_b rg_c metn meto ntc orig
1025625 425625 5 46 18 27 27 HE -1524.0-653.4 02elis 000025

LUMCO TESTING LTD. 62

elev td dep_lev rope spot drild qual
1253.0 70.2 70.0 10.1 001000 001100 n

piktyp plnum drop shade thick secname min cat_ntr
1 1232031 19.14 19.04 0.70 0 0 UNDEFINED
1 1232032 29.20 29.01 0.61 0 0 UNDEFINED
1 1232033 41.36 42.00 0.66 0 0 UNDEFINED
1 1232034 42.40 42.61 0.21 0 0 UNDEFINED

oicid_cat_id = top rg_a rg_b rg_c metn meto ntc orig
1025626 425626 5 46 18 27 27 HE -1666.0-727.0 02elis 000016

LUMCO LTD. 62

elev td dep_lev rope spot drild qual
1265.2 109.7 100.5 9.1 001000 001100 n

piktyp plnum drop shade thick secname min cat_ntr
1 1232025 39.49 31.94 0.39 0 0 UNDEFINED
1 1232026 41.85 31.89 0.79 0 0 UNDEFINED
1 1232027 32.79 31.79 0.39 0 0 UNDEFINED
1 1232028 42.79 43.61 0.22 0 0 UNDEFINED
1 1232029 43.61 43.34 0.33 0 0 UNDEFINED
1 1232030 40.91 41.55 0.55 0 0 UNDEFINED
1 1232031 41.49 41.49 0.55 0 0 UNDEFINED
1 1232042 45.00 45.31 0.43 0 0 UNDEFINED
1 1232043 45.51 45.98 0.39 0 0 UNDEFINED
1 1232044 45.51 45.71 1.08 0 0 UNDEFINED
1 1232045 46.13 46.71 0.39 0 0 UNDEFINED
1 1232046 46.42 46.76 0.34 0 0 UNDEFINED

oicid_cat_id = top rg_a rg_b rg_c metn meto ntc orig
1025627 425627 5 46 18 27 27 HE -1573.0-720.0 02elis 000014

LUMCO TESTING LTD. 62

elev td dep_lev rope spot drild qual
1246.7 85.3 85.1 7.6 001000 001100 n

piktyp plnum drop shade thick secname min cat_ntr
1 1232037 23.47 21.00 0.41 0 0 UNDEFINED
1 1232038 24.00 24.63 0.33 0 0 UNDEFINED
1 1232039 24.21 24.18 0.38 0 0 UNDEFINED
1 1232040 25.21 25.18 0.39 0 0 UNDEFINED
1 1232051 27.03 29.38 1.49 0 0 UNDEFINED
1 1232052 29.31 30.97 1.16 0 0 UNDEFINED
1 1232053 30.31 30.91 0.37 0 0 UNDEFINED
1 1232054 31.64 31.91 0.27 0 0 UNDEFINED
1 1232055 31.91 32.36 0.43 0 0 UNDEFINED
1 1232056 32.01 32.61 0.27 0 0 UNDEFINED
1 1232057 32.51 32.51 0.27 0 0 UNDEFINED
1 1232058 34.79 35.30 0.31 0 0 UNDEFINED
1 1232059 35.21 35.48 0.31 0 0 UNDEFINED
1 1232060 45.34 46.49 0.15 0 0 UNDEFINED
1 1232061 47.06 47.46 0.34 0 0 UNDEFINED
1 1232062 47.97 48.20 0.31 0 0 UNDEFINED
1 1232063 49.01 49.55 0.34 0 0 UNDEFINED

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1 1232065 69.45 69.77 0.22 35 20 UNDEFINED
1 1232066 69.77 70.10 0.23 35 20 UNDEFINED
1 1232067 70.20 70.62 0.26 35 20 UNDEFINED
1 1232068 71.22 71.65 0.22 35 20 UNDEFINED

oicid_cat_id = top rg_a rg_b rg_c metn meto ntc orig
1025629 425629 5 46 18 27 27 HE -1145.0-1052.0 02elis 000015

LUMCO TESTING LTD. 62

elev td dep_lev rope spot drild qual
1242.0 61.1 61.0 3.6 001000 001100 n

piktyp plnum drop shade thick secname min cat_ntr
1 1232069 21.17 21.69 0.22 0 0 UNDEFINED
1 1232070 26.31 26.31 0.20 0 0 UNDEFINED
1 1232071 26.97 27.23 0.26 0 0 UNDEFINED
1 1232072 27.52 27.63 0.26 0 0 UNDEFINED
1 1232073 28.25 28.63 0.26 0 0 UNDEFINED
1 1232074 30.83 32.31 0.46 0 0 UNDEFINED
1 1232075 32.21 32.74 0.43 0 0 UNDEFINED
1 1232076 32.21 32.74 0.43 0 0 UNDEFINED
1 1232077 35.14 35.21 0.47 0 0 UNDEFINED
1 1232078 35.21 35.46 0.45 0 0 UNDEFINED
1 1232079 35.21 35.46 0.45 0 0 UNDEFINED
1 1232080 35.21 35.46 0.45 0 0 UNDEFINED
1 1232081 35.21 35.46 0.45 0 0 UNDEFINED
1 1232082 40.31 40.31 0.47 0 0 UNDEFINED
1 1232083 41.71 42.05 0.27 0 0 UNDEFINED
1 1232084 42.63 42.71 0.27 0 0 UNDEFINED
1 1232085 42.71 43.95 0.26 0 0 UNDEFINED
1 1232086 43.44 43.95 0.26 0 0 UNDEFINED
1 1232087 44.44 45.05 0.21 0 0 UNDEFINED
1 1232088 45.05 45.25 0.21 0 0 UNDEFINED
1 1232089 45.29 45.56 0.67 0 0 UNDEFINED
1 1232090 45.29 45.56 0.67 0 0 UNDEFINED
1 1232091 47.39 48.27 0.48 0 0 UNDEFINED
1 1232092 49.27 49.86 0.49 0 0 UNDEFINED
1 1232093 50.59 50.39 0.49 0 0 UNDEFINED
1 1232094 50.69 50.99 0.31 0 0 UNDEFINED

oicid_cat_id = top rg_a rg_b rg_c metn meto ntc orig
1025628 425628 5 46 18 27 27 HE -1147.0-1029.0 02elis 000016

LUMCO TESTING LTD. 62

elev td dep_lev rope spot drild qual
1265.0 113.0 113.7 3.6 001000 001100 n

piktyp plnum drop shade thick secname min cat_ntr
1 1232095 24.42 24.99 0.35 0 0 UNDEFINED
1 1232096 25.21 25.35 0.34 0 0 UNDEFINED
1 1232097 25.21 25.35 0.34 0 0 UNDEFINED
1 1232098 25.43 25.43 0.34 0 0 UNDEFINED
1 1232099 26.21 26.21 0.34 0 0 UNDEFINED
1 1232100 27.76 27.13 0.43 0 0 UNDEFINED
1 1232101 28.06 28.28 0.24 0 0 UNDEFINED
1 1232102 28.46 28.46 0.24 0 0 UNDEFINED
1 1232103 28.46 28.46 0.24 0 0 UNDEFINED
1 1232104 29.59 29.42 0.33 0 0 UNDEFINED
1 1232105 29.59 29.42 0.33 0 0 UNDEFINED
1 1232106 29.59 29.42 0.33 0 0 UNDEFINED
1 1232107 29.59 29.42 0.33 0 0 UNDEFINED
1 1232108 29.59 29.42 0.33 0 0 UNDEFINED
1 1232109 29.59 29.42 0.33 0 0 UNDEFINED
1 1232110 29.59 29.42 0.33 0 0 UNDEFINED
1 1232111 30.29 30.29 0.34 0 0 UNDEFINED
1 1232112 30.29 30.29 0.34 0 0 UNDEFINED
1 1232113 30.29 30.29 0.34 0 0 UNDEFINED
1 1232114 44.93 45.45 0.45 0 0 UNDEFINED
1 1232115 45.43 45.43 0.45 0 0 UNDEFINED
1 1232116 45.43 45.43 0.45 0 0 UNDEFINED
1 1232117 46.82 46.82 0.45 0 0 UNDEFINED
1 1232118 46.82 46.82 0.45 0 0 UNDEFINED
1 1232119 46.82 46.82 0.45 0 0 UNDEFINED
1 1232120 46.82 46.82 0.45 0 0 UNDEFINED
1 1232121 51.39 52.23 0.35 0 0 UNDEFINED
1 1232122 52.23 54.00 1.77 0 0 UNDEFINED
1 1232123 52.23 54.00 1.77 0 0 UNDEFINED
1 1232124 53.49 54.47 0.45 0 0 UNDEFINED
1 1232125 57.84 58.65 1.81 0 0 UNDEFINED
1 1232126 59.34 59.49 0.13 0 0 UNDEFINED
1 1232127 59.34 59.49 0.13 0 0 UNDEFINED
1 1232128 59.37 59.57 0.21 0 0 UNDEFINED
1 1232129 59.51 100.19 0.25 0 0 UNDEFINED
1 1232130 102.47 102.49 0.35 0 0 UNDEFINED
1 1232131 102.47 102.49 0.35 0 0 UNDEFINED
1 1232132 102.87 103.26 0.37 0 0 UNDEFINED
1 1232133 103.70 104.27 0.49 0 0 UNDEFINED
1 1232134 104.27 104.38 0.28 0 0 UNDEFINED

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select cat_id a top rg s ro re meta meta_mn orig
 1025659 023552 3 46 19 12 12 HE -319.0 -319.0 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1318.0 31.4 121.2 000000 001000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133402 70.44 70.39 0.19 0 0 UNDEFINED

 select cat_id a top rg s ro re meta meta_mn orig
 1025670 024002 3 46 19 12 12 HE -371.0 -371.0 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1318.0 101.1 121.1 16.0 001000 001000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133403 83.70 83.57 0.27 0 0 UNDEFINED
 1 133404 83.57 83.48 0.26 0 0 UNDEFINED
 1 133405 84.43 84.73 0.34 0 0 UNDEFINED
 1 133406 104.15 104.15 0.45 0 0 UNDEFINED
 1 133407 116.89 117.15 0.35 0 0 UNDEFINED
 1 133408 117.15 117.35 0.35 0 0 UNDEFINED
 1 133409 117.90 118.05 0.15 0 0 UNDEFINED
 1 133410 118.05 118.20 0.15 0 0 UNDEFINED
 1 133411 118.20 118.35 0.15 0 0 UNDEFINED
 1 133412 118.35 118.50 0.15 0 0 UNDEFINED
 1 133413 118.50 118.65 0.15 0 0 UNDEFINED
 1 133414 118.65 118.80 0.15 0 0 UNDEFINED
 1 133415 118.80 118.95 0.15 0 0 UNDEFINED
 1 133416 118.95 119.10 0.15 0 0 UNDEFINED
 1 133417 119.10 119.25 0.15 0 0 UNDEFINED
 1 133418 119.25 119.40 0.15 0 0 UNDEFINED
 1 133419 119.40 119.55 0.15 0 0 UNDEFINED
 1 133420 119.55 119.70 0.15 0 0 UNDEFINED
 1 133421 119.70 119.85 0.15 0 0 UNDEFINED
 1 133422 119.85 120.00 0.15 0 0 UNDEFINED
 1 133423 120.00 120.15 0.15 0 0 UNDEFINED
 1 133424 120.15 120.30 0.15 0 0 UNDEFINED

 select cat_id a top rg s ro re meta meta_mn orig
 1025671 027037 3 46 19 12 12 HE -1231.0 -1231.0 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1321.1 121.9 120.7 6.7 020200 070000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133495 85.13 85.02 0.70 75 25 PASHAPOO FH
 1 133496 86.69 86.58 0.65 77 25 PASHAPOO FH

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select cat_id a top rg s ro re meta meta_mn orig
 1025672 028002 3 46 19 12 12 HE -1088.0 -1088.0 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1320.0 121.0 121.0 8.0 020200 070000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133497 84.64 84.45 0.41 75 0 PASHAPOO FH
 1 133498 84.64 84.45 0.41 75 0 PASHAPOO FH

 select cat_id a top rg s ro re meta meta_mn orig
 1025673 028003 3 46 19 12 12 HE -903.0 -903.0 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1320.0 30.0 30.0 9.1 020200 070000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133499 16.58 17.01 0.43 0 0 UNDEFINED
 1 133500 17.01 17.45 0.43 0 0 UNDEFINED
 1 133501 17.45 17.90 0.36 0 0 UNDEFINED
 1 133502 17.90 18.25 0.36 0 0 UNDEFINED
 1 133503 18.25 18.50 0.36 0 0 UNDEFINED
 1 133504 18.50 18.75 0.27 0 0 UNDEFINED
 1 133505 18.75 19.00 0.27 0 0 UNDEFINED
 1 133506 19.00 19.41 0.16 0 0 UNDEFINED
 1 133507 19.41 19.59 0.16 0 0 UNDEFINED

 select cat_id a top rg s ro re meta meta_mn orig
 1025674 029027 3 46 19 12 12 HE -1447.0 -1447.0 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1325.0 70.3 77.1 2.7 020200 070000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133508 15.44 15.15 0.41 0 0 UNDEFINED
 1 133509 15.15 15.43 0.26 0 0 UNDEFINED
 1 133510 15.43 15.71 0.26 0 0 UNDEFINED
 1 133511 15.71 16.00 0.26 0 0 UNDEFINED
 1 133512 16.00 16.28 0.27 0 0 UNDEFINED

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1 132513 58.45 58.70 0.21 0 0 UNDEFINED

 select cat_id a top rg s ro re meta meta_mn orig
 1025675 029040 3 46 19 12 12 HE -1137.0 -1137.0 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1328.0 62.0 62.0 3.1 020200 070000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133514 21.55 22.55 1.25 75 25 PASHAPOO FH
 1 133515 22.55 22.51 0.75 75 25 PASHAPOO FH
 1 133516 23.51 23.74 0.41 75 25 PASHAPOO FH
 1 133517 23.74 24.53 0.38 75 25 PASHAPOO FH
 1 133518 24.53 24.53 0.15 75 25 PASHAPOO FH
 1 133519 40.10 40.10 0.26 75 25 PASHAPOO FH

 select cat_id a top rg s ro re meta meta_mn orig
 1025676 029050 3 46 19 12 12 HE -726.1 -726.1 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1341.0 121.0 121.0 4.0 010200 001000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133520 53.34 53.35 0.61 0 0 UNDEFINED

 select cat_id a top rg s ro re meta meta_mn orig
 1025677 029052 3 46 19 12 12 HE -642.0 -642.0 02c15 000002
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1321.0 128.0 128.0 3.0 010200 001000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133521 6.16 6.16 0.21 0 0 UNDEFINED
 1 133522 6.16 6.16 0.21 0 0 UNDEFINED
 1 133523 6.17 6.17 0.20 0 0 UNDEFINED

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.....
 select cat_id a top rg s ro re meta meta_mn orig
 1025678 029161 3 46 19 12 12 HE -123.0 -123.0 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1324.0 64.0 62.0 3.4 000200 001000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133524 16.35 17.04 0.39 0 0 UNDEFINED
 1 133525 17.04 17.61 0.26 0 0 UNDEFINED
 1 133526 17.61 18.28 0.26 0 0 UNDEFINED

 select cat_id a top rg s ro re meta meta_mn orig
 1025679 029221 3 46 19 12 12 HE -178.0 -178.0 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1321.0 61.0 60.0 3.5 000200 001000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133527 6.71 7.20 0.41 0 0 UNDEFINED

 select cat_id a top rg s ro re meta meta_mn orig
 1025680 029231 3 46 19 12 12 HE -123.0 -123.0 02c15 020005
 LEMCO TESTING LTD. 62
 elev td dep_log rogo opdt drid qual
 1323.0 36.4 36.4 0.2 000200 001000 n
 pittyp pitnum stop dname thick secname min enc_pit
 1 133528 20.94 20.68 1.09 0 0 UNDEFINED

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\$1111d cat_id a top rg e re re note note nte orig
 1925690 425250 5 46 19 18 18 HE -143.0 -865.0 03e15 PC0018
 LEXCO TESTING LTD. 62
 elev td dep_log rogo epdt dldid qual
 1422.0 33.0 4.0 000200 000100 n
 pickup plnum stop shear thick seammin min
 1 122520 16.00 18.30 1.20 0 36 UNDEFINED

 \$1111d cat_id a top rg e re re note note nte orig
 1925691 425260 5 46 19 18 18 HE -254.0 -922.0 03e15 PC0019
 LEXCO TESTING LTD. 62
 elev td dep_log rogo epdt dldid qual
 1417.4 18.2 37.7 1.1 000200 000100 n
 pickup plnum stop shear thick seammin min
 1 122520 16.00 11.10 0.20 0 40 UNDEFINED

 \$1111d cat_id a top rg e re re note note nte orig
 1925692 425270 5 46 19 18 18 HE -199.0 -991.0 03e15 PC0020
 LEXCO TESTING LTD. 62
 elev td dep_log rogo epdt dldid qual
 1420.1 61.0 60.7 1.0 000200 000100 n
 pickup plnum stop shear thick seammin min
 1 122520 12.00 24.10 0.20 35 35 OMED CS
 1 122520 24.92 26.11 0.10 35 35 OMED CS
 1 122520 26.10 26.00 0.20 35 35 OMED CS

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1 122520 6.66 6.35 0.31 35 35 OMED CS
 1 122520 7.00 7.22 0.27 35 35 OMED CS
 1 122520 7.00 7.22 0.24 35 35 OMED CS

 \$1111d cat_id a top rg e re re note note nte orig
 1925693 425280 5 46 19 18 18 HE -860.0 -861.0 03e15 PC0021
 LEXCO TESTING LTD. 62
 elev td dep_log rogo epdt dldid qual
 1417.3 62.7 41.0 6.4 000200 000100 n
 pickup plnum stop shear thick seammin min
 1 122520 28.11 26.22 0.20 35 35 OMED CS
 1 122520 26.91 25.22 0.20 35 35 OMED CS
 1 122520 23.42 23.87 0.25 35 35 OMED CS
 1 122520 24.30 24.52 0.15 35 35 OMED CS

 \$1111d cat_id a top rg e re re note note nte orig
 1925694 425290 5 46 19 18 18 HE -126.0 -849.0 03e15 PC0022
 LEXCO TESTING LTD. 62
 elev td dep_log rogo epdt dldid qual
 1422.0 18.5 39.7 4.2 000200 000100 n
 pickup plnum stop shear thick seammin min
 1 122520 4.27 4.50 0.22 35 35 OMED CS
 1 122520 4.00 4.75 0.25 35 35 OMED CS
 1 122520 5.75 5.50 0.20 35 35 OMED CS
 1 122520 5.11 5.50 0.27 35 35 OMED CS
 1 122520 5.11 5.50 0.20 35 35 OMED CS
 1 122520 5.75 5.21 0.26 35 35 OMED CS

 \$1111d cat_id a top rg e re re note note nte orig
 1925710 425300 5 46 19 22 22 HE -842.0 -1122.0 03e15 PC0023
 LEXCO TESTING LTD. 62
 elev td dep_log rogo epdt dldid qual
 1420.0 121.0 121.0 3.1 001000 021000 n
 pickup plnum stop shear thick seammin min
 1 122520 18.11 19.20 1.00 0 28 UNDEFINED
 1 122520 19.20 19.51 0.31 0 36 UNDEFINED

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\$1111d cat_id a top rg e re re note note nte orig
 1925695 425230 5 46 19 18 18 HE -143.0 -865.0 03e15 PC0018
 LEXCO TESTING LTD. 62
 elev td dep_log rogo epdt dldid qual
 1422.0 61.0 60.2 1.0 000200 000100 n
 pickup plnum stop shear thick seammin min
 1 122520 7.14 7.74 0.10 35 35 OMED CS
 1 122520 7.92 8.20 0.20 35 35 OMED CS
 1 122520 8.20 8.50 0.25 35 35 OMED CS
 1 122520 18.74 21.19 0.25 35 35 OMED CS
 1 122520 21.19 21.50 0.20 35 35 OMED CS
 1 122520 22.24 22.50 0.25 35 35 OMED CS
 1 122520 22.33 22.72 0.27 35 35 OMED CS
 1 122520 28.41 28.62 0.21 35 35 OMED CS

 \$1111d cat_id a top rg e re re note note nte orig
 1925696 425240 5 46 19 18 18 HE -254.0 -922.0 03e15 PC0019
 LEXCO TESTING LTD. 62
 elev td dep_log rogo epdt dldid qual
 1417.4 18.2 37.7 1.1 000200 000100 n
 pickup plnum stop shear thick seammin min
 1 122520 17.07 17.51 0.20 35 35 OMED CS
 1 122520 17.77 18.26 0.20 35 35 OMED CS
 1 122520 18.26 18.56 0.20 35 35 OMED CS
 1 122520 20.26 20.56 0.20 35 35 OMED CS

 \$1111d cat_id a top rg e re re note note nte orig
 1925697 425250 5 46 19 18 18 HE -199.0 -991.0 03e15 PC0020
 LEXCO TESTING LTD. 62
 elev td dep_log rogo epdt dldid qual
 1420.1 60.0 60.0 2.0 000200 000100 n
 pickup plnum stop shear thick seammin min
 1 122520 6.00 6.41 0.26 35 35 OMED CS

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\$1111d cat_id a top rg e re re note note nte orig
 1925723 425302 5 46 19 22 22 HE -782.0 -1324.0 03e15 000114
 STANLEY COAL VALLEY MINING CO. LTD. 91
 elev td dep_log rogo epdt dldid qual
 1411.1 13.7 9.0 6.0 070200 001000 n
 pickup plnum stop shear thick seammin min
 1 122520 6.57 6.49 0.32 0 0 UNDEFINED

 \$1111d cat_id a top rg e re re note note nte orig
 1925724 425310 5 46 19 22 22 HE -731.0 -1127.0 03e15 000115
 STANLEY COAL VALLEY MINING CO. LTD. 91
 elev td dep_log rogo epdt dldid qual
 1420.1 65.7 6.0 3.0 070200 001000 n
 pickup plnum stop shear thick seammin min
 1 122520 22.00 22.16 0.26 0 0 UNDEFINED
 1 122520 22.00 22.31 1.23 0 0 UNDEFINED

 \$1111d cat_id a top rg e re re note note nte orig
 1925725 425320 5 46 19 22 22 HE -347.0 -331.0 03e15 PC0012
 LEXCO TESTING LTD. 62
 elev td dep_log rogo epdt dldid qual
 1422.0 30.0 31.7 1.0 000200 000100 n
 pickup plnum stop shear thick seammin min
 1 122520 18.00 18.50 1.00 0 36 UNDEFINED

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1 133783 26.82 26.94 0.12 100 50 COAL VALLEY C1
 1 133790 27.10 27.22 0.12 100 45 COAL VALLEY C1

 pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025749 426592 5 46 19 26 24 HE -620.0 -222.0 03e15 882194
 LEXCO TESTING LTD. 62
 elev td dep_log rege spotd drid qual
 1342.0 121.3 121.3 0.0 030200 070400 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133791 12.54 12.81 0.25 0 25 UNDEFINED
 1 133792 14.64 15.63 0.55 0 25 UNDEFINED
 1 133793 16.82 16.12 0.41 0 25 UNDEFINED
 1 133794 17.09 17.12 0.45 0 25 UNDEFINED

 pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025749 426592 5 46 19 26 24 HE -620.0 -222.0 03e15 882194
 LEXCO TESTING LTD. 62
 elev td dep_log rege spotd drid qual
 1342.0 121.3 121.3 17.7 030200 070400 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133795 16.47 16.17 0.70 0 25 UNDEFINED
 1 133796 17.01 17.16 0.36 0 25 UNDEFINED
 1 133797 18.38 18.77 0.39 0 25 UNDEFINED
 1 133798 19.11 19.55 0.39 0 25 UNDEFINED
 1 133799 20.35 20.55 0.37 0 25 UNDEFINED
 1 133800 21.35 21.45 0.45 0 25 UNDEFINED
 1 133801 22.83 22.35 0.45 0 25 UNDEFINED

 pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025751 426592 5 46 19 26 24 HE -620.0 -222.0 03e15 882195
 LEXCO TESTING LTD. 62
 elev td dep_log rege spotd drid qual
 1342.0 121.3 121.3 13.7 030200 070400 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133802 16.33 16.52 0.65 0 25 UNDEFINED
 1 133803 17.03 17.38 0.35 0 25 UNDEFINED

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pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025752 426592 5 46 19 26 24 HE -1032.0 -237.0 03e15 882197
 LEXCO TESTING LTD. 62
 elev td dep_log rege spotd drid qual
 1342.0 121.3 121.3 2.4 030200 070400 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133804 18.52 18.14 0.32 0 25 UNDEFINED
 1 133805 19.32 19.41 0.31 0 25 UNDEFINED
 1 133806 20.19 20.87 0.48 0 25 UNDEFINED
 1 133807 20.37 20.71 0.32 0 25 UNDEFINED
 1 133808 21.54 21.33 0.29 0 25 UNDEFINED

 pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025753 426592 5 46 19 26 24 HE -1132.0 -352.0 03e15 882198
 LEXCO TESTING LTD. 62
 elev td dep_log rege spotd drid qual
 1342.0 121.3 121.3 7.0 030200 070400 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133809 21.99 22.24 1.26 75 20 PAKAPOO FN
 1 133810 23.66 23.18 0.32 77 80 PAKAPOO FN

 pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025754 426592 5 46 19 26 24 HE -1232.0 -420.0 03e15 882199
 LEXCO TESTING LTD. 62
 elev td dep_log rege spotd drid qual
 1342.0 121.3 121.3 13.7 030200 070400 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133801 19.35 19.63 0.36 0 25 UNDEFINED
 1 133802 20.31 20.31 0.31 0 25 UNDEFINED
 1 133803 21.63 22.05 0.31 0 25 UNDEFINED
 1 133804 22.03 22.05 0.31 0 25 UNDEFINED
 1 133805 23.02 23.01 0.19 0 25 UNDEFINED

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pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025755 426592 5 46 19 26 24 HE -1310.0 -303.0 03e15 882200
 LEXCO TESTING LTD. 62
 elev td dep_log rege spotd drid qual
 1342.0 121.3 121.3 9.1 030200 070400 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133806 9.14 9.75 0.61 0 25 UNDEFINED
 1 133807 10.12 10.21 0.35 0 25 UNDEFINED
 1 133808 11.37 11.31 0.35 0 25 UNDEFINED
 1 133809 12.63 12.61 0.35 0 25 UNDEFINED
 1 133810 13.83 13.78 1.03 0 25 UNDEFINED

 pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025756 426592 5 46 19 26 24 HE -1332.0 -676.0 03e15 882201
 LEXCO TESTING LTD. 62
 elev td dep_log rege spotd drid qual
 1342.0 91.0 91.0 6.4 030200 070400 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133801 42.43 42.76 0.35 0 19 UNDEFINED
 1 133802 43.76 43.13 0.35 0 19 UNDEFINED
 1 133803 43.13 43.31 0.24 0 25 UNDEFINED
 1 133804 43.37 43.62 0.25 0 19 UNDEFINED
 1 133805 43.53 43.53 0.25 0 19 UNDEFINED
 1 133806 43.23 43.63 0.25 0 19 UNDEFINED
 1 133807 44.53 44.74 0.21 0 35 UNDEFINED
 1 133808 44.74 45.05 0.31 0 26 UNDEFINED
 1 133809 45.29 45.29 0.21 0 26 UNDEFINED
 1 133810 45.26 45.27 0.21 0 18 UNDEFINED
 1 133801 51.63 48.18 0.16 0 38 UNDEFINED

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pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025757 426592 5 46 19 26 24 HE -1462.0 -1462.0 03e15 882202
 SHELL CANADA RESOURCES LIMITED 89
 elev td dep_log rege spotd drid qual
 1342.0 124.1 124.1 9.0 030100 070100 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133802 25.06 27.00 0.72 0 25 UNDEFINED
 1 133803 28.07 29.37 1.32 0 25 UNDEFINED
 1 133804 29.93 30.99 0.92 0 25 UNDEFINED
 1 133805 31.28 32.72 0.51 0 25 UNDEFINED
 1 133806 32.03 32.03 0.25 0 25 UNDEFINED
 1 133807 182.72 182.87 1.26 0 25 UNDEFINED
 1 133808 184.34 184.05 0.61 0 25 UNDEFINED
 1 133809 187.31 187.67 0.27 0 25 UNDEFINED
 1 133810 187.31 187.67 0.27 0 25 UNDEFINED
 1 133801 197.97 196.51 0.65 0 25 UNDEFINED

pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025758 246720 5 46 19 26 24 HE -462.0 -864.7 03e15 882203
 LUSCAB LTD. 64
 elev td dep_log rege spotd drid qual
 1342.0 92.0 92.0 18.0 030100 070100 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133802 7.52 12.30 1.36 0 25 UNDEFINED
 1 133803 12.31 20.37 0.62 0 25 UNDEFINED
 1 133804 20.51 20.51 0.25 0 25 UNDEFINED

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pitid cat_id a_tup rg_a rg_b re_re meta meta_mis orig
 1025760 246720 5 46 19 26 24 HE -462.0 -1267.0 03e15 882203
 LUSCAB LTD. 64
 elev td dep_log rege spotd drid qual
 1342.0 92.0 92.0 22.0 030100 070100 N

 pittyp pitnum dep depth shape thick seammin min cnc_mis
 1 133805 2.41 9.00 2.47 0 25 UNDEFINED
 1 133806 5.16 8.20 2.04 0 25 UNDEFINED
 1 133808 19.36 20.93 0.77 0 25 UNDEFINED

oild_cat_id = cup re s ro re note note note ms orig
1023817 423602 5 46 19 27 27 HE -785.0 -183.0 03e15 P00294
LEXCO TESTING LTD. 62
elev td dep_lev rogo spot grid qual
1342.0 75.2 38.3 5.4 020200 070400 N
pittyp_pitnum stop dbaro thick seamm_min enc_nhr
1 134622 39.71 35.10 0.39 32 30 ORED CS
1 134623 39.71 35.21 0.39 32 30 ORED CS
1 134624 39.71 35.31 0.39 32 30 ORED CS
1 134625 39.71 35.41 0.39 32 30 ORED CS
1 134626 39.71 35.51 0.40 32 30 ORED CS
1 134627 39.71 35.61 0.40 32 30 ORED CS

oild_cat_id = cup re s ro re note note note ms orig
1023818 423611 5 46 19 28 28 HE -619.0 -393.0 03e15 P00295
LEXCO TESTING LTD. 62
elev td dep_lev rogo spot grid qual
1339.7 121.9 116.1 1.0 001000 031100 N
pittyp_pitnum stop dbaro thick seamm_min enc_nhr
1 134628 21.37 21.27 0.26 0 0 UNDEFINED
1 134629 21.37 20.61 0.18 0 0 UNDEFINED
1 134630 21.37 20.59 0.21 0 0 UNDEFINED
1 134631 21.37 20.57 0.21 0 0 UNDEFINED
1 134632 21.37 20.55 0.21 0 0 UNDEFINED
1 134633 21.37 20.53 0.21 0 0 UNDEFINED
1 134634 21.37 20.51 0.21 0 0 UNDEFINED
1 134635 21.37 20.49 0.21 0 0 UNDEFINED
1 134636 21.37 20.47 0.21 0 0 UNDEFINED
1 134637 21.37 20.45 0.21 0 0 UNDEFINED

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oild_cat_id = cup re s ro re note note note ms orig
1026626 206439 5 46 20 22 22 HE -149.0 -49.0 03e15 000009
SHELL CANADA RESOURCES LIMITED 69
elev td dep_lev rogo spot grid qual
1012.1 137.2 0.0 0.0 761000 010100 N
pittyp_pitnum stop dbaro thick seamm_min enc_nhr
1 137585 14.97 15.39 0.33 0 0 UNDEFINED
1 137586 16.51 16.78 0.16 0 0 UNDEFINED
1 137587 16.66 16.81 0.17 0 0 UNDEFINED
1 137588 16.81 16.95 0.18 0 0 UNDEFINED
1 137589 17.11 17.35 0.21 0 0 UNDEFINED
1 137590 17.16 17.37 0.21 0 0 UNDEFINED
1 137591 17.16 17.38 0.21 0 0 UNDEFINED
1 137592 17.16 17.39 0.21 0 0 UNDEFINED
1 137593 17.16 17.40 0.21 0 0 UNDEFINED
1 137594 17.16 17.41 0.21 0 0 UNDEFINED
1 137595 17.16 17.42 0.21 0 0 UNDEFINED
1 137596 17.16 17.43 0.21 0 0 UNDEFINED
1 137597 17.16 17.44 0.21 0 0 UNDEFINED
1 137598 17.16 17.45 0.21 0 0 UNDEFINED
1 137599 17.16 17.46 0.21 0 0 UNDEFINED
1 137600 17.16 17.47 0.21 0 0 UNDEFINED

oild_cat_id = cup re s ro re note note note ms orig
1026627 206443 5 46 20 22 22 HE -785.0 -183.0 03e15 000009
SHELL CANADA RESOURCES LIMITED 69
elev td dep_lev rogo spot grid qual
1000.0 37.6 0.0 1.0 761000 010100 N
pittyp_pitnum stop dbaro thick seamm_min enc_nhr
1 137502 27.19 27.62 0.44 0 0 UNDEFINED
1 137503 27.19 27.66 0.42 0 0 UNDEFINED

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oild_cat_id = cup re s ro re note note note ms orig
1023821 423609 5 46 19 28 28 HE -614.0 -1571.0 03e15 P00292
LEXCO TESTING LTD. 62
elev td dep_lev rogo spot grid qual
1336.0 121.3 121.3 5.6 020200 070400 N
pittyp_pitnum stop dbaro thick seamm_min enc_nhr
1 134628 27.45 26.91 0.36 0 0 UNDEFINED

oild_cat_id = cup re s ro re note note note ms orig
1023823 423607 5 46 19 28 28 HE -1329.0 -1472.0 03e15 P00293
LEXCO TESTING LTD. 62
elev td dep_lev rogo spot grid qual
1336.0 121.4 120.3 4.9 001000 031100 N
pittyp_pitnum stop dbaro thick seamm_min enc_nhr
1 134629 26.66 26.09 0.35 20 20 ORED CS
1 134630 26.66 26.09 0.35 20 20 ORED CS
1 134631 26.66 26.09 0.35 20 20 ORED CS
1 134632 26.66 26.09 0.35 20 20 ORED CS
1 134633 26.66 26.09 0.35 20 20 ORED CS
1 134634 26.66 26.09 0.35 20 20 ORED CS
1 134635 26.66 26.09 0.35 20 20 ORED CS
1 134636 26.66 26.09 0.35 20 20 ORED CS
1 134637 26.66 26.09 0.35 20 20 ORED CS
1 134638 26.66 26.09 0.35 20 20 ORED CS
1 134639 26.66 26.09 0.35 20 20 ORED CS
1 134640 26.66 26.09 0.35 20 20 ORED CS
1 134641 26.66 26.09 0.35 20 20 ORED CS
1 134642 26.66 26.09 0.35 20 20 ORED CS
1 134643 26.66 26.09 0.35 20 20 ORED CS
1 134644 26.66 26.09 0.35 20 20 ORED CS
1 134645 26.66 26.09 0.35 20 20 ORED CS
1 134646 26.66 26.09 0.35 20 20 ORED CS
1 134647 26.66 26.09 0.35 20 20 ORED CS
1 134648 26.66 26.09 0.35 20 20 ORED CS
1 134649 26.66 26.09 0.35 20 20 ORED CS
1 134650 26.66 26.09 0.35 20 20 ORED CS

oild_cat_id = cup re s ro re note note note ms orig
1024023 246421 5 46 20 22 22 HE -845.0 -463.0 03e15 000010
SHELL CANADA RESOURCES LIMITED 69
elev td dep_lev rogo spot grid qual
1439.0 192.1 0.0 1.0 761000 010100 N
pittyp_pitnum stop dbaro thick seamm_min enc_nhr
1 137502 27.19 26.91 0.35 0 0 UNDEFINED

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oild_cat_id = cup re s ro re note note note ms orig
1026020 206470 5 46 20 22 22 HE -632.0 -1144.0 03e15 000009
SHELL CANADA RESOURCES LIMITED 69
elev td dep_lev rogo spot grid qual
1460.0 31.4 0.0 1.0 761000 031100 N
pittyp_pitnum stop dbaro thick seamm_min enc_nhr
1 137504 15.00 16.01 0.74 0 0 UNDEFINED
1 137505 15.00 16.01 0.74 0 0 UNDEFINED
1 137506 15.00 16.01 0.74 0 0 UNDEFINED
1 137507 15.00 16.01 0.74 0 0 UNDEFINED

oild_cat_id = cup re s ro re note note note ms orig
1026626 206406 5 46 20 22 22 HE -345.0 -551.0 03e15 000009
SHELL CANADA RESOURCES LIMITED 69
elev td dep_lev rogo spot grid qual
1400.0 30.1 0.0 0.0 761000 010100 N
pittyp_pitnum stop dbaro thick seamm_min enc_nhr
1 137510 1.22 1.43 0.27 0 0 UNDEFINED
1 137511 1.22 1.43 0.26 0 0 UNDEFINED
1 137512 1.22 1.43 0.26 0 0 UNDEFINED
1 137513 1.22 1.43 0.26 0 0 UNDEFINED
1 137514 1.22 1.43 0.26 0 0 UNDEFINED
1 137515 1.22 1.43 0.26 0 0 UNDEFINED
1 137516 1.22 1.43 0.26 0 0 UNDEFINED
1 137517 1.22 1.43 0.26 0 0 UNDEFINED
1 137518 1.22 1.43 0.26 0 0 UNDEFINED
1 137519 1.22 1.43 0.26 0 0 UNDEFINED
1 137520 1.22 1.43 0.26 0 0 UNDEFINED

oild_cat_id = cup re s ro re note note note ms orig
1026623 206441 5 46 20 24 24 HE -1480.0 -764.0 03e15 000007
SHELL CANADA RESOURCES LIMITED 69
elev td dep_lev rogo spot grid qual
1300.0 79.2 0.0 0.0 761000 010100 N
pittyp_pitnum stop dbaro thick seamm_min enc_nhr
1 137510 27.43 27.95 0.32 0 0 UNDEFINED
1 137511 28.92 28.37 0.35 0 0 UNDEFINED

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1 137429 25.25 25.42 0.23 0 0 UNDEFINED
 1 137221 25.30 26.21 0.14 0 0 UNDEFINED
 1 137422 26.43 26.63 0.13 0 0 UNDEFINED

 oilid cat_id n_twp rg s re rc matc matc matc matc orig
 1026022 246520 5 46 20 23 25 -1005.4 -1157.3 03e15 000013
 SUEMAR LTD.
 44
 elev td dep_log zogo cpdt drid qual
 1425.6 72.2 0.0 731100 021000 x
 pitktyp pltnum dtop dbase thick seanno min
 1 137623 37.36 37.41 0.25 0 0 UNDEFINED

 oilid cat_id n_twp rg s re rc matc matc matc matc orig
 1026022 246546 5 46 20 23 25 NE -1003.5 -1005.0 03e15 000022
 OIL AND/OR GAS WELL
 72
 elev td dep_log zogo cpdt drid qual
 1413.3 506.6 0.0 6.0 731100 021000 x
 pitktyp pltnum dtop dbase thick seanno min
 1 137624 388.38 389.13 1.21 0 0 UNDEFINED
 1 137625 389.15 391.35 1.22 0 0 UNDEFINED
 1 137626 401.77 407.21 2.44 0 0 UNDEFINED

 oilid cat_id n_twp rg s re rc matc matc matc matc orig
 1026021 246536 5 46 20 23 26 NE -1357.9 -513.0 03e15 000001
 SHELL CANADA RESOURCES LIMITED
 89
 elev td dep_log zogo cpdt drid qual
 1524.6 231.1 0.0 5.0 761100 021000 x
 pitktyp pltnum dtop dbase thick seanno min
 1 137427 19.51 20.12 0.41 0 0 UNDEFINED
 1 137428 22.41 22.81 0.28 0 0 UNDEFINED
 1 137429 22.93 23.22 0.37 0 0 UNDEFINED
 1 137430 44.56 45.11 0.55 0 0 UNDEFINED
 1 137431 45.61 46.16 0.42 0 0 UNDEFINED
 1 137432 53.27 54.49 0.18 0 0 UNDEFINED
 1 137433 169.06 169.49 0.09 0 0 UNDEFINED

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oilid cat_id n_twp rg s re rc matc matc matc matc orig
 1026013 246397 5 46 20 21 27 NE -402.3 -422.3 03e15 000013
 SHELL CANADA RESOURCES LIMITED
 89
 elev td dep_log zogo cpdt drid qual
 1544.7 51.2 0.0 3.0 761200 021000 Y
 pitktyp pltnum dtop dbase thick seanno min
 1 137620 32.13 32.31 0.18 0 0 UNDEFINED
 1 137620 37.44 37.59 0.20 0 0 UNDEFINED
 1 137621 38.03 38.59 0.49 0 0 UNDEFINED
 1 137622 38.43 38.82 0.42 0 0 UNDEFINED
 1 137623 39.21 40.51 0.42 0 0 UNDEFINED
 1 137624 40.72 41.27 0.35 0 0 UNDEFINED
 1 137625 41.57 41.95 0.32 0 0 UNDEFINED
 1 137626 42.92 43.33 0.21 0 0 UNDEFINED
 1 137627 43.59 44.34 0.38 0 0 UNDEFINED
 1 137628 44.26 44.39 0.12 0 0 UNDEFINED

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 SHELL CANADA RESOURCES LIMITED
 89
 elev td dep_log zogo cpdt drid qual
 1421.0 81.4 0.0 4.0 761100 021000 x
 pitktyp pltnum dtop dbase thick seanno min
 1 137426 38.43 38.49 0.06 0 0 UNDEFINED

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Appendix 4. 83C/15 - Palynological Analysis of AGS Samples Collected in 1993

**PALynoLOGICAL ANALYSIS OF
SAMPLES FROM THE COAL VALLEY
AREA, ALBERTA**

by
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Project 93.10
October 1993

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Polyology Samples '93 ... Coal Composition Project

RC93-1A ; 537 540E 5859 532N ; 83C/16

RC93-5 ; 536 400E 5859 780N ; 83C/16

RC93-6 ; 534 662E 5859 815N ; 83C/16

RC93-7 ; 529 102E 5870 587N ; 83C/15

RC93-8 ; 528 185E 5871 565N ; 83C/15

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SECTION 1

INTRODUCTION

Five samples from the Coal Valley area of Alberta were processed for palynological analysis. Most yielded rich assemblages but RC93-6 was relatively poor. Four of the samples are clearly Maastrichtian in age but the result for RC93-1A is equivocal despite the fact that the sample is from the Coalspur Beds of Palaeocene age. The results are summarised below and described in detail in Section 2.

Sample	Age
RC93-1A	Palaeocene
RC93-5	early Maastrichtian
RC93-6	early Maastrichtian
RC93-7	early Maastrichtian
RC93-8	early Maastrichtian

SECTION 2

RESULTS

SAMPLE: RC93-1A
Age: Palaeocene, on field evidence

Remarks

This sample comes from the Palaeocene Coalspur Beds but the assemblage recovered is unusual. It lacks the Palaeocene angiosperm pollen association which is normally found in these beds but it contains several typically Cretaceous spore species such as *Foraminisporis wonthaggiensis*, *Cicatricosisporites* spp., *Eucommiidites minor* and *Tigrisporites* sp. which were presumably reworked.

Algal cysts of the *Schizosporis* type are abundant but have little stratigraphic value. They occur in the Cretaceous but a "spike" in their abundance has been observed in the basal Palaeocene in some western Canadian localities. This is obviously a response to the environment.

Despite the excellent recovery, there are insufficient data to confirm the age.

Significant species

Schizosporis spp. (A)
Cyathidites spp. (A)
Cicatricosisporites spp.
Tigrisporites sp.

Bisaccate pollen (A)
Lycopodiumsporites sp.
Eucommiidites minor
Angiosperm pollen (R)

SAMPLES:

Age:

RC9-5, 6, 7, 8

Late Cretaceous, early Maastrichtian

Remarks

All four samples contain angiosperm pollen species typical of the Maastrichtian. The species variants recorded are usually found in the early Maastrichtian. No late Maastrichtian forms are present.

Sample RC93-5 contains abundant *Foraminisporis wonthaggiensis* and *Balmeisporites* spp. with small numbers of *Aquilapollenites amplus* and *A. augustus*. Rare brackish or freshwater microplankton are also present.

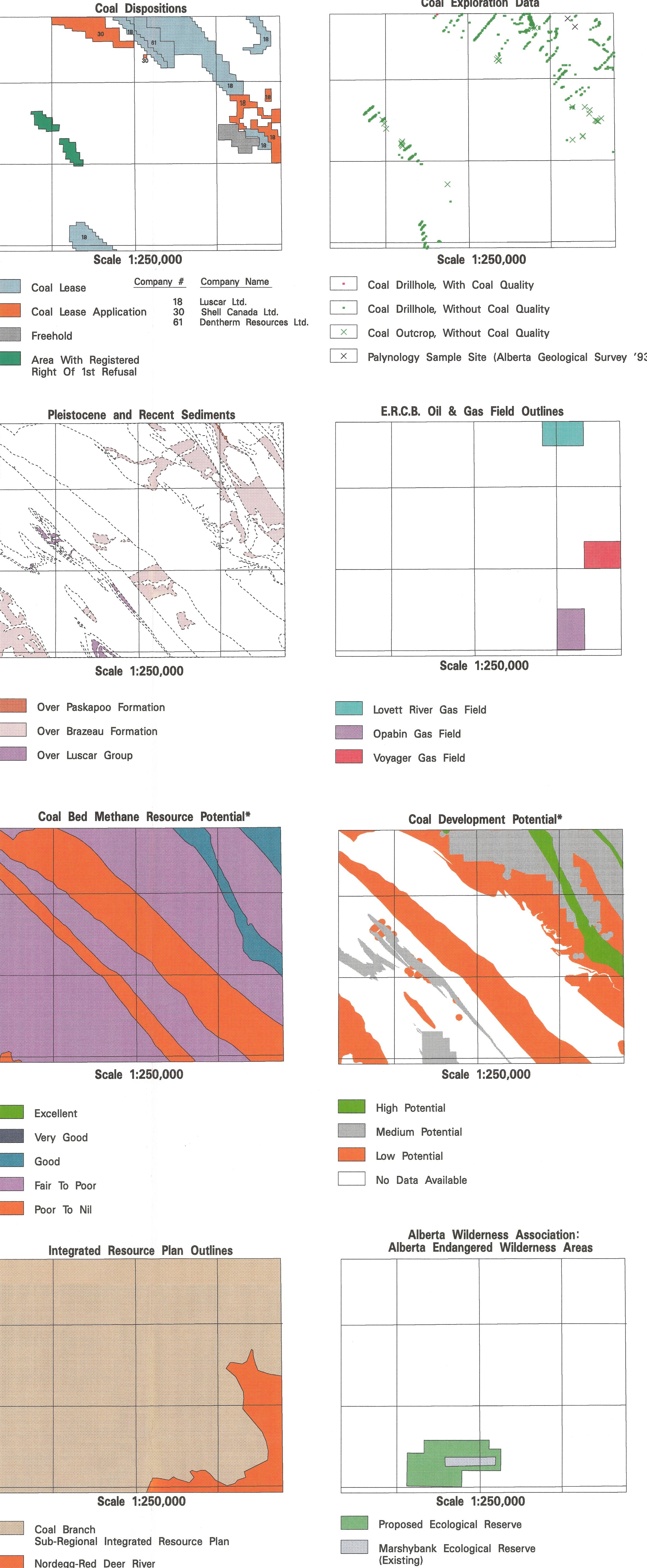
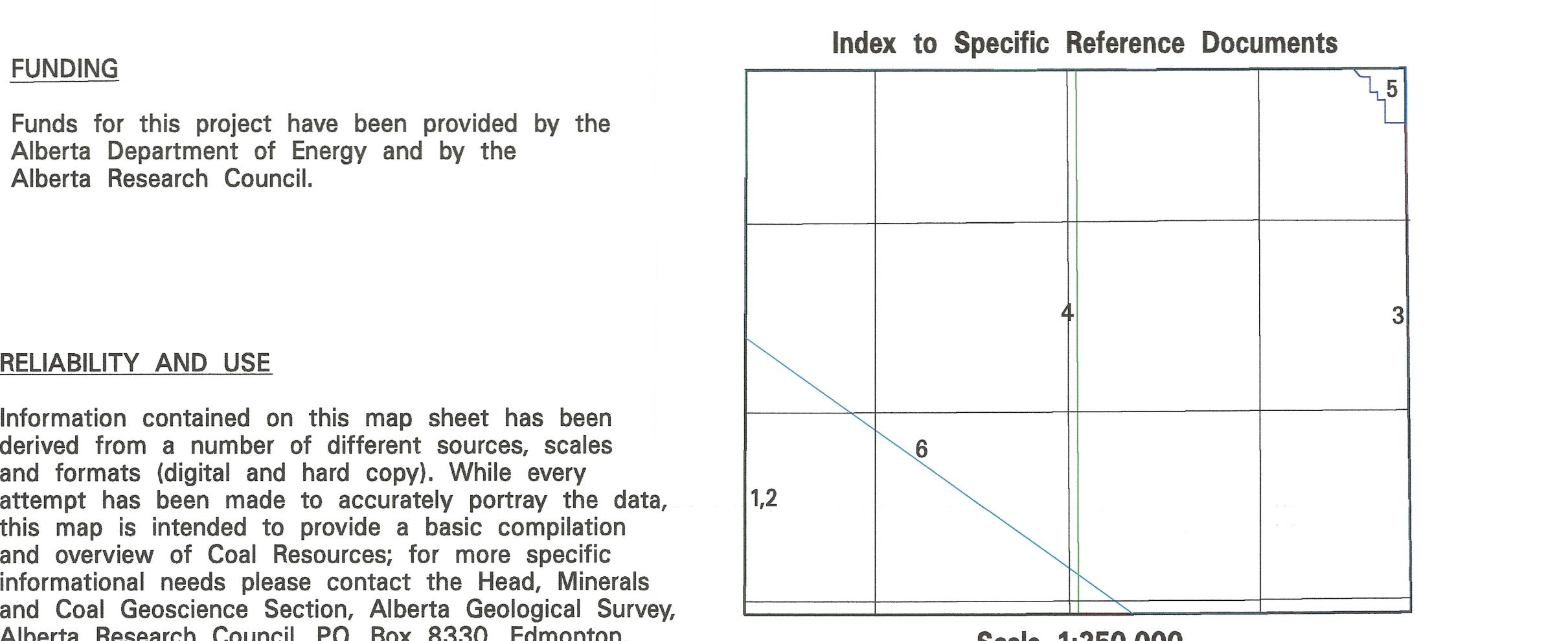
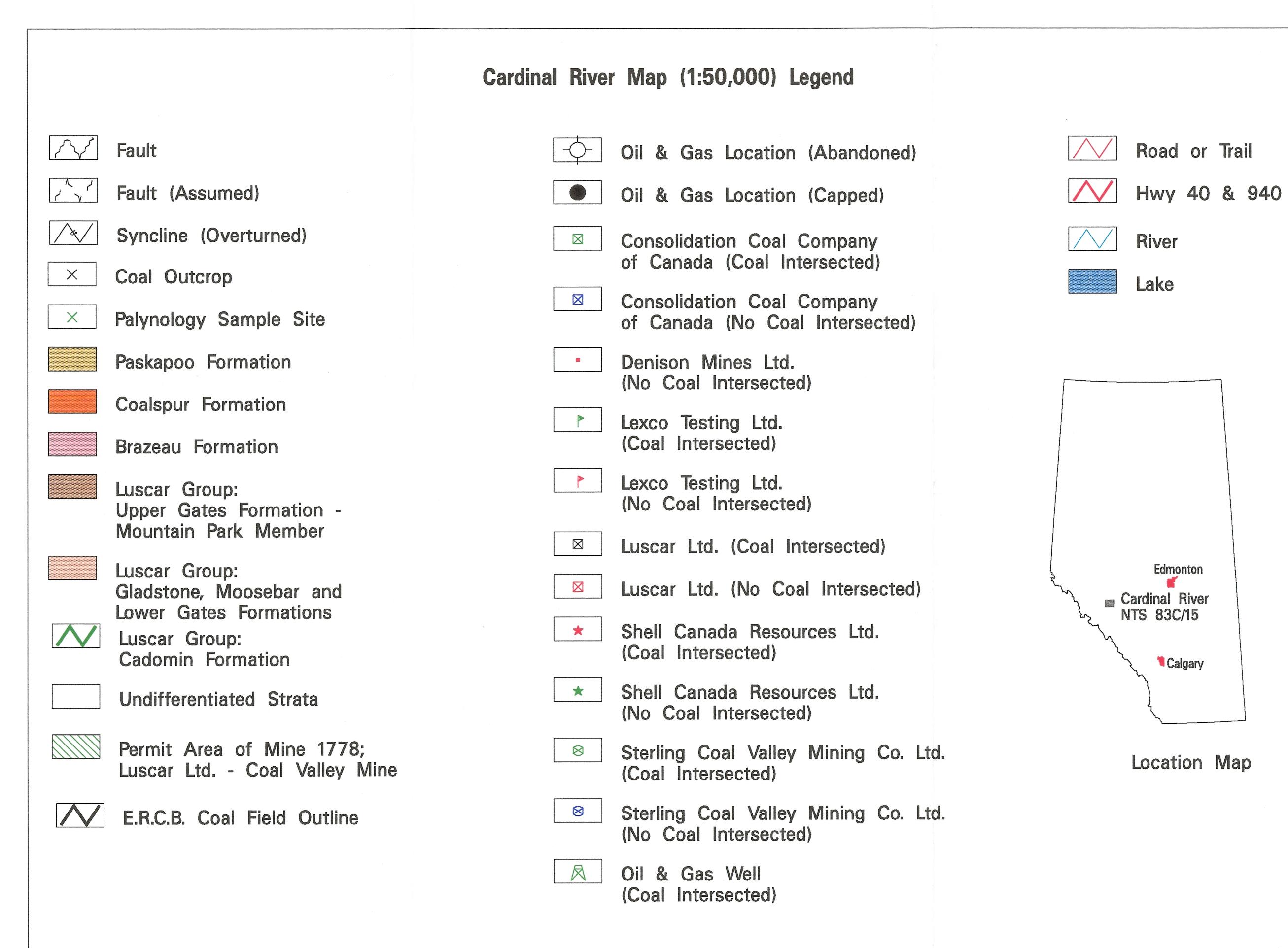
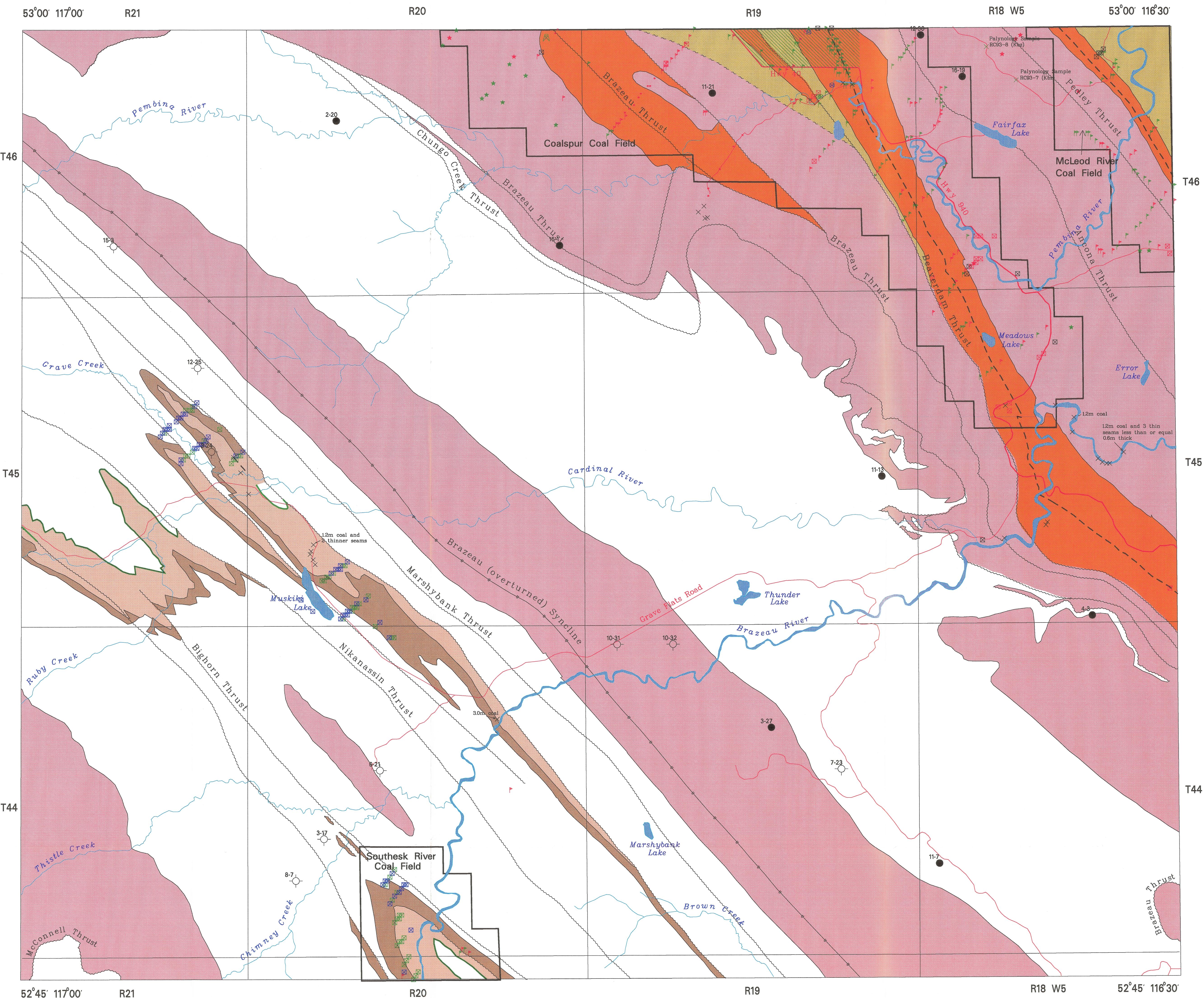
Sample RC93-6 is dominated by fusinite and palynomorphs are rare. A specimen of *A. funkhauserii* confirms the age.

Sample RC93-7 yielded numerous early Maastrichtian variants of *Pulcheripollenites krempii* and *Manicorpus* sp. as well as *A. quadrilobus*.

Sample RC93-8 contained numerous *Aquilapollenites* species including *A. aff. amplus*, *A. cf. quadrilobus*, *A. funkhauserii* and *A. cf. stelkii*. *Siberiapolis* sp. also confirms the early Maastrichtian age since this species does not range into the late Maastrichtian.

Significant species

RC93-5	<i>Aequitriradites spinulosus</i> <i>Foraminisporis wonthaggiensis</i> (A) <i>Eucommiidites minor</i> <i>Aquilapollenites amplus</i> <i>Pulcheripollenites krempii</i> <i>Tetranguladinium</i> sp.	<i>Cicatricosporites</i> spp. <i>Balmeisporites</i> spp. (A) <i>Schizosporis</i> spp. (R) <i>A. augustus</i> <i>Cranwellia</i> sp. Dinocyst fragments
RC93-6	<i>Aquilapollenites funkhauserii</i>	<i>Balmeisporites</i> sp.
RC93-7	<i>Pulcheripollenites krempii</i> <i>Manicorpus</i> spp. <i>Schizosporis</i> spp.	<i>Orbiculapolis</i> aff. <i>globosus</i> <i>Aquilapollenites quadrilobus</i> <i>Foraminisporis wonthaggiensis</i>
RC93-8	<i>Aquilapollenites</i> aff. <i>amplus</i> <i>A. funkhauserii</i> <i>Siberiapolis</i> sp.	<i>A. cf. quadrilobus</i> <i>A. cf. stelkii</i>



Regional Coal Mapping Cardinal River, Alberta - NTS 83C/15

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Original Compilation: 1992
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* ELAD Enterprises Inc.