CDR WOOD BUFFALO C74

Drilling Authority No. 369
Date Issued 21 March 1969

WELL NAME CDH Wood Buffalo C-74
FIELD Area:
LOCATION: Unit C Section 74 Grid 60-40-114-30
Latitude 60-33-07.79 Longitude 114-44-05.02
From Established Reference Marker

U.W.L.R. 60.55216 — 114.73472
U.W.I. 300074604011430O

Rig Release Date: 7/5/69
Status
Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
March 21, 1969	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
12-12-64	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well History Supplement.
Nov 26/69	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells — Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells — Vitter's Method.
	M.P.R. — Oil — Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale ..... Small scale .....

NANR 52-90 (7-65)

Drilling Authority No. 369
Date Issued March 21, 1969

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

WELL COMPLETION DATA

To be submitted in duplicate within thirty days after the completion, rework, abandonment, recompletion or suspension of every well.

Well name and number: CDR Wood Buffalo C-74-60-40-114-30

Permit No. 4734 Lease No.

Central-Del Rio Oils Limited (Permittee, Licensee, Lessee) Exploratory Licence No. 1115

Central-Del Rio Oils Limited (Operator) Exploratory Licence No. 1115

Location: Unit G Section 74 Grid 60°40'; 114°30'

Latitude 60° 33' 07.79" Longitude 114° 44' 05.02"

From Established Reference Marker NE. CR. 36-132-5 W5

Universal Well Location Reference Lat. 60.55216° N., Long. 114.73472° W.

	DATE	DEPTH
Spudded	Apr 6/69	surface
Suspended		
Resumed Operations		
Finished Drilling	May 4/69	1191
Deepened		
Complete (gas/oil)		
Abandoned	May 6/69	
Rig released	May 5/69	

Pool(s) Wildcat

Interval(s) open to production Dry and Abandoned

Elevation: Gr. 863 K.B. n/a

Rig No. 1

Drilling Contractor Apollo Exploration Ltd.

Contractor's Business Licence No.

CASING RECORD

Casing Size (inches)	Grade	Weight	Amount	Set at —	Sacks of Cement and Additives
1. 2 7/8"	BX	4.7	152	152	4 sacks of cement
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION	
	Depths	Sub-Sea
Watt Mountain	317	546
Sulphur Point	328	535
Muskeg	431	432
Keg River	849	14
Keg River Platform	1022.3	-159.3
Chinchaga	1171	-308

CORE RECORD

From	To	Rec.	From	To	Rec.
Continuous core from surface to T.D. See Section II of Report 100% recovery					

LOG RECORD

Run No.	Type of Log	From	To
	No Logs Run		

IAND 52-90(2) (3-67)

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
May 5/69	T.D.	800	5 sacks of cement
May 5/69	200	surface	7½ sacks of cement
			Plate welded on top and identification marker erected.

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks

SERVICING RECORD (Acidizing, Fracing, etc.)

Date	From	To	Remarks

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	I.F.B.H.P.	F.F.B.H.P.	I.H.P.	F.H.P.	REMARKS

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks

PRESENT STATUS OF WELL

Oil		(Interval)
Gas		(Interval)
Dry	X	Abandon
Susp.		

Company Central-Del Rio Oils Limited

Signed by [signature] (W. J. Scott)

Title Superintendent of Operations

Date November 28, 1969

Forms to be prepared in duplicate and forwarded to the Oil Conservation Engineer, Calgary, Alberta.

File No. .....
Drilling Authority No. 360

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
[redacted]
OIL AND MINERAL DIVISION

Application to Abandon a Well ~~or Suspend Drilling~~

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval to abandon, to suspend drilling:—

Name and number of well ..... CGR Wood Buffalo C-74 60-40-114-30 .....
Location: Unit C Section 74 Grid 60°40': 114°30' .....
Latitude 60° 33' 07.79" Longitude 114° 44' 05.02" .....
From Established Reference Marker MK. CR. 36-132-6 W5 .....
Universal Well Location Reference Lat. 60.55216° N., Long. 114.73472° W. .....
Permit No. 4734 Lease No. .....

Central-Del Rio Oils Limited .....
(Operator, Licensee, Lessee)

Date of commencement of proposed program May 5, 1969 .....

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at .....
Gas at .....
Water at .....
Total Depth 1191 Date of last operations May 4, 1969 .....
Present condition of well Dry Hole .....
.....
.....
.....

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 3 7/8"	4.7#/ft.	152	152	4 sacks of cement	none
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	T.D. to 800'	Chinchaga, Keg River		
		Platform, Keg River	5	
2	300' to surface	Slave Point	7½	

Cut off casing 3 feet below ground level and cap with a welded plate and sign post.

The following logs have been run none .....
Other operations proposed none .....
.....
Operations to be carried out by Apollo Explorations Ltd. Contractor Licence No. .....
Address 2 - 1347 12th Avenue S.W., Calgary, Alta. Address .....
Responsible Agent in field D. McTavish .....
Dated at Calgary, Alberta, this 4th Day of May 19 69
Signed by ..... (W. J. Scotchmpany Central-Del Rio Oils Limited
Title Operations Superintendent Operator's Exploratory Licence No. 1115 & 1288

Note:—The Oil Conservation Engineer's office must be notified before work is commenced.

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

This application has been examined and proposed programme approved, subject to the following conditions:

.....
Confirming oral approval, including item No. 3, as given
by Mr. G. E. Blue on the 3rd May 1969.
.....

Dated 12th December, 19 69 .....
Oil Conservation Engineer

Forms to be submitted in triplicate to Oil Conservation Engineer, Department of Indian Affairs and Northern Development, Calgary, Alberta.

IAND 52-90 (5) (3-67)

Drilling Authority No. 369

Project No.

File No.

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Application for a Drilling Authority

This notice of intention to begin drilling operations, in triplicate, and where required a plan of survey approved by the Surveyor General showing the target area or the site of the well must be submitted and approved before commencing operations.

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval to drill:—

Name and number of well CDR Wood Buffalo C74 60-40 114-30

Location: Unit C Section 74 Grid 60-40, 114-30

Latitude 60° 33' 07.79" Longitude 114° 44' 05.02"

From Established Reference Marker M.E. Cr 36-132-3 W5

Universal Well Location Reference Lat. 60.552164 N., Long. 114.734727 W.

Elevation: Ground K.B. feet above sea-level.

Well is expected to produce from Keg River formation at a depth of about 670 feet. Expected total final depth 1200 ft.

Area assigned to well (for Oil Conservation Engineer's use only)

Permit No. 4734 Lease No. Acreage 55206

Permittee, licensee, or lessee Central-Del Rio Oils Limited

Exploratory Licence No. 1115 (1966-67) and 1288 (1969-70)

Surface owned by Crown or Crown (If alienated submit name and address of owner and occupant.)

Petroleum and natural-gas rights owned by Crown

We propose to use the following strings of casing, either cementing or landing them as indicated below:—

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Backs of Cement
1. 8⅝"	32.9	J-55	New	130	Cement returns to surface
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment to be controlled by adequately weighted drilling fluid and blowout preventers.

Well will be drilled with Rotary Rig No. 1 by Apollo Exploration Ltd., Suite 3, (Drilling Contractor or company)

1347 - 12th Avenue S.W., Calgary 3, Alberta.

Responsible agent of applicant:— Contractor's business Licence No. Applied For

At well D. McTavish At registered office W. J. Scott

Address Weyburn, Saskatchewan Address 736 - 8th Avenue S.W., Calgary 2, Alberta.

It is understood that if changes become necessary, notice of the change of plan will be submitted.

Dated at Calgary, Alberta, this 20th day of March 1969

Signed by J. M. Gibson Company Central-Del Rio Oils Limited

Title Staff Engineer Operator's Licence No. 1115 & 1288

(For Resource Management Division use only)

APPROVED

This application has been examined and approved subject to the following conditions:—

1. The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.
2. During well drilling and testing operations, every effort shall be made to ensure that

Dated 21st March 1969 Oil Conservation Engineer (over)

Forms to be submitted to Oil Conservation Engineer, Department of Indian Affairs and Northern Development, Calgary, Alberta.

IAND 52-90-1 (3-67)

UNIQUE WELL IDENTIFIER - 300C746040114300

drilling fluids, chemicals and waste shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.

3. Surface casing shall be cemented at least 75 feet into a competent formation.

4. We draw your attention to sections 9 and 10 of the Oil and Gas Land Regulations.

Oil Conservation Engineer

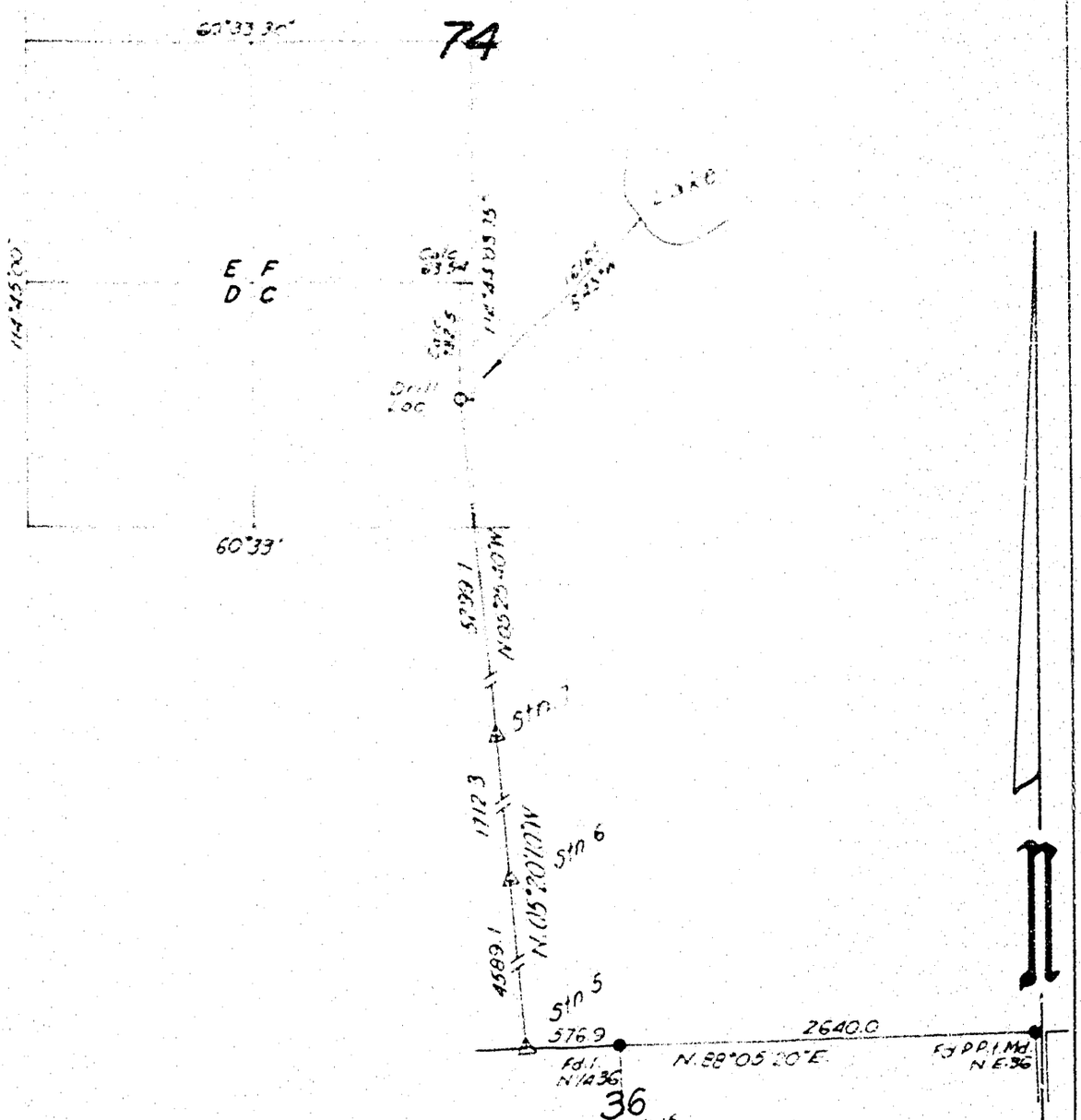
FINAL PLAN

CDR WOOD BUFFALO

C74,60-40,114-30

Latitude 60° 33' 07.79" Longitude 114° 44' 05.02"

NORTHWEST TERRITORIES



Scale: 1000' to 1"

COORDINATE TABLE

U.T.M. Values Scale Factor 0.9999 Ref. Mer. 117° 00'

Station	Bearing	Distance	North	East
N.E. 36			22,025,486.2	411.998.1
N/4 36	S. 88°05'20"W.	2640.0	22,025,398.2	409,359.6
Stn. 5	S. 88°05'20"W.	576.9	22,025,378.9	408,783.0
6	N.05°20'10"W.	4589.1	22,029,948.2	408,356.2
7	N.05°20'10"W.	1712.3	22,031,653.1	408,197.0
Well Loc	N.05°25'40"W.	5299.1	22,036,928.4	407,692.7

Survey completed 19th day of March, 1969.
Certified correct.

ALS

NOTE:
1. Distances are in feet and decimals.

CENTRAL-DEL RIO OILS LIMITED

ELEV: 863 Gr. @ Drill Loc.

DATUM: B.M. #115 @ N.E. 36 132-5W5
Elev. 870.113

MIDWEST SURVEYS CO. LTD.

C 178-69 c

26-11-4-10

WELL HISTORY RECORD

on the

DRILLING & ABANDONMENT

of

CDR Wood Buffalo C-74-[illegible]

Copy #3

26-11-4-10


OIL & GAS OPERATIONS UNIT
MAR 11 1970
OTTAWA, CANADA
Dept. of Indian Affairs & Northern Development

WELL HISTORY RECORD

on the

DRILLING & ABANDONMENT

of

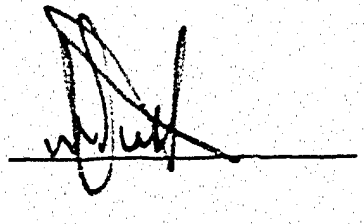
CDR Wood Buffalo C-74-60-40-114-30

Location: Latitude 60° 32' 7.79"
Longitude 114° 44' 5.02"

Northwest Territories

CIR Wood Buffalo C-74-60-40-114-30

INDEX

Approved By: 

CDR Wood Buffalo C-74-60-40-114-30

Section I - Summary of Well Data

a) Well Name and Number - CDR Wood Buffalo C-74-60-40-114-30
b) Permittee - Central-Del Rio Oils Limited
c) Name of Operator - Central-Del Rio Oils Limited
d) Location - Lat. 60.55216° N., Long. 114.73472° W. Unit C, Sec. 03, Grid 60°40';114°30'
e) Co-ordinates - Lat. 60° 33' 07.79", Long. 114° 44' 5.02"
f) Permit - No. 4734 U.W.I. 300C746040114300
g) Drilling Contractor - Apollo Exploration Limited, Rig No. 1, Rotary
h) Drilling Authority - No. 369, March 21, 1969
i) Classification - Wildcat
j) Elevation - Ground 863'
All measurements are taken from ground level
k) Spudded - April 6, 1969
l) Completed Drilling - May 4, 1969
m) Total Depth - 1191
n) Well Status - Dry and Abandoned
o) Rig Released - May 6, 1969
p) Hole Size - 1 3/4" 152' - TD; 2 7/8" Surface to 152'
q) Casing - 152' of 2 7 8" BX casing cemented with 4 sacks of cement.

Section III - Engineering Summary

a) Drill Stem Test Reports - None taken
b) Casing Record - Ran and cemented 152' of BX 2 7/8" O.D. 4.7#/ft. casing with 4 sacks of cement.
c) Bit Record - None kept according to mining custom
d) Mud Report - Water only used
e) Deviation Record - Acid bottle dip test at 300' hole vertical
f) Abandonment Plugs - 5 sacks of cement from T.D. to 800' 7½ sacks of cement from 200' to surface
g) Lost Circulation Zones - Lost circulation at 355 feet, continued drilling and regained full circulation

Section VI - Completion Summary

c) Cementation Record

May 5, 1969 ran Plug No. 1, 800' to T.D. with 5 sacks of cement

May 5, 1969 ran Plug No. 2, 200' to surface 7½ sacks of cement

CDR Wood Buffalo C-74

GEOLOGICAL TOPS	DEPTH	SUB-SEA
Watt Mountain	317	+546
Sulphur Point	328	+535
Muskeg	431	+432
Keg River	849	+14
Keg River Platform	1022.3	-159.3
Chinchaga	1171	-308

CENTRAL-DEL RIO OILS LIMITED

OFFICE MEMORANDUM

TO: M. W. McKay

SUBJECT:

COMPILED BY: D. McTavish

DATE: July 21, 1969

I will write a summary and will include as much information as possible. Some, such as formations penetrated, water, oil or gas encountered should be filled in by geological department.

CDR Wood Buffalo C-74-60-40-114-30

Spudded 6:30 p.m. April 6, 1969

Drilling surface hole with new BX casing.

April 7	8:00 a.m.	60'	overburden
April 8	8:00 a.m.	120'	BX core from bed rock 80'
April 9	8:00 a.m.	152'	BX core from 74' to 152'

April 9 Cemented 152' of BX casing with 4 sacks of cement and burnt shoe into bed rock.

April 9 Spring break up made it impossible to travel. From April 9 to April 21 was spent waiting for M-5 swamp buggy to arrive from Rainbow Lake, moving camp and contractor bringing in new crews from Lac La Ronge.

April 21 Drilled out with AX core shoe.
April 22 278' coring AX.
April 23 348'
April 24 367'
April 25 455'
April 26 588'
April 27 662'
April 28 724'
April 29 801'
April 30 902'
May 1 935' one acid dip test made at 300' hole vertical.
May 2 1000'
May 3 1070'
May 4 1141'

May 4 Night shift drilled to 1191 into Chinchaga
May 5 Ran 5 bags cement from 800' to TD 1191. Ran 7½ bags cement from 200' to surface BX casing.
May 5 to May 14 Moving from CDR Wood Buffalo to CDR Wood Buffalo C-3-60-40-114-30

CDR WOOD BUFFALO

C -74-60-40, 114-30 Lat. 60° 33' 07.79" Long. 114° 44' 05.02"

CORE DESCRIPTION

80 - 85 (5') Shale, light greyish green, fissile in part. Calcareous, abundant, blebs finely disseminated and fine veins of pyrite throughout. Scattered shell fragments, fairly numerous complete brachiopods.

85 - 89.4 (4.4") Limestone, light brown, mud textured, synerisis cracks infilled with calcite, thin wispy argillaceous laminae scattered throughout. Argillaceous content increases towards base. Scattered brachiopod valves. Basal 0.4' contains a 0.1' oblique fracture - infilled with green shale as above which contains fine fragments of brown limestone and some crinoid fragments. Minor finely disseminated pyrite.

89.4 - 89.7 (0.3') Shale, gray green as above. N.B. This shale coupled with large fracture noted in above interval would seem to indicate the core from 85 to 89.7' was boxed upside down and if so the top of the Slave Point is @ 85' not 89.7'.

Note: 5' core lost possible between 95 - 100 but more likely from the shale section, core below 100' all recovered.

89.7 - 125.7 (36') Intra formational conglomerate composed of large (up to 0.5') grading to very fine rounded to subrounded fragments set in a light brown micrograined to chalky limestone matrix. Fragments are composed of crinoid debris, coral fragments, brachiopod valves, cabbage type stroms (below 105) and scattered stachyodes. Corals present @ 110-113 appear similar to coral zone of Swan Hills area. The majority of the smaller to medium sized fragments are coated by up to 2 mm of buff algal (?) material, numerous wispy argillaceous partings are present in the matrix and swell up to surround the fragments. Some of the larger fragments with no apparent structure may represent algal mud flats. A light brown oil stain is present throughout the matrix and thus aids in outlining the fragments. There is good fluorescence and a good streaming cut with chlorethene. The core has a strong petroliferous odour, particularly so from a fresh break. Some of the large stroms are also oil stained. No visible porosity. Ineffective. Probably represents back side of a marginal shoal or patch reef because of algae coating and lack of green shales, but one would think the front should not be too far away.

125.7 - 144.6 (18.9') Limestone, light brown, fine grained (0.1 mm) set in a micrograined to chalk matrix., represents a more restricted sequence of sediments with only minor fine fossil conglomerate from 139-143. Fossils not identified. Some algal laminate present. Wispy shale partings as above present but not, as numerous. Some birdseye structures, oil stained as above with strong odour on fresh break. No visible porosity Ineffective. Good fluorescence, good streaming cut with chlorethene. Interpreted as lagoonal sequence.

144.6 - 152 (7.4') Limestone, light brown, fine grained, set in a chalky to micrograined matrix. Scattered thin walled pellets, abundant thin wispy shale partings tend to give core a laminated appearance. Scattered minor intra formational brecciation (present at base of core also) light brown stain present gives fair streaming cut - no visible porosity. Ineffective. Interpreted as lagoonal sequence.

H. C. P. Erickson

CDR WOOD BUFFALO

C-74-60-40, 114-30 Lat. 60° 33' 07.79" Long. 114° 44' 05.02'

CORE DESCRIPTION Con't. Box #6

152 - 164 (12') Limestone, light brown, continuation of previous interval. From 158.5 to 160 the grain size increases slightly with a result some v. poor inter-crystalline porosity develops. Staining and cut as before. Ineffective.

164 - 172 (8') Cemented lump limestone, light brown, scattered pellets, abundant birdseyes, infilled with calcite, minor wispy argillaceous partings as above. No visible porosity. Ineffective. Generally light brown oil stain fluoresces and gives a slow streaming cut.

172 - 184 (12') Micrograined limestone with mud matrix grading to fine grained limestone with micrograined matrix between 175 and 179'. No visible porosity. Synesisis cracks throughout No visible porosity. Light brown stain in fine grained variety, fluoresces, cuts as above. Ineffective.

184 - 220 (36') Limestone, light grey brown, crypto-micrograined with mud matrix. Strong varved appearance caused by increase in argillaceous content generally contains a light brown stain, which gives a light cut in chlorothene - No visible porosity. except @ following intervals.

194.5 to 194.8	205.3 - 205.6	219.0 - 219.3
195.8 - 196.2	211.5 - 212.0	

(total = 1.8' porosity) These intervals contain intra fossil and shrinkage vug porosity which varies from poor to fair. Vugs contain medium brown oil on fresh break. Fine crystals line vugs - fossil probably coral. Ineffective.

223 - 232 (9') Lime mud with abundant varves. Crypto to micrograined with some chalky texture near base - upper 1' of interval & lower 2 feet contain some slump like structures resembling conglomerate to give appearance of an unconformity. Scattered brachiopod spines and crinoid ossicles in upper 1'.

Top Fort Vermillion 232'

232 - 253 (21') Interbeds of dolomite, anhydrite & gypsum with thin bands of limestone and dolomitic shale. Anhydrite varies from white sugary with enclosed blebs of light brown primary anhydrite and clear gypsum to beds of light brown primary anhydrite and clear gypsum to beds of light brown primary anhydrite up to 0.5'. Dolomite occurs in beds up to 1.5' thick & consists of light greyish brown dolomitized lime mud. 1' of limestone from 237 - 238', light grey brown, mud texture. Limestone and dolomite tend

...../

232 - 253 (21') Con't. to a slightly varved appearance due to fine argillaceous bands. Shale occurs as thin bands (up to 0.1') interbedded with anhydrite, primarly from 242 - 243. The primary anhydrite and dolomite also occur as fine interbeds (1/8") giving a coarse laminated appearance. Some of these laminae may be due to algal activity. Portions of the evaporite sequence have a marbled appearance.

253 - 262 (9') Light brown lump limestone with some pellets. Cemented with calcite and infilled with clear gypsum. Interbedded with light brown anhydrite and light grey limestone mud containing floating grains of lump limestone and primary anhydrite.

262 - 268 (6') Dolomite, light brownish grey to grey, crypto crystalline, contains fine argillaceous? inclusions and clear gypsum, no porosity, some finely disseminated pyrite.

268 - 270 (2') Dolomite brown, mud textured (probably dolomitized skeletal lump) interbedded and infilled with white secondary and brown primary anhydrite.

270 - 278 (8') Dolomite as 262 - 268 with some inclusions. One foot of limestone, light brown, fine grained, cemented with calcite and chalk and containing abundant argillaceous material.

278 - 282 (4') Dolomite, light brown, v. finely crystalline, cemented. Strong smell of hydrocarbons on fresh break. Fine argillaceous partings, fluoresces, gives light streaming cut, no visible porosity. Ineffective.

282 - 284.7 (2.7') Limestone, fine grained grading towards sucrostic texture. Infilled with chalky matrix thus obliterating any inter-crystalline porosity. Strong petroliferous odor, good medium brown stain, good flash cut with chlorothene. Trace very fine organic porosity and pin point vug porosity. Ineffective. Contains fine inclusions of sphalerite, pin point to 3/4" brown, resinous, soft, white streak.

284.7 - 294 (9.3') Dolomite, light grey, very fine crystalline, cemented. Contains very fine blind vugs in part. Argillaceous, pyritic. Inclusions are present in part. One vertical healed fracture down to 290.5 contains soft white and translucent crystalline gypsum. Good medium brown stain in part and in part a light stain, staining ends at base of fracture. (core boxes stained from core). Good flash cut from heavy stain light streaming cut from remainder. Ineffective. May be some sphalerite in fracture.

294 - 302.6 (8.6') Interbedded dolomite anhydrite and gypsum. Dolomite is light grey to light brown, crypto to very fine crystalline. Cemented matrix is chalky size in part. Contains finely disseminated

..../

294 - 302.6 (8.6')
Con't,.. pyrite and black argillaceous pyritic inclusions. Contains interbedded brown - bluish grey anhydrite and white anhydrite giving core appearance of marble in part and in part a laminated appearance. (algal?).

302.6 - 317 (14.4') Limestone with thin interbeds of dolomite and anhydrite. Limestone is light grey, mud textured to very fine grained with chalky matrix, argillaceous, slightly pyritic in part, appears to be a cemented lump limestone, tight. Dolomite is a dolomitized brown lime mud with interbedded anhydrite.Core Tends to take on a slump like or fine boundinage appearance near base of interval. Thin portions of this interval have marble like appearance as above.

317 Watt Mountain

317 - 328.3 (11.3') Limestone mud, light grey, grades to very fine grained in part. Contains blebs and thin interbeds of light green waxy shale.

Sulphur Point 328'

328.3 - 337 (8.7') Limestone, light grey. Fine grained with calcite cement, fine bituminous partings in part, grades to light brown lime mud (lithographic) containing thin bands of lump limestone, cemented with clear calcite. No porosity. Light stain in lump limestone, cuts. Minor green shale partings.

337 - 339.5 (2.5') Limestone, medium brown, fine grained tending to lump structure with majority of fine inter lump porosity destroyed by calcite cement. Faint fluorescence, cuts in chlorothene. Porosity plugged with white chalk in part in basal 0.7',porosity is poor. Ineffective.

339.5 - 359.3 (15.8') Limestone, light grey brown, fine grained skeletal with much of porosity obliterated by calcite cement and some chalkiness. Porosity grades from poor to good generally with the majority being fair to good and occasional excellent. Porosity is of a coralline type and contains fine bitumen and some heavy dark brown dead oil stain. The porosity all gives a good flash cut with chlorothene. Fine infilling by apple green shale in basal 1 foot which appears to be a zone of limestone detrital infilled by green shale, clear calcite and chalk with numerous fine stylolites. Interval is effective and represents organic lattice.

359.3 - 361.0 (1.7') Limestone, light grey brown, fine grained skeletal as above. Poor coralline type porosity, good cut in chlorothene. Porosity mainly infilled with clear calcite cemente and chalk. Gradational contact with underlying interval. Poorly effective.

.../

361.0 - 376.8 (15.8') Limestone mud, light tan to medium brown, abundant fine stylolitic partings, numerous fine vertical and horizontal closed fractures infilled with clear calcite. Scattered pin point blind vug porosity, light cut down to 366. from 372 to 376.8 native sulphur is present in fractures, in blebs up to 1" across. Ineffective.

376.8 - 387.5 (11.7') Dolomite, light brown, fine subhedral, partially interlocking fair to good intercrystalline and fine vug porosity down to 382, probably dolomitized coralline porosity. Light brown stain, no cut. From 382 to 387.5 dolomite is very fine to fine, subhedral, interlocking with minor poor porosity. No shows. Upper 2' contains Native Sulphur as above. Pyrite blebs scattered throughout.

387.5 - 391 (3.5') Limestone, light grey brown. Mud textured, scattered fine stylolites. Basal 1.5' contain fine argillaceous varves with dips to 45°.

391 - 424 (33') Dolomite, light brown, micro to fine crystalline, subhedral, interlocking generally, but occasionally rhombic, is developed. Porosity grades from poor to fair intercrystalline and fine vug with occasionaly good. No stain, no cut. Minor fine varves near base, scattered fine stylolites. Clear gypsum occasionaly infilling vugs and fractures. Effective.

424 - 431 (7') Dolomite, light brown, very fine to microcrystalline, subhedral, interlocking. Trace poor intercrystalline porosity. Abundant clear gypsum infilling fractures and vugs. (0.4') clear and sugary white gypsum at 424, thin varves common at base with approx. 10-15° dip. Contact with underlying Muskeg is abrupt and at an angle of 45°, exhibiting a jagged surface. Ineffective.

Muskeg 431

431 - 473.5 (42.5') Anhydrite, dark brown, tan and bluish grey, primary with some thin interbeds of dolomite, light grey, very fine crystalline, tight, plugged with anhydrite. Also some beds up to 3' thick of dolomite, light brown, micro to fine crystalline, subhedral interlocking with pore spaces infilled by brown anhydrite and or clear gypsum. The anhydrite beds contain veins and cavity fillings of clear gypsum scattered throughout. Basal 2' is mainly a grey, micro to very fine crystalline dolomite with abundant fine blebs of pyrite scattered throughout.

473.5 504.4 (30.9') Dolomite, light brown, micro to fine crystalline, subhedral, interlocking in part and in part fine crystalline, set in dolomitized chalk matrix. Very limited intercrystalline and fine vug porosity. No shows. Contains abundant pancake stromatapoids. Anhydrite present in two 1 foot beds near top of interval and one 3 foot bed near base, slightly brownish blue grey type. Ineffective.

504.4 - 561 (56.6') Interbedded anhydrite, blue grey and dolomite, light brown, fine crystalline, subhedral interlocking. Scattered vugs,

504.4 - 561 (56.6') Continued..

infilled with clear gypsum laths. The anhydrite contains zones of shrinkage vugs up to ¼" which have been infilled with either gypsum or micro crystalline dolomite, or both in some cases, with the dolomite being last. Some minor light grey shale partings up to 2" are present throughout. The dolomite beds range up to 7' in thickness. Each of the shale partings is capped by a ¼" to ½" band of clear white gypsum in sharp contact with it.

561 - 603 (42') Anhydrite, blue-grey as with thin interbeds of shale (1" to 6") as above capped by gypsum as above, with scattered beds up to 1' thick of dolomite, light brown, micro-crystalline, subhedral, interlocking with algal laminations in part.

603 - 675 (72') Interbedded anhydrite and dolomite with shale & gypsum. Same as interval 504.4 - 561.

675 - 691 (16') Dolomite, light brown, micro to fine crystalline, subhedral, grading to near rhombic in part, with poor to good intercrystalline porosity in part. Scattered vugs, pin point to ½", partially infilled with clear gypsum. No shows. Effective.

691 - 734.4 (43.4') Interbedded anhydrite, gypsum & shale as in previous two intervals. Upper 3' has marbled appearance, basal 25.5 is pure anhydrite with minor vugs filled by gypsum (brown). Dolomites are a light brown, crypto crystalline, subhedral, interlocking type with fine bands of gypsum throughout. Probably represent an algal mat in a sebka like deposit which is likely what the previous similar dolomites represent.

734.4 - 748.5 (14.1') Dolomite, light brown, fine crystalline, subhedral with dolomitized chalk matrix plugging majority of intercrystalline porosity leaving only very poor porosity - grades downward into micro grained & dolomitized chalk texture. Finely laminated throughout with argillaceous material. Scattered pancake stroms. Some gypsum bands as above in basal 2 feet. No shows. Ineffective.

748.5 - 849 (100.5') Interbedded anhydrite as above and dolomites, light brown micro-grained to chalky. Subhedral. Local fine pin point vug and intercrystalline porosity. Salt crystals have formed on core. Doubtful effective. Majority of dolomite is tight with laminations as above. Bed thickness - dolomite 3 to 8 feet.
- anhydrite 3 to 20 feet.
Contains thin laminations of argillaceous material in most dolomite beds, and shaley laminations near top of anhydrite beds. Inclusions in anhydrite as above.

KEG RIVER 849

849 - 850 (1') Algal, laminate with some thin argillaceous partings & gypsum inclusions. Dip of the laminations varies from 5° to 45° with majority about 5 - 10°. The dolomite is light buff, chalk to crypto crystalline, with light brown argillaceous partings, dense, no shows.

850 - 855 (5')	Dolomite, light brown, fine subhedral, interlocking with poor intercrystalline and fine vug porosity grading downwards into fine rhombic dolomite with good intercrystalline porosity @ 851.7. Partially cemented, no shows, effective.
855 - 859.7 (4.7')	Dolomite, (dolomitized, skeletal with chalk matrix,) light brown, fine crystalline, subhedral, cemented, chalky matrix, poor to no intercrystalline porosity, with scattered fine fenestral type vug porosity, due in part to corals & partially collapsed shell fragments. Much of the larger vug porosity is plugged with gypsum. No shows. Poorly effective. Scattered dark brown, fine plant like fossil debris.
859.7 - 861.1 (1.4')	Dolomite, light brown, fine crystalline, subhedral to rhombic, with much of intercrystalline porosity, infilled with clear gypsum, no shows. Poorly effective.
861.1 - 900 (38.9')	Dolomite, light brown, micro to fine crystalline, subhedral, interlocking with minor intercrystalline porosity. Alternating with fine rhombic dolomite, partially cemented with fair to locally good intercrystalline and fine vug porosity. Much of the intercrystalline and larger vug porosity is plugged with clear gypsum. No shows. Overall porosity rates as poor to fair. Effective.
900 - 902 (2')	Dolomite, light brownish grey, very fine grained, cemented - grades to a fine mud texture. Scattered fine vugs due to partially collapsed fossil casts which are in part infilled with gypsum. Fine lamination of dark brown argillaceous material. Ineffective.
902 - 905.5 (3.5')	Dolomite, light brown, microcrystalline, subhedral, interlocking, with scattered fine intra fossil vug porosity containing some dolomite crystalline growth. Grades downwards to fine crystalline, subhedral, interlocking dolomite and locally fine rhombic dolomite, with good to excellent porosity. No shows. Effective. Minor gypsum plugging.
905.5 - 907.5 (2')	Dolomite, light brownish grey, very fine grained, subhedral, cemented. tight.
907.5 - 971.3 (63.8')	Organic lattice, Dolomite, light brown, fine crystalline to micro crystalline, subhedral, partially interlocking, grading to fine rhombic locally, with excellent intercrystalline porosity. Abundant intra fossil vug porosity containing fine dolomite rhombs. Porosity and permeability generally good. Majority of porosity in this interval is fine to coarse vuggy intra fossil. Gastrapods and corals recognizable. Minor black shale partings. No shows. Effective. 925 - 927 - 2 showings of sphalerite - 1 in a 2" fracture - 1/8" thick lined with sphalerite and one in a vug (½") partially filled with sphalerite. Core is missing in above described section over the following intervals.

916.5 to 921.5	933.3 to 935.3	941.3 to 942.6
946,6 to 948.4	967.3 to 968,10	

971.3 - 1014 (42.7') Crinoidal unit (Foundation unit?) dolomite, medium brown, crypto to micro crystalline, interlocking, subhedral, argillaceous with fine fractures infilled with clear gypsum lathes. No matrix porosity, scattered fine to coarse intra fossil vugs. Fairly abundant crinoid ossicles. Pelecypods? Scattered corals (both branching & cup) throughout and gastrapods are other fossils. scattered, partially open, vertical fractures. Doubtful effective.

1014 - 1016 (2') Dolomite, medium to dark brown, crypto to microcrystalline, very argillaceous with interbedded dark grey brown, dolomitic shale, occuring as wisps and up to 2" beds.

1016 - 1019 (3') Dolomite, medium brown, fine, subhedral, interlocking. Containing numerous fine vertical to horizontal fractures, healed with white dolomite. Scattered vugs have been infilled first with white dolomite and finally with clear gypsum as have some of the larger fractures. Some crinoid and coral fragments present. Scattered blebs of pyrite.

1019 - 1019.5 (0.5') Intermixture of coarse white dolomite and clear gypsum with tiny fragments of brown dolomite as above caught up in it. The brown dols contain finely disseminated pyrite.

1019.5 - 1022.3 (2.8') Dolomite, medium brown, micro to fine crystalline, subhedral. Containing dark brown, argillaceous partings and abundant coarse skeletal fragments as above which have been replaced with coarse white dolomite. Also a fine network of fractures filled with white dolomite is present.

KEG RIVER PLATFORM 1022.3

1022.3 - 1027.1 (4.8') Shale, light grey, lightly dolomitic, contains scattered blebs of finely disseminated pyrite and abundant buff colored, dolomitized crinoid fragments. Upper contact is abrupt, lower contact is gradational.

1027.1 - 1031.5 (4.4') Dolomite, medium brown, micro crystalline, tight. Crinoidal as above, contains a 6" oblique fracture infilled 1st with white dolomite and then with gypsum.

1031.5 - 1036.0 (4.5') Lime mud, light grey and light brown, contains abundant finely disseminated pyrite. Abundant crinoid fragments, scattered brachiopods, scattered calcite filled fractures.

1036 - 1058 (22') Shale, light grey, very limey, contains abundant brachipods and crinoids, boudinage structure present., definately an open marine shale. Scattered fine pyrite.

1058 - 1093 (35') Lime mud, medium brown, hard, very even textured. Numerous crinoid ossicles, scattered fine brachiopod fragments, Random dark grey, fine, wispy, argillaceous partings. Rare calcite filled, oblique fractures.

1058 - 1093 (35') Con't. Grading to a dolomitized lime mud in basal 5 feet. Occasional fracture below 1072 contains clear gypsum.

1093 - 1100 (7') Dolomite, medium brown, crypto to micro crystalline to occasional fine crystalline, subhedral, interlocking. Abundant crinoid debris, scattered coral and brachiopod fragments. Rare ½" vug. No shows, although a brown stain is present in part. Scattered wispy argillaceous partings. Ineffective.

1100 - 1132 (32') Crinoidal rich lime mud. Limestone, medium brown, mud textured, to occasional micro-grained. Contains abundant crinoids, fair amount thin shelled brachiopods. Abundant black to dark brown, argillaceous partings. Occasional thin stylolites.

1132 - 1145.5 (13.5') Dolomite, light brown, fine to medium crystalline, subhedral, interlocking. Trace intercrystalline and fine vug porosity. Ineffective. Some fine chalky dolomite plugging pore spaces. Numerous crinoid fragments, scattered fine wispy argillaceous partings. Scattered finely disseminated pyrite. Salty taste.

1145.5 - 1171 (25.5) Dolomite, light grey brown to brown, micro to fine crystalline. Trace intercrystalline porosity, majority plugged by cement and chalk textured matrix. Some intra formational breciation or slump structures in basal 12 feet. Salty taste over fine crystalline portion. (1164-66) scattered anhydrite and gypsum plugging large vugs. Ineffective.

CHINCHAGA 1171

1171 - 1191 (20') Anhydrite, grey brown, primary, with thin interbeds of dolomite, tan, mud textured. Upper 2' contains light brown, primary dolomite with interlayered fine bands of clear gypsum filling shrinkage cracks, possibly algal laminate.

T.D. 1191

H. G. P. Erickson

~~Transcription Corrections~~ CDR Files.

CDR Wood Buffalo C 74

File on well File.

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: C D R | Hole No: | Size: | Casing: | Inclination: | T D:

Property Location: Hay River | Date Began: March 16 | Date Finished:

Date	Employees	Footages	Hours	Remarks
16	D Hoadley	From	12	Went to PR to wait for truck
16	H Sokell	To	24	Coming from walrowden with truck
17	D Hoadley	From	24	On route to Hay River
17	H Sokell	To	24	
18	D Hoadley	From	14	Get to Hay River put camp material
18	H Sokell	To	14	on Jet and started to check for other
19	D Hoadley	From	12	Drying material and looking for
19	H Sokell	To	12	Crew
20	D Hoadley	From	12	Hauling to Camp and looking for drill
20	H Sokell	To	12	sites
21	D Hoadley	From	14	looking for crew in Hay River
21	H Sokell	To	14	Hauling to camp
22	D Hoadley	From	12	Building Camp
22	H Sokell	To	12	and looking for crew
23	D Hoadley	From	16	building camp
23	H Sokell	To	16	found 3 men in after noon
24	D Hoadley	From	14	working on camp site
24	H Sokell	To	14	
24	D Bingham	From	12	Bingham out here in after noon
24	H McInnis	To	0	
25	D Hoadley	From	12	Building Camp
25	H Sokell	To	12	
25	D Bingham	From	12	
26	H McInnis	To	12	

Foreman: Chuck Hoadley Authorized Company Rep.

CDR Wood Buffalo C 74

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: CDR Hole No: Size: Casing: Inclination: T.D:

Property Location: Hay River Date Began: March 15 Date Finished:

Date	Employees	Footages	Hours	Remarks
25	D Howell	From	12	finishing camp and starting to haul material to Litup (Shell Quit
25	H Sokell	To	6	
26	D Mayhem	From	12	
26	H McInnis	To	12	Same
27	D Howell	From	12	Went to town with gang to get more
27	H Mayhem	To	12	stuff and plane
27	D McInnis	From	12	
27	H	To		
28	D Howell	From	14	Worked on drill and went to get repairs
28	H Mayhem	To	10	rehired Sokell at (225 per day)
28	D McInnis	From	10	
28	H	To		
29	D Howell	From	24	hauled drill to Litup. Cat Rathclan
29	H Sokell	To	24	work all night to repair
29	D Mayhem	From	12	
29	H McInnis	To	12	
30	D Howell	From	14	repairing tractor and 1 more trip
30	H Sokell	To	14	to Litup for belts
31	D Mayhem	From	12	
31	H McInnis	To	12	cutting wood for camp
31	D Howell	From	14	Litupping and getting Clevis mark
31	H Sokell	To	14	Bell Taped
31	D McInnis	From	10	
31	H	To		

Foreman: Dick Howell Authorized Company Rep.

CDR Wood Buffalo C 74

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: CDR Hole No: 3 Size: BXT Casing: Inclination: Vert. TD:

Property Location: Hay River NWT Date Began: April 6-69 Date Finished:

Date	Employees	Footages	Hours	Remarks
Apr 1	D Lovell	From	12	Setting up
1	H McKell	To	12	
1	D Laramie	From	12	
1	H McInnis	To	12	
2	D Lovell	From	12	
2	H McKell	To	12	
2	D Laramie	From	12	
2	H McInnis	To	12	
3	D Lovell	From	12	
3	H McKell	To	12	
3	D Laramie	From	12	
3	H McInnis	To	12	
4	D Lovell	From	12	
4	H McKell	To	12	
4	D Laramie	From	12	
4	H McInnis	To	12	
4	D Lovell	From	6	
4 5	H McKell	To	12	
5	D McKell	From	12	
5	H Laramie	To	12	
5	D McInnis	From	12	
5	H Gagnon	To	12	
	D	From		
	H	To		

Foreman: Lovell Authorized Company Rep.

CDR Wood Buffalo C 74

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: C D R Hole No: 3 Size: BXT Casing: Inclination: T D:

Property Location: Hay River N W T Date Began: Date Finished:

Date	Employees	Footages	Hours	Remarks
6	D Howdle	From 0	24	went to ~~Hay~~ Enco pump report for adapter
6	H Lahill	To 31	12	Called for out shift
6	D Laramie	From 31	6	stand by and work in camp
6	H Mc Innis	To 60	6	
6	D Mc Intyre	From	6	
7	H Howdle	To 60	12	
7	D Lahill	From 90	12	
7	H Laramie	To 90	12	
7	D MacInnis	From 120	12	
7	H Mayhew	To	12	
8	D Howdle	From 120	12	
8	H Lahill	To 150	12	
8	D Laramie	From	12	
8	H MacInnis	To	12	
8	D Mayhew	From	12	
9	H Howdle	To	12	Roads all starting to go Have
9	D Lahill	From	12	trouble to get to drill area
9	H Laramie	To	12	Loads
9	D MacInnis	From	12	
9	H Mayhew	To	12	
10	D Howell	From	12	
10	H Lahell	To	12	
10	D Laramie	From	12	
10	H Mc Innis	To	12	

Foreman: Howdle Authorized Company Rep.

CDR Wood Buffalo C 74

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: C D R Hole No: Size: Casing: Inclination: T D:

Property Location: Keyhaver Date Began: Date Finished:

Date	Employees	Footages	Hours	Remarks
10	D Haydon	From		
11	H Howdle	To		
11	D Isbell	From		Went to town to find different type of transportation
11	H Laramie	To		
11	D Mackenzie	From		
11	H Mayhaven	To		
12	D Howdle	From		
12	H Isbell	To		
12	D Laramie	From		
12	H McInnis	To		
12	D Mayhaven	From		
	H	To		
	D	From		
	H	To		
	D	From		
	H	To		
	D	From		
	H	To		
	D	From		
	H	To		
	D	From		
	H	To		
	D	From		
	H	To		

Foreman: Howdle Authorized Company Rep.

CDR Wood Buffalo C 74

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: Canol Joint Ref. No. Hole No:
Property Location: Wood Buffalo Park Hay River N.W.T.

Size: A W Casing: B.X 132 Inclination: 90°
Date Began: A.X. 140 Date Finished:

TD:

Date	Employees	Footages	Hours	Remarks
14	French Parsons		8	waiting at Hay River
15	D Gerry	From Tuesday	8 ✓	Muskeg boggie not on yet impossible to go in north track
	H Frank	To	9 ✓	pick up gas and core barrel. Made one trip to Buffalo road
16	D Gerry	From Wednesday 10		Bombadier arrived at 7 00 A.M. pick up the cook
	H Frank	To	10 ✓	went out to camp. Bombadier not running good
	D Canal Fr	From Son	7 ✓	need new coil & points. Left bombadier on the road
	H	To		and walk 2 miles to camp
17	D Gerry	From Thursday	12 ✓	went to town to pick Stan Mercer & John Scott. Arrived
	H Frank	To	12 ✓	from Location at 4 00 A.M. Park Authority will not give us permission to go
	D Richard	From Cook		true the bush south side of lake. Frank & Canal.
	H Canal Vernon		12 ✓	Scout all day on north side of lake for possible
18	D	From		road to go through. Impossible
	H Gerry	To Laramie	12 ✓	Got new part for Bombadier. Working good
	D Frank	From Laramie	12 ✓	Full Crew on camp.
	H John	To Scott	12 ✓	Got permission finally from Park Authority
	D Stan	From Mercer	12 ✓	to go through South side of lake. Work all day
	H Canal	To Vernon	12 ✓	Cleaning old bush road 12 hrs 5 men
	D Richard	From Beaulieu	Cook	
19	H Gerry	To	14 ✓	moved camp 8 miles to drill site raining
	D Frank	From	14 ✓	and snow very hard going. Set up one tent
	H John	To	14 ✓	build a new sloop
	D Stan	From	14 ✓	
	H Canal	To	6 1/2 ✓	Noland in from Hay River (Hwy 6 Laramie)
	D	From		
	H	To		

Foreman: J. H. Parsons

Authorized Company Rep. J. Mc Smith

CDR Wood Buffalo C 74

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: Central Del Rio Ltd Hole No: Size: Casing: BX 136 Inclination: TD:

Property Location: Date Began: AX-140 Date Finished:

Date	Employees	Footages	Hours	Remarks
20	D Gerry	From	16 ✓	Start up 5:00 AM tearing down Steping camp #2
	H Frank	To	16 ✓	and move to drill site. Cold and 1½ inches of snow
	D John	From	14 ✓	on the ground. Set up camp #2 at drill site and
	H Stan	To	16 ✓	lined up tripat & drill not finished. Water all
	D Gerral	From	14 ✓	froze up
~~21~~	H Gerry	To		
	D Frank	From		
	H John	To		
	D Stan	From		
	H Gerral	To		
21	D Frank	From 152	12 ✓	
	H Stan	To 205	12 ✓	Cleaning out hole and drill core
	D Gerry	From	12 ✓	
	H	To		Finish lining tripat lower top stage and timed drills motor
	D John	From 205	17 ✓	17 hrs
	H Gerral	To 278	17 ✓	17 hrs
22	D Frank	From 278	12 ✓	7 hrs delay repairing B.O.P valve and repairing
	H Stan	To 318	12 ✓	generator very soft drilling and muddy
	D John	From 318	9 ✓	
	H Gerral	To 328	9 ✓	transmission came loose on drill. Motor rover
	D	From		ahead and bust the radiator
23	H John	To	12 ✓	Cooling & waiting for helper
	D Frank	From 328	13 ✓	replace transmission repair radiator
	H Stan	To 347	13 ✓	Loose water completely at 355

Foreman: J.H Rasenui Authorized Company Rep. J. McIntosh

CDR Wood Buffalo C 74

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: Central Del Rio Hole No: Size: AW Casing: Inclination: TD:

Property Location: Wood Buffalo Park Hay River N.W.T. Date Began: Date Finished:

Date		Employees	Footages	Hours	Remarks
24	D	Leach	From 367	13	
	H	Stan	To 455	13	soft soc good casing
	D	John	From	12	
	H		To		reaming & casing
25	D	Leach	From 455	12	
	H	Stan	To 537	12	soft soc good casing
25	D	John	From 537	12	Breaking in new
	H	Mark Hamel	588	12	~~Driller~~ helper
26	D	Leach	From 588	12	
	H	Stan	To 662	12	soft soc very muddy.
26	D	John	From —	12	Helper quit
	H		To		cut back down for helipart ½ hrs
	D		From		
	H		To		
	D		From		
	H		To		
	D		From		
	H		To		
	D		From		
	H		To		
	D		From		
	H		To		

Foreman: J G Leach Authorized Company Rep. K. Van Steenkiste

CDR Wood Buffalo C 74

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: Hole No: Size: Casing: Inclination: TD:

Property Location: Date Began: Date Finished:

Date	Employees	Footages	Hours	Remarks
27	D Frank	From 662	12	reinforce plateforms to use
	H Stan	To 704	12 ✓	foot clamp - soft loc. very muddy.
	D John	From 704	12 ✓	
	H Jerry	To 724	12 ✓	
28	D Frank	From 724	12 ✓	Delay 4 hrs repairing rocking new hose
	H Stan	To 764	12 ✓	for pressure pump. motor swivel.
	D John	From 764	12 ✓	Preven hose too much keep blowing out
	H Jerry	To 801	12 ✓	delay 3 hrs repairing pressure hose
29	D Frank	From 801	12 ✓	
	H Stan	To 851	12 ✓	Soft. good boring
	D John	From 851	12 ✓	
	H Jerry	To 902	12 ✓	very soft Ground
30	D Frank	From 902	12 ✓	
	H Stan	To 935	12 ✓	very soft and Sloppy
	D John	From —	12 ✓	Cleaned South line to the Rotr 4 hrs work
	H Jerry	To —	12 ✓	Stand by no night shift
1	D Frank	From 935	12 ✓	
	H Stan	To 968	12 ✓	soft very sloppy. 2 hrs Trouble water.
	D John	From 968	12 ✓	
	H Jerry	To 1000	12 ✓	one mid test at 300 ft level
2	D Frank	From 1000	12 ✓	
	H Stan	To 1039	12 ✓	soft and sloppy.
	D John	From		
	H Jerry	To		

Foreman: _____ Authorized Company Rep. _____

CDR Wood Buffalo C 74

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: Central Del Rio Ltd Hole No: Size: Casing: Inclination: TD: 1191 ft

Property Location: Wood Buffalo Park Hay River Date Began: Date Finished: may 5th

Date	Emplcyees	Footages	Hours	Remarks
3	D Leon	From 1070	12 ✓	Troubles with fuel injection
	H Stan	To 1021	12 ✓	Good coring very slow going
	D John	From 11 21	12 ✓	
	H Jerry	To 11 41	12 ✓	drill 8 hrs delay repairing oil lines and gasket
	D Frank	From 11 41	12 ✓	adjust B.O.P. swivel
	H Stan	To 11 71	16 ✓	Good coring delay repairing water pump &
	D John	From 11 71	12 ✓	
	H Jerry	To 11 91	12 ✓	drill 8 hrs. Delay repairing bent fuel pressure hose
5	D Leon	From —	12 ✓	Cored hole 1191 ft ends in lost
	H Stan	To —	12 ✓	proceed in cementing hole as required
5	D John	From —	12 ✓	
	H Jerry	To —	12 ✓	Lower 50 ft tript and finish cementing as
6	D Frank	From —	14 ✓	required from 800 ft level down the bottom and
	H Stan	To —	14 ✓	plug the hole at 200 ft level and cement all the
	D John	From —	14 ✓	way to colon of hole. very succesfully
	H Jerry	To —	14 ✓	walk the outside and inside claim line and cut all trees
7	D Frank	From	14 ✓	leaning over
	H Stan	To	14 ✓	Start moving to set up #2 Aprioximatly 10 mile very rough slow going
	D John	From	14 ✓	Impassible to get at the set up on the claim line
	H Jerry	To	14 ✓	Scout around and found an old road to move the gear
8	D Frank	From	14 ✓	in
	H Stan	To	14 ✓	1 trip of drill gear from #1 set up to #2 and one trip
	D Jerry	From	14 ✓	
	H John	To	14 ✓	to highway for gas & Casing. Core boxes

Foreman: _____ Authorized Company Rep. _____

CDR Wood Buffalo C 74

DRILLING RECORD APOLLO EXPLORATION LTD.

Company: Central Del Rio Oil Ltd. Hole No.

Size: Casing: Inclination: T D:

Property Location: Hay River N.W.T. Date Began: Date Finished:

Date	Employees	Footages	Hours	Remarks
May 9	D Frank	From	16	
	H Stan	To	16	1 trip of drill gear to set up with drill
	D John	From	16	
	H Gerry	To	16	one trip to highway for gas & supply
	D Frank	From	16	Put on new runner on sloop
	H Stan	To	16	Tear down camp and move to set # 2
	D John	From	16	
	H Gerry	To	16	put cookerie and sleeping camp not finish
	D Charlie Hiwonik		16	
	~~H Frank~~	~~To~~		~~put on new runner on sloop~~
	D Stan	From		
	H John	To		
	D Charlie	From Hiwonik		
	H Gerry	To		
	D	From		
	H	To		
	D	From		
	H	To		
	D	From		
	H	To		
	D	From		
	H	To		
	D	From		
	H	To		

Foreman: _____ Authorized Company Rep. _____