Drilling Authority No. 447

Date Issued 13-8-70

WELL NAME Banff Aquit ARCO Rat Pass K-35

FIELD ..... Area: .....

LOCATION: Unit K Section 35 Grid 68-00-135-15

Latitude 67-54-42.55 Longitude 135-21-56.83

U.W.L.R. 67.91182 --- 135.36578

U.W.I. 300K356800135150

Rig Release Date: .....

Status .....

Information Release Date ....

CHANGE OF NAME:

DATE RECEIVED		INDEX
13-8-70		Application for a Drilling Authority.
		Well Completion Data.
		Well History Report.
		Application to Amend a Drilling Authority.
		Application to change a Well Name.
11/1/71		Application to Abandon a Well or Suspend Drilling.
		Application to Alter Condition of a Well.
		Well History Supplement.
16-2-71		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.....

IAND 5270 (3-69)

Drilling Authority No. 447

Date Issued 8/13/70

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

IAND 52-90 (2) (3-70)

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 Banff Aquit ARCO Rat Pass K-35

Permit No. 4649 Lease No. Nil

Atlantic Richfield Canada Ltd. (Permittee, Licensee, Lessee) Exploratory Licence No. 1635

Banff Oil Ltd. (Operator) Exploratory Licence No. 1636

Location: Unit K Section 35 Grid 68°00' -- 135°15'

Latitude 67°54'42.55"N Longitude 135°21'56.83"W

Unique well identifier 300K356800135150

Universal Well Location Reference Lat. 67.911820°, Long. 135.36578°

	DATE	DEPTH
Spudded	10/21/70	0'
Suspended		
Resumed Operations		
Finished Drilling	12/06/70	6004'
Deepened		
Complete (gas/oil)		
Abandoned	12/12/70	6004'
Rig released	12/13/70	6004'

Pool(s) N/A

Interval(s) open to production N/A

Elevation: Gr. 67' K.B. 81'

Rig No. 3

Drilling Contractor Guthrie McLaren Drilling Ltd.

Contractor's Business Licence No. 908

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at —	Sacks of Cement and Additives
1. 13-3/8" (Conductor)	J-55	48#	65.10	63'	180 cu. ft. Permafrost cement.
2. 9-5/8"	J-55	36#	930.80	927'	360 cu. ft. Permafrost cement & 150 cu. ft. Oilwell cement.
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION Depths	ELEVATION Sub-Sea
Middle Devonian	5910'	-5829'
Cretaceous	980'	- 899'

CORE RECORD

From	To	Rec.	From	To	Rec.
5294'	5300'	5.7			
5300'	5320'	20.0			
5980'	6004'	24.0			

LOG RECORD

Run No.	Type of Log	From	To
1	DIL	4181'	928'
1	BHC-SGRC	4182'	928'
1	Lithology Overlay	5980'	3600'
1	Continuous Dipmeter	5980'	928'
2	FDC	5990'	928'
2	DIL	5986'	3650'
2	SNP	5992'	50'
2	BHC-SGRC	5980'	3650'
1	Hydrocarbon Well Log	6004'	20'
1	Velocity Survey	4182'	928'
2	"	5980'	3650'

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
12/12/70	5904'	6004'	35 saqks Oilwell, no feel
12/12/70	3700'	3850'	80 sacks Oilwell, felt plug @ 3680'.
12/12/70	857'	957'	80 sacks Oilwell, felt plug @ 820'.

Surface casing cut 3' below ground, cemented w/ 5 sacks cement and welded on steel plate. Five foot riser and name plate installed.

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks
	N/A		

SERVICING RECORD (Acidizing, Fracing, etc.)

Date	From	To	Remarks
	N/A		

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
1	12/8/70		3750'	3804'										Misrun; tool failed to open, Rec. 8' of mu
2	12/9/70		3750'	3804'										Misrun; tool failed to open.
3	12/10/70		4978'	5031'	120	70	120	not obtained	2205	579	778	2312	2312	Office corrected figures; rec. 770' of mud 450' of salt water.
4	12/10/70		1900'	1954'										Misrun
5	12/11/70		1907'	1955'										Misrun

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
C71-2717-1	Muddy water	3750'	3804'	DST #1	Sampled from Top of Hydrospring
-2	" "	"	"	"	Sampled from Top of Tool
-3	" "	4978'	5031'	DST #3	Sampled from Top of Recovery
-4	" "	4978'	5031'	DST #3	Sampled from 450' above Tool
-5	" "	4978'	5031'	DST #3	Sampled from Top of Tool

PRESENT STATUS OF WELL

Oil ..... (Interval.)

Gas ..... (Interval.)

Dry .....

Susp. .....

Company Banff Oil Ltd. (Aquitaine Company of Can

Signed by W.M. Boyd

Title Drilling Superintendent

Date February 16, 1971

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

CANADA

File No.....
Drilling Authority No.....447.....

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
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 Banff Aquit ARCO Rat Pass K-35

Location: Unit K Section 35 Grid 68°-00', 135°-15'

Latitude 67° 54' 42.55" N Longitude 135° 21' 56.83" W

From Established Reference Marker

Universal Well Location Reference Lat. 67.91182°, Long. 135.36578°

Permit No. 4649 Lease No. Nil

Atlantic Richfield Canada Ltd.
(Permittee, Licensee, Lessee)

Date of commencement of proposed program

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at Nil

Gas at Nil

Water at 5,000'

Total Depth 6,004' Date of last operations December 13, 1970

Present condition of well Plugged and Abandoned

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 13-3/8"	48#	50'	63'	180 sx Permafrost	Nil
2. 9-5/8"	36#	914'	927'	360 sx Permafrost &	
3.				150 sx Oilwell	Nil
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	6,004'-5,904'	Ronning (?)	40	
2	3,850'-3,700'	Paleozoic	60	Felt for & found @ 3680'
3	957'- 857'	Surface Casing	50	Felt for & found @ 820'
	Cut off casing 3 feet below ground level and weld on name plate.			

The following logs have been run IES, BHC-SGRC, FDC, DIL, SNP, Dipmeter, Velocity Survey

Other operations proposed Nil

Operations to be carried out by Guthrie McLaren Drlg. Contractor Licence No. 908

Address 14630 - 119th Avenue, EDMONTON, Alta. Address

Responsible Agent in field W.M. Bogert

Dated at CALGARY, Alberta, this 6th Day of January 19 71

Signed by W.M. Bogert Company Aquitaine Company of Canada Ltd.

Title Drilling Superintendent Operator's Exploratory Licence No. 1636

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. G. E. Hine on the 10th December 1970.

Dated 11th January, 19 71

B.H.S. Norris
Oil Conservation Engineer

IAND 52-90 (5) (2-69)

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

Drilling Authority No. 447

Project No.

File No.

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL 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: Banff Aquit ARCO Rat Pass K-35

Location: Unit: K Section: 35 Grid: 68°-00', 135°-15'

Latitude: 67°54'42.55"N Longitude: 135°21'56.83"W

Unique Well Identifier: 300K356800135150

Universal Well Location Reference: Lat. 67.91182° Long. 135.36578°

Elevation: Ground: 67' (estimated) K.B. 80' (estimated) feet above sea-level.

Well is expected to produce from: Cretaceous Jurassic formation at a depth of about: 3,000 feet. Expected total final depth: 6,000

Area assigned to well:

(for Oil Conservation Engineer's use only)

Permit No.: 4649 Lease No.: Nil Acreage: 48,202

Permittee, licensee, or lessee: Atlantic Richfield Canada Ltd.

Exploratory Licence No.: 1635

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	Sacks of Cement
1.	9-5/8"	36#	J55	New	800'	To surface
2.						
3.						
4.						
5.						

Expected water, gas, and oil horizons and type of control equipment: Anticipated reservoir rock is Bug Creek (Middle & Upper Jurassic) to be controlled by drilling mud of adequate weight; blow-out preventers described as follows: 1 Cameron 10", Series 900, double gate; 1 Hydril 10", Series 900, Hydraulic operated.

Well will be drilled with Rotary Rig No. 3 by Guthrie McLaren Drilling Ltd.
(Drilling Contractor or company)

14630 - 119th Avenue, EDMONTON, Alberta

Responsible agent of applicant:— Contractor's Business Licence No.:

At well: Robert Schwab At registered office: Robert Schwab

Address: 550 - 6th Ave. S.W., Calgary Address: 550 - 6th Avenue S.W., CALGARY 1, Alberta

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

Dated at Calgary, Alberta, this 12th day of August 19 70

Signed by: R. Mikle Company: Banff Oil Ltd.

Title: President Operator's Licence No.: 1636

(For Oil and Mineral 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

Dated 13th August 19 70 Please see over page
Oil Conservation Engineer

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

IAND 52-90-1 (3-69)

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

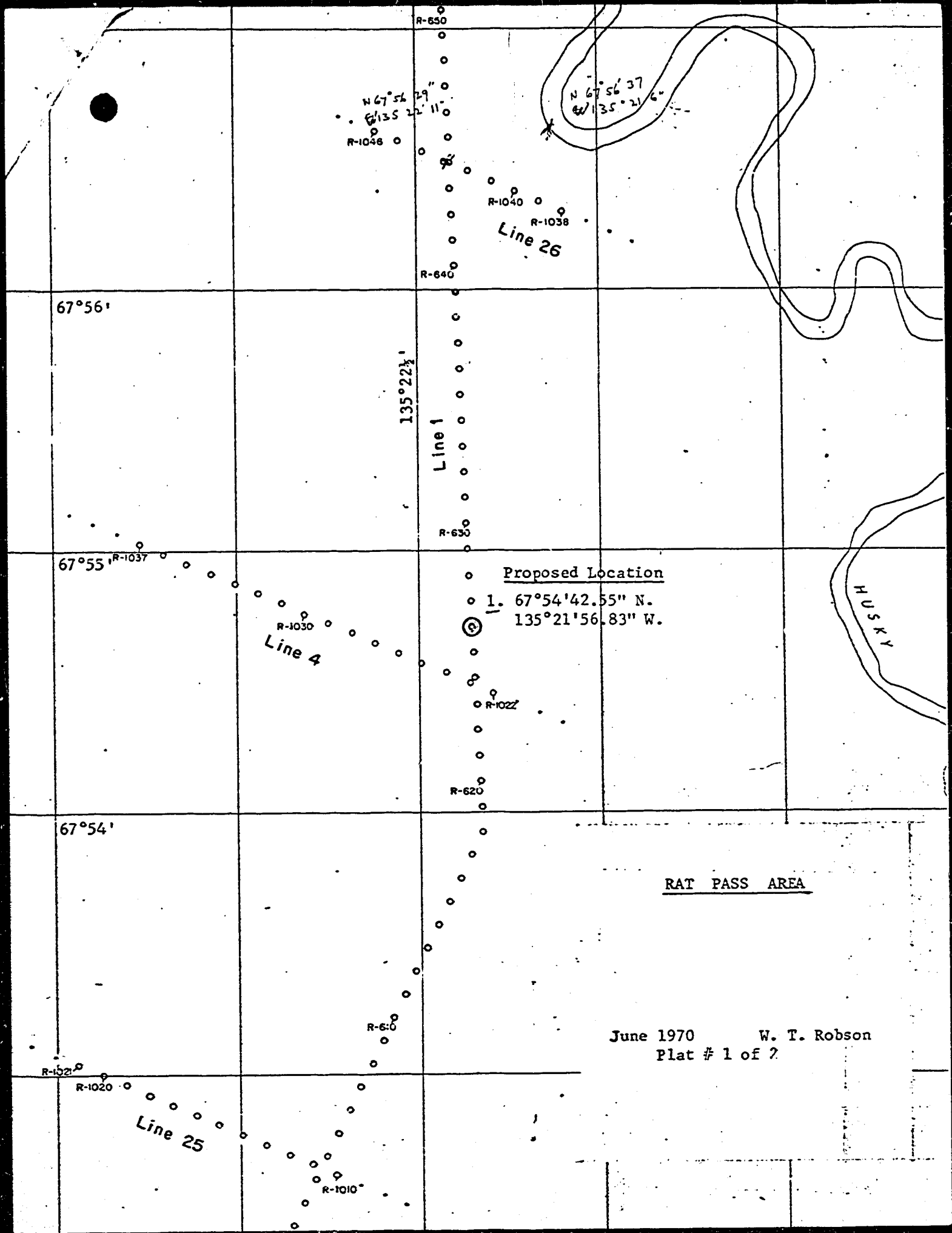
3. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.

4. Intermediate and production strings of casing are to receive the approval of the Oil Conservation Engineer prior to running.

B.H.J. Thoms

B.H.J. Thoms, Oil Conservation Engineer




R-650
N 67°56' 29"
W 135° 22' 11"
R-1046
N 67°56' 37"
W 135° 21' 6"
R-1040
R-1038
Line 26
R-640
67°56'
135°22½'
Line 1
R-630
67°55'
R-1037
Proposed Location
1. 67°54'42.55" N.
135°21'56.83" W.
R-1030
Line 4
R-1022
HUSKY
R-620
67°54'
RAT PASS AREA
R-610
R-1021
R-1020
Line 25
R-1010
June 1970 W. T. Robson
Plat # 1 of 2

CANADA

File No.....
Drilling Authority No.....442.....

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

WELL-SITE INSPECTION REPORT

FROM: Field Office or Area: Inuvik Date: 20th July 1971

TO: The Oil Conservation Engineer:

RE: Banff Aquit ARCO Rat Pass K-35 68-00-135-15

Location: 67.91182°N., 135.36578°W. Status: D & A 1970

This location was inspected by the undersigned on 8th July 1971 T.D. 6004'

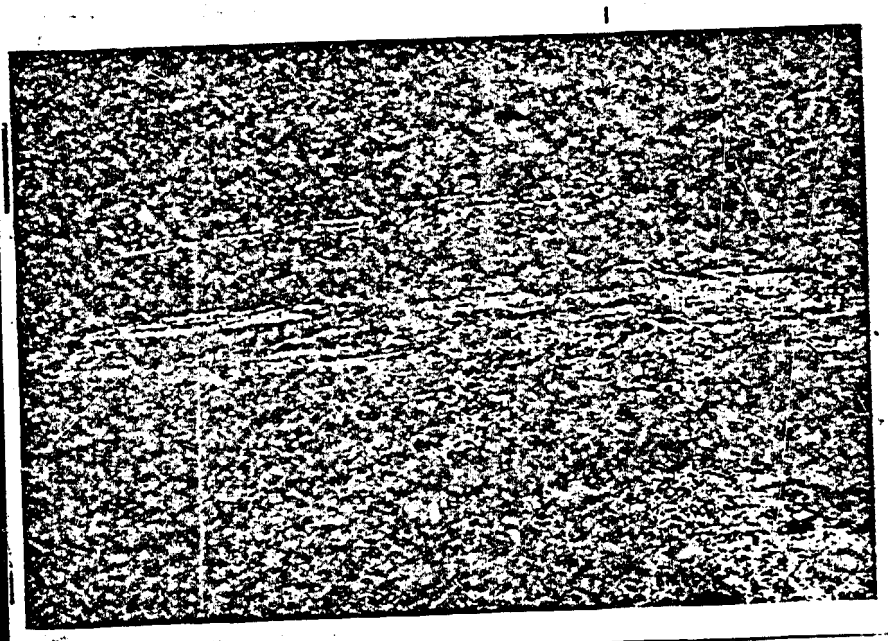
The location is in ~~satisfactory~~ unsatisfactory condition.

The following items require attention:

1. Pile and burn all lumber
2. Bury all non-degradables
3. Weld identification pipe to top of casing or set in concrete block.
4. Backfill cellar
5. Paint identifier flourescent orange
6.

Other comments and recommendations: (Include Map, if necessary for clarity)

No clean-up has been done.



Inspected by M. D. Thomas

M. D. Thomas
District 2

Original to Oil Conservation Engineer, Dept of IA & ND, Duplicate to Field Office or Inspecting Engineer.

IAND 52-90-14 (9-69)

WELL HISTORY

Banff Aquit ARCO Rat Pass K-35

JANUARY 1970

216-11-6-21

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Banff Aquit ARCO Rat Pass K-35

216-11-6-21

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Completion Summary (Not applicable)

FIELD PRINTS OF LOGS (No Final Prints available)

OIL & GAS OPERATIONS UNIT
Oil and Mineral Division
MAR 14 1977
OTTAWA, CANADA
Dept. of Indian Affairs & Northern Development

SECTION I

WELL HISTORY REPORT

Banff Aquit ARCO Rat Pass K-35

SECTION I - Summary of Well Data

(a) Well Name and Number: Banff Aquit ARCO Rat Pass K-35

(b) Permittee: Atlantic Richfield Canada Ltd.

(c) Name of Operator: Banff Oil Ltd.
550 - 6th Avenue S.W.
CALGARY 1, Alberta

(d) Location: Unit K, Section 35, Grid 68°-00', 135°-15'
Unique Well Identifier: 300K356800135150
Universal Well Location Reference: 67.91182°
135.36578°

(e) Co-ordinates: Latitude: 67° 54' 42.55" N
Longitude: 135° 21' 56.83" W

(f) Permit No.: 4649

(g) Drilling Contractor: Guthrie McLaren Drilling Ltd.
14630 - 119th Avenue
EDMONTON 42, Alberta

Rig No. 3, H-525 Ideco Double Drum

(h) Drilling Authority: Number 447
Date Issued: August 13, 1970

(i) Classification: Wildcat

(j) Elevations: Ground: 67'
K.B.: 81'

(k) Spudded: October 21, 1970, 5:00 p.m.

(l) Completed drilling: December 6, 1970

(m) Total Depth: 6,004'

(n) Well Status: Plugged and Abandoned

(o) Rig Released: December 13, 1970, 8:00 a.m.

(p) Hole Sizes: 24" to 67'; 12-1/4" to 927'; 8-3/4" to 6,004'

(q) Casing: 13-3/8" conductor casing set @ 63'
9-5/8" surface casing set @ 927'

SECTION II

SECTION II - Geological Summary

(a) Formation Tops: None available from either samples or logs.

(b) Cored Intervals: See "Core Report" attached.

(c) Core Descriptions: Included in "Geological Sample Descriptions" attached.

(d) Sample Descriptions: See "Geological Sample Descriptions" attached.

(e) Paleontological Determinations: Not applicable.

FORM 5161

BANFF OIL LTD.

CORE REPORT

WELL NAME: Banff Aquit ARCO Rat Pass K-35 LOCATION: Unit K, Section 35, Grid 68°-00', 135°-15'

CORE NO.	INTERVAL	RECOVERY	FORMATION	ANGLE OF DIP
1	5,294' - 5,300'	5.7'	Ord-Sil (?)	25°
2	5,300' - 5,320'	20.0'	Ord-Sil (?)	0°-60°
3	5,980' - 6,004'	24.0'	Ord-Sil (?)	

Schlumberger sidewall cores attempted on November 16, 1970 at the following depths:

945', 965', 1,025', 1,080', 1,130', 1,155', 1,180', 1,220', 1,250', 1,280', 1,325', 1,350', 1,380', 1,410', 1,445', 1,480', 1,530', 1,560', 1,600', 1,630', 1,660', 1,680', 1,735', 1,765', 1,810', 1,855', 1,895', 1,920', 1,980', 2,025', 2,075', 2,125', 2,175', 2,225', 2,325', 2,375', 2,425', 2,475', 2,525', 2,575', 2,625', 2,675', 2,725', 2,765', 2,825', 2,875'.

GEOLOGICAL SAMPLE DESCRIPTION

Sheet No. 1

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
930	950	D		20		Shale, dark grey, micromicaceous.
950	960	D		10		Shale, as above, in part silty.
960	970	D		10		Shale, medium to dark grey, in part silty; Siltstone (20%), white, tight.
970	990	D		20		As above with trace pyrite.
990	1000	D		10		Shale (100%), medium grey.
1000	1010	D		10		Shale (60%), as above; Shale (40%), brick red to reddish brown.
1010	1020	D		10		Shale (95%), medium to dark grey, micromicaceous; Mudstone, dark brown.
1020	1030	D		10		Shale, as above, with trace pyrite.
1030	1050	D		20		Shale (100%), medium to dark grey, micromicaceous.
1050	1080	D		30		Shale (100%), medium grey, micromicaceous.
1080	1090	D		10		Shale (95%), as above; Siltstone (5%), light grey, glauconitic, tight.
1090	1100	D		10		Shale, as above, in part glauconitic and pyritic.
1100	1110	D		10		Shale (95%), medium grey, micromicaceous, in part silty; Siltstone (5%), medium brown, quartzitic, hard, tight.
1110	1120	D		10		Shale (80%), as above; Siltstone (20%), as above.
1120	1130	D		10		Shale (90%), as above; Siltstone (10%), light grey, hard, tight.
1130	1140	D		10		Shale (100%), medium grey, micromicaceous, in part slightly silty with trace of siltstone, light grey, hard, tight.
1140	1150	D		10		Shale (95%), as above; Mudstone (5%), medium brown.
1150	1160	D		10		Shale (90%), as above; Mudstone (10%), medium brown.
1160	1180	D		20		Shale (50%), as above; Mudstone (30%), as above; Siltstone (20%), light grey, hard, tight.

SAMPLES NOT LAGGED

~~SAMPLES LAGGED AT ____ FT. PER ____~~

(Delete as Appropriate)

BANFF OIL LTD.

Sheet No. 2

GEOLOGICAL SAMPLE DESCRIPTION

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
1180	1190	D		10		Shale (40%), as above; Siltstone (40%), medium grey, hard, tight; Mudstone (20%), medium brown.
1190	1200	D		10		Shale (40%), as above; Siltstone (10%), as above; Mudstone (40%), as above; Sandstone (10%), light grey, very fine grained, glauconitic, salt and pepper, hard, tight.
1200	1230	D		30		Siltstone (80%), light to medium grey, hard, tight, slightly glauconitic, well cemented; Shale (20%), medium grey.
1230	1240	D		10		As above with trace sandstone, light grey, very fine grained glauconitic, hard, tight.
1240	1250	D		10		Shale (50%), medium grey; Siltstone (50%), as above.
1250	1260	D		10		Shale (100%), medium grey, very silty, trace pyrite.
1260	1270	D		10		Siltstone (60%), light grey, glauconitic, tight; Shale, as above; Mudstone, trace, medium brown.
1270	1280	D		10		Siltstone (70%), as above; Shale (20%), as above; Sandstone (10%), white, very fine grained, slightly glauconitic, tight.
1280	1290	D		10		Shale (80%), medium grey, micromicaceous; Siltstone (20%), medium grey, argillaceous.
1290	1310	D		20		Shale (40%), medium to dark grey, micromicaceous; Siltstone (40%), medium grey; Sandstone (20%), light to medium grey, very fine grained, hard, tight, with trace chert fragments, coarse, trace pyrite.
1310	1320	D		10		Shale (40%), medium to dark grey-black, in part carbonaceous; Siltstone (20%), medium grey; Mudstone/ironstone concretions (30%), brown to red; Calcite (10%), amber color.
1320	1330	D		10		Siltstone (50%), medium grey, slightly glauconitic; Sandstone (30%), white, very fine grained, tight, slightly glauconitic; Mudstone (20%), brown, with trace floating sand grain inclusions.

SAMPLES NOT LAGGED

~~SAMPLES LAGGED AT ..... FT. PER MIN.~~

(Delete as Appropriate)

BANFF OIL LTD.

Sheet No. 3

GEOLOGICAL SAMPLE DESCRIPTION

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
1330	1340	D		10		Sandstone (70%), white to light grey, very fine grained, salt and pepper, slightly kaolinitic, tight; Carbon fragments, trace, slightly glauconitic, pyritic, isolated coarse quartz grains; Mudstone (20%), brown, floating sand grain inclusions.
1340	1350	D		10		Sandstone (30%), as above; Shale (40%), as above; Mudstone (30%), as above, with trace pyrite.
1350	1360	D		10		Sandstone (70%), as above; Siltstone (20%), medium grey; Shale (10%), medium to dark grey, micromicaceous, trace pyrite.
1360	1370	D		10		As above, with trace microforms.
1370	1380	D		10		Sandstone (70%), medium grey, very fine grained, argillaceous, salt and pepper, kaolinitic, carbon fragments; Shale (30%), medium to dark grey, micromicaceous, trace pyrite.
1380	1390	D		10		Siltstone (80%), medium grey; Sandstone (10%), as above; Mudstone (10%), brown, with secondary calcite veins.
1390	1410	D		20		Siltstone (50%), medium grey; Shale (40%), medium to dark grey, micromicaceous; Sandstone (10%), as above, trace pyrite.
1410	1420	D		10		Siltstone (70%), as above; Shale (20%), as above; Sandstone (10%), as above.
1420	1460	D		40		Shale (80%), medium to dark grey, micromicaceous to black, bituminous; Siltstone (10%), as above; Sandstone (10%), as above.
1460	1480	D		20		Sandstone (60%), medium grey, argillaceous; Siltstone (20%), as above; Shale (20%), as above.
1480	1490	D		10		Shale (80%), medium to dark grey, trace black, bituminous; Shale (10%), red to maroon.
1490	1500	D		10		Shale (60%), medium to dark grey, micromicaceous; Siltstone (40%), medium grey.

SAMPLES NOT LAGGED

~~SAMPLES LAGGED AT ..... FT. PER MIN.~~

(Delete as Appropriate)

BANFF OIL LTD.

GEOLOGICAL SAMPLE DESCRIPTION

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
1500	1510	D		10		Shale (40%), as above; Siltstone (40%); Sandstone (10%).
1510	1530	D		20		Shale (80%), as above; Siltstone (20%), as above.
1530	1540	D		10		Shale (100%), medium to dark grey, micromicaceous.
1540	1560	D		20		Shale (80%), as above; Siltstone (20%), as above, with carbon fragments.
1560	1570	D		10		Shale (60%), as above; Siltstone (40%), as above.
1570	1580	D		10		As above with trace sandstone, white, very fine grained, glauconitic, kaolinitic, carbon fragments, tight, trace pyrite.
1580	1600	D		20		Shale (40%), as above; Siltstone (40%), as above; Sandstone (20%), as above, with trace pyrite.
1600	1620	D		20		Shale (40%), as above; Siltstone (30%), as above; Sandstone (30%), white to medium grey, very fine grained, argillaceous, glauconitic, kaolinitic, hard, tight.
1620	1630	D		10		Siltstone (80%), as above; Shale (10%), as above; Sandstone (10%), as above.
1630	1640	D		10		Siltstone (80%), glauconitic, floating quartz grains, medium grey, trace coarse chert pebbles, grey, rounded; Shale (10%), as above; Sandstone (10%), as above.
1640	1650	D		10		Siltstone (50%), as above; Shale (50%), as above, with trace pyrite.
1650	1660	D		10		Siltstone (50%), as above; Shale (40%), as above; Sandstone (10%), with trace chert pebbles, grey, rounded, coarse.
1660	1700	D		40		Sandstone (50%), light to medium grey, very fine to fine grained, argillaceous, glauconitic, kaolinitic, salt and pepper, carbon fragments, tight; Shale (30%), as above; Siltstone (20%), as above, with trace pyrite.

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(Delete as Appropriate)

GEOLOGICAL SAMPLE DESCRIPTION

Sheet No. 5

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
1700	1710	D		10		Shale (70%), medium to dark grey, micromicaceous; Siltstone (20%), as above; Sandstone (10%), as above.
1710	1720	D		10		Shale (70%), medium to dark grey to black, bituminous; Siltstone (20%), as above; Sandstone (10%), medium brown, very fine grained, calcareous hard, tight.
1720	1730	D		10		Shale (70%), as above; Siltstone (30%), medium grey, floating quartz grain inclusions, medium grained.
1730	1740	D		10		Shale (70%), as above; Siltstone (25%), red to maroon; Sandstone (5%), white, fine grained, kaolinitic, quartzitic, salt and pepper, hard, tight.
1740	1750	D		10		Sandstone (60%), white to light grey, fine to very fine grained, glauconitic, salt and pepper, kaolinitic, quartzitic, in part argillaceous; Siltstone (20%), as above; Shale (20%), medium to dark grey to grey-black.
1750	1760	D		10		Sandstone (30%), as above; Siltstone (30%), as above; Shale (40%), as above.
1760	1770	D		10		Shale (70%), dark grey to black, bituminous; Siltstone (20%), dark grey to black, floating quartz grains; Sandstone (10%), as above.
1770	1800	D		30		Shale (100%), as above with trace sandstone and siltstone, as above.
1800	1860	D		60		Shale (60%), as above; Sandstone (20%), very fine grained, as above; Siltstone (20%), medium grey.
1860	1880	D		20		Shale (90%), as above; Siltstone (10%), medium grey.
1880	1900	D		20		Shale (90%), medium to dark grey to maroon, in part bituminous; Siltstone (10%), as above with trace sandstone, white, fine grained, kaolinitic, salt and pepper, tight.

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BANFF OIL LTD.

GEOLOGICAL SAMPLE DESCRIPTION

Sheet No. 6

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
1900	1910	D				Sandstone (60%), light tan, very fine to fine grained, slightly glauconitic, slightly salt and pepper, slightly kaolinitic, sub-angular, friable, soft, fair (5%) porosity, layers of bitumen, trace coal fragments, with abundant pyrite; Shale (30%), as above; Siltstone (10%), as above.
1910	1920	D		10		Sandstone (40%), as above; Shale (50%), as above; Siltstone (10%), as above.
1920	1930	D		10		Shale (70%), grey-black, bituminous, trace shale, maroon; Sandstone (20%), as above; Siltstone (10%), as above.
1930	1950	D		20		Shale (90%), black, bituminous; Siltstone (10%), medium grey, abundant pyrite.
1950	1970	D		20		Shale (100%), black, bituminous, trace pyrite.
1970	1980	D		10		As above with trace shale, light brownish grey, silty.
1980	2000	D		20		Shale (100%), black, bituminous, brittle, abundant pyrite.
2000	2010	D		10		Shale, as above, with trace sandstone, black, bituminous, fine grained.
2010	2020	D		10		Shale (80%), as above; Chert (20%), black, trace sandstone, black, as above.
2020	2050	D		30		Shale (90%), as above; Chert (10%), as above, trace pyrite.
2050	2060	D		10		As above with trace shale, medium grey.
2060	2130	D		70		Shale (50%), black, bituminous, brittle; Shale (50%), medium brownish grey, in part silty and waxy.
2130	2150	D		20		Shale (75%), medium brownish grey, in part silty and waxy; Shale (25%), black, bituminous.
2150	2160	D		10		Shale (80%), medium brownish grey, as above; Shale (20%), black, bituminous.
2160	2170	D		10		Shale (90%), medium brownish grey, as above; Shale (10%), black bituminous.

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BANFF OIL LTD.

GEOLOGICAL SAMPLE DESCRIPTION

Sheet No. 7

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Shavings O.G.W.	
2170	2220	D		50		Shale (100%), medium brownish grey, in part silty and waxy.
2220	2240	D		20		Shale (50%), as above; Shale (40%), dark grey-black, micromicaceous to bituminous; Siltstone (10%), light grey, hard.
2240	2250	D		10		Shale (90%), medium brownish grey, in part silty and waxy; Shale (10%), dark grey to black, bituminous.
2250	2260	D		10		Shale (90%), medium brownish grey to black, bituminous to dark grey to maroon, silty, slightly pyritic; Siltstone (10%), light grey, hard.
2260	2270	D		10		Shale (90%), medium brownish grey, in part silty and waxy; Shale (10%), black, bituminous.
2270	2300	D		30		Shale (100%), medium to dark grey, in part silty, with trace shale, brown to maroon.
2300	2330	D		30		Shale (100%), medium to dark grey to black, bituminous.
2330	2340	D		10		Shale (70%), as above; Shale (30%), red to maroon, silty.
2340	2360	D		20		Shale (70%), medium to dark grey, micromicaceous, in part silty; Shale (30%), black, bituminous.
2360	2380	D		20		Shale (90%), medium to dark grey, micromicaceous, in part silty; Shale (10%), black, bituminous.
2380	2390	D		10		Shale (60%), black, bituminous, very dolomitic, hard; Shale (40%), medium to dark grey, micromicaceous, in part silty.
2390	2420	D		30		Shale (80%), black, bituminous, very dolomitic, hard; Shale (20%), medium to dark brownish grey, micromicaceous, in part silty, pyritic.
2420	2430	D		10		Shale (90%), black, bituminous, very dolomitic, hard; Dolomite (10%), black, crystalline, very fine grained, bituminous, hard, tight.
2430	2460	D		30		Shale (70%), black, bituminous, very dolomitic, hard; Shale (30%), medium to dark brownish grey, micromicaceous, in part silty; with trace dolomite, black, crystalline, very fine grained, bituminous, hard, tight, abundant pyrite.

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BANFF OIL LTD.

GEOLOGICAL SAMPLE DESCRIPTION — Sheet No. 8

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
2460	2470	D		10		Shale (60%), black, bituminous, as above; Shale (40%), medium grey-brown, as above; with trace dolomite, black, crystalline, very fine grained, bituminous, hard, tight.
2470	2490	D		20		Shale (70%), medium grey-brown to red to maroon, in part silty; Shale (30%), black, bituminous, as above; with trace dolomite, as above.
2490	2510	D		20		Shale (30%), medium grey-brown to red to maroon, in part silty; Shale (70%), black, bituminous, very dolomitic; with trace dolomite, black, crystalline, very fine grained, hard, tight; with trace siltstone, blackish grey, very dolomitic.
2510	2520	D		10		Shale (80%), black, bituminous, as above; Shale (20%), medium brownish grey, in part silty; with trace dolomite and siltstone, as above.
2520	2560	D		40		Shale (90%), black, bituminous, very dolomitic; Dolomite (10%), grey to grey-black, crystalline, fine to medium grained, hard, tight.
2560	2570	D		10		Shale (70%), black, bituminous, very dolomitic; Shale (20%), medium grey-brown, silty, dolomitic; Dolomite (10%), as above.
2570	2580	D		10		Shale (50%), black, as above; Shale (50%), medium grey-brown, as above.
2580	2590	D		10		Shale (80%), black, as above; Shale (10%), medium grey-brown, as above; Dolomite (10%), as above.
2590	2600	D		10		Shale (30%), black, bituminous, very dolomitic, hard; Shale (60%), medium grey-brown, silty, dolomitic; Dolomite (10%), dark grey to black, very fine to fine grained, hard, tight.
2600	2610	D		10		Shale (70%), black, bituminous, very dolomitic, hard; Dolomite (30%), buff to dark grey-black, cryptocrystalline to crystalline, fine grained, hard, tight.
2610	2620	D		10		Shale (40%), black, as above; Shale (30%), medium brownish grey, as above; Dolomite (10%), as above.

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SAMPLES LAGGED AT ~~==== FT. PER MIN.~~ 1-1/4 mins/100'

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BANFF OIL LTD.

Sheet No. 9

GEOLOGICAL SAMPLE DESCRIPTION

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
2620	2660	D		40		Shale (50%), black, bituminous, very dolomitic, hard; Shale (40%), medium brownish grey, silty, dolomitic; Dolomite (10%), dark grey to black, very fine to fine grained, hard, tight, pyritic.
2660	2700	D		40		Shale (50%), black, as above; Shale (50%), medium brownish grey, as above; with trace dolomite, as above.
2700	2710	D		10		Shale (90%), black, as above; Dolomite (10%), as above.
2710	2720	D		10		Shale (80%), black, as above; Dolomite (20%), as above.
2720	2750	D		30		Shale (70%), black, as above; Dolomite (30%), as above; with one chip dolomite, white, euhedral.
2750	2770	D		20		Shale (70%), black, as above; Siltstone (20%), light to medium grey, very dolomitic, hard; Dolomite (10%), as above.
2770	2780	D		10		Shale (60%), black, as above; Siltstone (40%), as above.
2780	2810	D		30		Shale (50%), black, as above; Siltstone (50%), as above; with trace dolomite, dark grey to black, very fine to fine grained, hard, tight, pyritic.
2810	2880	D		70		Siltstone (90%), light to medium grey, trace light grey-brown, hard, dolomitic, pyritic; Shale (10%), black, as above; with trace dolomite, as above; with trace calcite, white.
2880	2900	D		20		Siltstone (100%), as above; with trace shale, black, as above; with trace dolomite and calcite, as above.
2900	2910	D		10		Siltstone (100%), as above; with trace brown to reddish brown; with trace shale, dolomite, calcite, as above.
2910	2950	D		40		Siltstone (100%), light to medium grey, dolomitic, pyritic, hard, tight; with trace shale and dolomite, as above.
2950	2970	D		20		Shale (100%), black, bituminous, very dolomitic, pyritic with trace dolomite, black, crystalline, very fine to fine grained, hard, tight, with trace calcite.

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BANFF OIL LTD.

GEOLOGICAL SAMPLE DESCRIPTION

Sheet No. 10

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
2970	2980	D		10		Shale (90%), as above; Dolomite (10%), as above; Calcite, trace.
2980	3020	D		40		Shale (80%), as above; Dolomite (20%), as above; Calcite, trace.
3020	3040	D		20		As above (poor sample after trip).
3040	3050	D		10		As above, with trace shale, red.
3050	3080	D		30		Shale (80%), as above; Dolomite (20%), as above; Calcite, trace.
3080	3090	D		10		Shale (40%), black, bituminous, as above; Dolomite (60%), grey to black, very fine grained, tight; Calcite, trace.
3090	3100	D		10		Shale (80%), as above; Dolomite (20%), as above, pyritic, with abundant calcite filled fractures.
3100	3110	D		10		Dolomite (70%), black, very fine grained, bituminous, silty, fairly soft; Shale (30%), as above, with calcite, trace chert, black, dolomitic, pyritic.
3110	3130	D		20		Shale (30%), black, as above; Dolomite (40%), as above; Dolomite (10%), light grey to black, crystalline, fine grained, tight; Chert, trace, grey to black, dolomitic, pyritic.
3130	3140	D		10		Shale (60%), as above; Dolomite (20%), black, silty, as above; Dolomite (10%), light grey, crystalline, as above with abundant pyrite.
3140	3180	D		40		Shale (80%), black, as above; Dolomite (10%), light grey to black, bituminous, crystalline, fine grained, tight; Chert, light grey to black, dolomitic, pyritic in part.
3180	3200	D		20		Shale (90%), black, as above; Dolomite, trace, as above; Chert (10%), as above.

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SAMPLES LAGGED AT 100 FT. PER MIN.

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GEOLOGICAL SAMPLE DESCRIPTION

Sheet No. 11

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
3200	3210	D		10		Shale (80%), as above; Dolomite (10%), as above; Chert (10%), as above.
3210	3220	D		10		Shale (70%), as above; Dolomite (20%), as above; Chert (10%), as above.
3220	3230	D		10		Shale (60%), as above; Dolomite (20%), as above; Chert (10%), as above.
3230	3250	D		20		Shale (40%), as above; Dolomite (10%), as above; Chert (50%), as above.
3250	3260	D		10		Shale (30%), as above; Dolomite (20%), as above; Chert (50%), as above.
3260	3270	D		10		Shale (20%), as above; Dolomite (40%), as above; Chert (40%), as above.
3270	3310	D		40		Shale (30%), as above; Dolomite (30%), as above; Chert (40%), as above.
3310	3320	D		10		Shale (10%), as above; Dolomite (30%), as above; Chert (60%), as above.
3320	3330	D		10		Chert (70%), dark grey to black, bituminous, pyritic, dolomitic; Dolomite (30%), white to light grey to black, crystalline, fine grained, tight, bituminous.
3330	3350	D		20		Chert (60%), as above; Dolomite (30%), as above; Shale (10%), black, bituminous, very dolomitic.
3350	3360	D		10		Chert (70%), as above; Dolomite (30%), as above.
3360	3370	D		10		Dolomite (70%), black, bituminous, microcrystalline, silty, hard, tight; Chert (30%), as above.

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SAMPLES LAGGED AT 100 FT. PER MIN.

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GEOLOGICAL SAMPLE DESCRIPTION — Sheet No. 12

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
3370	3390	D		20		Dolomite (40%), as above; Chert (30%), as above; Shale (30%), black, bituminous, very dolomitic.
3390	3400	D		10		Shale (90%), as above; Chert (10%), as above.
3400	3420	D		20		Shale (70%), as above; Chert (20%), as above; Dolomite (10%), as above.
3420	3440	D		20		Shale (30%), as above; Chert (30%), as above; Dolomite (40%), as above.
3440	3460	D		20		Shale (20%), as above; Chert (50%), as above; Dolomite (30%), as above.
3460	3500	D		40		As above.
3500	3510	D		10		Shale (50%), as above; Chert (20%), as above; Dolomite (30%), as above.
3510	3520	D		10		Shale (70%), as above; Dolomite (30%), as above.
3520	3530	D		10		Shale (70%), as above; Dolomite (20%), as above; Chert (10%), as above.
3530	3540	D		10		Shale (40%), as above; Dolomite (30%), as above; Chert (30%), as above.
3540	3550	D		10		Shale (70%), as above; Dolomite (20%), as above; Chert (10%), as above, with one piece of pyritized plant stem (?).
3550	3560	D		10		Shale (50%), as above; Dolomite, trace, as above; Chert (50%), as above.
3560	3570	D		10		Chert (80%), black, bituminous, pyritic; Dolomite (10%), as above; Shale (10%), as above.

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SAMPLES LAGGED AT 100 FT. PER MIN.

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BANFF OIL LTD.

GEOLOGICAL SAMPLE DESCRIPTION — Sheet No. 13

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
3570	3590	D		20		Chert (80%), medium grey to dark brownish grey to black, bituminous, pyritic; Dolomite (10%), as above, trace white, euhedral; Shale (10%), as above.
3590	3610	D		20		Dolomite (40%), light to medium grey to black, microcrystalline to crystalline, fine grained, bituminous, hard, tight, pyritic; Chert (40%), medium grey to black, pyritic; Shale (20%), black, bituminous, very dolomitic.
3610	3620	D		10		Dolomite (10%), as above; Chert (70%), as above; Shale (20%), as above.
3620	3630	D		10		Shale (70%), as above; Chert (30%), as above.
3630	3640	D		10		Dolomite (50%), as above; Shale (25%), as above; Chert (25%), as above.
3640	3650	D		10		Dolomite (80%), light to dark grey-black, bituminous, hard, tight; Dolomite, trace, euhedral, in part pyritic; Chert (10%), as above.
3650	3660	D		10		Dolomite (80%), light to medium to dark grey-black, bituminous, microcrystalline to crystalline, fine grained, hard, tight, one chip dolomite, white, crystalline, medium grained, excellent porosity; Shale (10%), as above; Chert (10%), as above.
3660	3670	D		10		Dolomite (50%), as above, very silty to microcrystalline; Shale (40%), as above; Chert (10%), as above.
3670	3680	D		10		Dolomite (90%), light to dark grey-black, crystalline, very fine grained, bituminous, hard, tight; Dolomite, trace, white, euhedral, hard, tight; Shale (10%), black, bituminous, dolomitic.
3680	3690	D		10		Dolomite (50%), medium grey to black, micrccrystalline, bituminous, hard, tight; Shale (50%), as above.

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SAMPLES LAGGED AT 100 FT. PER MIN.

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GEOLOGICAL SAMPLE DESCRIPTION — Sheet No. 14

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
3690	3710	D		20		Dolomite (30%), as above; Dolomite (30%), white, as above; Shale (30%), as above; Chert (10%), as above.
3710	3720	D		10		Dolomite (50%), grey-black, as above; Dolomite (10%), white, as above; Shale (30%), as above; Chert (10%), as above.
3720	3730	D		10		Dolomite (80%), dark grey to black, crystalline to micro-crystalline, bituminous, hard, tight; Dolomite, trace, white, as above; Shale (20%), as above; Chert (10%), as above.
3730	3740	D		10		Dolomite (40%), dark grey-black, as above; Dolomite (30%), white, as above; Shale (20%), as above; Chert (10%), as above.
3740	3750	D		10		Dolomite (40%), dark grey to black, microcrystalline, bituminous, hard, tight; Dolomite (40%), white to medium grey, crystalline, medium grained, bituminous, tight; Chert (20%), as above.
3750	3760	D		10		Dolomite (20%), microcrystalline, as above; Dolomite (70%), white to medium grey, crystalline, medium grained, hard, tight; Chert (20%), as above.
3760	3770	D		10		Dolomite (80%), dark grey to black, microcrystalline to very fine grained crystalline, bituminous, hard, tight; Dolomite (10%), white to medium grey, crystalline, medium grained, hard, tight, bituminous; Chert, as above.
3770	3790	D		20		Dolomite (100%), dark grey to black, microcrystalline, bituminous, hard, tight; trace chert, pyrite.
3790	3800	D		10		Dolomite (80%), light grey to grey-black, bituminous, crystalline, fine grained, friable, no visible porosity; Chert (20%), dark grey to black.
3800	3810	D		10		Dolomite (90%), as above; Chert (10%), as above.

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SAMPLES LAGGED AT 100 FT. PER MIN.

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BANFF OIL LTD.

GEOLOGICAL SAMPLE DESCRIPTION

Sheet No. 15

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
3810	3820	D		10		Dolomite (80%), dark grey to black, crystalline, very fine grained, hard, tight; Chert (10%), as above; Shale (10%), black, bituminous.
3820	3830	D		10		Dolomite (90%), as above; Chert (10%), as above.
3830	3850	D		20		Dolomite (100%), dark grey black, as above.
3850	3870	D		20		Dolomite (100%), as above; with trace chert, dark grey to black.
3870	3940	D		70		Dolomite (95%), as above; Chert (5%), as above.
3940	3990	D		50		Dolomite (95%), dark grey to black, microcrystalline to fine grained crystalline, bituminous, hard, tight; Chert (5%), dark grey to black.
3990	4050	D		60		Dolomite (95%), as above, in part calcareous; Chert (5%), as above, with trace limestone, light grey, chalky.
4050	4090	D		40		Dolomite, as above; with chert/limestone, as above.
4090	4110	D		20		Dolomite (95%), as above; Chert (5%), as above; Limestone, trace, light grey, crystalline, very fine grained, tight.
4110	4120	D		10		Dolomite (70%), as above; Calcite (30%), white, with trace amber.
4120	4130	D		10		Calcite (90%), white, with trace amber; Dolomite (10%), as above, with trace pyrite.
4130	4140	D		10		Calcite (70%), as above; Dolomite (30%), light grey to black, microcrystalline to crystalline, very fine grained, hard, tight.
4140	4160	D		20		Dolomite (90%), as above; Calcite (10%), as above, with trace chert, dark grey to black.
4160	4170	D		10		Dolomite (100%), as above.

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SAMPLES LAGGED AT 100 FT. PER MIN.

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GEOLOGICAL SAMPLE DESCRIPTION — Sheet No. 16

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
4170	4180	D		10		Dolomite (70%), black, microcrystalline, bituminous, hard, tight; Dolomite (20%), light to medium grey, microcrystalline to crystalline, very fine grained, hard, tight; Chert (10%), dark grey.
4180	4200	D		20		Dolomite (70%), as above; Dolomite (30%), light to medium grey, as above, in part pyritic.
4200	4210	D		10		Dolomite (70%), as above; Dolomite (20%), light to medium grey, as above; Dolomite (10%), white, euhedral.
4210	4220	D		10		Dolomite (70%), as above; Dolomite (20%), light to medium grey, as above; with trace of dolomite, white, euhedral; Chert (10%), dark grey to black.
4220	4230	D		10		Dolomite (100%), dark grey to black, microcrystalline to crystalline, very fine grained, hard, tight; with trace chert, as above.
4230	4250	D		20		Dolomite (80%), as above; Chert (20%), dark grey to black.
4250	4420	D		170		Dolomite (80%), as above; Dolomite (10%), white, euhedral; Chert (10%), dark grey to black.
4420	4460	D		40		Dolomite (80%), dark grey to black, as above; Dolomite (10%), white, euhedral; Chert (10%), dark grey to black.
4460	4500	D		40		Dolomite (100%), dark grey to black, microcrystalline, bituminous, tight; with trace secondary calcite veins; trace pyrite.
4500	4510	D		10		Dolomite (100%), dark grey to black, microcrystalline to crystalline, very fine grained, tight, in part medium grey, calcareous, argillaceous, pyritic.
4510	4550	D		40		Dolomite (100%), medium to dark grey to black, microcrystalline, tight, calcareous in part, argillaceous, pyritic; trace chert, black; trace dolomite, white, slightly calcareous; trace limestone, medium grey, chalky.
4550	4700	D		150		Dolomite, as above.

~~SAMPLES NOT LAGGED~~

SAMPLES LAGGED AT 100 FT. PER MIN.

(Delete as Appropriate)

BANFF OIL LTD.

GEOLOGICAL SAMPLE DESCRIPTION — Sheet No. 17

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
4700	4750	D		50		Dolomite, as above; with trace chert, black.
4750	4770	D		20		Dolomite, as above.
4770	4780	D		10		Dolomite (90%), as above; Dolomite (10%), white, crystalline, euhedral.
4780	4800	D		20		Dolomite (100%), medium to dark grey-black, as above; trace limestone, medium grey, chalky.
4800	4810	D		10		Dolomite (40%), medium to dark grey, as above; Dolomite (50%), black, bituminous, argillaceous; Chert (10%), black.
4810	4830	D		20		Dolomite (100%), medium to dark grey-black; with trace limestone, medium grey, chalky; with trace chert, black; with trace pyrite.
4830	4870	D		40		As above; with trace dolomite, white, euhedral.
4870	4890	D		20		Dolomite, as above; with trace limestone, medium grey, chalky; trace pyrite.
4890	4900	D		10		Dolomite, as above, with increase in medium and dark grey dolomite and decrease in black, bituminous dolomite.
4900	4910	D		10		Dolomite (80%), medium to dark grey to black, micro-crystalline, hard, tight; Dolomite (20%), medium grey, silty, soft, slightly calcareous; with trace dolomite, white, in part calcareous; with trace calcite, in part dolomitic; with trace chert, black; trace pyrite.
4910	4960	D		50		Dolomite (70%), medium to dark grey to black, as above; Dolomite (30%), medium grey, silty, as above; with trace dolomite, white, calcareous; with calcite, white, dolomitic; trace chert, black; trace pyrite.
4960	5070	D		110		As above; with trace dolomite, dark grey, crystalline, fine to medium grained, hard, tight.
5070	5100	D		30		As above but poor samples due to cavings after trip.
5100	5120	D		20		Dolomite, as above.
5120	5130	D		10		Dolomite (100%), medium to dark grey to black, micro-crystalline, hard, tight, pyritic; with trace dolomite, medium grey, silty, slightly calcareous; trace dolomite, white, as above; calcite, as above.

~~SAMPLES NOT LAGGED~~

SAMPLES LAGGED AT 100 FT. PER MIN.

(Delete as Appropriate)

FORM NO.

GEOLOGICAL SAMPLE DESCRIPTION — Sheet No. 18

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
5130	5140	D		10		As above sample.
5140	5150	D		10		Dolomite (70%), medium to dark grey to black, micro-crystalline, hard, tight, pyritic; Dolomite (20%), medium grey, silty, slightly calcareous; Dolomite, trace, white, slightly calcareous; with calcite, slightly dolomitic; trace pyrite.
5150	5200	D		50		Dolomite (100%), medium to dark grey to black, as above; trace dolomite, white; calcite, as above.
5200	5230	D		20		Dolomite (100%), medium to dark grey to black, as above; trace chert.
5230	5250	D		20		Dolomite, as above; trace dolomite, medium grey to black, crystalline, fine grained, tight; trace chert, black.
5250	5260	D		10		Dolomite (90%), as above; Calcite (10%), white.
5260	5294	D		34		As above.
						<u>CORE #1, 5,294' - 5,300', Recovered 5.7'</u>
5294	5300	C		6		5.7' - Dolomite, dark grey to black, microcrystalline, bituminous, hard, tight, abundant shatter fractures filled with calcite and white dolomite; very isolated, small (1/10" in diameter) vugs; bedding plane dipping at approximately 25°.
						<u>CORE #2, 5,300' - 5,320', Recovered 20'</u>
5300	5320	C		20		20' - Dolomite, medium to dark grey to black, micro-crystalline, argillaceous, in part bituminous, hard, tight, laminated in 1/2" to 1" layers, abundant shatter fractures, with visible slippage of up to 2", abundant calcite, white and in part dolomitic: and dolomite, white, calcareous, infill along all fractures; angle of dip varies from 0° to approximately 60°.
5320	5360	D		40		Dolomite (70%), medium to dark grey to black, micro-crystalline, in part bituminous, argillaceous, hard, tight, pyritic; with calcite, white, dolomitic; Dolomite (30%), white, calcareous.
5360	5430	D		70		Dolomite (100%), as above; with trace calcite and white dolomite, as above.

~~SAMPLES NOT LAGGED~~

SAMPLES LAGGED AT 100 FT. PER MIN.

(Delete as Appropriate)

BANFF OIL LTD.

GEOLOGICAL SAMPLE DESCRIPTION

Sheet No. 19

Banff Aquit ARCO Rat Pass K-35

From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
5430	5480	D		50		Dolomite (100%), medium to dark grey to black, micro-crystalline, in part bituminous, argillaceous, hard, tight, pyritic; with trace calcite, white, in part dolomitic; with dolomite, white, in part calcareous.
5480	5490	D		10		Dolomite (70%), medium to dark grey to black, as above; Calcite and dolomite (30%), as above.
5490	5500	D		10		Dolomite (90%), as above; Calcite and white dolomite (10%), as above.
5500	5530	D		30		Dolomite (100%), medium to dark grey to black, as above; Calcite and white dolomite, trace, as above.
5530	5550	D		20		Dolomite (90%), as above; Calcite and white dolomite (10%), as above.
5550	5810	D		260		Dolomite (100%), as above; Calcite and white dolomite, trace, as above.
5810	5820	D		10		Dolomite, as above, in part calcareous; with trace lime-stone, light grey, chalky.
5820	5980	D		160		Dolomite, as above.
						CORE #3, 5,980' - 6,004', Recovered 24'
5980	6004	C		24		24' - Dolomite, medium to dark grey to black, micro-crystalline, in part bituminous, in part calcareous, hard, tight, argillaceous, laminated with thin layers at a 30° dip, abundant diagonal fractures at 60° angle, infilled with calcite from hairline to 5/8" thick, slightly pyritic, slickensides present along fracture planes.
						DRILLER'S T.D.: 6,004'

~~SAMPLES NOT LAGGED~~

SAMPLES LAGGED AT 100 FT. PER MIN.

(Delete as Appropriate)

BANFF OIL LTD.

SECTION III

SECTION III - Engineering Summary

(a) Report of Drill Stem Tests: See charts attached.

(b) Casing Record: See "Casing Information", "Running and Cementing" and "Engineering Pipe Tally" attached.

(c) Bit Record: See "Bit Record" attached.

(d) Mud Report: See "Mud and Additive Summary" attached.

(e) Deviation Record: See "Deviation Survey Report" attached.

(f) Abandonment Plugs: See "Plug-Back and Abandonment Report" attached.

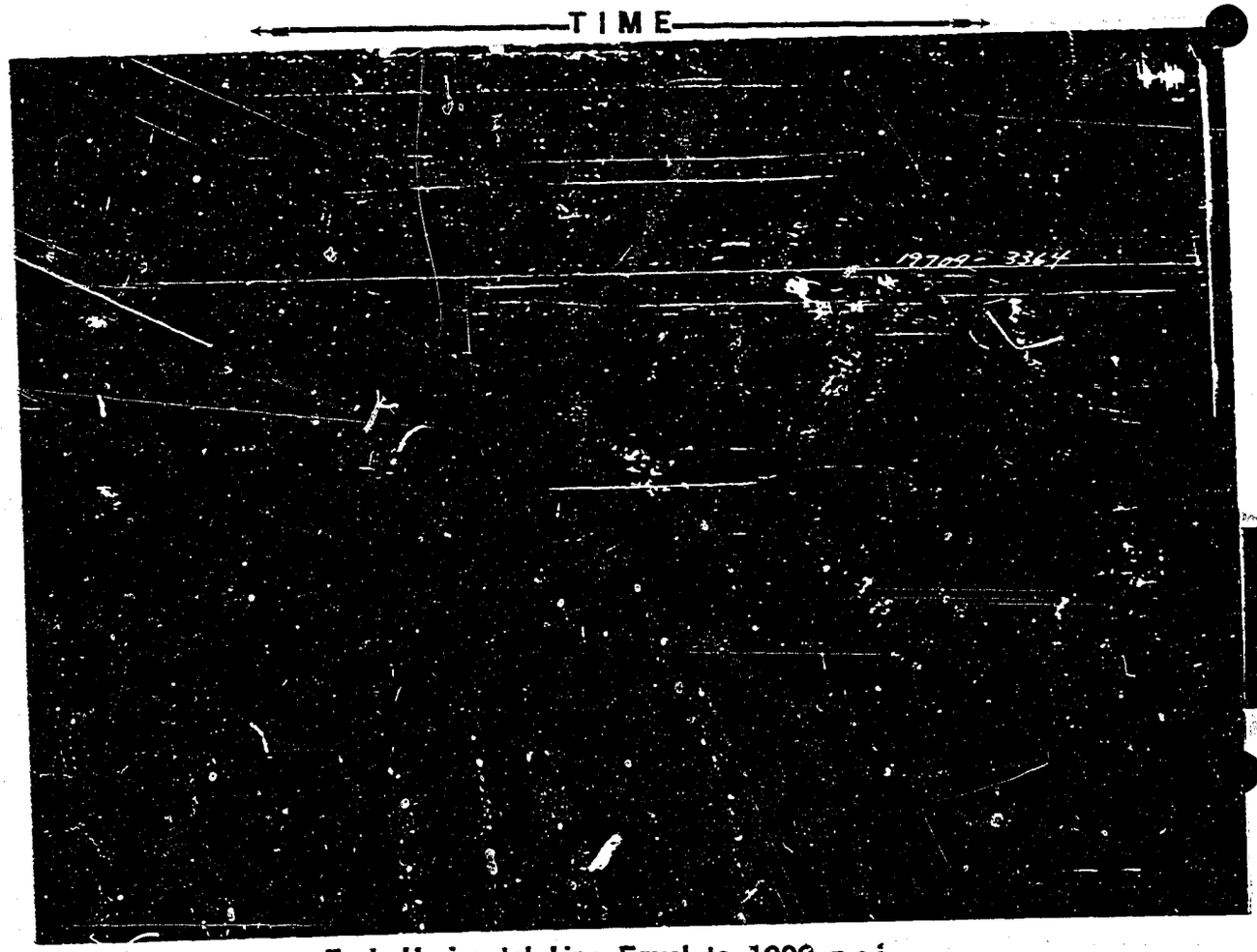
(g) Lost Circulation Zones: Not applicable.

(h) Report of Blowouts: Not applicable.

Information Testing Service Report

PRESSURE

TIME



Each Horizontal Line Equal to 1000 p.s.i.

PRESSURE

TIME

Each Horizontal Line Equal to 1000 p.s.i.

Depth Top Gauge 3731 Ft.	Blanked Off No	Date December 8, 1970	Ticket No. 32-19709
BT P.R.D. No. 2820	8742 12 Hr. Clock	Kind of Job Dual Straddle	HOWCO District High Level
Pressure Readings / Field / Office Corrected		Tester H. F. Sponholz	Witness E. Shack
Initial Hydro Mud Pressure		Contractor Guthrie McLaren Drilling Co. Ltd.	
Initial Closed in Pressure		KB Elevation	Top Packer Depth 3750 / Bottom Packer Depth 3804
Initial Flow Pressure	Chart Lost	Total Depth 5980	Casing Perforations Top / Bottom
Final Flow Pressure		Interval Tested 3750 - 3804	Formation Tested
Final Closed in Pressure		Casing or Hole Size 8 3/4"	Liner or Rathole Size 6 1/4
Final Hydro Mud Pressure		Size Surface Choke 3/4" / Size Bottom Choke 3/4"	Size and Type Wall Packer 7 3/4" ES
Depth Centre Gauge Ft.	Blanked Off	Size Drill Pipe 4 1/2 FH	ID and Length Drill Collars
BT P.R.D. No.	Hr. Clock	Anchor Size O.D. 5.00" I.D.	Amount-Type of Cushion Nil
Pressure Readings / Field / Office Corrected		Gauge Depth Temp. °F meas. °F est.	Mud Weight 9.0 / Mud Viscosity 50
Initial Hydro Mud Pressure		All Depths Measured From K.B.	No. Folders Reproduced 11
Initial Closed in Pressure		Time Periods (Minutes) 1st Flow 10 Initial CIP 60 2nd Flow 120 Final CIP 120	
Initial Flow Pressure		Recovered 8 Feet of Mud	
Final Flow Pressure		Recovered Feet of	
Final Closed in Pressure		Recovered Feet of	
Final Hydro Mud Pressure		Recovered Feet of	
Depth Bottom Gauge 3762 Ft.	Blanked Off Yes	Oil Recovery Degrees API	Water Recovery Specific Gravity
BT P.R.D. No. 3364	4305 12 Hr. Clock	REMARKS: Misrun. Tool failed to open.	
Pressure Readings / Field / Office Corrected			
Initial Hydro Mud Pressure			
Initial Closed in Pressure	Chart Drum		
Initial Flow Pressure	Not Set		
Final Flow Pressure	Properly		
Final Closed in Pressure			
Final Hydro Mud Pressure			

LEGAL DESCRIPTION 67° 59'N 135° 22' W

Lease Name BANFF AQUIT ARCO RAT PASS Well No. K-35 Test No. 1

FIELD OR AREA RAT PASS Owner's District CALGARY Lease Owner BANFF OIL LIMITED

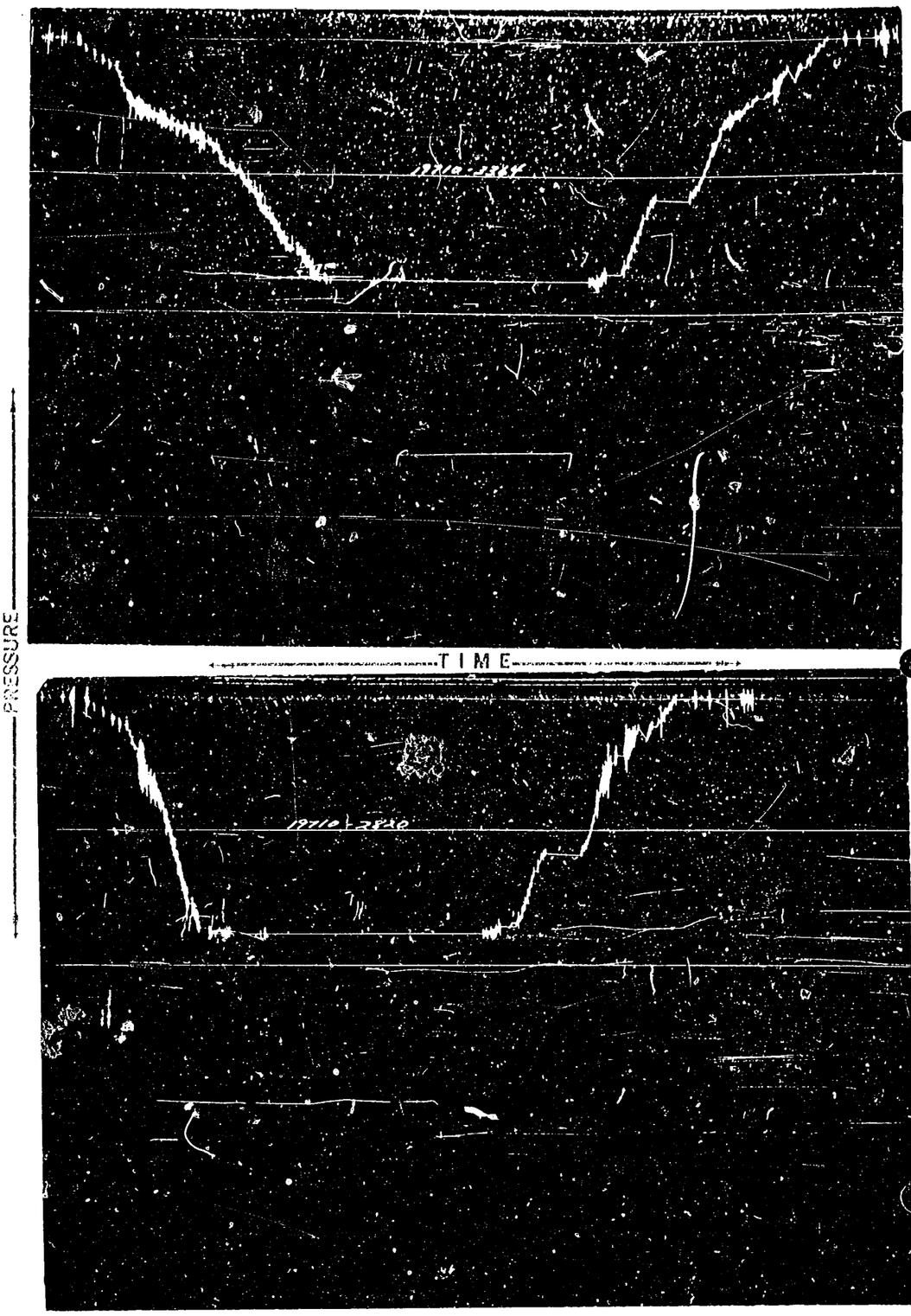
PROVINCE N.W.T.

FORM 233-1

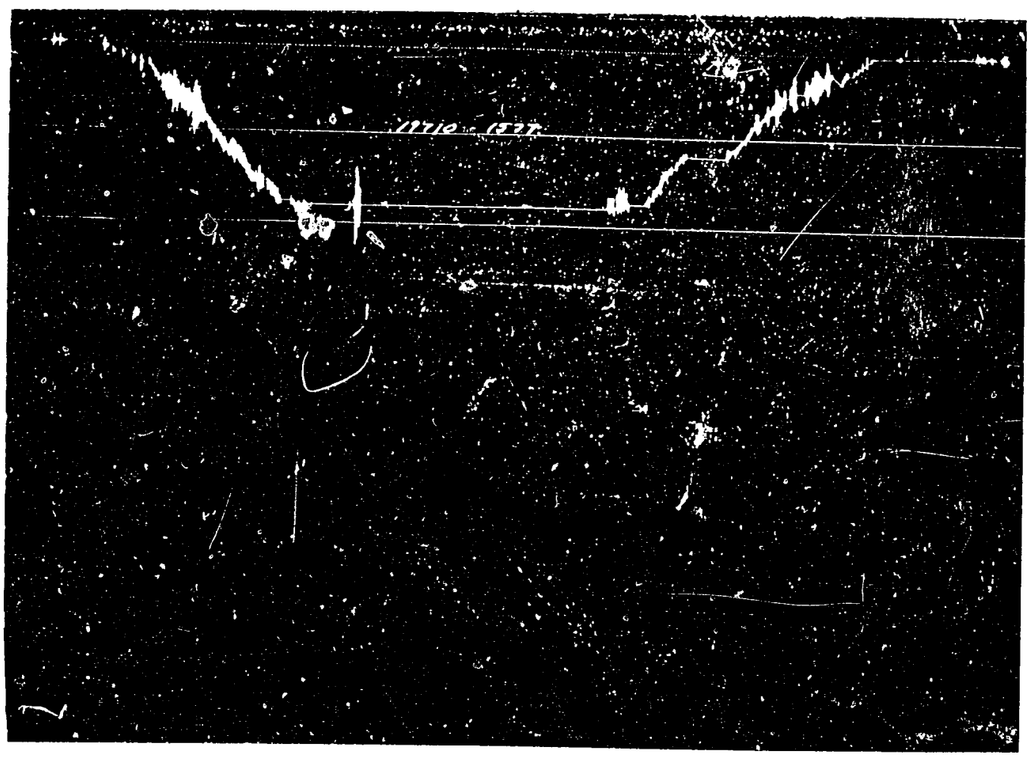
DRILL STEM TEST DATA

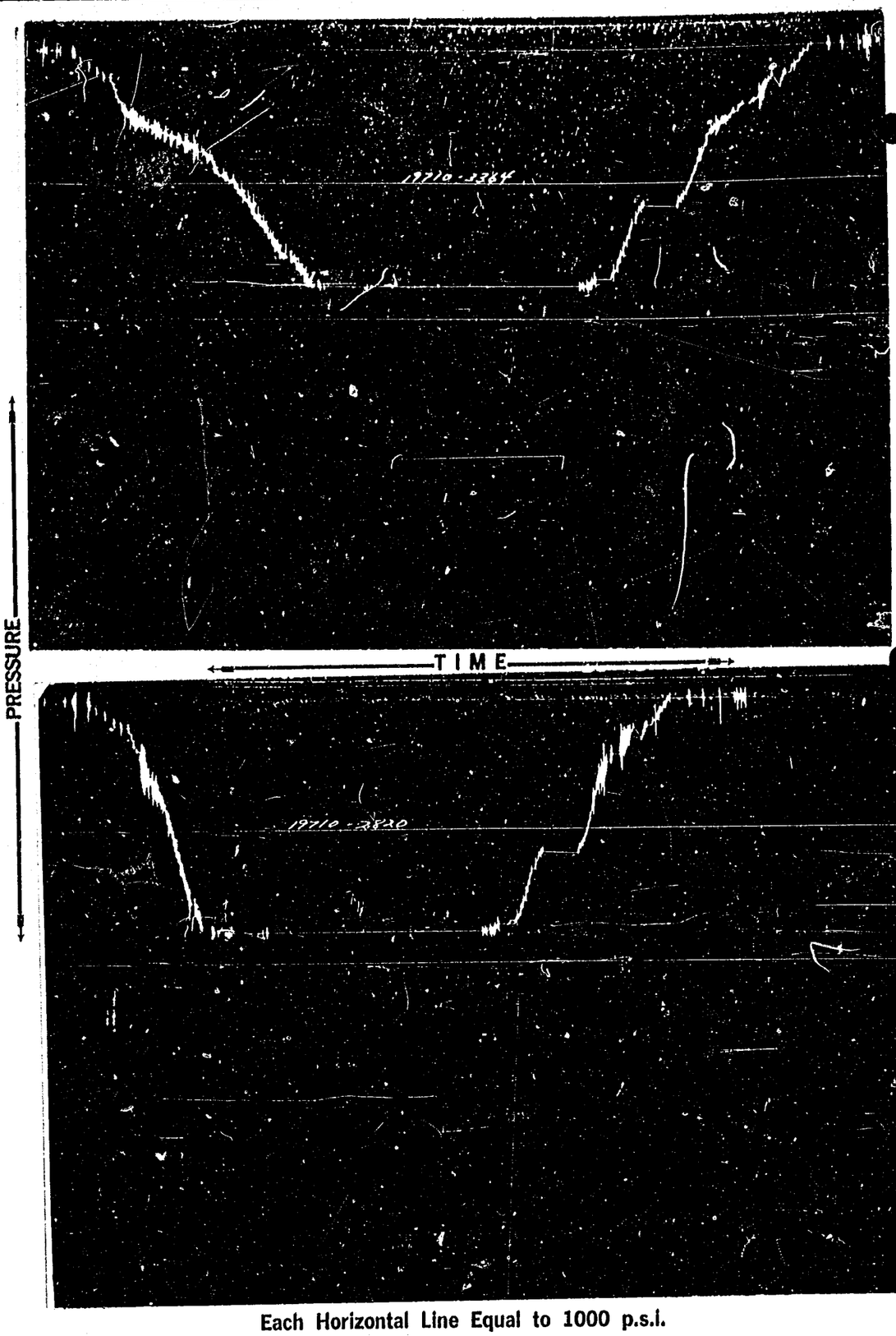
Your Formation Testing Service Report

Halliburton

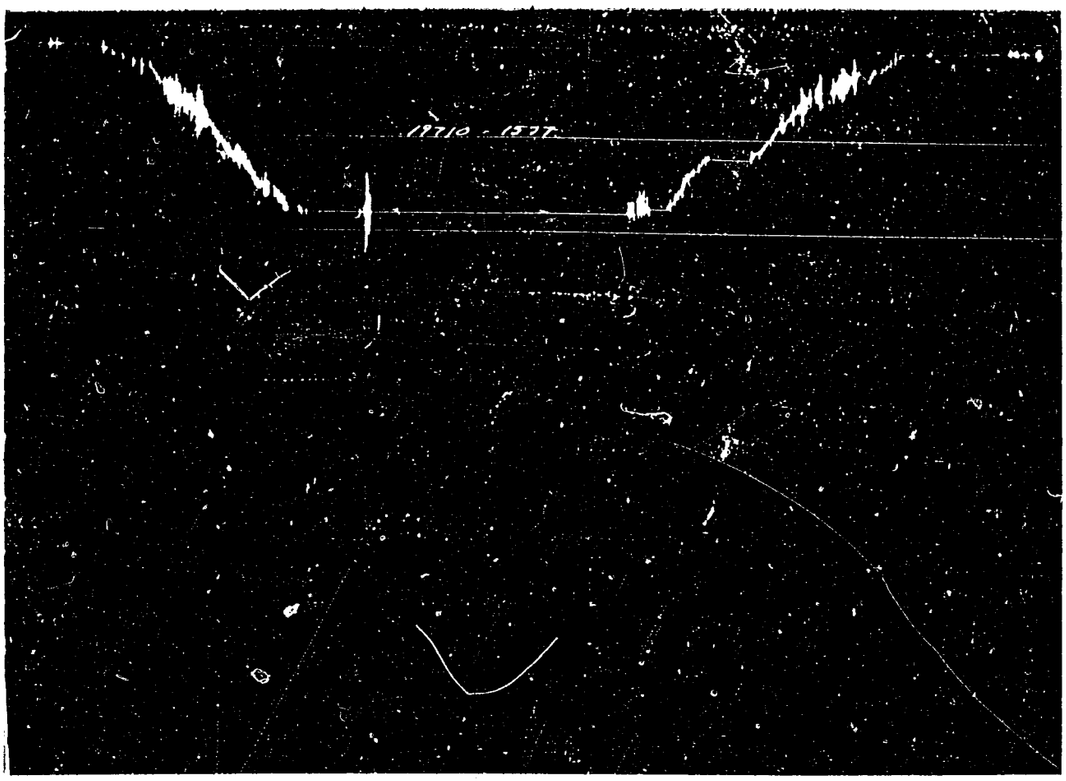


Each Horizontal Line Equal to 1000 p.s.i.





Each Horizontal Line Equal to 1000 p.s.i.



Depth Top Gauge	3761 Ft.	Blanked Off	No
BT P.R.D. No.	3364	4362 12 Hr. Clock	

Pressure Readings	Field	Office Corrected
Initial Hydro Mud Pressure	1741	1755
Initial Closed in Pressure		
Initial Flow Pressure		
Final Flow Pressure		
Final Closed in Pressure		
Final Hydro Mud Pressure	1741	1755

Depth Centre Gauge	3735 Ft.	Blanked Off	No
BT P.R.D. N	2820	8742 12 Hr. Clock	

Pressure Readings	Field	Office Corrected
Initial Hydro Mud Pressure	1760	1754
Initial Closed in Pressure		
Initial Flow Pressure		
Final Flow Pressure		
Final Closed in Pressure		
Final Hydro Mud Pressure	1760	1754

Depth Bottom Gauge	3762 Ft.	Blanked Off	Yes
BT P.R.D. No.	1577 (8000)	4305 12 Hr. Clock	

Pressure Readings	Field	Office Corrected
Initial Hydro Mud Pressure	2259	1767
Initial Closed in Pressure		
Initial Flow Pressure		
Final Flow Pressure		
Final Closed in Pressure		
Final Hydro Mud Pressure	2259	1767

Date December 9, 1970 — Ticket No. 32-19710

Kind of Job Dual Straddle — HOWCO District High Level

Tester H.F. Sponholz — Witness E. Shack

Contractor Guthrie McLaren Drilling Co. Ltd.

K B Elevation		Top Packer Depth	3750
		Bottom Packer Depth	3804
Total Depth	5980	Casing Perforations Top	
		Casing Perforations Bottom	
Interval Tested	3750–3804	Formation Tested	–
Casing or Hole Size	8 3/4"	Liner or Rathole Size	6 1/4"
Size Surface Choke		Size Bottom Choke	
Size and Type Wall Packer	7 3/4"ES		
Size Drill Pipe	4 1/2 FH	ID and Length Drill Collars	
Anchor Size	I.D. O.D. 5.00"	Amount-Type of Cushion	Nil
Gauge Depth Temp.	°F meas. °F est.	Mud Weight	9.0
		Mud Viscosity	50
All Depths Measured From	K.B.	No. Folders Reproduced	11

Time Periods (Minutes)			
1st Flow	Initial CIP	2nd Flow	Final CIP

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Oil Recovery Degrees API — Water Recovery Specific Gravity

REMARKS: Misrun. Tool failed to open.

LEGAL DESCRIPTION 67° 59'N 135° 22'W

FIELD OR AREA RAT PASS

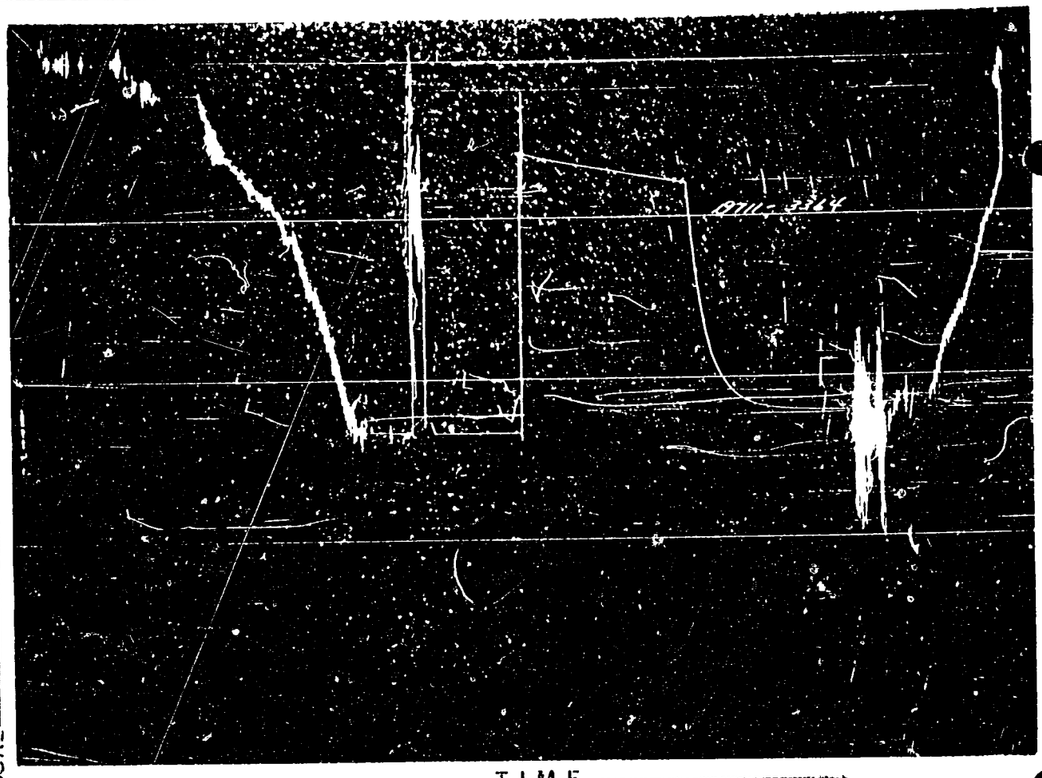
PROVINCE N.W.T.

BANFF AQUIT ARCO RAT PASS — Lease Name — K-35 Well No. — 2 Test No. — CALGARY Owner's District — BANFF OIL LIMITED Lease Owner

DRILL STEM TEST DATA

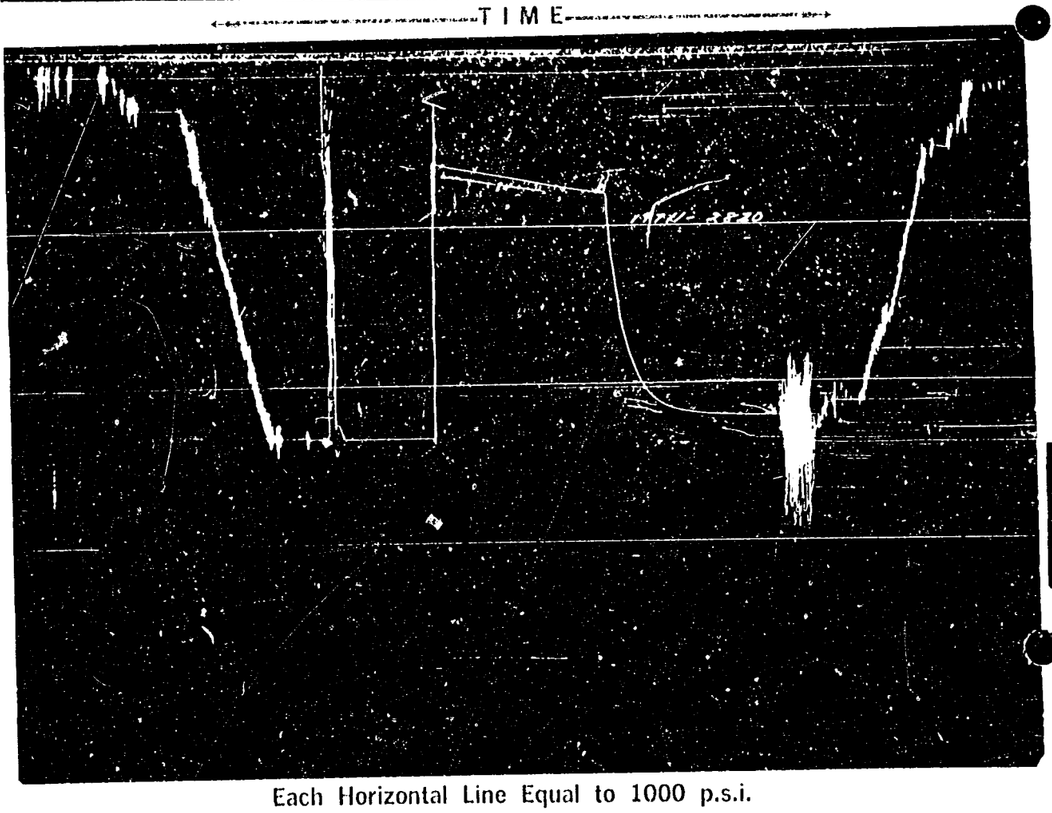
FORM 233-1

Your Formation Testing Service Report



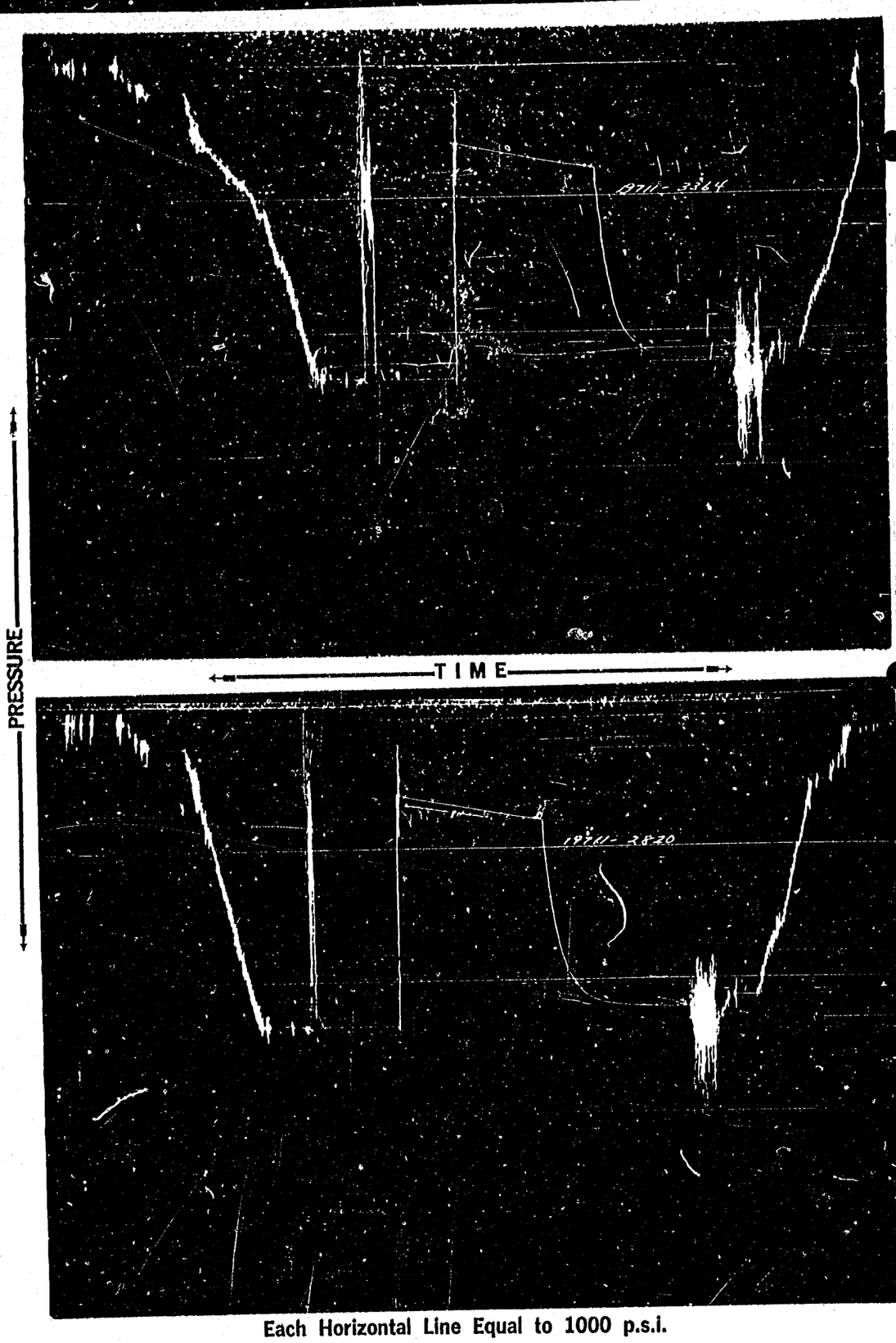
PRESSURE

TIME

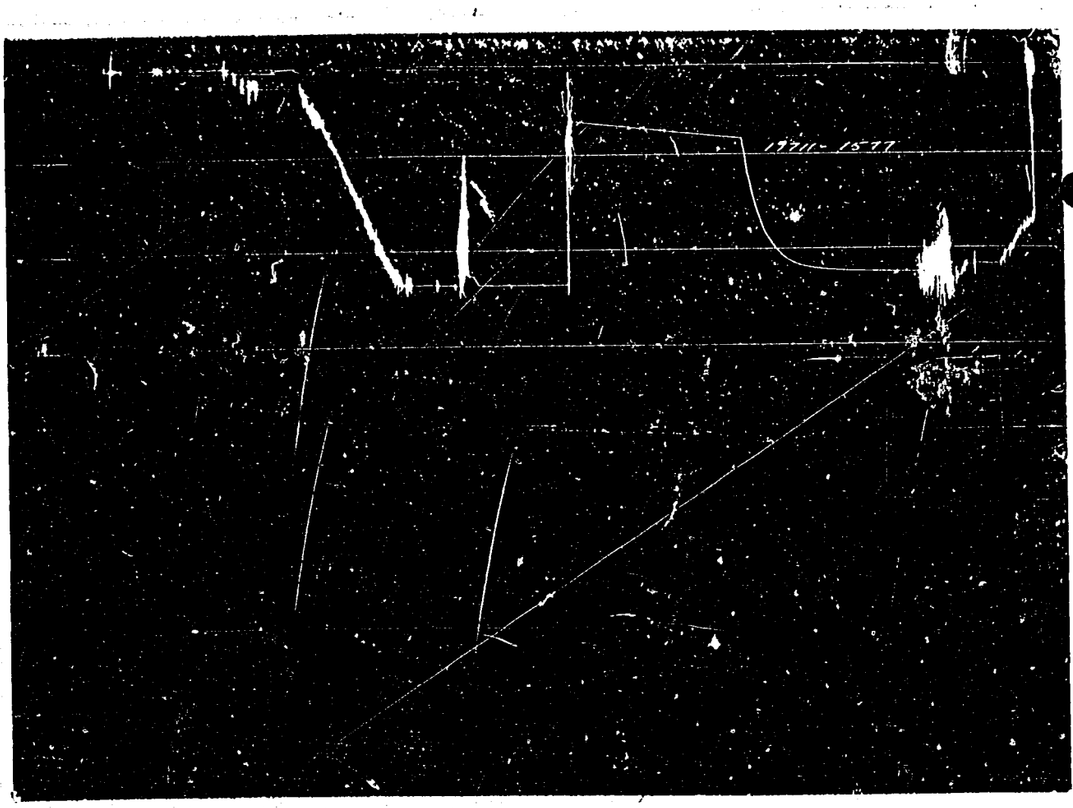


Each Horizontal Line Equal to 1000 p.s.i.





Each Horizontal Line Equal to 1000 p.s.i.



Depth Top Gauge	4958 Ft.	Blanked Off	No	Date December 10, 1970	Ticket No. 37-19711
BT P.R.D. No.	3364	4362 12 Hr. Clock		Kind of Job Dual Straddle	HOWCO District High Level
Pressure Readings	Field	Office Corrected		Tester H.F. Sponholz	Witness E. Shack
Initial Hydro Mud Pressure	2332.4	2312		Contractor Guthrie McLaren Drilling Co. Ltd.	
Initial Closed in Pressure	2134.5			K B Elevation	Top Packer Depth 4978 Bottom Packer Depth 5031
Initial Flow Pressure	791.9	579		Total Depth 5980	Casing Perforations Top / Bottom
Final Flow Pressure	778.8	778		Interval Tested 4978 - 5031	Formation Tested
Final Closed in Pressure	2015.8	2205		Casing or Hole Size 8 3/4"	Liner or Rathole Size 6 1/4"
Final Hydro Mud Pressure	2337.4	2312		Size Surface Choke	Size Bottom Choke 3/4" Size and Type Wall Packer 7 3/4" ES
Depth Centre Gauge	4963 Ft.	Blanked Off	No	Size Drill Pipe 4 1/2 FH	ID and Length Drill Collars 2 7/8"
BT P.R.D. No.	2820	8742 12 Hr. Clock		Anchor I.D. Size O.D. 5.00"	Amount-Type of Cushion Nil
Pressure Readings	Field	Office Corrected		Gauge Depth 80 °F meas. °F est. Temp.	Mud Weight 9.1 Mud Viscosity 55
Initial Hydro Mud Pressure	2333	2316		All Depths Measured From K.B.	No. Folders Reproduced 11
Initial Closed in Pressure	2293			Time Periods (Minutes) 1st Flow 5 Initial CIP 70 2nd Flow 120 Final CIP 120	
Initial Flow Pressure	665	589		Recovered 770 Feet of Mud	
Final Flow Pressure	639	778		Recovered 450 Feet of Salt Water	
Final Closed in Pressure	1985	2205		Recovered Feet of	
Final Hydro Mud Pressure	2333	2316		Recovered Feet of	
Depth Bottom Gauge	4991 Ft.	Blanked Off	Yes	Oil Recovery Degrees API	Water Recovery Specific Gravity EST. 1.07
BT P.R.D. No.	1577	4305 12 Hr. Clock		REMARKS: Tool open at 6:45 am. Shut in at 6:50 am. Tool open at 8:00 am with weak blow throughout flow period. Shut in at 10:00 am. Pulled loose at 12:00. Top packers leaked during preflow and ICIP.	
Pressure Readings	Field	Office Corrected			
Initial Hydro Mud Pressure		2331			
Initial Closed in Pressure					
Initial Flow Pressure		604			
Final Flow Pressure		794			
Final Closed in Pressure		2227			
Final Hydro Mud Pressure		2331			

INTERPRETATION CALCULATIONS ENCLOSED

LEGAL DESCRIPTION 67° 59'N 135° 22' W

BANFF AQUIT ARCO RAT PASS Lease Name

K-35 Well No.

3 Test No.

FIELD OR AREA RAT PASS

CALGARY Owner's District

BANFF OIL LIMITED Lease Owner

PROVINCE N.W.T.

FORM 233-1

DRILL STEM TEST DATA

HALLIBURTON TICKET No. 19711

Interpretation Summary

P_f (extrapolated)	initiol final	psig 2245 psig	DR	5.8	
kh/u	199	md-ft/cp	P_D	1280	psi
kh	201	md-ft	r_i	99	ft
k or k'	3.79	md	PS		ft
OIL OR WATER PRODUCTION			**GAS PRODUCTION**		
Q	73.3	bbl/day	Q_g		MCFD
PI	.0472	bbl/day-psi	AOF, maximum estimated		MCFD
PI_t	.222	bbl/day-psi	AOF, minimum estimated		MCFD
Q_m		bbl/day	AOF_t, maximum estimated		MCFD
$Q_{m,r}$		bbl/day	AOF_t, minimum estimated		MCFD

Liquid Recovery Data

Cushion Volume	bbl	Reported Recovery	bbl
Annular Mud Volume	bbl	Calculated Recovery	bbl
Total	bbl	Reported Recovery/Calculated Recovery	

NOMENCLATURE

AOF = absolute open flow potential, MCFD
AOF_t = theoretical absolute open flow potential if damage were removed, MCFD
B = formation volume factor, res bbl/ST bbl
D = gauge depth from KB, ft
DR = damage ratio, dimensionless
E = KB elevation, ft
h = net pay thicknes, ft
h' = thickness of test interval, ft
k = average effective permeability, md
k' = estimated average effective permeability, md
m = slope of final CIP buildup plot, psig/cycle (psig²/cycle for gas
P_D = average pressure drop across damaged zone during flow, psig
P_f = reservoir pressure, psig
P_s = final flow pressure, psig
$\bar{P}$ = weighted average flow pressure, psig
PI = productivity index, bbl/day-psi
PI_t = theoretical productivity index if damage were removed, bbl/day-psi
PS = potentiometric surface, fresh water corrected to 100°F, ft
Q = average liquid production rate, bbl/day
Q_g = measured gas production rate, MCFD at 60°F, 14.4 psig, sp. gr. 0.60
Q_m = maximum production rate during flow, bbl/day
Q_{mt} = maximum theoretical production rate if damage were removed, bbl/day
r_i = radius of investigation, ft
t = effective flow time, min
T = reservoir temperature, °R
u = viscosity, cp
Z = compressibility factor, dimensionless

These calculations are based upon information furnished by you and taken from Drill Stem Test pressure charts, and are furnished you for your information. In furnishing such calculations and evalutions based thereon, Halliburton is merely expressing its opinion. You agree that Halliburton makes no warranty express or implied as to the accuracy of such calculations or opinions, and that Halliburton shall not be liable for any loss or damage, whether due to negligence or otherwise, in connection with such calculations and opinions.

HALLIBURTON TICKET No. 19711

BT No. 3364 Depth 4958 — 12 Hr. Clock No. 4362 — Temperature Corrected to 80 °F

	1st Flow Pressure		Initial CIP					2nd Flow Pressure		Final CIP				
	Time Defl. .000" T=P10	PSIG Temp. Corr.	Time Defl. .000" / Q	T+Θ	T+Θ / Θ	PSIG Temp. Corr.	PSIG² ÷10⁶ (Gas)	Time Defl. .000" T=P10	PSIG Temp. Corr.	Time Defl. .000" / Q	T+Θ	T+Θ / Θ	PSIG Temp. Corr.	PSIG² ÷10⁶ (Gas)
P0								.000	579	.0000			778	
P1								.079	605	.0795			1665	
P2								.158	627	.1590			1984	
P3								.237	647	.2385			2108	
P4								.316	667	.3180			2156	
P5								.395	685	.3975			2178	
P6								.474	705	.4770			2192	
P7								.553	726	.5565			2197	
P8								.632	743	.6360			2201	
P9								.711	761	.7155			2203	
P10								.790	778	.7950			2205	

BT No. 2820 Depth 4963 — 12 Hr. Clock No. 8742 — Temperature Corrected to 80 °F

	1st Flow Pressure		Initial CIP					2nd Flow Pressure		Final CIP				
	Time Defl. .000" T=P10	PSIG Temp. Corr.	Time Defl. .000" / Q	T+Θ	T+Θ / Θ	PSIG Temp. Corr.	PSIG² ÷10⁶ (Gas)	Time Defl. .000" T=P10	PSIG Temp. Corr.	Time Defl. .000" / Q	T+Θ	T+Θ / Θ	PSIG Temp. Corr.	PSIG² ÷10⁶ (Gas)
P0								.000	589	.000			778	
P1								.081	610	.081			1689	
P2								.162	631	.162			1991	
P3								.243	649	.243			2108	
P4								.324	669	.324			2158	
P5								.405	688	.405			2179	
P6								.486	708	.486			2191	
P7								.567	726	.567			2197	
P8								.648	745	.648			2201	
P9								.729	761	.729			2203	
P10								.810	778	.810			2205	

Intervals of Pressure Readings (Minutes): 1st Flow Pressure — Initial CIP — 2nd Flow Pressure 12.0 Final CIP 12.0

Remarks:

HOWCO 52107

PRESSURE DATA

HALLIBURTON TICKET No. 19711

BT No. 1577 Depth 4991 — 12 Hr. Clock No. 4305 — Temperature Corrected to 80 °F

	1st Flow Pressure		Initial CIP					2nd Flow Pressure		Final CIP				
	Time Defl. .000" T=P10	PSIG Temp. Corr.	Time Defl. .000" / 0	T+0	T+0 / 0	PSIG Temp. Corr.	PSIG² ÷10⁶ (Gas)	Time Defl. .000" T=P10	PSIG Temp. Corr.	Time Defl. .000" / 0	T+0	T+0 / 0	PSIG Temp. Corr.	PSIG² ÷10⁶ (Gas)
P0								.0000	604	.000		T= .795	794	
P1								.0795	625	.081		10.8	1694	
P2								.1590	646	.162		5.91	2002	
P3								.2385	664	.243		4.27	2128	
P4								.3180	683	.324		3.45	2178	
P5								.3975	701	.405		2.96	2200	
P6								.4770	725	.486		2.63	2212	
P7								.5565	743	.567		2.40	2218	
P8								.6360	759	.648		2.23	2223	
P9								.7155	778	.729		2.09	2225	
P10								.7950	794	.810		1.98	2227	

BT No. Depth — Hr. Clock No. — Temperature Corrected to °F

	1st Flow Pressure		Initial CIP					2nd Flow Pressure		Final CIP				
	Time Defl. .000" T=P10	PSIC Temp. Corr.	Time Defl. .000" / 0	T+0	T+0 / 0	PSIG Temp. Corr.	PSIG² ÷10⁶ (Gas)	Time Defl. .000" T=P10	PSIG Temp. Corr.	Time Defl. .000" / 0	T+0	T+0 / 0	PSIG Temp. Corr.	PSIG² ÷10⁶ (Gas)
P0														
P1														
P2														
P3														
P4														
P5														
P6														
P7														
P8														
P9														
P10														

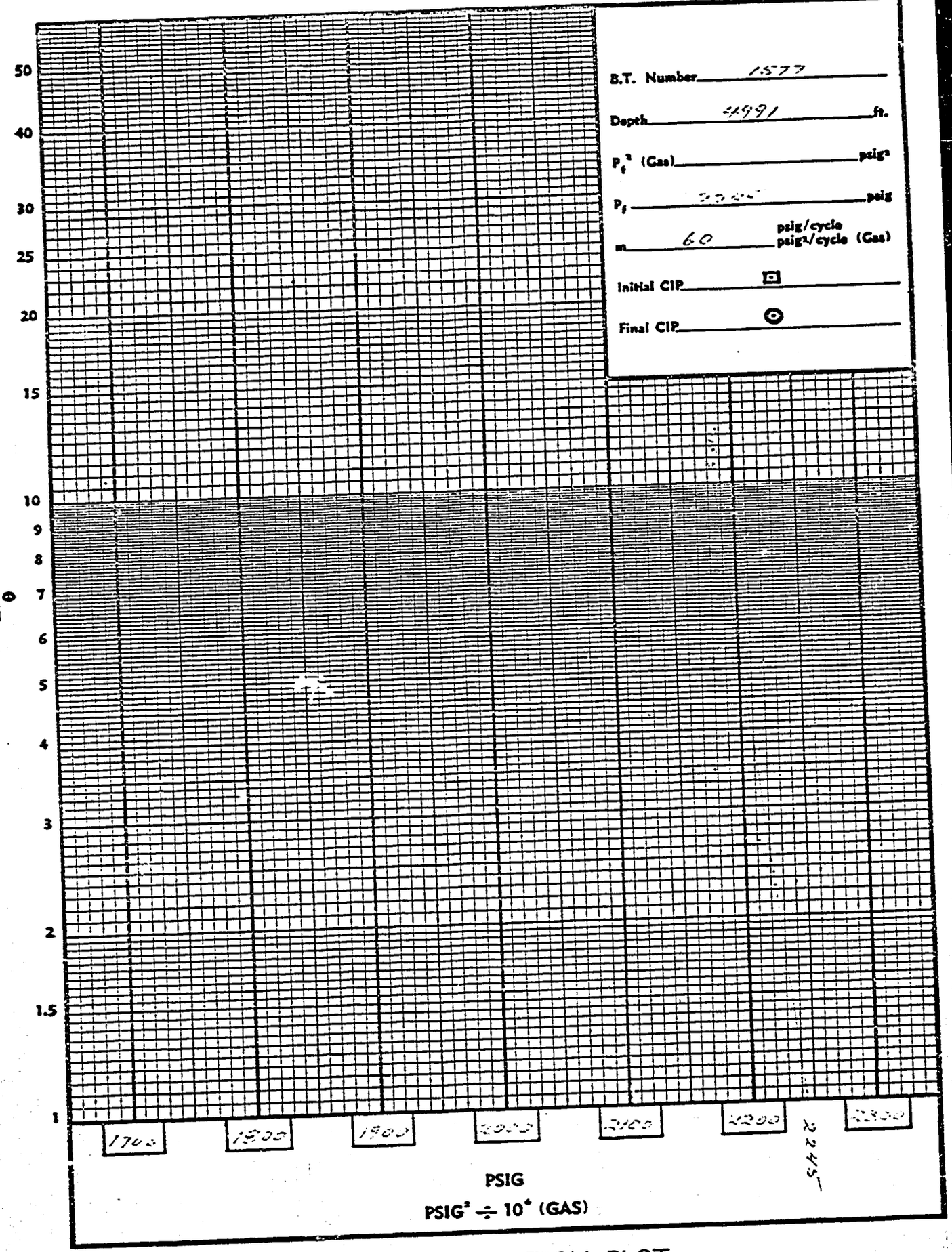
Intervals of Pressure Readings (Minutes): 1st Flow Pressure — Initial CIP — 2nd Flow Pressure 12.0 Final CIP 12.0

Remarks:

HOWCO 52107

PRESSURE DATA

HALLIBURTON TICKET No. [illegible]



HOWCO 521016

PRESSURE EXTRAPOLATION PLOT

HALLIBURTON TICKET No. 19711

FLUID PROPERTIES

API Gravity @ 60°F ..... ° Specific Gravity @ 60°F 1.07 Estimated Viscosity (Reservoir) 1.01 cp

POTENTIOMETRIC SURFACE

$PS = E - D + 2.319\,(P_f) = (\quad) - (\quad) + 2.319\,(\quad) =$ ..... ft

AVERAGE PRODUCTION RATE DURING TEST

$$Q = \frac{1440\ (\text{drill collar capacity} \times \text{recovery} + \text{drill pipe capacity} \times \text{recovery})}{\text{initial flow time} + \text{final flow time}}$$

$$= \frac{1440\ [(\quad)(\quad) + (.0142)(430)]}{(\quad) + (120)} = 73.3 \text{ bbl/day}$$

TRANSMISSIBILITY

$$\frac{kh}{u} = \frac{162.6\ QB}{m} = \frac{162.6\ (73.3)(1.00)}{(60)} = 199 \text{ md-ft/cp}$$

IN SITU CAPACITY

$kh = (199)(1.01) =$ 201 md-ft

AVERAGE EFFECTIVE PERMEABILITY

$k = (\quad)/(\quad) =$ ..... md

$k' = kh/h' = (201)/(53) =$ 3.79 md

PRODUCTIVITY INDEX

$$PI = \frac{Q}{P_f - \bar{P}} = \frac{(73.3)}{(2245) - (694)} = .0472 \text{ bbl/day-psi}$$

DAMAGE RATIO

$$DR \approx \frac{(P_f - \bar{P})/m}{\log(kt) + 1.80} \approx \frac{[(2245) - (694)]/(60)}{\log[(3.79)(120)] + 1.80} \approx 5.8$$

PRESSURE DROP ACROSS DAMAGED ZONE

$$P_D = \frac{(P_f - \bar{P})(DR - 1)}{DR} = \frac{[(2245) - (694)](4.8)}{(5.8)} = 1280 \text{ psi}$$

PRODUCTIVITY INDEX WITH DAMAGE REMOVED

$PI_t = PI\,(DR) = (.0472)(4.7) =$ 222 bbl/day-psi

MAXIMUM THEORETICAL PRODUCTION RATE, DAMAGE REMOVED

$Q_{mt} = PI_t\,(P_f) = (\quad)(\quad) =$ ..... bbl/day

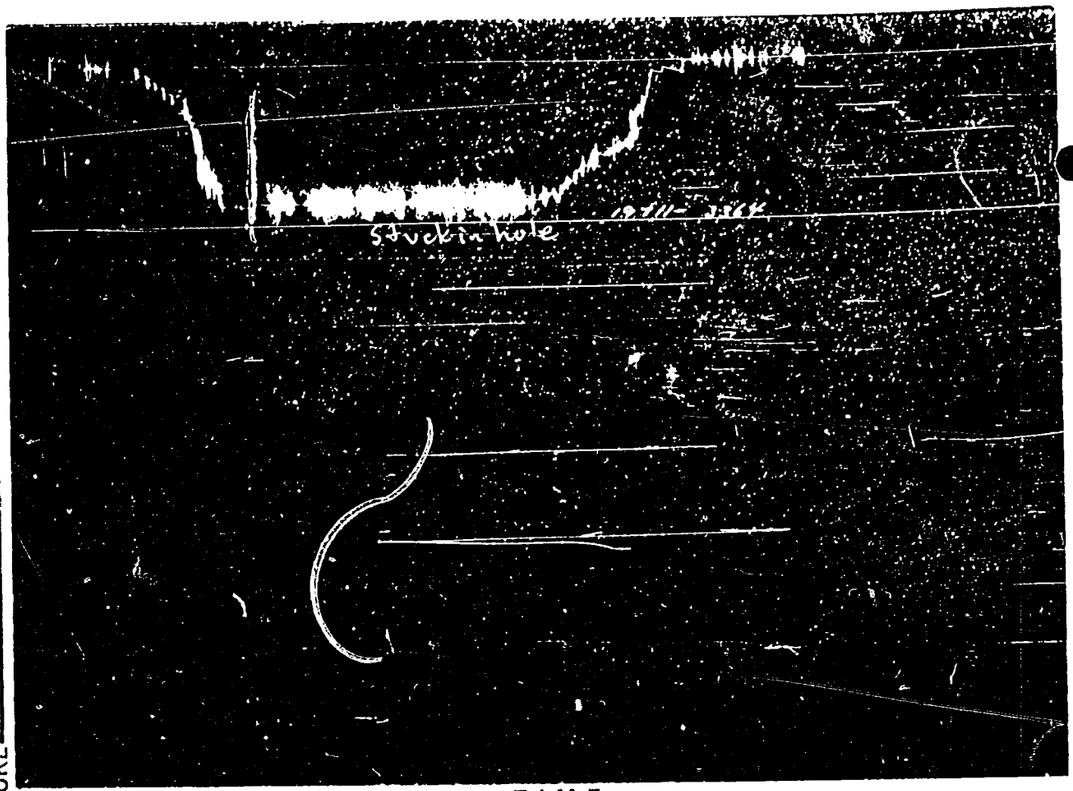
APPROXIMATE RADIUS OF INVESTIGATION

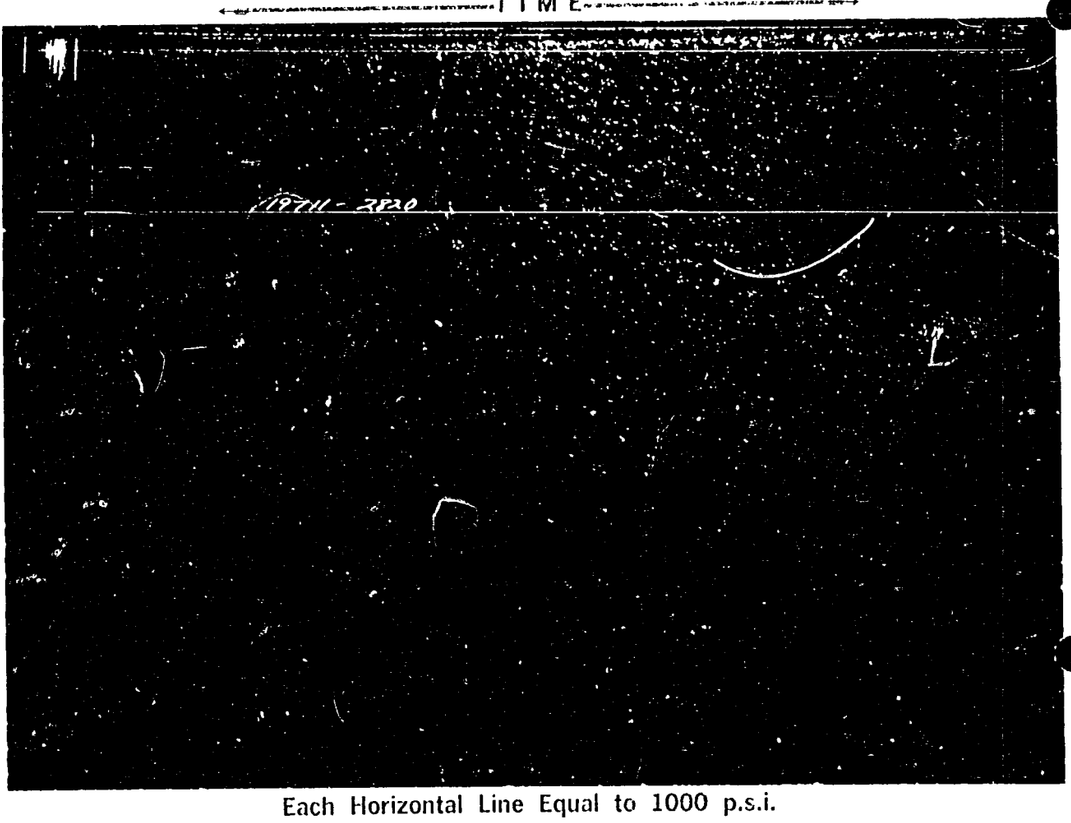
$$r_i \approx 4.63\sqrt{kt} \approx 4.63\sqrt{(3.79)(120)} \approx 99 \text{ ft}$$

Your . . . .

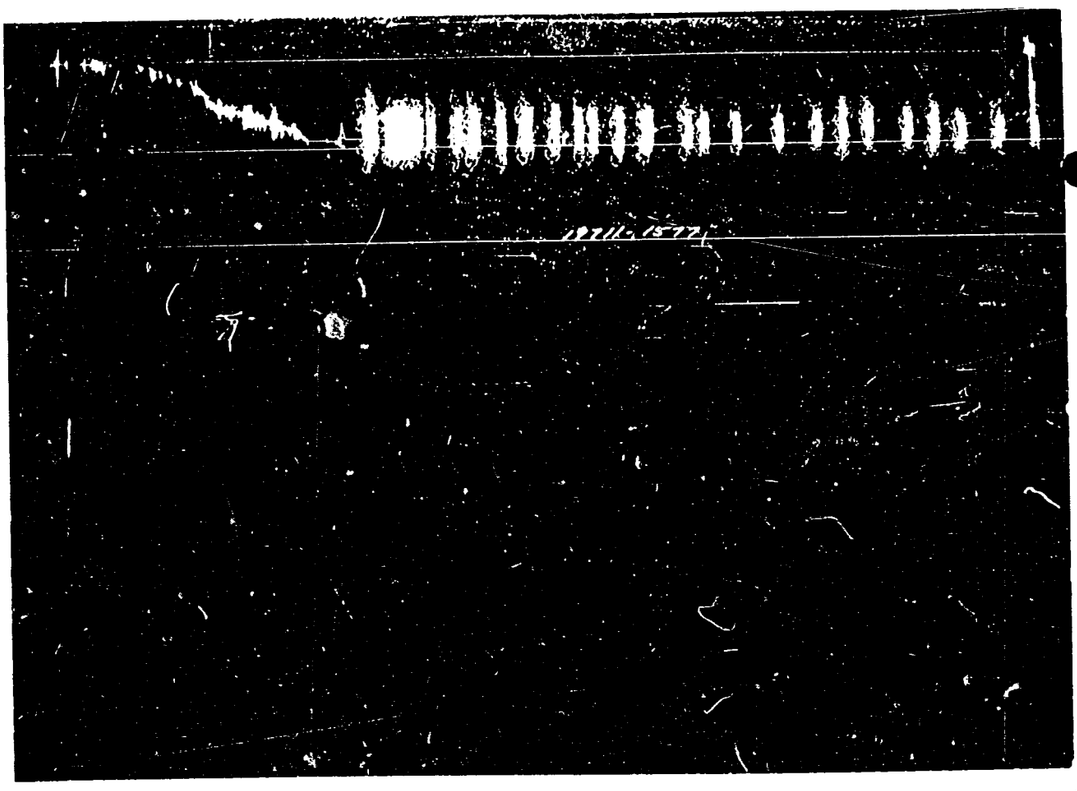
Information Testing Service Report

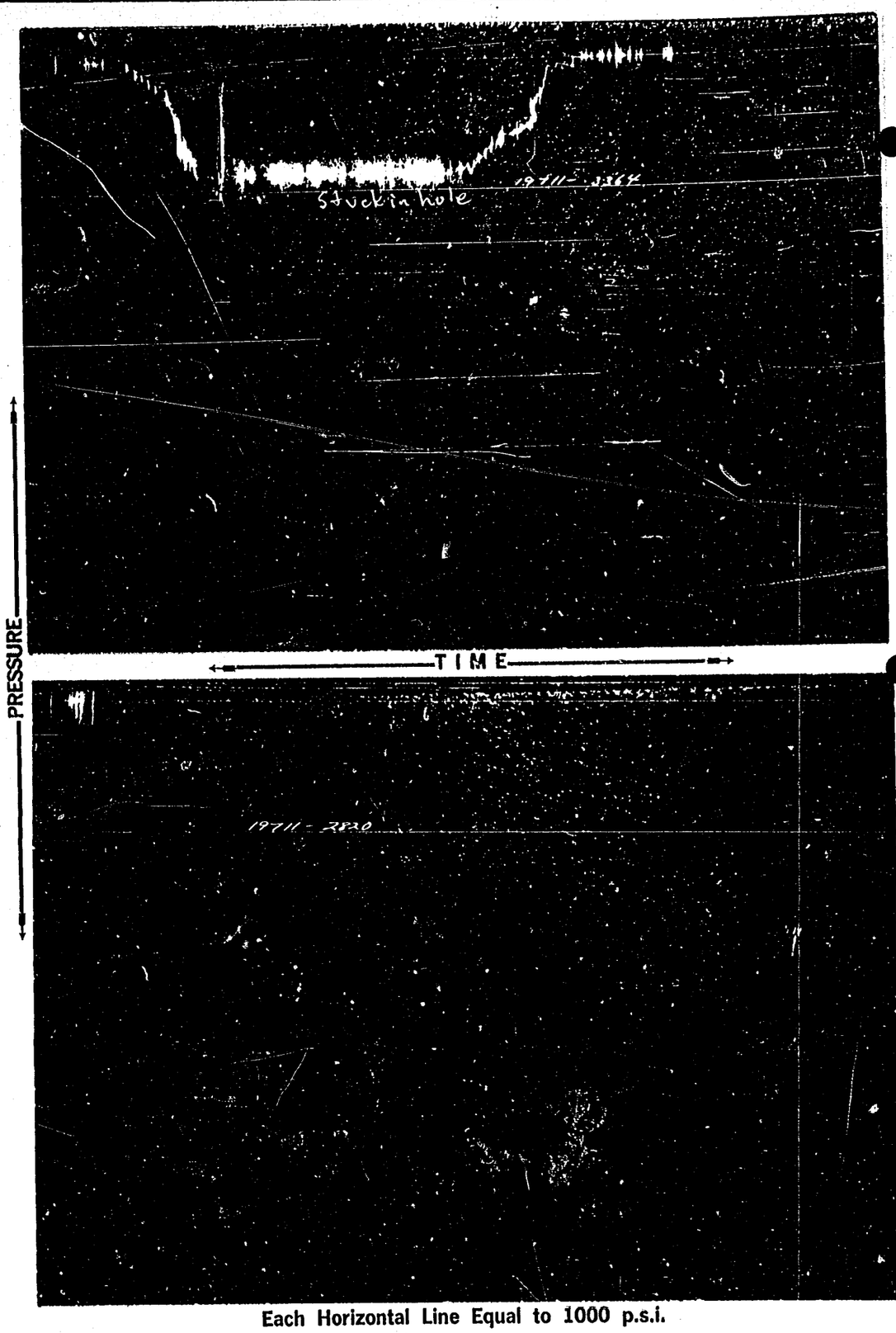
Belleville
Ontario



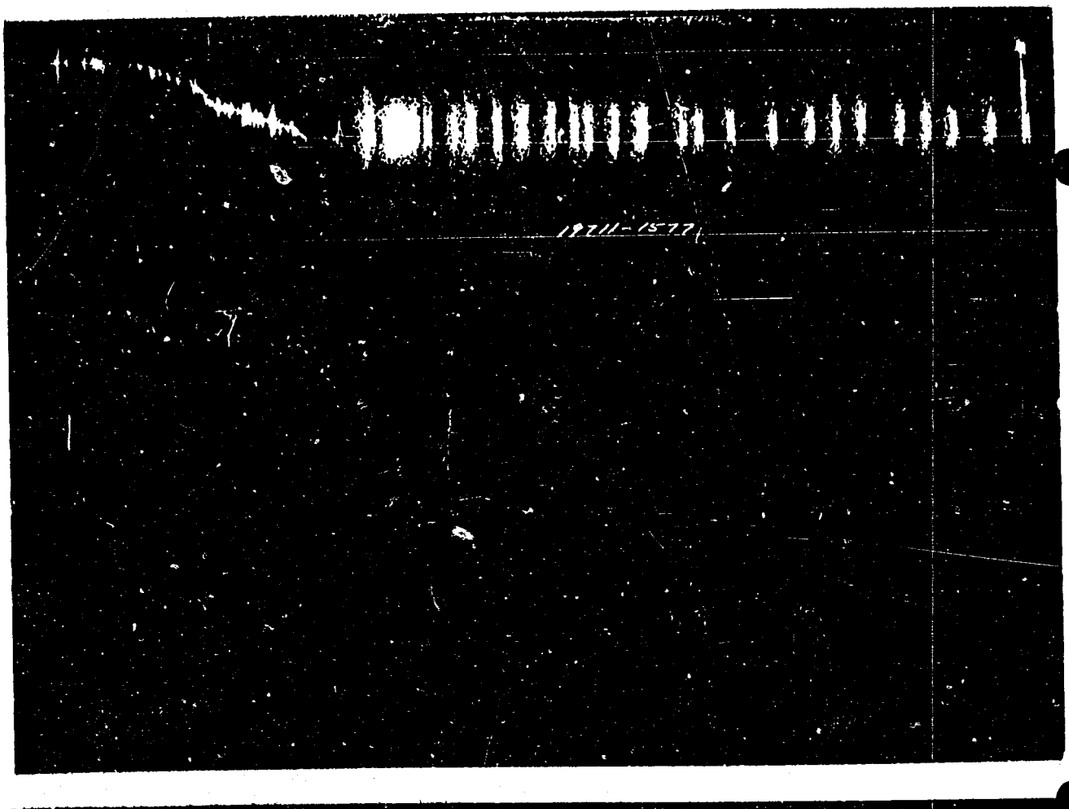


Each Horizontal Line Equal to 1000 p.s.i.





Each Horizontal Line Equal to 1000 p.s.i.



Depth Top Gauge	1984 Ft.	Blanked Off	No	Date December 10, 1970	Ticket No. 37-19711
BT P.R.D. No.	3364	4362 12 Hr. Clock		Kind of Job Dual Straddle	HOWCO District High Level
Pressure Readings	Field	Office Corrected		Tester H. F. Sponholz	Witness E. Shack
Initial Hydro Mud Pressure		861		Contractor Guthrie McLaren Drilling Co. Ltd.	
Initial Closed in Pressure				KB Elevation	Top Packer Depth 1900 Bottom Packer Depth 1954
Initial Flow Pressure				Total Depth 5980	Casing Perforations Top Bottom
Final Flow Pressure				Interval Tested 1900 - 1954	Formation Tested
Final Closed in Pressure				Casing or Hole Size 8 3/4	Liner or Rathole Size 6 1/4
Final Hydro Mud Pressure		861		Size Surface Choke	Size Bottom Choke 3/4" Size and Type Wall Packer 7 3/4" ES
Depth Centre Gauge	1989 Ft.	Blanked Off	No	Size Drill Pipe 4 1/2 FH	ID and Length Drill Collars 2 7/8"
ST P.R.D. No.	2820	4742 12 Hr. Clock		Anchor I.D. Size O.D. 5.00"	Amount-Type of Cushion Nil
Pressure Readings	Field	Office Corrected		Gauge Depth Temp. °F meas. °F est.	Mud Weight 9.1 Mud Viscosity 45
Initial Hydro Mud Pressure				All Depths Measured From K.B.	No. Folders Reproduced 11
Initial Closed in Pressure	Stylus	Not		Time Periods (Minutes) 1st Flow Initial CIP 2nd Flow Final CIP	
Initial Flow Pressure		Engaged		Recovered Feet of	
Final Flow Pressure				Recovered Feet of	
Final Closed in Pressure				Recovered Feet of	
Final Hydro Mud Pressure				Recovered Feet of	
Depth Bottom Gauge	2028 Ft.	Blanked Off	Yes	Oil Recovery Degrees API	Water Recovery Specific Gravity
BT P.R.D. No.	1577	4305 12 Hr. Clock		REMARKS:	
Pressure Readings	Field	Office Corrected		BT 3364	
Initial Hydro Mud Pressure		891		Hydrostatic pressure on bottom 852 psi.	
Initial Closed in Pressure				Pressure after weight set on packers 861 psi.	
Initial Flow Pressure				Pressure after tool opened 842 psi.	
Final Flow Pressure					
Final Closed in Pressure				BT 1577	
Final Hydro Mud Pressure		891		Hydrostatic pressure on bottom 884 psi.	
				Pressure after weight set on packers 891 psi.	
				Pressure when tool opened 697 psi.	
				Pressure after tool opened 873 psi.	

LEGAL DESCRIPTION 67° 59'N 135° 22' W

FIELD OR AREA RAT PASS

PROVINCE N.W.T.

BANFF AQUIT ARCO RAT PASS — Lease Name

K-35 — Well No.

4 — Test No.

CALGARY — Owner's District

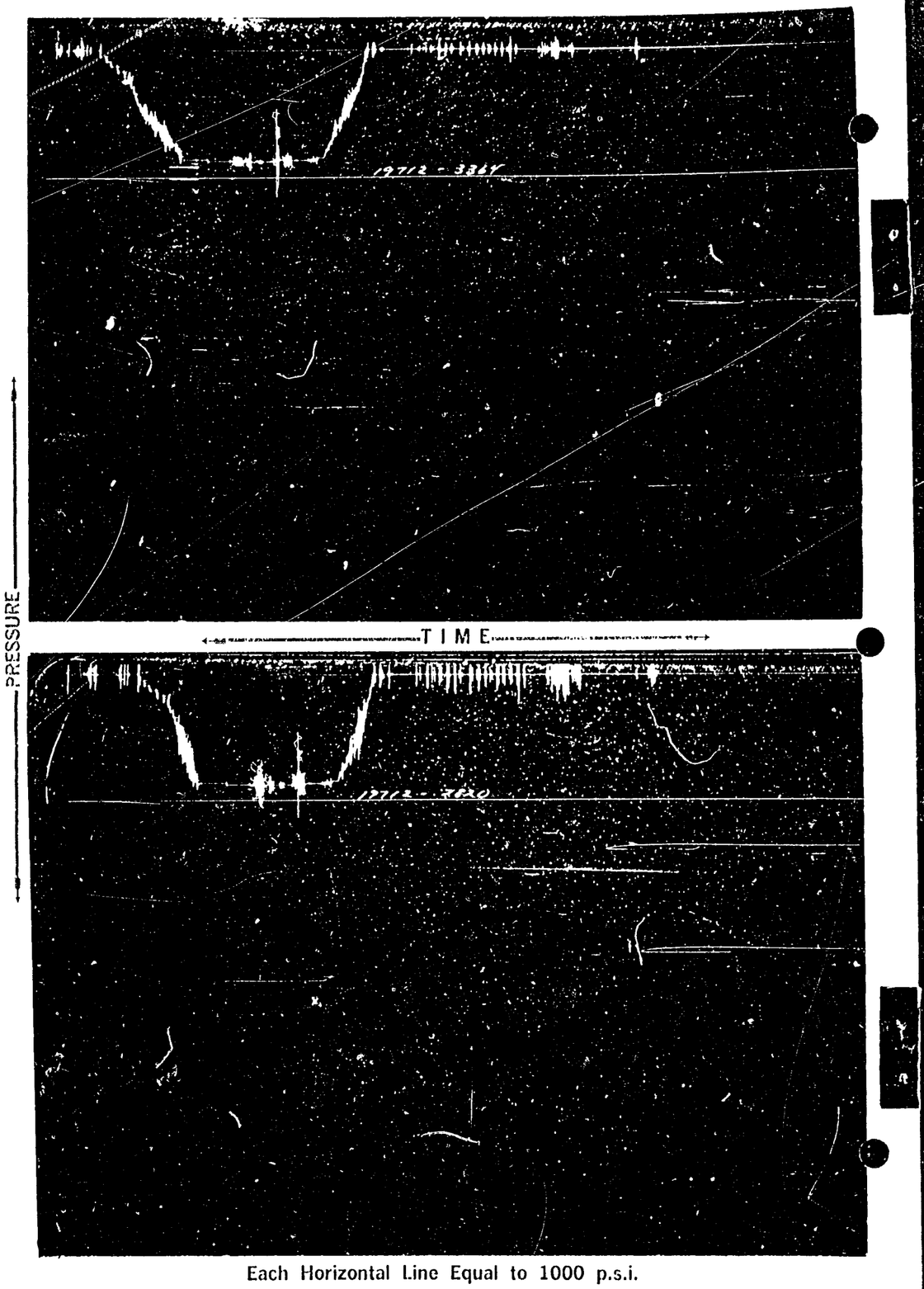
BANFF OIL LIMITED — Lease Owner

FORM 233

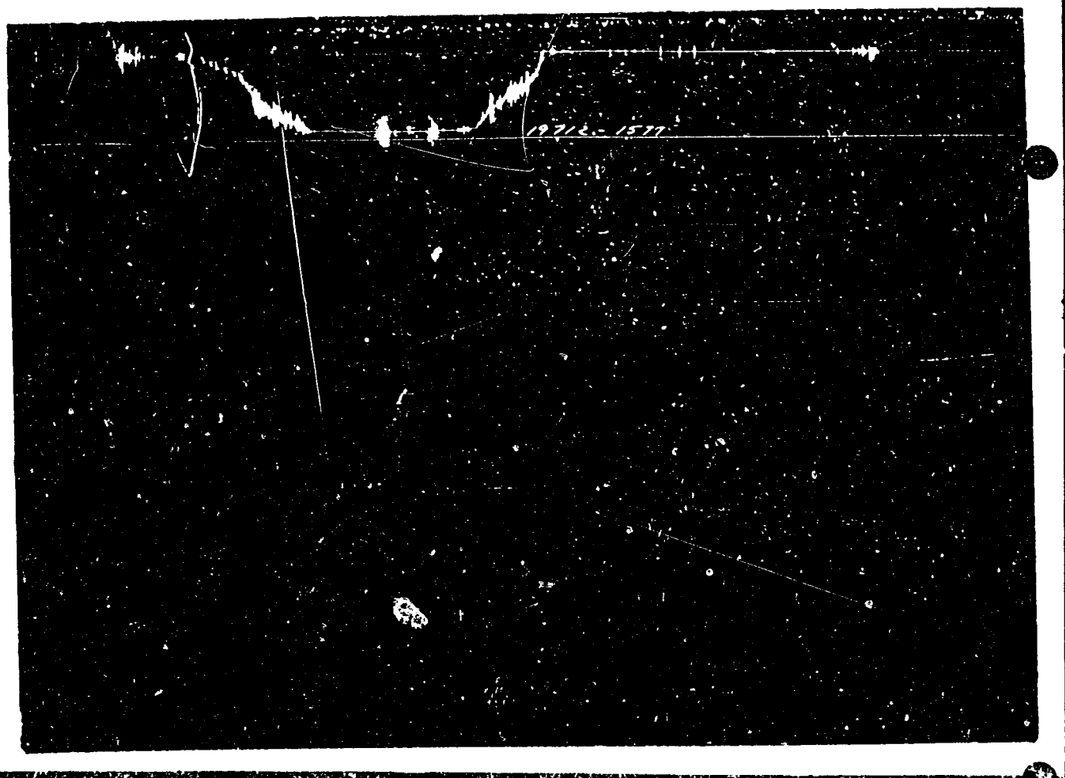
DRILL STEM TEST DATA

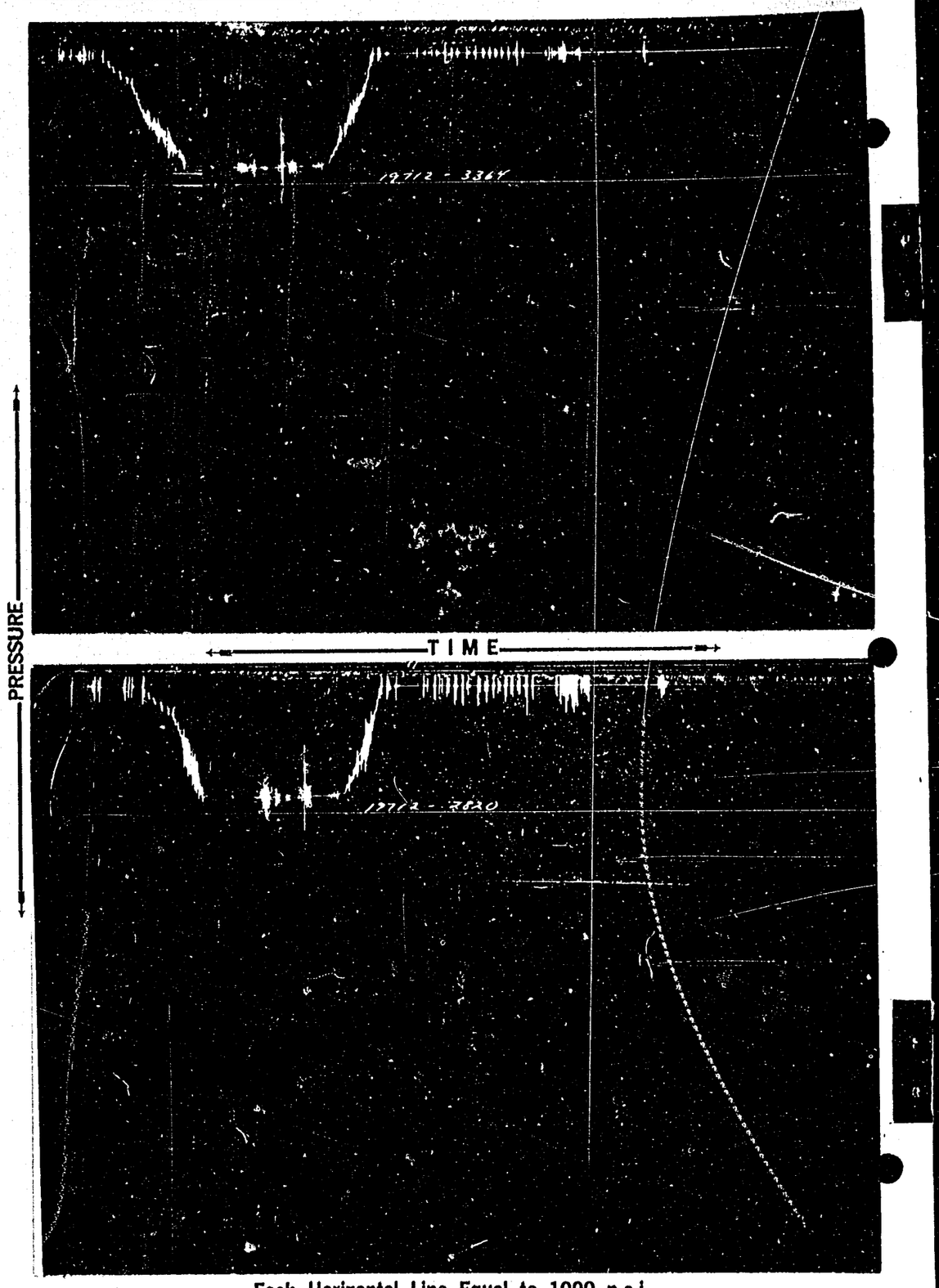
Your ... Formation Testing Service Report

Halliburton

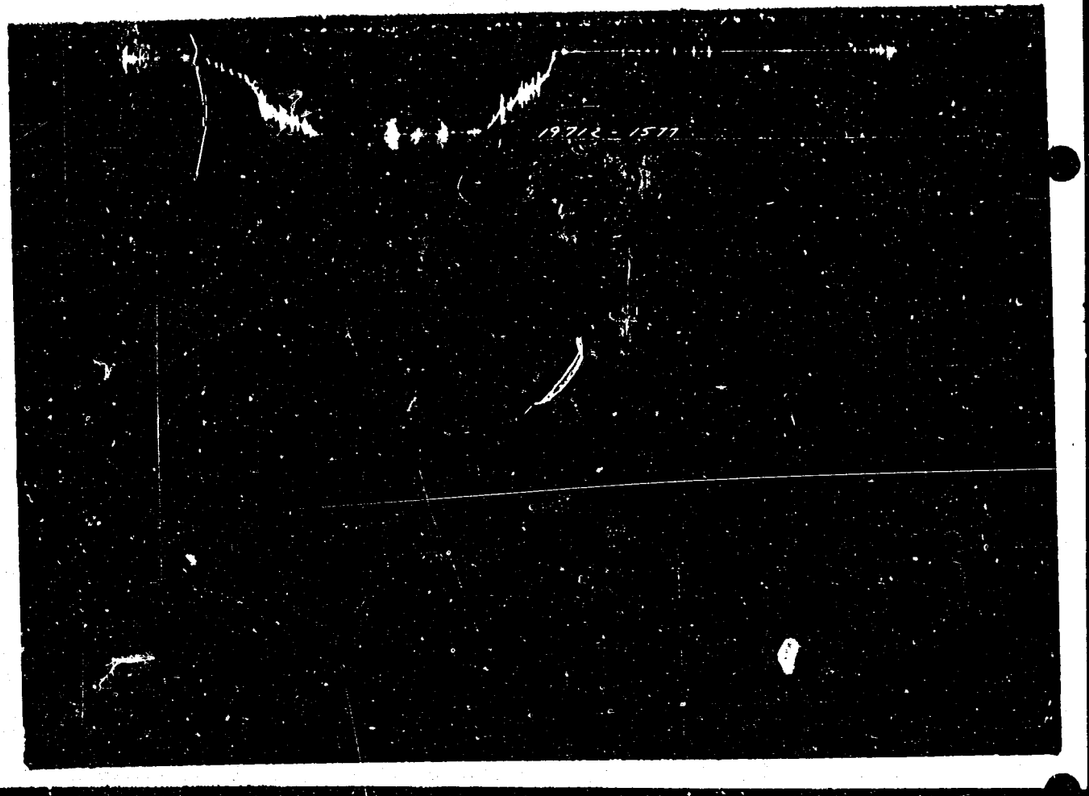


Each Horizontal Line Equal to 1000 p.s.i.





Each Horizontal Line Equal to 1000 p.s.i.



Depth Top Gauge 1887 Ft.	Blanked Off No	Date December 11, 1970	Ticket No. 32-19712
BT P.R.D. No. 3364	4362 12 Hr. Clock	Kind of Job Dual Straddle	HOWCO District High Level
Pressure Readings / Field	Office Corrected	Tester H.F. Sponholz	Witness E. Shack
Initial Hydro Mud Pressure	857	Contractor Guthrie McLaren Drilling Co. Ltd.	
Initial Closed in Pressure		K B Elevation / Top Packer Depth 1907 / Bottom Packer Depth 1953	
Initial Flow Pressure		Total Depth 5985 / Casing Perforations Top / Bottom	
Final Flow Pressure		Interval Tested 1907 – 1955 / Formation Tested –	
Final Closed in Pressure		Casing or Hole Size 8 3/4 / Liner or Rathole Size 6 1/4	
Final Hydro Mud Pressure	857	Size Surface Choke / Size Bottom Choke 3/4 / Size and Type Wall Packer 7 3/4"	
Depth Centre Gauge 1892 Ft.	Blanked Off No	Size Drill Pipe 4 1/2 FH / ID and Length Drill Collars 2 7/8	
BT P.R.D. No. 2820	8742 12 Hr. Clock	Anchor Size I.D. / O.D. / Amount-Type of Cushion	
Pressure Readings / Field	Office Corrected	Gauge Depth Temp. °F meas. °F est. / Mud Weight 9.1 / Mud Viscosity 45	
Initial Hydro Mud Pressure	864	All Depths Measured From K.B. / No. Folders Reproduced 11	
Initial Closed in Pressure		Time Periods (Minutes): 1st Flow / Initial CIP / 2nd Flow / Final CIP	
Initial Flow Pressure		Recovered Feet of	
Final Flow Pressure		Recovered Feet of	
Final Closed in Pressure		Recovered Feet of	
Final Hydro Mud Pressure	864	Recovered Feet of	
Depth Bottom Gauge 1933 Ft.	Blanked Off Yes	Oil Recovery Degrees API / Water Recovery Specific Gravity	
BT P.R.D. No. 1577	4305 12 Hr. Clock	REMARKS: Misrun. No packer seat.	
Pressure Readings / Field	Office Corrected		
Initial Hydro Mud Pressure	882		
Initial Closed in Pressure			
Initial Flow Pressure			
Final Flow Pressure			
Final Closed in Pressure			
Final Hydro Mud Pressure	882		

LEGAL DESCRIPTION 67° 59'N 135° 22' W

Lease Name BANFF AQUIT ARCO RAT PASS Well No. K-35 Test No. 5

FIELD OR AREA RAT PASS Owner's District CALGARY Lease Owner BANFF OIL LIMITED

PROVINCE N.W.T.

FORM 233-1

DRILL STEM TEST DATA

FORM 5115

Banff Oil Ltd.

CASING INFORMATION

Conductor Casing
~~Surface Casing~~
~~Intermediate Casing~~ O.D. 13-3/8"
~~Production Casing~~
~~Liner~~

Well Banff Aquit ARCO Rat Pass K-35 Location Unit K, Section 35, Grid 68°-00', 135°-15' Date October 23, 1970

Jts. on Locat.	Ft. on Locat.	Csg. Wt.	Gr.	Rge.	Thd.	T.&C.	Make	Jts. Run	Depth Landed	Ft. Run in Well
2	65.10	48#	J55	3	8 Rd	ST&C	Mann.	2	67'	65.10'

Shoe: Make _____ Type _____ Length _____

Collar: Make _____ Type _____ Length _____

Landing Joint (when used) Length _____

Overall Length of Casing String 65.10'

Feet up from K.B. (Subtract) _____

Setting Depth: By Driller 67' By Tally 67.00'

Shoe Joint: Overall _____ (Subtract) _____

Float Collar Landed: By Driller _____ By Tally _____

CENTRALIZERS

Make _____

Number _____

Positions _____

SCRATCHERS

Make _____

Number _____

Positions _____

No. of Collars Welded _____

Remarks: _____

Agent of Operator E. Schack

FORM 5115

Banff Oil Ltd.

CASING INFORMATION

Surface Casing
~~Intermediate Casing~~ O.D. 9-5/8"
~~Production Casing~~
~~Liner~~

Well Banff Aquit ARCO Rat Pass K-35 Location Unit K, Date October 29, 1970
Section 35, Grid 68°-00', 135°-15'

Jts. on Locat.	Ft. on Locat.	Csg. Wt.	Gr.	Rge.	Thd.	T.&C.	Make	Jts. Run	Depth Landed	Ft. Run in Well
22	930.80	36#	J55	3	8 Rd	ST&C	Mann.	22	927'	930.80'

Shoe: Make	Howco	Type	Float	Length 1.63'
Collar: Make	Howco	Type	Float	Length 1.45'
Landing Joint (when used) Length				
Overall Length of Casing String				933.88'
Feet up from K.B. (Subtract)				6.88'
Setting Depth:	By Driller 927.00'		By Tally	927.00'
Shoe Joint:	Overall 46.08'		(Subtract)	46.08'
Float Collar Landed:	By Driller 880.92'		By Tally	880.92'

CENTRALIZERS

Make Howco

Number 3

Positions 921', 810', 720'

SCRATCHERS

Make Nil

Number

Positions

No. of Collars Welded Two plus float collar and float shoe

Remarks:

Agent of Operator E. Schack

FORM 5114

Banff Oil Ltd.
RUNNING AND CEMENTING

Conductor Casing
~~Surface Casing~~
~~Intermediate Casing~~ O.D. 13-3/8"
~~Production Casing~~
~~Liner~~

GENERAL

Well Banff Aquit ARCO Rat Pass K-35 Location Unit K, Section 35, Grid 68°-00', 135°-15' Date October 23, 1970

K.B. Elevation _____ K.B.-Csg. Flge. 14' Total Depth (Driller) 67'

Hole Size	24"			Casing in Hole		
Depth	67'			Depth Set		

Mud: Type _____ Wt. _____ Visc. _____ W.L. _____

B.O.P.'s _____

RUNNING

Power Tongs _____ Torque: Max. _____ Nom. _____ Min. _____

Time pipe started _____ Time on Bottom _____ Time Circulated _____

Fill-up Points _____ Btm. by Csg. 67' Ft. up from K.B. _____

Remarks _____

CEMENTING

Cement Co. _____ Operator _____ Time on Location _____

Types & Quantities of Cement 180 cubic feet Permafrost cement

Ht. to be Cemented To surface

Water ahead _____ bbls. Mix Times: Start _____ Finish _____ Slurry Wt. 16.0 ppg

Calc. Disp. _____ bbls. Est. Disp. Time _____ Mins. Start _____ Finish _____

Max. Pumping Press. _____ Bump. Press _____ Bumped by _____ No. Times Bumped _____

Cement Returns: Yes/No. Remarks _____

LANDING

Time Landed _____ Date _____ Init. Wt. of Cem. String (less blocks) _____

Wt. Landed in Slips _____ Make of Bowl _____ Nom. Size _____ Series _____

Slip & Seal Assembly _____ Remarks _____

Agent of Operator E. Schack

FORM 5114

Banff Oil Ltd.

RUNNING AND CEMENTING

Surface Casing
~~Intermediate Casing~~ O.D. 9-5/8"
~~Production Casing~~
~~Liner~~

GENERAL

Well Banff Aquit ARCO Rat Pass K-35 Location Unit K, Section 35, Grid 68°-00', 135°-15' Date October 29, 1970

K.B. Elevation _____ K.B.-Csg. Flge. 14' Total Depth (Driller) 927'

Hole Size	24"	12-1/4"		Casing in Hole	13-3/8"	
Depth	67'	927'		Depth Set	67'	

Mud: Type Salt Kelzan Wt. 11.0 Visc. 50 W.L. _____

B.O.P.'s Nil

RUNNING

Power Tongs Nil (Rope) Torque: Max. 4900 Nom. 3500 Min. 2900

Time pipe started 6:30 a.m. Time on Bottom 9:00 a.m. Time Circulated 45 minutes

Fill-up Points Every joint Btm. by Csg. 927' Ft. up from K.B. 6.88

Remarks _____

CEMENTING

Cement Co. Howco Operator J. Elliot Time on Location October 24/70

Types & Quantities of Cement 360 sx Permafrost cement; tailed in with 150 cubic feet oilwell neat cement Ht. to be Cemented 927'

Water ahead 10 bbls. Mix Times: Start 11:10 a.m. Finish 11:30 a.m. Slurry Wt. Permafrost 15.0 Oilwell 16.2

Calc. Disp. 68 bbls. Est. Disp. Time 25 Mins. Start 11:35 a.m. Finish 12:00 noon

Max. Pumping Press. 200 Bump. Press 1000 Bumped by Howco No. Times Bumped 1

Cement Returns: Yes/~~No~~ Remarks Approximately 2 bbls good cement returns

LANDING

Time Landed _____ Date _____ Init. Wt. of Cem. String (less blocks) _____

Wt. Landed in Slips _____ Make of Bowl _____ Nom. Size _____ Series _____

Slip & Seal Assembly _____ Remarks _____

Agent of Operator E. Schack

FORM 5116

Banff Oil Ltd.

ENGINEERING PIPE TALLY SHEET

WELL NAME Banff Aquit ARCO Rat Pass K-35 DATE October 23, 1970

32	00										
33	10										
65	10										

XNOBINGXCASING

O.D. 13-3/8"

Wt. 48#

Grade J55

Range 3

Thread 8 Rd

Collar ST&C

Make Mann.

SUMMARY		
Col. 1	65	10
2		
3		
4		
5		
	65	10
Fwd.		
Fwd.		
Fwd.		
	65	10
	65	10

Tallied by: E. Schack

2 Tot. Jts. on location

– Jts. out (Incl. Ldg. Jt.)

2 Jts. perm. in hole

Remarks:

This was insulated conductor casing.

Agent of Operator E. Schack

FORM 5116

Banff Oil Ltd.

ENGINEERING PIPE TALLY SHEET

WELL NAME Banff Aquit ARCO Rat Pass K-35 DATE October 29, 1970

*	43	00		42	10						
	42	87		40	60						
	42	58									
	44	50									
	42	08									
	40	40									
	44	15									
	43	55									
	40	70									
	44	70									
	41	40									
	42	70									
	43	05									
	42	10									
	41	27									
	42	35									
	42	35									
	40	80									
	42	40									
	41	23									
	848	10		82	70						

TUBING/CASING

O.D. 9-5/8"

Wt. 36#

Grade J55

Range 3

Thread 8 Rd

Collar ST&C

Make Mann.

SUMMARY		
Col. 1	848	10
2	82	70
3		
4		
5		
	930	80
Fwd.		
Fwd.		
Fwd.		
	930	80
	930	80

Tallied by:

E. Schack & crew

22 Tot. Jts. on location

– Jts. out (Incl. Ldg. Jt.)

22 Jts. perm. in hole

Remarks:

* Shoe Joint

Agent of Operator E. Schack

FORM 5112-1

BANFF OIL LTD.

BIT RECORD

WELL NAME: Banff Aquit ARCO Rat Pass K-35 LOCATION: Unit K, Section 35, Grid 68°-00', 135°-15'

DRILLING CONTRACTOR: Guthrie McLaren Drilling Ltd.; Rig #3

DATE DRILLING STARTED: October 21, 1970 DATE COMPLETED: December 6, 1970

BIT NO.	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS	NO. DC.	WT. 1000's	RPM	PUMP PRESS.	REMARKS
1	24"	Conductor hole		67'	67'	Drilled	dry				
1	12-1/4"	Reed	YT3-R	505'	440'	18	12	20	120	150	686077; 2-2-I
2	8-3/4"	Smith	SDGH	658'	153'	8-1/4	11	7	160	150	DL3C7; 5-1-I
3	12-1/4"	Smith	Hole Opener	658'	153'	8-1/4	12	20	160	150	9007; 1-1-I
4	8-3/4"	Smith	SDGH	752'	94'	6-1/4	12	7-10	180	150	DL348; 5-1-I
5	8-3/4"	H.W.	X1G	877'	125'	5-1/4	12	7-10	180	150	23714; 5-1-I
6	8-3/4"	H.W.	X1G	927'	50'	5-1/4	12	7-10	180	150	22269; 3-1-I
7	12-1/4"	Smith	Hole Opener	850'	192'	13-3/4	12	20	100	150	9007; 6-1-I
8	12-1/4"	Reed	YT3-R	927'	77'	3-1/2	12	0	180	150	684254; 2-1-I
1	8-3/4"	Smith	SDGH	1,030'	103'	4-3/4	12	15	120	850	CM819; 2-1-I
2	8-3/4"	Reed	SS1G	1,531'	501'	15-3/4	20	40	85	1200	686387; 6-2-I
3	8-3/4"	Reed	SS1G	1,938'	407'	12-1/4	20	40	85	1100	777230; 5-2-I
4	8-3/4"	Reed	SS1G	2,203'	265'	13-3/4	20	40	85	1100	783491; 7-2-I
5	8-3/4"	Reed	SS1G	2,385'	182'	11-3/4	20	40	80	1200	777233; 5-2-I
6	8-3/4"	Smith	SDGH	2,512'	127'	7-1/4	20	40	80	1200	DL391; 6-2-I
7	8-3/4"	Smith	SDGH	2,590'	78'	9	20	40	70	1100	DL345; 8-2-I
8	8-3/4"	Reed	SC5G	2,950'	360'	30	20	45	60	1100	777216; 8-2-I
9	8-3/4"	Reed	SS1G	3,034'	84'	6-1/4	20	45	80	1100	684956; 8-3-I
10	8-3/4"	Reed	SCM	3,083'	49'	7	21	45	55	1100	856067; 1-1-I
11	8-3/4"	Reed	SS1G	3,105'	22'	3-3/4	21	25	80	1100	686449; 5-1-I
12	8-3/4"	Smith	SS5	3,160'	55'	10	21	25	55	1100	AU878; 2-1-I
13	8-3/4"	Reed	SCM	3,207'	47'	9-1/4	21	25	55	1100	856067; 1-1-I
14	8-3/4"	Reed	SC5G	3,442'	235'	27-3/4	20	40	50	1100	777214; 7-8-0

FORM 5112-1

BANFF OIL LTD.

BIT RECORD

WELL NAME: Banff Aquit ARCO Rat Pass K-35 LOCATION: Unit K, Section 35, Grid 68°-00', 135°-15'

DRILLING CONTRACTOR: Guthrie McLaren Drilling Ltd.; Rig #3

DATE DRILLING STARTED: October 21, 1970 DATE COMPLETED: December 6, 1970

BIT NO.	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS	NO. DC.	WT. 1000#	RPM	PUMP PRESS.	REMARKS
15	8-3/4"	Reed	SC5G	3,560'	118'	17-3/4	20	40	50	1100	582977; 2-1-I
16	8-3/4"	Reed	SC5G	3,742'	182'	33-1/2	20	40	50	1100	663242; 3-1-I
17	8-3/4"	Reed	SCM	3,934'	192'	23-1/4	20	40	50	1100	856067; 6-3-I
18	8-3/4"	Reed	SCM	4,197'	263'	36-1/4	20	40	50	1100	586325; 2-2-I
19	8-3/4"	Reed	SCM	4,230'	33'	4-3/4	20	30	50	1100	586177; 2-2-I
19	8-3/4"	Reed	SCM	4,375'	145'	27-1/2	20	30	50	1100	586177; re-run
20	8-3/4"	Reed	SC5G	4,427'	52'	13-1/4	20	30	50	800	582993; 1-1-I
21	8-3/4"	Reed	YHG	4,467'	40'	8	20	30	50	800	777322; 4-6-I
22	8-3/4"	Reed	YHG	4,524'	57'	14	20	30	50	1100	876500; 5-5-I
23	8-3/4"	Reed	SCM	4,768'	244'	41	20	30	50	1100	580179
24	8-3/4"	Reed	SCM	5,086'	318'	50-1/4	20	25	70	1100	576187
25	8-3/4"	Reed	SCM	5,294'	208'	41-3/4	20	20	70	800	586324
26	8-3/4"	Reed	SCM	5,548'	254'	43	20	20	68	1100	586186
27	8-3/4"	Reed	SCM	5,794'	246'	45	20	20	68	1100	856112
28	8-3/4"	Reed	SCM	5,980'	186'	30	20	25	68	1100	586319
1	6-3/16"	DDL-W	Core	6,004'	24'	10	20	8	76	1100	33-70

MUD AND ADDITIVE SUMMARY

Banff Aquit ARCO Rat Pass K-35
Well Name

Page 1

Date	Tour	Depth	Mud wt.	Viscosity	Water Loss	pH	Filter Cake 32nds inch	Gel. Strength	Additives: Gel	Benex	Salt	Kelzan	Caustic	Peltex
											3600#			
Oct24	1	67'												
											25000#	100#	100#	
Oct25	1	67'	9.2	40		10.5			500#			250#		
	3	335'	10.5	46		10.5								
Oct26	1	505'	10.8	43		9.5			1000#				50#	
	2	505'	10.8	43		9.5								
Oct27	1	689'	10.9	45		10.5							50#	
	2	800'	11.1	46		9.0								
	3	895'	11.0	44		9.5								
Oct28	1	927'	11.0	45		9.5								
	2	927'	11.3	52		9.0								
	3	927'	11.5	57		9.0								
Oct29	1	927'	11.0	62		9.0								
	2	Running 9-5/8" casing												
													50#	
Oct30	1	927'							4100#					
Oct31	2	1,030'	8.7	38		10.5								
	3	1,253'	9.0	44		10.5								
Nov 1	1	1,480'	9.5	50	15-20	10.5								
	2	1,596'	9.5	65	15-20	10.5								
	3	1,813'	9.2	40	15-20	10.5								
Nov 2	1	1,938'	9.4	46	15-20	10.5								
	2	2,094'	9.6	43	15-20	10.5								
	3	2,203'	9.6	38	15-20	10.0								
													50#	
Nov 3	1	2,317'	9.4	45	15-20	10.0			2000#	8#			50#	
	2	2,395'	9.5	38	15-20	10.0			2100#	8#				
	3	2,500'	9.3	38	15-20	9.5			500#	2#				
Nov 4	1	2,541'	9.4	42	15-20	9.0			1000#	4#				
	2	2,590'	9.4	42	15-20	9.5			1000#	4#			50#	
	3	2,653'	9.2	40	15-20	10.5								
Nov 5	1	2,781'	9.2	45	15-20	10.0			2500#	10#				
	2	2,865'	9.2	45	15-20	10.5			1000#	4#			50#	
	3	2,945'	9.2	45	15-20	10.0								

MUD AND ADDITIVE SUMMARY

Banff Aquit ARCO Rat Pass K-35
Well Name

	Tour	Depth	Mud wt.	Viscosity	Water Loss	pH	Filter Cake 32nds inch	Gel. Strength	Additives: Gel	Benex	Salt	Kelzan	Caustic	Peltex
Nov 6	1	3,003'	9.2	44	15-20	10.0			1000#	4#				
	2	3,034'	9.4	43	15-20	9.5			1500#	6#			50#	
	3	3,083'	9.1	43	15-20	10.0								
Nov 7	1	3,104'	9.1	44	15-20	10.0								
	2	3,127'	9.1	44	15-20	10.0							50#	
	3	3,162'	9.1	42	15-20	10.5								
Nov 8	1	3,188'	9.1	43	15-20	10.5			1500#	6#				
	2	3,207'	9.1	42	15-20	10.0								
	3	3,207'	9.1	42	15-20	10.0								
Nov 9	1	3,275'	9.1	40	15-20	10.0			500#					
	2	3,346'	9.1	42	15-20	9.5							50#	
	3	3,396'	9.2	43	15-20	10.5				2#				
Nov10	1	3,442'	9.1	43		10.5	2		500#	2#				
	2	3,470'	9.2	47		9.0	2						50#	
	3	3,515'	9.1	47	17.2	10.0	2						50#	
Nov11	1	3,560'	9.2	50	14.4	11.0								
	2	3,584'	9.2	42	14.8	10.5								
	3	3,625'	9.1	41		10.5								
Nov12	1	3,670'	9.2	48	12.8	10.5	2		1000#	4#				
	2	3,707'	9.3	45	12.8	10.5	2		1700#	7#				
	3	3,742'	9.2	53	14.1	10.5	2							
Nov13	1	3,787'	9.2	44	12.0	10.5	2							
	2	3,857'	9.2	45	12.8	10.5	2						50#	
	3	3,913'	9.4	43	12.0	10.5	2							
Nov14	1	3,942'	9.2	43		10.5							50#	
	2	3,999'	9.2	43	14.2	10.5	2							
	3	4,052'	9.3	44	15.2	10.5	2							
Nov15	1	4,113'	9.3	43	14.4	10.5	2							
	2	4,169'	9.3	42	14.2	10.5	2							
	3	4,197'	9.4	42	14.6	10.5	2							
Nov16	24 hr	4,197'	Logging											
Nov17	1	4,230'	9.2	43		10.0								
	2	4,235'	9.3	40									50#	
	3	4,280'	9.1	65	16.2	10.5								

MUD AND ADDITIVE SUMMARY

Banff Aquit ARCO Rat Pass K-35
Well Name

Date	Tour	Depth	Mud wt.	Viscosity	Water Loss	pH	Filter Cake 32nds inch	Gel Strength	Additives: Gel	Benex	Salt	Kelzan	Caustic	Peltex		
Nov18	1	4,325'	9.3	48	14.2	10.5										
	2	4,362'	9.3	45	14.6	10.5										
	3	4,378'														
Nov19	1	4,413'	9.4	44		10.5										
	2	4,427'	9.4	43		10.5										
	3	4,453'	9.3	42	15.2	10.0	2									
													50#			
Nov20	1	4,467'	9.3	46	16.3		2									
	2	4,493'	9.2	44		10.5										
	3	4,524'	9.3	45		10.5										
Nov21	1	4,555'	9.3	44		10.0										
	2	4,598'	9.3	42		10.0			1200#	5#						
	3	4,634'	9.4	50		10.0							50#			
Nov22	1	4,689'	9.3	53		10.5			1000#	4#						
	2	4,728'	9.2	44		10.0										
	3	4,768'	9.1	39		10.0										
													50#			
Nov23	1	4,808'	9.2	39		9.5							50#	50#		
	2	4,848'	9.3	43		10.5										
	3	4,884'	9.2	38		10.5										
													50#			
Nov24	1	4,949'	9.2	40		10.5			1500#	6#						
	2	4,987'	9.2	40		10.5										
	3	5,034'	9.2	40		10.5										
Nov25	1	5,080'	9.2	44		10.5		5/20	1500#	6#						
	2	5,086'														
	3	5,108'	9.0	38		9.0			500#	2#						
													50#			
Nov26	1	5,147'	9.2	40	17.4	10.5		4/18	1000#	4#						
	2	5,190'	9.2	43	15.8	10.5										
	3	5,226'	9.1	42		10.5										
Nov27	1	5,259'	9.2	42		10.0							50#			
	2	5,294'	9.1	40		9.5										
	3	5,294'														
Nov28	1	5,300'														
	2	5,310'	9.2	37		9.0										
	3	5,319'	9.2	37		9.0			500#	2#						

MUD AND ADDITIVE SUMMARY

Banff Aquit ARCO Rat Pass K-35
Well Name

Page 4

Date	Tour	Depth	Mud wt.	Viscosity	Water Loss	pH	Filter Cake 32nds inch	Gel. Strength	Additives: Gel	Benex	Salt	Kelzan	Caustic	Peltex		
Nov29	1	5,320'	9.3	38	14.4	9.0										
	2	5,355'	9.3	45	14.6	10.5			1500#	6#			50#			
	3	5,392'	9.3	45	14.8	10.5										
													50#			
Nov30	1	5,429'	9.3	45	13.8	10.0			1000#	4#			50#			
	2	5,469'	9.3	43	13.6	8.5										
	3	5,509'	9.3	44	13.8	10.5										
Dec 1	1	5,543'	9.3	43	13.8	10.0										
	2	5,555'	9.3	46	15.2	10.0			1000#	4#						
	3	5,580'	9.3	47	13.8	10.0			1000#	4#						
Dec 2	1	5,617'	9.2	46	14.2	10.0							50#			
	2	5,648'	9.1	44	14.6	9.5			1000#	4#						
	3	5,678'	9.1	45	14.4	10.5										
Dec 3	1	5,726'	9.1	45	14.8	10.0										
	2	5,766'	9.1	45	15.4	10.0			1500#	6#			50#			
	3	5,794'	9.0	48	16.4	10.5										
Dec 4	1	5,872'	9.1	45	15.6	10.5			1000#	4#						
	2	5,878'	9.0	40	15.8	10.5							50#			
	3	5,920'	9.0	45		9.5										
Dec 5	1	5,959'	9.1	44	15.8	10.5										
	2	5,980'	9.1	39	15.6	10.5			500#	2#						
	3	5,988'	9.0	43	15.2	9.5										
Dec 6		6,004'	TOTAL DEPTH													
					TOTAL ADDITIVES				39100#	134#	28600#	350#	1500#	50#		

FORM 5162

BANFF OIL LTD.

DEVIATION SURVEY REPORT

WELL NAME: Banff Aquit ARCO Rat Pass K-35 LOCATION: Unit K, Section 35, Grid 68°-00', 135°-15'

DEPTH	DEVIATION	DEPTH	DEVIATION
4,319'	8-1/8°		
4,375'	8-3/4°		
4,467'	8-3/4°		
4,524'	9-1/8°		
4,567'	8-1/8°		
4,629'	8°		
4,691'	8°		
4,753'	8°		
4,810'	10°		
4,877'	10°		
4,909'	10°		
4,971'	9-7/8°		
5,002'	9-7/8°		
5,064'	9-3/4°		
5,178'	10-1/2°		
5,202'	10-1/2°		
5,240'	10-3/4°		
5,363'	11°		
5,424'	11°		
5,484'	10°		
5,548'	10°		
5,610'	10°		
5,672'	10°		
5,762'	9°		
5,918'	8°		

FORM 5162

BANFF OIL LTD.

DEVIATION SURVEY REPORT

WELL NAME: Banff Aquit ARCO Rat Pass K-35 LOCATION: Unit K, Section 35, Grid 68°-00', 135°-15'

DEPTH	DEVIATION	DEPTH	DEVIATION
103'	1/2°	2,812'	3-1/4°
150'	1/2°	3,034'	4-1/4°
207'	1/2°	3,052'	4°
290'	1/2°	3,083'	4-1/2°
380'	1°	3,105'	4-1/2°
443'	1/2°	3,146'	4-1/8°
474'	1-1/4°	3,160'	4°
505'	1-1/2°	3,176'	4-3/4°
564'	1-1/2°	3,207'	5-3/4°
596'	1-3/4°	3,223'	4-3/4°
622'	1°	3,254'	5°
658'	1-3/4°	3,315'	5-3/4°
689'	1°	3,346'	5-3/4°
721'	1-1/2°	3,377'	5-3/4°
752'	7/8°	3,439'	6°
814'	1/4°	3,470'	6-1/8°
877'	1-1/2°	3,533'	6°
927'	2°	3,625'	6-1/8°
1,030'	1-1/8°	3,687'	7°
1,283'	1°	3,742'	7°
1,530'	1-1/4°	3,811'	6-1/4°
1,938'	2°	3,857'	6-1/4°
2,203'	1-3/4°	3,904'	6-1/2°
2,385'	2-1/4°	4,031'	7-1/2°
2,512'	3-1/4°	4,123'	8°
2,590'	1-3/4°	4,197'	8°

Form 5120

Banff Oil Ltd. PLUG-BACK AND ABANDONMENT REPORT

Well Banff Aquit ARCO Rat Pass K-35 Location Unit K, Section 35, Grid 68°-00', 135°-15'

Hole Size	24"	12-1/4"	8-3/4"	
Depth	67'	927'	6004'	

Casing in Hole	Size	Set at	Top of Cement
Surface Casing	9-5/8"	927'	Surface
Production String			

K.B. Elev. 81'

F.T.D. 6,004'

Fluid in Hole Drilling mud

Plug Back String 4-1/2" drill string

Service Company Howco

Cons. Bd. Officer

	Plug #1	Plug #2	Plug #3	Plug #4	Plug #5	Plug #6
Date	Dec12/70	Dec12/70	Dec12/70			
Interval — Top Bottom	5,904' 6,004'	3,700' 3,850'	857' 957'			
Formation — Name Depth						
Calipered Hole Size (Average)	8"	9"	11"			
Type of Cement	Oilwell	Oilwell	Oilwell			
Number of Sacks	35	80	80			
Additives	-	-	-			
Bbls. of Water Ahead	5	5	5			
Displacement — Bbls. Water Bbls. Mud	5 75	5 45	11			
Slurry Weight	15.8	15.6	15.5			
Mixing Times — Start Finish	8:35 am 8:49 am	10:30 am 10:45 am	8:30 pm 8:55 pm			
Displacing Times — Start Finish	8:50 am 9:00 am	10:46 am 11:00 am	9:10 pm 9:51 pm			
Felt Plug Time	No feel	7:00 pm	5:30 am			
Felt Plug Depth	-	3,680'	820'			

Surface Casing Cut 3 Ft. Below Grd. Surface Plugs 5 Sacks. Plate Welded Yes

CASING SALVAGE: Shot off at - No. of Jts. Recovered -

Remarks 5' riser and name plate welded on casing.

Agent of Operator E. Schack

SECTION IV

SECTION IV - Logs

DATE RUN	RUN NUMBER	INTERVAL	TYPE
November 16, 1970	1	4,181' - 928'	Dual Induction - Laterolog
November 16, 1970	1	4,182' - 928'	Borehole Compensated Sonic Log
December 6, 1970	2	5,986' - 3,650'	Dual Induction - Laterolog
December 6, 1970	2	5,980' - 3,650'	Borehole Compensated Sonic Log
December 6, 1970	2	5,990' - 928'	Formation Density Log
December 6, 1970	2	5,992' - 50'	Sidewall Neutron Porosity Log
December 7, 1970	1	5,980' - 928'	Continuous Dipmeter
December 6, 1970	1	5,980' - 3600'	Lithology Overlay
November 16, 1970	1	4,182' - 928'	Seismic Reference Service
December 6, 1970	2	5,980' - 3,650'	Seismic Reference Service

SECTION V - Analysis

Water sample from interval 4,978' - 5,031' was analysed; see "Water Analysis" attached.

SECTION VI - Completion Summary

Not applicable.

SUBMITTED BY AQUITAINE COMPANY OF CANADA LTD.

DATE: Jan 22 1971 BY: W. M. Boyer

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. C71-2717-5

Received: Dec. 28, 1970 Reported: Jan 7, 1971

Well: Location: Banff Aquit ARCO Rat Pass K-35 67° 59'N - 135° 22'W

Field or Area: N.W.T.

Operator: BANFF OIL (1970) LTD.

Elev.: K.B. 80' Grd. 67' Zone/Formation: Upper Devonian

Sample Interval: 4978' - 5031'

Method of Production: D.S.T. #3 Sampled from: Top of Tool

Sampled by: Halliburton Date: Dec. 10, 1970

OTHER PERTINENT DATA Service order # 21078 SO

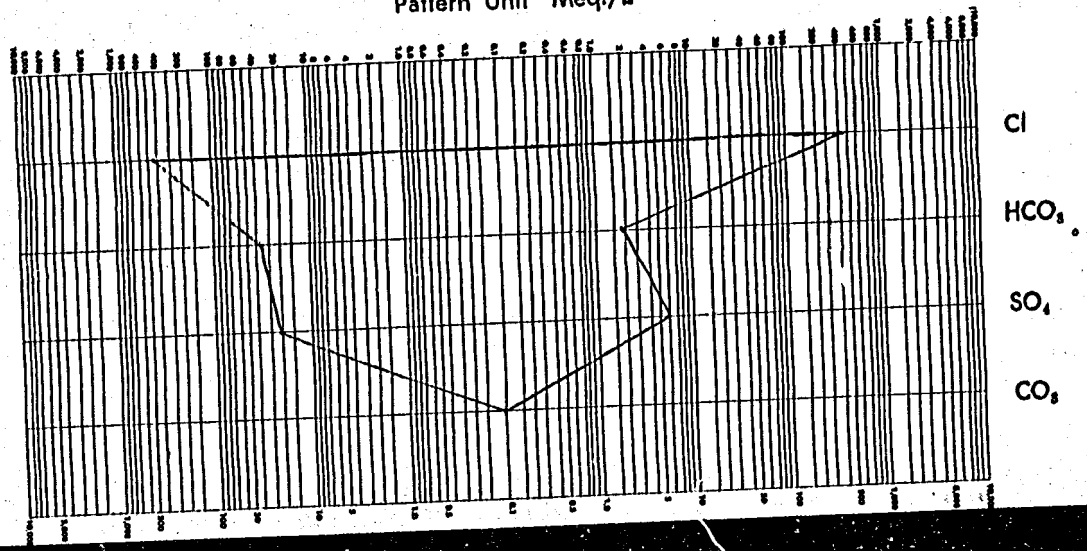
(Signed)

	Na	K	Ca	Mg					SO_4	Cl			CO_3	HCO_3		
Mg./L	9870		770	270					290	17,100			---	110		
Meq./L	429.44		38.42	22.19					6.03	482.22			---	1.80		
Meq. %	43.02		3.92	2.26					0.62	49.20			---	0.18		

Total Solids Mg/L: By Evaporation 29,400 Fe Trace Specific Gravity 1.025 @60°F Observed pH 7.8 @ 76 °F

Calculated 28,410 After Ignition 27,010 H_2S Nil Refractive Index 1.3379 @25°C Resistivity 0.252 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

The sample as received was a muddy water. The filtrate was colourless.

continued.....

C.C.L. 64

CHEMICAL & GEOLOGICAL LABORATORIES LIMITED

OPERATOR: BANFF OIL (1970) LTD. REPORT NUMBER: C71-2717

DATE SAMPLED: See Below DATE RECEIVED: Dec. 28, 1970 DATE REPORTED: Jan. 7, 1971

WELL: Banff Aquit ARCO Rat Pass K-35 67° 59' N, 135° 22' W.

LABORATORY NUMBER	SAMPLED FROM	DATE SAMPLED (1970)	METHOD OF PRODUCTION	INTERVAL	RESISTIVITY (Ohm-meters at 68°F.)
C71-2717-1	Top of Hydrospring	Dec. 9	D.S.T. #1	3750'-3804'	3.97
-2	Top of tool	Dec. 9	D.S.T. #1	3750'-3804'	4.04
-3	Top of recovery	Dec. 10	D.S.T. #3	4978'-5031'	3.38
-4	450' above tool	Dec. 10	D.S.T. #3	4978'-5031'	0.402

No. 5926

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Banff Apex Circo Rat Pass K-35

Location — Lsd. ___ Sec. ___ Twp. ___ Rge. ___ W. ___ M.

Date: Dec 13 1970

Weather Condition: -10 | Road Conditions | Nearest Town: Akkavik | Water - Source: lake | Miles Hauled: 12 | Pumped: — | Camp Distance from Rig: 150 feet | Reason for Extra L. Plant: standby

OPERATOR: Banff Oil Co

Rig No. 3 | DWKS 525 Ideco | Drill Pipe String No. 2 Size 4½ | Tool Joint 5¾ O.D. | Type Thd. F.H

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Schaub

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Eilab

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Dalwell	214-P	14
2.	Dalwell	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	STC.	36	22	930	13.20	927	

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals			

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.

No. of Lines ___ Size

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud

Cumulative Rotating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
	Stands D.P.	Ft.	Bit No.		Time	
	Singles D.P.	Ft.	Size		Weight	
	D.C. I.D. O.D.	Ft.	Mfg.		Visc.-Sec.	
	D.C. I.D. O.D.	Ft.	Type		W.L.-C.C.	
	Stb. Body O.D.	Ft.	Nozzle No. / Size		FL TR. CK.	
	Stb. Body O.D.	Ft.	Ser. No.		PH	
	Rmr. Body O.D.	Ft.	Depth Out		SD. Cont. %	
	Subs O.D.	Ft.	Depth In		Pressure Gradient	
	Bit or C.B.	Ft.	Total Ftg.			
	Kelly Down	Ft.	Total Hr. Run		Mud & Chemicals Added	
	Total	Ft.	Cond. of Bit		Type / Amt. / Type / Amt.	
Wt. of String		Lbs.	Reamer No.			
Pipe in Hole		Jts.	Reamer Type			
Pipe on Racks		Jts.	Water Charges Reg. Hrs. O.T. Hrs.			
Total Pipe on Lease		Jts.	Trucker		Driller Wm McCarthur	

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
	Stands D.P.	Ft.	Bit No.		Time	
	Singles D.P.	Ft.	Size		Weight	
	D.C. I.D. O.D.	Ft.	Mfg.		Visc.-Sec.	
	D.C. I.D. O.D.	Ft.	Type		W.L.-C.C.	
	Stb. Body O.D.	Ft.	Nozzle No. / Size		FL TR. CK.	
	Stb. Body O.D.	Ft.	Ser. No.		PH	
	Rmr. Body O.D.	Ft.	Depth Out		SD. Cont. %	
	Subs O.D.	Ft.	Depth In		Pressure Gradient	
	Bit or C.B.	Ft.	Total Ftg.			
	Kelly Down	Ft.	Total Hr. Run		Mud & Chemicals Added	
	Total	Ft.	Cond. of Bit		Type / Amt. / Type / Amt.	
Wt. of String		Lbs.	Reamer No.			
Pipe in Hole		Jts.	Reamer Type			
Pipe on Racks		Jts.	Water Charges Reg. Hrs. O.T. Hrs.			
Total Pipe on Lease		Jts.	Trucker T.N.T. 23 hrs.		Driller	
			Trucker Daryl Krause 14 hrs.			
			Trucker Bud Herbert 14 hrs			

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
	Stands D.P.	Ft.	Bit No.		Time	
	Singles D.P.	Ft.	Size		Weight	
	D.C. I.D. O.D.	Ft.	Mfg.		Visc.-Sec.	
	D.C. I.D. O.D.	Ft.	Type		W.L.-C.C.	
	Stb. Body O.D.	Ft.	Nozzle No. / Size		FL TR. CK.	
	Stb. Body O.D.	Ft.	Ser. No.		PH	
	Rmr. Body O.D.	Ft.	Depth Out		SD. Cont. %	
	Subs O.D.	Ft.	Depth In		Pressure Gradient	
	Bit or C.B.	Ft.	Total Ftg.			
	Kelly Down	Ft.	Total Hr. Run		Mud & Chemicals Added	
	Total	Ft.	Cond. of Bit		Type / Amt. / Type / Amt.	
Wt. of String		Lbs.	Reamer No.			
Pipe in Hole		Jts.	Reamer Type			
Pipe on Racks		Jts.	Water Charges Reg. Hrs. O.T. Hrs.			
Total Pipe on Lease		Jts.	Trucker		Driller	

MORNING TOUR

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	5.00	5						W.O.C Lay Down pipe
5.00	5.15	1/4						Tag Plug #3 @ @ 820.
5.15	8.00	2 3/4						Lay Down D.P.'s welded on plate

Rig Released off K-35 @ 8 A.M.

Dec. 13/70

DAY TOUR

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	4.00							Clean Yard
								Load Derrick
								Take Crawlers off Derrick & haul to new loc.
								haul mud tanks to new lease

EVENING TOUR

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
								Take Derrick off of Lease

DEC 23

No. 5999

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Banff Aquitaine Rec Pat Pass.

Location — Lsd. 62 Sec. 5 Twp 135 Rge 22 W. 5 M.

Dec 12, 19 72

Weather Condition: 40° Road Conditions: Nil

Nearest Town: Oshawa Water - Source: Lake Miles Hauled: — Pumped: — Camp Distance from Rig: 150 yds Reason for Extra L. Plant: Standby

OPERATOR: Banff Oil Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Schaak

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

Rig No. 3 Ideco DWKS 525 | Drill Pipe String: No. 2, Size 4½ | Tool Joint: Size 5 3/4 O.D., Type Thd. F.H.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	Stac	36#	22	930.80	13.20	927	36 sks. permafrost 156 sks. Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals			

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.

No. of Lines Size

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud LLC

Cumulative Rotating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD: Bit No., Size, Mfg., Type, Nozzle No., Nozzle Size, Ser. No., Depth Out, Depth In, Total Ftg., Total Hr. Run, Cond. of Bit, Reamer No., Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD: Time, Weight, Visc.-Sec., W.L.-C.C., FL TR. CK., PH, SD. Cont. %, Pressure Gradient

Mud & Chemicals Added: Type, Amt., Type, Amt.

Driller: John McCutcheon

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record: Depth, Dev., Direction (×3)

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12³⁰	½						LAY DOWN TEST EQUIPMENT
12³⁰	1³⁰	1						HOIST TAIL PIPE
1³⁰	2⁰⁰	½						LAY DOWN D. COLLARS.
2⁰⁰	5³⁰	3½						RUN IN OPEN END, HAD TO PICK UP KELLY & CIRC. MUD
								FREEZEING IN PIPE & BOILING
								OVER FREEZEING ELEVATORS & Slips
5³⁰	7⁰⁰	1½						PICK UP 18 SINGLES.
7⁰⁰	8⁰⁰	1						CIRC PRIOR TO CEMENTING

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD: Bit No., Size, Mfg., Type, Nozzle No., Nozzle Size, Ser. No., Depth Out, Depth In, Total Ftg., Total Hr. Run, Cond. of Bit, Reamer No., Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD: Time, Weight, Visc.-Sec., W.L.-C.C., FL TR. CK., PH, SD. Cont. %, Pressure Gradient

Mud & Chemicals Added: Type, Amt., Type, Amt.

Driller

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
Ran plug	#2	3350-3700			Cemented w/ 80 sx. Gel. Oilwell								
next - Slurry	wt - 15-6#.	Displaced w/ 50 bbl. Mud.											
plug down	@ 11-A.M.	Dec-12-											

Deviation Record: Depth, Dev., Direction (×3)

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	8.45	¾						Rig up Halliburton
8.45	9.00	¼						Cement + Plug 1st #
[illegible]	[illegible]	[illegible]						[illegible]
9.00	10:30	1½						Circ - Hoist To 3850.
10:30	11-00	½						Run Plug #2
11-00	4-00	5						Trip out; W-O-C Lay down 69 Singles.

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD: Bit No., Size, Mfg., Type, Nozzle No., Nozzle Size, Ser. No., Depth Out, Depth In, Total Ftg., Total Hr. Run, Cond. of Bit, Reamer No., Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD: Time, Weight, Visc.-Sec., W.L.-C.C., FL TR. CK., PH, SD. Cont. %, Pressure Gradient

Mud & Chemicals Added: Type, Amt., Type, Amt.

Driller

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
Ran plug	#3	957-857			Cemented	w/ 80	sx.	Pt.	Oilwell				
Next - Slurry	wt - 15-5	plug down @ 9-15	P.M.										
Displaced	w/ 11	bbl. Mud.											

Deviation Record: Depth, Dev., Direction (×3)

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]						[illegible]
[illegible]	[illegible]	[illegible]						[illegible]
[illegible]	[illegible]	[illegible]						[illegible]
[illegible]	[illegible]	[illegible]						[illegible]
5:30								
4.00	7.00	3						W-O-C. Run in Tag plug #2 at 3680
7.00	8:30	1½						Hoist To 957'
8-30	9:15	¾						Run Plug #3.
9:15	12-00	2¾						W-O-C. Lay down drill pipe.

No. 5959

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Banff Aquitaine Rea Rat Pass K-35 | Date: Dec 11 19 75

Location — Lsd. 6 Sec. 29 Twp. 135 Rge. 22 W. 5 M.

Weather Condition: -30° | Road Condition: Nil | Nearest Town: Blairmore | Water — Source: Lake | Miles Haul: 2 | Pumped | Camp Distance from Rig: 1 3/4 Miles | Reason for Extra L. Plant: Isolation

OPERATOR: Banff Oil Co.

Rig No. 3 Oilers DWKS 525 | Drill Pipe String: No. 2, Size 4½ | Tool Joint: 5¾ O.D., Type Thd. F.H.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Schaab

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Rudd

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	S T+C	36	22	930.80	13.20	927	36 sks. permafrost
							156 sks. Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming	1		
Conditioning Mud & Circulating		13¼	
Trips	4	1¼	13¼
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Casing ~~Cement~~ Tear Down	1		
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other	2	1¼	6¼
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.	M10092
No. of Lines	8 Size 11/16
Feet Slipped	225
Feet Cut Off	135
Present Length	4865
Ton Mi. or Trips Since Last Cut	492
Cumulative Ton Mi. or Trips	5736
No. of Days From Spud	48
Cumulative Rotating Hrs.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		Ft.
57	Stands D.P.	
1	Singles D.P.	5357.33
21	D.C. 2 7/8 I.D. 6¼ O.D.	604.00
	D.C. I.D. O.D.	
	Stb. Body O.D.	
	Stb. Body O.D.	
	Rmr. Body O.D.	
	Subs O.D.	
	Bit or C.B.	23.67
	Kelly Down	5985.00
	Total	

Wt. of String: 140,000 Lbs.
Pipe in Hole: 1172 Jts.
Pipe on Racks: 44 Jts.
Total Pipe on Lease: 216 Jts.

BIT RECORD

Bit No. | Size | Mfg. | Type | Nozzle No. | Nozzle Size | Ser. No. | Depth Out | Depth In | Total Ftg. | Total Hr. Run | Cond. of Bit | Reamer No. | Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker ..... Trucker ..... Trucker .....

MUD RECORD

Time			7:00
Weight			9.1
Visc.-Sec.			45
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: E. McLaughlin

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
	DST #4				1900 - 1915 - Mission, Top Packer failed to seat								

Deviation Record | Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:30	½						FINISHED OUT
12:30	2:30	2						BREAK DOWN PACKER
2:30	3:30	1						HOIST TAIL PIPE
3:30	6:00	2½						RUN IN
6:00	7:00	1						BREAK CIRC & CLEAN TO BOTTOM. 30' of fill
7:00	8:00	1						REAM 5' OF RAT HOLE.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		Ft.
57	Stands D.P.	
1	Singles D.P.	5357.33
21	D.C. 2 7/8 I.D. 6¼ O.D.	604.00
	D.C. I.D. O.D.	
	Stb. Body O.D.	
	Stb. Body O.D.	
	Rmr. Body O.D.	
	Subs O.D.	
	Bit or C.B.	
	Kelly Down	23.67
	Total	5685

Wt. of String: 140 [illegible] Lbs.
Pipe in Hole: 1172 Jts.
Pipe on Racks: 44 Jts.
Total Pipe on Lease: 216 Jts.

BIT RECORD

Bit No. | Size | Mfg. | Type | Nozzle No. | Nozzle Size | Ser. No. | Depth Out | Depth In | Total Ftg. | Total Hr. Run | Cond. of Bit | Reamer No. | Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker T. Nil 20 hrs
Trucker D. Krause 15
Trucker B. Hurbert 15

MUD RECORD

Time | Weight | Visc.-Sec. | W.L.-C.C. | FL TR. CK. | PH | SD. Cont. % | Pressure Gradient

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: [illegible]

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record | Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7:00	9:45	1¾						[illegible] Hole
9:45	12:15	2½						P.U. Out To Test
12:15	2:15	2						Run In Test H-3R
2:15	3:45	1½						MAKE UP TEST
3:45	4:00	¼						R. In
								Extra help to clean out Camp Mo.

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		Ft.
	Stands D.P.	
	Singles D.P.	
	D.C. I.D. O.D.	
	D.C. I.D. O.D.	
	Stb. Body O.D.	
	Stb. Body O.D.	
	Rmr. Body O.D.	
	Subs O.D.	
	Bit or C.B.	
	Kelly Down	
	Total	

Wt. of String: Lbs.
Pipe in Hole: Jts.
Pipe on Racks: Jts.
Total Pipe on Lease: Jts.

BIT RECORD

Bit No. | Size | Mfg. | Type | Nozzle No. | Nozzle Size | Ser. No. | Depth Out | Depth In | Total Ftg. | Total Hr. Run | Cond. of Bit | Reamer No. | Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker ..... Trucker ..... Trucker .....

MUD RECORD

Time | Weight | Visc.-Sec. | W.L.-C.C. | FL TR. CK. | PH | SD. Cont. % | Pressure Gradient

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: [illegible]

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
DST #5		1407 - 1455 - Mission Top Packers Parted To Seat.											

Deviation Record | Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1						Run T.
5:00	5:30	½						Head Off
5:30	6:15	¾						Test C Packer Dbl. Nut Hold
6:15	6:45	½						Ck. Down Pressure Stabilized To Test
6:45	9:30	3¼						Put Test On Surface
7:30	9:00	1½						Lay Down Tools (15)
9:00	12:00	3						LAY DOWN TESTING Equipment

No. 5958

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Banff Aquit Ares Pat Pass — Dist. K-35

Location — Lsd. 67 Sec. 29 Twp. 13S Rge. 22W. 5 M. — Dec 10 1970

Weather Condition: 58° — Road Conditions — Nearest Town: Aklavik — Water - Source: Lake — Miles Hauled — Pumped — Camp Distance from Rig: 13 Miles — Reason for Extra L. Plant: Standby

OPERATOR: Banff Oil Co.

Rig No. 3 Ideco DWKS 525 — Drill Pipe String: No. 2, Size 4½ — Tool Joint 5 3/4 O.D. — Type Thd. F.H.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Nichols

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214 P	14
2.	Oilwell	214 P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	STFC	36#	22	930.80	13.20	902	360 sks permafrost 150 sks. Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips		2½	4
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test		4	1
Other		1½	3
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals		7½	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.	M20092
No. of Lines	8
Size	1 1/8
Feet Slipped	225
Feet Cut Off	135
Present Length	4805
Ton Mi. or Trips Since Last Cut	328
Cumulative Ton Mi. or Trips	5572
No. of Days From Spud	47
Cumulative Rotating Hrs.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	Ft.
	Stands D.P.	
	Singles D.P.	
	D.C. I.D. O.D.	
	D.C. I.D. O.D.	
	Stb. Body O.D.	
	Stb. Body O.D.	
	Rmr. Body O.D.	
	Subs O.D.	
	Bit or C.B.	
	Kelly Down	
	Total	
	Wt. of String	Lbs.
	Pipe in Hole	Jts.
	Pipe on Racks	Jts.
	Total Pipe on Lease	Jts.

BIT RECORD: Bit No., Size, Mfg., Type, Nozzle No., Nozzle Size, Ser. No., Depth Out, Depth In, Total Ftg., Total Hr. Run, Cond. of Bit, Reamer No., Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD: Time, Weight, Visc.-Sec., W.L.-C.C., FL TR. CK., PH, SD. Cont. %, Pressure Gradient

Mud & Chemicals Added: Type, Amt., Type, Amt.

Driller: Ken Scott

FOOTAGE: From, To, Ftge. — DR-D RM-R Core-C — Core No. — FORMATION (SHOW CORE RECOVERY) — Rotary RPM — Wt. on Bit 1000 Lbs. — Pump Press — Pump No. 1: Liner Size, S.P.M. — Pump No. 2: Liner Size, S.P.M. — Method Run: SGL-S Par'el-P Com'd-C

Deviation Record: Depth, Dev., Direction (×3)

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	1 00	1						FINISHED OUT RUN TEST
1 00	4 00	3						RUN 2 W/W TAIL PIPE PICK UP AND MAKE UP PACKER
4 00	6 30	2½						RUN IN W/W PACKER
6 30	7 00	½						HEAD UP.
7 00	8 00	1						WELL ON TEST.
								DST #2 - 1900 - 1954 MISRUN
								Fuel 2:30

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	Ft.
	Stands D.P.	
	Singles D.P.	
	D.C. I.D. O.D.	
	D.C. I.D. O.D.	
	Stb. Body O.D.	
	Stb. Body O.D.	
	Rmr. Body O.D.	
	Subs O.D.	
	Bit or C.B.	
	Kelly Down	
	Total	
	Wt. of String	Lbs.
	Pipe in Hole	Jts.
	Pipe on Racks	Jts.
	Total Pipe on Lease	Jts.

BIT RECORD: Bit No., Size, Mfg., Type, Nozzle No., Nozzle Size, Ser. No., Depth Out, Depth In, Total Ftg., Total Hr. Run, Cond. of Bit, Reamer No., Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker 1-N.T. 18 hrs.
Trucker Bud Herbert 18
Trucker Daryl Krause 18

MUD RECORD: Time, Weight, Visc.-Sec., W.L.-C.C., FL TR. CK., PH, SD. Cont. %, Pressure Gradient

Mud & Chemicals Added: Type, Amt., Type, Amt.

O.K. E.S.

Driller: Ken Scott

FOOTAGE: From, To, Ftge. — DR-D RM-R Core-C — Core No. — FORMATION (SHOW CORE RECOVERY) — Rotary RPM — Wt. on Bit 1000 Lbs. — Pump Press — Pump No. 1: Liner Size, S.P.M. — Pump No. 2: Liner Size, S.P.M. — Method Run: SGL-S Par'el-P Com'd-C

Deviation Record: Depth, Dev., Direction (×3)

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
5.00	12 00	7						WELL ON TEST
12.00	12.45	¾						BLOW DOWN CHOKE SAND 4 HOURS - PRESS
12.45	3.30	2¾						PULL TEST (STAY OUT)
3.30	4.00	½						HANDLE TEST TOOLS

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	Ft.
	Stands D.P.	
	Singles D.P.	
	D.C. I.D. O.D.	
	D.C. I.D. O.D.	
	Stb. Body O.D.	
	Stb. Body O.D.	
	Rmr. Body O.D.	
	Subs O.D.	
	Bit or C.B.	
	Kelly Down	
	Total	
	Wt. of String	Lbs.
	Pipe in Hole	Jts.
	Pipe on Racks	Jts.
	Total Pipe on Lease	Jts.

BIT RECORD: Bit No., Size, Mfg., Type, Nozzle No., Nozzle Size, Ser. No., Depth Out, Depth In, Total Ftg., Total Hr. Run, Cond. of Bit, Reamer No., Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD: Time, Weight, Visc.-Sec., W.L.-C.C., FL TR. CK., PH, SD. Cont. %, Pressure Gradient

Mud & Chemicals Added: Type, Amt., Type, Amt.

Driller: Ken Scott

FOOTAGE: From, To, Ftge. — DR-D RM-R Core-C — Core No. — FORMATION (SHOW CORE RECOVERY) — Rotary RPM — Wt. on Bit 1000 Lbs. — Pump Press — Pump No. 1: Liner Size, S.P.M. — Pump No. 2: Liner Size, S.P.M. — Method Run: SGL-S Par'el-P Com'd-C

Deviation Record: Depth, Dev., Direction (×3)

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4.00	5.30	1½						HANDLE TEST TOOLS
5.30	6.30	1						R.U. FOR 2 STANDS TAIL PIPE
6.30	8.00	1½						MAKE UP TEST TOOLS
8.00	9 00	1						RUN IN & HEAD UP.
9 00	10 00	1						WELL ON TEST
10 00	12 00	2						WORK TIGHT HOLE & HOIST OUT
								Rerun DST #3 - 1907 - 1955. MISRUN
								MISRUN - No pkr seat

No. 5957

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Banff Aquitaine Rat Lake No. 1 — Pool: Wildcat — Dec 9, 1970

Location — Lsd. 6 Sec. 29 Twp. 135 Rge. 22 W. 5 M.

Weather Condition: 60° — Road Condition: Nil — Nearest Town: Athabasca — Water — Source: Lake — Miles Haul: 12 — Pumped: — Camp Distance from Rig: 15 Reason for Extra L. Plant: Standby

OPERATOR: Banff Oil Ltd.

Rig No. 3 Ideco DWKS 525 — Drill Pipe String: No. 2, Size 4½ — Tool Joint O.D. 5 3/4 — Type Thd. F.H.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. MacFarland

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Rudd

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING / TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	S.T.&C.	36#	22	930.80	13.20	917	360 pump float
							160 sks Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming Cell			4½
Conditioning Mud & Circulating			1½
Trips	9½	3	5
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			1
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test	8½	3	
Other	½		
Fishing			
COMPLETION WORK: A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals			8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.	M10092
No. of Lines	8
Size	1⅛
Feet Slipped	225
Feet Cut Off	135
Present Length	4865
Ton Mi. or Trips Since Last Cut	82
Cumulative Ton Mi. or Trips	5326
No. of Days From Spud	46
Cumulative Rotating Hrs.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.

Wt. of String ____ Lbs.
Pipe in Hole ____ Jts.
Pipe on Racks ____ Jts.
Total Pipe on Lease ____ Jts.

BIT RECORD

Bit No. | Size | Mfg. | Type | Nozzle No. | Nozzle Size | Ser. No. | Depth Out | Depth In | Total Ftg. | Total Hr. Run | Cond. of Bit | Reamer No. | Reamer Type

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker ____
Trucker ____
Trucker ____

MUD RECORD

Time | Weight | Visc.-Sec. | W.L.-C.C. | FL TR. CK. | PH | SD. Cont. % | Pressure Gradient

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: L. MacArthur

FOOTAGE

From	To	Ftge.

DR-D RM-R Core-C | Core No. | FORMATION (SHOW CORE RECOVERY) | Rotary RPM | Wt. on Bit 1000 Lbs. | Pump Press | Pump No. 1 Liner Size | Pump No. 1 S.P.M. | Pump No. 2 Liner Size | Pump No. 2 S.P.M. | Method Run SGL-S Par'el-P Com'd-C

Deviation Record: Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	2⁰⁰	2						WELL ON TEST
2⁰⁰	5⁰⁰	3						PULL OUT PACKER
5⁰⁰	8⁰⁰	3						RUN IN W PACKER
								Re-run DST #1 to get SI pressure
								NOTE (Chart analysis indicates test No. 1 and the re-run were misruns)

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.

Wt. of String ____ Lbs.
Pipe in Hole ____ Jts.
Pipe on Racks ____ Jts.
Total Pipe on Lease ____ Jts.

BIT RECORD

Bit No. | Size | Mfg. | Type | Nozzle No. | Nozzle Size | Ser. No. | Depth Out | Depth In | Total Ftg. | Total Hr. Run | Cond. of Bit | Reamer No. | Reamer Type

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker T.N.T. — 22 hrs.
Trucker Dairy Kreem — 19
Trucker Bud Herbert — 17

MUD RECORD

Time | Weight | Visc.-Sec. | W.L.-C.C. | FL TR. CK. | PH | SD. Cont. % | Pressure Gradient

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Bernie Lock

FOOTAGE

From	To	Ftge.

DR-D RM-R Core-C | Core No. | FORMATION (SHOW CORE RECOVERY) | Rotary RPM | Wt. on Bit 1000 Lbs. | Pump Press | Pump No. 1 Liner Size | Pump No. 1 S.P.M. | Pump No. 2 Liner Size | Pump No. 2 S.P.M. | Method Run SGL-S Par'el-P Com'd-C

Deviation Record: Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
3⁰⁰	11⁰⁰	8						WELL ON TEST
11⁰⁰	11³⁰	½						BLOW DOWN, PUMP SOME WATER OUT
11³⁰	2⁰⁰	2½						PULL TEST
2⁰⁰	4⁰⁰	2						MIX & TRY & FORCE OUT
								DST #2 4995 - 5040 Stauffer
								Weak air blow throughout test.
								Rec. 450 of salty drlg mud & 70' Drlg mud
								HP 2332/2332 IFP 165 FFP 639
								ISI 2293 FSI 1985.

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.

Wt. of String ____ Lbs.
Pipe in Hole ____ Jts.
Pipe on Racks ____ Jts.
Total Pipe on Lease ____ Jts.

BIT RECORD

Bit No. | Size | Mfg. | Type | Nozzle No. | Nozzle Size | Ser. No. | Depth Out | Depth In | Total Ftg. | Total Hr. Run | Cond. of Bit | Reamer No. | Reamer Type

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker ____
Trucker ____
Trucker ____

MUD RECORD

Time: 10⁰⁰ | Weight: 9.1 | Visc.-Sec.: 45 | W.L.-C.C. | FL TR. CK. | PH | SD. Cont. % | Pressure Gradient

Mud & Chemicals Added

Type	Amt.	Type	Amt.
1000#		GEL	
100#		CAUSTIC	

Driller: L. MacArthur

FOOTAGE

From	To	Ftge.

DR-D RM-R Core-C | Core No. | FORMATION (SHOW CORE RECOVERY) | Rotary RPM | Wt. on Bit 1000 Lbs. | Pump Press | Pump No. 1 Liner Size | Pump No. 1 S.P.M. | Pump No. 2 Liner Size | Pump No. 2 S.P.M. | Method Run SGL-S Par'el-P Com'd-C

Deviation Record: Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	5⁰⁰	1						RUN CASING TO
5⁰⁰	6⁰⁰	1						SLIP LINE 45'
6⁰⁰	8³⁰	2½						RUN TBG. TO CLEAN HOLE
8³⁰	9⁰⁰	½						BREAK CIRC & CLEAN TO BOTTOM
9⁰⁰	10³⁰	1½						CIRC TO COND FOR TEST
10³⁰	12⁰⁰	1½						HOIST OUT TO RUN TEST

No. 5995

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF BAULT ARCO RAT PASS K-35 | Date: DEC 8 19 70

Location — Lsd. 62 Sec. 54 Twp. 135 Rge. 22 W. 5 M.

Weather Condition: 60 | Road Conditions: NIL | Nearest Town: ARLBUICK | Water - Source: LAKE, Miles Hauled: 2, Pumped | Camp Distance from Rig: 150 yds. | Reason for Extra L. Plant: Standby

OPERATOR: BANFF Oil Co

Rig No. 3 IDECO DWKS 525 | Drill Pipe String: No. 2, Size 7 5/8 | Tool Joint: 5 3/4 O.D., Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. Micholand

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214-P	14
2.	Oilwell	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST-C	36#	22	930.80	13.20	927	360 sks Class A Frost
							150 sks Oilwell

MORNING TOUR

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating	2 1/2		
Trips	2 1/2		4 1/2
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging	3	11/2	
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			3 1/2
Other		6 1/2	
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

DRILLING ASSEMBLY AT END OF TOUR

NO.		
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges - Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	
Weight	
Visc.-Sec.	
W.L.-C.C.	
FL TR. CK.	
PH	
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	500#		
BENTEX	2#		

Driller: M Breen

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1900	2 30	2 1/2						Circ. Con. Mud
2 30	5-00	2 1/2						Pull out To Finish Logging
5-00	8 00	3						Logging
								Run velocity Survey
								TD to surface
								Fuel 1' 10"

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges - Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	
Weight	
Visc.-Sec.	
W.L.-C.C.	
FL TR. CK.	
PH	
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Lin McArthur

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	9 30	1 1/2						LOGGING Velocity Survey
9 30	4 30	16 1/2						MAKE UP PACKER

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
57	Stands D.P.	5325.55 Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	603.64 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	6027 Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges - Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	
Weight	
Visc.-Sec.	
W.L.-C.C.	
FL TR. CK.	
PH	
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Ron Hanson

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 30	8 30	4 1/2						MAKE UP TEST & RUN IN HOLE
8 30	12 00	3 1/2						WELL ON TEST
								DST #1 3750 - 3804 Straddle Test
								TO 315 minutes. SI Tool did not close.
								Weak puff. Died immediately
								Rec 8' drlg mud. No Shows

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.	W1100917
No. of Lines	8 Size 1 1/16
Feet Slipped	150
Feet Cut Off	135
Present Length	4275
Ton Mi. or Trips Since Last Cut	570
Cumulative Ton Mi. or Trips	4916
No. of Days From Spud	45
Cumulative Rotating Hrs.	

No. 5994

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF Dow T Pablo Rbt Pass K-35

Date: DEC 7 1970

Location — Lsd. 67 Sec. 59 Twp. 35 Rge. 22 W. 5 M.

Weather Condition: BS Road Conditions: N.L Nearest Town: Athabasca Water - Source: LAKE Miles Hauled: 2 Pumped: Camp Distance from Rig: 150 yds Reason for Extra L. Plant: STBY

OPERATOR: BANFF Oil Co

Rig No. 3 IDECO DWKS 525 — Drill Pipe String: No. 2, Size 4½ — Tool Joint: Type Tbd. FH, O.D. 5 3/4

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Ewald

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214-P	14
2.	Oilwell	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	ST-C	36#	22	930.80	13.20	927	360 sks PERMAFROST
							150 sks Oilwell

TIME DISTRIBUTION—HOURS (MORNING TOUR)

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			1
Trips			3
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging	8	8	3
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			1
Fishing			
COMPLETION WORK: A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.	M10092
No. of Lines	8
Size	1⅜
Feet Slipped	180
Feet Cut Off	135
Present Length	4775
Ton Mi. or Trips Since Last Cut	406
Cumulative Ton Mi. or Trips	4252
No. of Days From Spud	44
Cumulative Rotating Hrs.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
	Wt. of String	Lbs.
	Pipe in Hole	Jts.
	Pipe on Racks	Jts.
	Total Pipe on Lease	Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker ____ Trucker ____ Trucker ____

MUD RECORD

Time	
Weight	
Visc.-Sec.	
W.L.-C.C.	
FL TR. CK.	
PH	
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Green

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	800	8						Logging
								Ran DIL 3650 – 5986
								BHCSGR 3650 – 5982
								FDC 5990 – 928
								SNP 50 – 5992
								Dipmeter 5990 – 928

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
	Wt. of String	Lbs.
	Pipe in Hole	Jts.
	Pipe on Racks	Jts.
	Total Pipe on Lease	Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. 17 hrs. — O.T. Hrs.

Trucker ____ Trucker N. Dary & Sons Trucker ____

MUD RECORD

Time	
Weight	
Visc.-Sec.	
W.L.-C.C.	
FL TR. CK.	
PH	
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: [signature]

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	400	8						LOGGING
								F. C STEWART HELP HAUL FUEL AND
								Mud.

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
	Wt. of String	Lbs.
	Pipe in Hole	Jts.
	Pipe on Racks	Jts.
	Total Pipe on Lease	Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker ____ Trucker ____ Trucker ____

MUD RECORD

Time	12.00
Weight	9.1
Visc.-Sec.	44
W.L.-C.C.	16.2
FL TR. CK.	2/32
PH	10.0
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Green

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	700	3						LOGGING
700	730	1½						TEAR OUT LOGGER
730	1080							RUN IN TO CON. MUD
1080	1100	2						BEB. CIRC CLEAN TO BOTTOM
1100	1200	1						CIRC

No. 5993

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: BANFF HEWITT HARO ROT PACK K-35 — Date: DEC 6 1970

Location — Lsd. 07 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Weather Condition: -30 — Road Conditions: N.L. — Nearest Town: ATHABASCA — Water — Source: LAKE — Miles Hauled: 5 — Pumped: — Camp Distance from Rig: 150 yds — Reason for Extra L. Plant: STANDBY

OPERATOR: BANFF Oil Co

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Fuld

Rig No. 3 IDECO DWKS 525 — Drill Pipe String: No. 2, Size 4½ — Tool Joint: 6 3/4 O.D., Type Thd. FH

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214-P	14
2.	"	"	"
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	STC	36	22	930.80	13.20	927	360 sks PERMAFROST
							150 sks Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips	1¾	½	
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring	6¼	~~6¼~~	
Wire Line Logging		6	8
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other		1½	
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No. 9710092.
No. of Lines 8 — Size 15
Feet Slipped 180
Feet Cut Off 135
Present Length 4775
Ton Mi. or Trips Since Last Cut 325
Cumulative Ton Mi. or Trips 4170
No. of Days From Spud 43
Cumulative Rotating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
57	Stands D.P.	5325.88 Ft.	Bit No.	3
	Singles D.P.	Ft.	Size	8 3/16-3 2/32
21	D.C. I.D. 6¼ O.D.	603.69 Ft.	Mfg.	
	D.C. I.D. O.D.	Ft.	Type	DDL-W
	Stb. Body O.D.	Ft.	Nozzle No.	
	Stb. Body O.D.	Ft.	Nozzle Size	
	Rmr. Body O.D.	Ft.	Ser. No.	33-70
	Subs JARS CORE BBS	62.86 Ft.	Depth Out	
	Bit or C.B.	Ft.	Depth In	5980
	Kelly Down	11.57 Ft.	Total Ftg.	24
	Total	6004.00 Ft.	Total Hr. Run	10
Wt. of String	140,000 Lbs.		Cond. of Bit	1N
Pipe in Hole	171 Jts.		Reamer No.	
Pipe on Racks	45 Jts.		Reamer Type	
Total Pipe on Lease	216 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
			Trucker	
			Trucker	
			Trucker	

MUD RECORD

Time	100	400	700
Weight	9.0	9.0	T
Visc.-Sec.	41	47	R
W.L.-C.C.		16.4	1
FL TR. CK.		2/32	P
PH	9.5	10.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	300#		
PENEX	1=		
CAUSTIC	50#		

Driller M Baker

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5988	6004	16	C			76	8	1100	5	62			S

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	5 15	6¼						CORING
6 15	8 00	1¾						PULL CORE #3
								CORE #3 5980 - 6004
								REC 24'
								FUEL 4' 2"

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
	Stands D.P.	Ft.	Bit No.	
	Singles D.P.	Ft.	Size	
	D.C. I.D. O.D.	Ft.	Mfg.	
	D.C. I.D. O.D.	Ft.	Type	
	Stb. Body O.D.	Ft.	Nozzle No.	
	Stb. Body O.D.	Ft.	Nozzle Size	
	Rmr. Body O.D.	Ft.	Ser. No.	
	Subs O.D.	Ft.	Depth Out	
	Bit or C.B.	Ft.	Depth In	
	Kelly Down	Ft.	Total Ftg.	
	Total	Ft.	Total Hr. Run	
Wt. of String		Lbs.	Cond. of Bit	
Pipe in Hole		Jts.	Reamer No.	
Pipe on Racks		Jts.	Reamer Type	
Total Pipe on Lease		Jts.	Water Charges	Reg. Hrs. O.T. Hrs.
			Trucker	
			Trucker	
			Trucker	

MUD RECORD

Time			
Weight			
Visc.-Sec.			
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller J. McCarthur

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 30	½						FINISHED OUT RECOVER CORE, SERVICE BBLS & LAY DOWN CORE BBLS.
8 30	10:00	1½						RIG UP TO LOG & LOGGING
10 00	4 00	16						
								F. STEWART HELP HAUL FUEL & MUD

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
	Stands D.P.	Ft.	Bit No.	
	Singles D.P.	Ft.	Size	
	D.C. I.D. O.D.	Ft.	Mfg.	
	D.C. I.D. O.D.	Ft.	Type	
	Stb. Body O.D.	Ft.	Nozzle No.	
	Stb. Body O.D.	Ft.	Nozzle Size	
	Rmr. Body O.D.	Ft.	Ser. No.	
	Subs O.D.	Ft.	Depth Out	
	Bit or C.B.	Ft.	Depth In	
	Kelly Down	Ft.	Total Ftg.	
	Total	Ft.	Total Hr. Run	
Wt. of String		Lbs.	Cond. of Bit	
Pipe in Hole		Jts.	Reamer No.	
Pipe on Racks		Jts.	Reamer Type	
Total Pipe on Lease		Jts.	Water Charges	Reg. Hrs. O.T. Hrs.
			Trucker	
			Trucker	
			Trucker	

MUD RECORD

Time			
Weight			
Visc.-Sec.			
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller M. Hogan

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	12 00	8						LOGGING

No. 5992

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: BANFF Aquit ARCO BAT Pass K — Date: 35 DEC 5 1970

Location — Lsd. 67 Sec. 59 Twp. 35 Rge. 22 W. 5 M.

Weather Condition: -30 — Road Conditions: NIL — Nearest Town: ATLEDUCK — Water - Source: LAKE — Miles Hauled: 5 — Pumped — Camp Distance from Rig: 1350 yds — Reason for Extra L. Plant: STBY

OPERATOR: BANFF Oil Co

Rig No. 3 — IDECO DWKS 525 — Drill Pipe String: No. 2, Size 4½ — Tool Joint: Type Thd FH, 5¾ O.D.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214-P	14
2.	Oilwell	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	SF-C	36#	22	930.80	13.20	927	360sks Peerma Frost
							150sks Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7	4	
Reaming			
Conditioning Mud & Circulating		1	½
Trips	½	2¾	2
Lubricate Rig		¼	¼
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig	½		
Coring			3¾
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			1¼
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use, Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 — Size 1⅛

Feet Slipped 180

Feet Cut Off 135

Present Length 4775

Ton Mi. or Trips Since Last Cut 240

Cumulative Ton Mi. or Trips 4086

No. of Days From Spud 42.

Cumulative Rotating Hrs. 614¾

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
57	Stands D.P.	5325.88 Ft.	Bit No.	28
	Singles D.P.	Ft.	Size	8¾
	D.C.		Mfg.	REED
	I.D. O.D.	Ft.	Type	SCDJJ
21	D.C. 2⅞ 6¼ I.D. O.D.	603.69 Ft.	Nozzle No.	3
	Stb. Body O.D.	Ft.	Nozzle Size	12
	Stb. Body O.D.	Ft.	Ser. No.	586319
	Rmr. Body O.D.	Ft.	Depth Out	
	Subs DRILLED O.D.	10.76 Ft.	Depth In	5794
	Bit or C.B.	Ft.	Total Ftg.	165
	Kelly Down	18.67 Ft.	Total Hr. Run	26
	Total	5959.00 Ft.	Cond. of Bit	1N
Wt. of String	140,000 Lbs.		Reamer No.	
Pipe in Hole	171 Jts.		Reamer Type	
Pipe on Racks	45 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
Total Pipe on Lease	216 Jts.		Trucker	
			Trucker	
			Trucker	

MUD RECORD

Time	100	400	700
Weight	9.1	9.1	9.1
Visc.-Sec.	45	45	44
W.L.-C.C.		15.8	
FL TR. CK.		2/32	
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M. Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5920	5959	39	D			68	25	1100	6	53			

Deviation Record: Depth / Dev. / Direction (×3)

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1230	½						SPLICE SANDLINE
1230	100	½						RUN IN.
100	800	7						DRILL
								FUEL 2' 7"

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
57	Stands D.P.	5325.88 Ft.	Bit No.	28
	Singles D.P.	Ft.	Size	8¾
	D.C.		Mfg.	REED
	I.D. O.D.	Ft.	Type	SCMJ
21	D.C. 2⅞ 6¼ I.D. O.D.	603.69 Ft.	Nozzle No.	3
	Stb. Body O.D.	Ft.	Nozzle Size	12
	Stb. Body O.D.	Ft.	Ser. No.	586319
	Rmr. Body O.D.	Ft.	Depth Out	
	Subs DRILLED O.D.	10.76 Ft.	Depth In	5794
	Bit or C.B.	Ft.	Total Ftg.	186
	Kelly Down	39.67 Ft.	Total Hr. Run	30
	Total	5980.00 Ft.	Cond. of Bit	1-1-1
Wt. of String	140,000 Lbs.		Reamer No.	
Pipe in Hole	171 Jts.		Reamer Type	
Pipe on Racks	45 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
Total Pipe on Lease	216 Jts.		Trucker	T.I.T. 8 hrs.
			Trucker	DRIVER 8 hrs
			Trucker	DUSTY 8 hrs

MUD RECORD

Time	900	1200	300
Weight	9.1	9.1	
Visc.-Sec.	38	39	
W.L.-C.C.	15.6		
FL TR. CK.			
PH	10.5	10.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		500#	
BENEX		2#	

Driller: L. McArthur

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5959	5980	21	D			68	25	1100	6	53			(S)

Deviation Record: Depth / Dev. / Direction (×3)

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	1200	4						DRILLING
1200	100	1						CIRC TO COND. HOLE FOR CORE.
100	115	¼						RIG SERVICE, CHECK BOPS, MOTOR STATIONS
115	400	2¾						HOIST OUT & MEASURE OUT.
								(PIPE) (COLLARS)
								MEASURED 5326.44 604.00
								PIPE TALLY 5325.88 603.69
								DIFF. .56 .31
								F. Stewart 16 hours help nodwell haul to new lease
								NO. CHANGE.

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
56	Stands D.P.	Ft.	Bit No.	3C
D	Singles D.P.	5294.80 Ft.	Size	6¼ - 3¾
	D.C.		Mfg.	
	I.D. O.D.	Ft.	Type	DDL-W
21	D.C. 2⅞ 6¼ I.D. O.D.	603.69 Ft.	Nozzle No.	
	Stb. Body O.D.	Ft.	Nozzle Size	
	Stb. Body O.D.	Ft.	Ser. No.	33-70
	Rmr. Body O.D.	Ft.	Depth Out	
	Subs JARS O.D. CORE BLS	Ft.	Depth In	5980
	Bit or C.B.	62.86 Ft.	Total Ftg.	8
	Kelly Down	26.65 Ft.	Total Hr. Run	3¾
	Total	5988 Ft.	Cond. of Bit	IN
Wt. of String	170,000 Lbs.		Reamer No.	
Pipe in Hole	170 Jts.		Reamer Type	
Pipe on Racks	46 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
Total Pipe on Lease	216 Jts.		Trucker	
			Trucker	
			Trucker	

MUD RECORD

Time		8.00	11.00
Weight		9.1	9.
Visc.-Sec.		42	43
W.L.-C.C.		15.2	
FL TR. CK.		2/32	
PH		10.0	9.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M. Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5980	5988	8	C			76	8	575	5	62.			

Deviation Record: Depth / Dev. / Direction (×3)

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	530	1½						LAY-DOWN STABILIZER & PICK UP
								JARS & CORE BBLS.
530	730	2						RUN IN W/ CORE BBLS.
730	800	½						BREAK CIRC & CLEAN TO BOTTOM
800	815	¼						RIG SERVICE & B.O.P.
815	1200	3¾						CORING

No. 5991

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF ROUT ARCO ROT BASSK-35

Location — Lsd. 07 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Date: DEC 4 1970

Weather Condition: -45° Road Conditions: N.L. Nearest Town: DAWSON Water Source: LAKE Miles Hauled: 12 Pumped: Camp Distance from Rig: 2130 yds Reason for Extra L. Plant: Standby

OPERATOR: BANFF Oil Co

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Ormuckholland

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Ewald

Rig No. 3 IDECO DWKS 525 | Drill Pipe String: No. 2 Size 4½ | Tool Joint: 5 3/4 O.D. | Type Thd. FH

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214-P	14
2.	"	"	"
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	STC	36#	22	930.80	13.20	925	360sks Class A Neat
							150sks Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	5	7 3/4	6 1/4
Reaming			
Conditioning Mud & Circulating	1/2		
Trips	2		1/2
Lubricate Rig	1/4	1 1/4	1/4
Deviation Survey			1
Test B.O.P.			
Cut Off Drilling Line	1/4		
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 Size 1 1/8

Feet Slipped 180

Feet Cut Off 135

Present Length 4775

Ton. Mi. or Trips Since Last Cut 76

Cumulative Ton Mi. or Trips 3922.

No. of Days From Spud 41

Cumulative Rotating Hrs. 603 3/4

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
55	Stands D.P.		Ft.
5	Singles D.P.	5171.38	Ft.
	D.C.		
	I.D. O.D.		Ft.
21	D.C. 2 1/8 6 1/4 I.D. O.D.	603.69	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	36.16	Ft.
	Total	3822.00	Ft.
	Wt. of String	140,000	Lbs.
	Pipe in Hole	166	Jts.
	Pipe on Racks	50	Jts.
	Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	28
Size	8 3/4
Mfg.	REED
Type	SCM
Nozzle No.	2
Nozzle Size	12
Ser. No.	586319
Depth Out	
Depth In	5794
Total Ftg.	28
Total Hr. Run	5
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker ____ Trucker ____ Trucker ____

MUD RECORD

Time	100	400	700
Weight		9.2	9.1
Visc.-Sec.		47	45
W.L.-C.C.		15.6	
FL TR. CK.		2/32	
PH		10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	1000#		
BENEX	4#		

Driller: M Hansen

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
5794	5822	28	D			68	20	1100	6	53			

Deviation Record: Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	1/4						Rig Service / B.O.P.
1215	1250	1/4						Finish sliping Line
1220	230	2						Run in with Bit - 28
230	300	1/2						Ber Cir Clean To Bottom 8' of Fill
300	800	5						Drill
								Fuel 3'11"

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
56	Stands D.P.	5233.76	Ft.
	Singles D.P.		Ft.
	D.C.		
21	D.C. 2 1/8 6 1/4 I.D. O.D.	603.69	Ft.
	D.C.		
	I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	29.79	Ft.
	Total	5878.00	
	Wt. of String	140,000	Lbs.
	Pipe in Hole	168	Jts.
	Pipe on Racks	48	Jts.
	Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	28
Size	8 3/4
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586319
Depth Out	
Depth In	5794
Total Ftg.	84
Total Hr. Run	12 3/4
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker T.N.T. 8 hrs.

Trucker DRIVER 13 hrs

Trucker Daryl Knaus

MUD RECORD

Time	900	1200	300
Weight	9.1	9.0	9.0
Visc.-Sec.	44	43	40
W.L.-C.C.	15.8		
FL TR. CK.	2/32		
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: L. McCutcheon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
5822	5878	56	D			68	25	1100	6	53			(S)

Deviation Record: Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	1/4						Drilling
815	830	1/4						Rig Service, Check Bops, Motor Shut Off.
830	400	7 1/2						Drilling
								F. Lamont 15 hours help
								nadwell haul cement

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
56	Stands D.P.		Ft.
5	Singles D.P.	5264.25	Ft.
	D.C.		
	I.D. O.D.		Ft.
21	D.C. 2 1/8 6 1/4 I.D. O.D.	603.69	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	41.40	Ft.
	Total	5920.00	Ft.
	Wt. of String	140,000	Lbs.
	Pipe in Hole	164	Jts.
	Pipe on Racks	47	Jts.
	Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	28
Size	8 3/4
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586319
Depth Out	
Depth In	5794
Total Ftg.	126
Total Hr. Run	19
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker ____ Trucker ____ Trucker ____

MUD RECORD

Time	500	800	1100
Weight	9.0	9.0	1
Visc.-Sec.	40	45	R
W.L.-C.C.			1
FL TR. CK.			P
PH	9.0	9.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		

Driller: M Hagen

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
5878	5920	42	D			68	25	1100	6	53			(S)

Deviation Record: Depth 5918 | Dev. 8° | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	1015	6 1/4						Drilling
1015	1030	1/4						Rig Service
1030	1100	1/2						Survey Sandline Broke
1100	1130	1/2						P.U. 16 stands DP
1130	1200	1/2						Splice Sandline

No. 5990

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name BANFF AQUITAINE PARGO ANT PASS K-35

Date DEC 3 1970

Location — Lsd. 07 Sec 35 Twp. 135 Rge 22 W. 5 M.

Weather Condition — 45° | Road Conditions Mud | Nearest Town Aklavik | Water — Source LAKE, Miles Hauled 1/2, Pumped | Camp Distance from Rig 150 yds., Reason for Extra L. Plant STANDBY

OPERATOR: BANFF Oil Co

Rig No. 3 FRECO DWKS 525

Drill Pipe String: No. 2, Size 4½

Tool Joint: Size 5 3/4 O.D., Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D Muckleland

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Gould

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214-P	14
2.	"	"	"
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST-C	36#	22	930.80	13.20	927	360 sks PERMAFROST
							150 sks Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7 3/4	7 3/4	8 1/2
Reaming			
Conditioning Mud & Circulating			
Trips			2
Lubricate Rig		1/4	
Deviation Survey		1/2	
Test B.O.P.			
Cut Off Drilling Line			1
Repair Rig	1/4	1/2	
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 Size 1 1/8

Feet Slipped 180

Feet Cut Off 135

Present Length 4775

Ton Mi. or Trips Since Last Cut 05-79

Cumulative Ton Mi. or Trips 3846

No. of Days From Spud 40

Cumulative Rotating Hrs. 58 3/4

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
54	Stands D.P.	Ft.
8	Singles D.P.	5078.99 Ft.
	D.C.	
	I.D. O.D.	Ft.
21	D.C. 28 6 1/4 I.D. O.D.	603.69 Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILLCO O.D.	10.76 Ft.
	Bit or C.B.	Ft.
	Kelly Down	32.56 Ft.
	Total	5726.00 Ft.

Wt. of String 138,000 Lbs.

Pipe in Hole 163 Jts.

Pipe on Racks 53 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	27
Size	8 3/4
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	856112
Depth Out	~~5726~~
Depth In	5548
Total Ftg.	178
Total Hr. Run	33 ~~1/2~~
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	100	400	700
Weight	9.1	9.1	9.1
Visc.-Sec.	45	45	45
W.L.-C.C.		14.8	
FL TR. CK.		2/32	
PH	10.	10.	10.
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller M Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5618	5726	48	D			68	20	1100	6	53			(5)

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	~~8 45~~	~~8 3/4~~						DRILL
7 45	8 00	1/4						WORK ON ROTARY CHAIN
								FUEL 2'2"

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
55	Stands D.P.	5140.60 Ft.
	Singles D.P.	Ft.
	D.C.	
	I.D. O.D.	Ft.
21	D.C. 27/8 6 1/4 I.D. O.D.	603.69 Ft.
	D.C.	
	I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Sub DRILLCO	10.76 Ft.
	Bit or C.B.	Ft.
	Kelly Down	10.95 Ft.
	Total	5766.00 Ft.

Wt. of String 140,000 Lbs.

Pipe in Hole 165 Jts.

Pipe on Racks 51 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	27
Size	8 3/4
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	856112
Depth Out	
Depth In	5548
Total Ftg.	218
Total Hr. Run	40
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charge Reg. Hrs. O.T. Hrs.

Trucker I.N.T. 16 hrs.

Trucker Driver 16 hrs.

Trucker D. Knoop

MUD RECORD

Time	900	1200	300
Weight	9.1	9.1	9.1
Visc.-Sec.	44	45	45
W.L.-C.C.	15.4		
FL TR. CK.	2/32		
PH	10.0	10.0	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
1500	#	GEL	
6	#	BENEX	

Driller M McCutcheon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5726	5766	40	D			68	20	1100	6	53			(5)

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
5762	9°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 30	1/2						WORK ON ROTARY CHAIN
8 30	10 00	1 1/2						DRILLING
10 00	10 15	1/4						RIG SERVICE, CHECK BOPS, MOTOR SHUT OFF
10 15	3 15	5						DRILLING
3 15	3 45	1/2						SURVEY
3 45	4 00	1/4						DRILLING
								F. STEWART HELPING HAUL MUD AND FUEL.
								CHANGE OIL IN LIGHT PLANT + STAND BY MOTORS

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
55	Stands D.P.	5140.60 Ft.
	Singles D.P.	Ft.
	D.C.	
	I.D. O.D.	Ft.
21	D.C. 27/8 6 1/4 I.D. O.D.	603.69 Ft.
	D.C.	
	I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILLCO	10.76 Ft.
	Bit or C.B.	Ft.
	Kelly Down	38.95 Ft.
	Total	5794.00 Ft.

Wt. of String 140,000 Lbs.

Pipe in Hole 166 Jts.

Pipe on Racks 51 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	27
Size	8 3/4
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	856112
Depth Out	5794
Depth In	5548
Total Ftg.	246
Total Hr. Run	45
Cond. of Bit	1 1 1
Reamer No.	
Reamer Type	

Water Charges Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	500	800	1100
Weight	9.0	9.0	T
Visc.-Sec.	46	48	R
W.L.-C.C.		16.4	I
FL TR. CK.		2/32	P
PH	9.0	10.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC		50#	

Driller M Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5766	5794	28	D			68	20	1100	6	53			

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	9 00	5						DRILLING
9 00	11 00	2						TRIP FOR BIT #27
11 00	12 00	1						SLIP 45 FT of LINE CUT 90 FT of LINE

No. 5989

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF Dev'T AREA Rat Pass K-3 | Date

Location — Lsd 7 Sec 29 Twp. 13S Rge. 22 W. 5 M. | DEC 2 19 70

Weather Condition: -50 | Road Conditions: Not | Nearest Town: ALBERTA | Water — Source: LAKE, Miles Hauled: 5, Pumped | Camp Distance from Rig: 150, Reason for Extra L. Plant: Standby

OPERATOR: BANFF Oil Co

Rig No. 3 IDECO DWKS 525 | Drill Pipe String: No. 2, Size 9 5/8 | Tool Joint O.D. 5 3/4 | Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A Build

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14"
2.	"	"	
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST-C	36#	22	930.80	13.20	927	360 sks Permafrost
							150 sks Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7	5 3/4	6 3/4
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig		1/4	1/4
Deviation Survey	1/2		1/2
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig	1/2	2	3/4
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK: A. Perforating; B. Tubing Trips; C. Swabbing; D. Testing; E. Additional

Totals: 8 | 8

TIME SUMMARY (Office Use Only)

Day Work

Hrs. W/DP

Hrs. WO/DP

Hrs. Standby

Total Day Work

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 Size 1 1/4

Feet Slipped 135

Feet Cut Off 45

Present Length 4865

Ton Mi. or Trips Since Last Cut 503

Cumulative Ton Mi. or Trips 3720

No. of Days From Spud 39

Cumulative Rotating Hrs. 65 1/4

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
53	Stands D.P.	Ft.
5	Singles D.P.	498.52 Ft.
	D.C.	
	I.D. O.D.	Ft.
21	D.C. 2 1/8 6 1/4 I.D. O.D.	603.69 Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILL O.D.	10.76 Ft.
	Bit or C.B.	Ft.
	Kelly Down	16.03 Ft.
	Total	5617.00 Ft.
Wt. of String	136,000	Lbs.
Pipe in Hole	160	Jts.
Pipe on Racks	56	Jts.
Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	27	
Size	8 3/4	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	856112	
Depth Out		
Depth In	5548	
Total Ftg.	69	
Total Hr. Run	13 1/4	
Cond. of Bit	1N	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	1 00	4 00	7 00
Weight	9.2	9.2	9.2
Visc.-Sec.	47	47	46
W.L.-C.C.		14.2	
FL TR. CK.		2/32	
PH	10.	10.	10.
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Shaver

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
5580	5617	37	D			68	20	1100	6	53			

Deviation Record: Depth 5610, Dev. 10, Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	5 15	5 1/4						DRILL
5 15	5 45	1/2						SURVEY
5 45	7 30	1 3/4						DRILL
7 30	8 00	1/2						Work on ROTARY CHAIN

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
53	Stands D.P.	Ft.
2	Singles D.P.	5017.95 Ft.
	D.C. 2 1/8 6 1/4	
21	I.D. O.D.	603.69 Ft.
	D.C.	
	I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drill O.D.	10.76 Ft.
	Bit or C.B.	Ft.
	Kelly Down	15.60 Ft.
	Total	5648.00 Ft.
Wt. of String	136,000	Lbs.
Pipe in Hole	161	Jts.
Pipe on Racks	55	Jts.
Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	27	
Size	8 3/4	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	856112	
Depth Out		
Depth In	5548	
Total Ftg.	100	
Total Hr. Run	19	
Cond. of Bit	1N	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker 1.N.I 16 hrs.

Trucker Baker 16 hrs.

Trucker W. Shaver

MUD RECORD

Time	9 00	12 30	3 00
Weight	9.2	9.2	9.1
Visc.-Sec.	44	45	44
W.L.-C.C.		14.6	
FL TR. CK.		3/32	
PH	10.0	10.0	9.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		1000#	
RENEX			
CAUSTIC		50#	

Driller: John McCutcheon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
5617	5648	31	D			68	20	1100	6	53			(5)

Deviation Record: Depth, Dev., Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	1/4						REPAIR ROTARY CHAIN
8 15	8 30	1/4						RIG SERVICE, CHECK BOPS, MOTOR SHUT OFF
8 30	1 00	4 1/2						DRILLING
1 00	2 45	1 3/4						CHANGED WASH PIPE
2 45	4 00	1 1/4						DRILLING

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
54	Stands D.P.	5048.35 Ft.
	Singles D.P.	Ft.
	D.C. 2 1/8 6 1/4	
21	I.D. O.D.	603.69 Ft.
	D.C.	
	I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILL O.D.	10.76 Ft.
	Bit or C.B.	Ft.
	Kelly Down	15.20 Ft.
	Total	5678.00 Ft.
Wt. of String	138,000	Lbs.
Pipe in Hole	162	Jts.
Pipe on Racks	54	Jts.
Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	27	
Size	8 3/4	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	856112	
Depth Out		
Depth In	5548	
Total Ftg.	130	
Total Hr. Run	25 1/2	
Cond. of Bit	1N	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	5 00	8 00	11 00
Weight	9.1	9.1	9.1
Visc.-Sec.	45	45	45
W.L.-C.C.		14.4	
FL TR. CK.		2/32	
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Shaver

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
5648	5678	30	D			68	20	1100	6	53			(5)

Deviation Record: Depth 5672, Dev. 10°, Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	7 30	3 1/2						DRILLING
7 30	8 15	3/4						PUT NEW ROTARY CHAIN ON
8 15	8 30	1/4						RIG SERVICE / BOP
8 30	10 15	1 3/4						DRILL
10 15	10 45	1/2						SURVEY
10 45	12 00	1 1/4						DRILL

No. 5988

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF Aquitaine Rat Pass K-35 | Date: DEC 1 1970

Location — Lsd. 07 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Weather Condition: -40 | Road Conditions: N.I | Nearest Town: ARLAVICK | Water - Source: LAKE, Miles Hauled: 5, Pumped: | Camp Distance from Rig: 150 yds, Reason for Extra L. Plant: STANDBY

OPERATOR: BANFF Oil Co

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D Mitchell

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

Rig No. 3 IDECO DWS 525 | Drill Pipe String: No. 2, Size 4½ | Tool Joint: Type Thd. F H, 5 3/4 O.D.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214-P	14
2.	"	"	"
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST-C	36#	22	930.80	13.20	927	360 sks Permafrost
							150 sks Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7¼	2½	4¾
Reaming	1.00	1/2	
Conditioning Mud & Circulating			
Trips		4	
Lubricate Rig	¼	¼	¼
Deviation Survey		¼	
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig	½	1½	3
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work
Hrs. W/DP
Hrs. WO/DP
Hrs. Standby
Total Day Work

WIRE LINE RECORD

Reel No. M10092
No. of Lines 8 Size 1/4
Feet Slipped 135
Feet Cut Off 45
Present Length 4865
Ton Mi. or Trips Since Last Cut 503
Cumulative Ton Mi. or Trips 3770
No. of Days From Spud 38
Cumulative Rotating Hrs. 546

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
52	Stands D.P.		Ft.
5	Singles D.P.	4894.39	Ft.
	D.C.		
	I.D. O.D.		Ft.
21	D.C. 2 7/8 6 1/4 I.D. O.D.	603.69	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	34 16	Ft.
	Total	5543.00	Ft.

Wt. of String 132,000 Lbs.
Pipe in Hole 157 Jts.
Pipe on Racks 59 Jts.
Total Pipe on Lease 216 Jts.

BIT RECORD		
Bit No.	26	
Size	8¾	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	536186	
Depth Out		
Depth In	5320	
Total Ftg.	223	
Total Hr. Run	42	
Cond. of Bit	1N	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	100	400	700
Weight	9.3	9.3	9.3
Visc.-Sec.	44	44	47
W.L.-C.C.	13.8		
FL TR. CK.	2/32		
PH	10.5	10.5	10.
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Green

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5509	5543	34	D			68	20	1100	6	53			

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	130	½						DRILL
130	145	¼						Rig SERVICE / BOP. / Motor shut offs
145	600	4¼						DRILL
600	630	½						REPAIR ROTARY DRIVE CHAIN IN DRAWWORKS
630	800	1½						DRIL

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
52	Stands D.P.		Ft.
2	Singles D.P.	4924.39	Ft.
	D.C.		
	I.D. O.D.		Ft.
21	D.C. 2 7/8 6 1/4 I.D. O.D.	603.69	Ft.
	D.C.		
	I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs Drilled	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	16.16	Ft.
	Total	5555.00	Ft.

Wt. of String 135,000 Lbs.
Pipe in Hole 158 Jts.
Pipe on Racks 58 Jts.
Total Pipe on Lease 216 Jts.

BIT RECORD		
Bit No.	26	27
Size	8 3/4	8 3/4
Mfg.	REED	REED
Type	SCM	SCM
Nozzle No.	3	3
Nozzle Size	12	12
Ser. No.	586186	856112
Depth Out	5548	
Depth In	5320	5548
Total Ftg.	228	7
Total Hr. Run	43	1 1/2
Cond. of Bit	1-1-1	1N
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker I. N. T. 16 hrs.
Trucker DRAWER 16 hrs.
Trucker Daryl Kramer

MUD RECORD			
Time	900	1200	300
Weight	9.3	T	9.3
Visc.-Sec.	47	R	46
W.L.-C.C.			15.2
FL TR. CK.		1	2/32
PH	10.0	D	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		1000#	
BENEX		4#	

Driller: Lon McCallum

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5543	5555	12	D			68	20	1100	6	53			(S)

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	5548	10°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	900	1						DRILLING
900	915	¼						RIG SERVICE
915	930	¼						SURVEY
930	130	4						TRIP FOR BIT
130	200	½						BREAK CIRC & CLEAN TO BOTTOM 10'
200	330	1½						DRILLING
330	400	½						REPAIR ON ROTARY CHAIN

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
53	Stands D.P.	4965.90	Ft.
	Singles D.P.		Ft.
	D.C.		
	I.D. O.D.		Ft.
21	D.C. 2 7/8 6 1/4 I.D. O.D.	603.69	Ft.
	D.C.		
	I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs Drilled	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	9.65	Ft.
	Total	5680.00	Ft.

Wt. of String 138,000 Lbs.
Pipe in Hole 159 Jts.
Pipe on Racks 57 Jts.
Total Pipe on Lease 216 Jts.

BIT RECORD		
Bit No.	27	
Size	8 3/4	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	856112	
Depth Out		
Depth In	5548	
Total Ftg.	32	
Total Hr. Run	6¼	
Cond. of Bit	1N	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	500	800	1100
Weight	9.3	9.3	9.3
Visc.-Sec.	46	47	47
W.L.-C.C.			13.8
FL TR. CK.			2/32
PH	10.0	10.0	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		1000#	
BENEX		4#	

Driller: M Green

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5555	5580	25	D			68	20	1100	6	53			(S)

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	530	1½						REPAIR ON ROTARY CHAIN
530	730	2						DRILLING
730	846	1¼						REPAIR ON ROTARY CHAIN.
846	900	¼						RIG SERVICE / B.O.P.
900	945	1¾						DRILL
945	1000	¼						REPAIR standpipe BY PUMP
1000	1200	2						DRILL

No. 5987

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF Aquitaine Area Bat Pass K-36 | Date: Nov 30 1970

Location — Lsd 62 Sec 59 Twp 135 Rge 22 W. 5 M.

Weather Condition: -25° | Road Conditions: Nil | Nearest Town: AKLAVIK | Water - Source: LAKE | Miles Hauled: 5 | Pumped: | Camp Distance from Rig: 150 yds | Reason for Extra L. Plant: Standby

OPERATOR: BANFF Oil Co

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Guild

Rig No. 3 IDECO DWKS 525

Drill Pipe String: No. 2 Size 4½

Tool Joint 5¾ O.D. Type Thd. FH

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214-P	14
2.	"	"	"
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	STC	36#	22	930.80	13.20	927	360 sks PERMAFROST
							150 sks Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7¼	7¼	7½
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig	¼	1¼	
Deviation Survey	½		½
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Dry Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. 7711092

No. of Lines 8 Size 1¼

Feet Slipped 135

Feet Cut Off 45

Present Length 4865

Ton Mi. or Trips Since Last Cut 35½

Cumulative Ton Mi. or Trips 261½

No. of Days From Spud 37

Cumulative Rotating Hrs. 531½

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
51	Stands D.P.		Ft.
3	Singles D.P.	4800.39	Ft.
	D.C. I.D. O.D.		Ft.
21	D.C. 2 2/8 6¼ I.D. O.D.	603.69	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLCO O.D.	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	14.16	Ft.
	Total	5429.00	Ft.

Wt. of String 130,000 Lbs.

Pipe in Hole 154 Jts.

Pipe on Racks 62 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	26					
Size	8¾					
Mfg.	REED					
Type	SCM					
Nozzle No.	3					
Nozzle Size	12					
Ser. No.	586186					
Depth Out						
Depth In	5320					
Total Ftg.	109					
Total Hr. Run	19½					
Cond. of Bit						
Reamer No.						
Reamer Type						

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	100	400	700
Weight	9.3	9.2	9.3
Visc.-Sec.	47	45	45
W.L.-C.C.		13.8	
FL TR. CK.		2/32	
PH	10.5	10.5	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	1000#		
BENEX	4#		

Driller: M Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5392	5429	37	D			65	20	1100	6	52			

Deviation Record: Depth 5424 | Dev. 11° | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼						Rig SERVICE / B.O.P. / Motor shut offs
1215	630	6¼						DRILL
630	700	½						SURVEY
700	800	1						DRILL

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
51	Stands D.P.		Ft.
2	Singles D.P.	4830.96	Ft.
	D.C. I.D. O.D.		Ft.
21	D.C. 2 2/8 6¼ I.D. O.D.	603.69	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLCO O.D.	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	23.59	Ft.
	Total	5469.00	Ft.

Wt. of String 132,000 Lbs.

Pipe in Hole 155 Jts.

Pipe on Racks 61 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	26					
Size	8¾					
Mfg.	REED					
Type	SCM					
Nozzle No.	3					
Nozzle Size	12					
Ser. No.	586186					
Depth Out						
Depth In	5320					
Total Ftg.	149					
Total Hr. Run	27¼					
Cond. of Bit	IN					
Reamer No.						
Reamer Type						

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	900	1200	300
Weight	9.3	9.3	9.3
Visc.-Sec.	45	43	43
W.L.-C.C.		13.6	
FL TR. CK.		2/32	
PH	10.5	10.5	8.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		

Driller: Don McCallum

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5429	5469	40	D			65	20	1100	6	52	5		(5)

Deviation Record: Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	1145	3¾						DRILLING
1145	1200	¼						Rig SERVICE CHECK Baps & Motor Shut OFFS
1200	400	4						DRILLING

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
52	Stands D.P.	4862.63	Ft.
	Singles D.P.		Ft.
	D.C. I.D. O.D.		Ft.
21	D.C. 2 2/8 6¼ I.D. O.D.	603.69	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLCO O.D.	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	31.92	Ft.
	Total	5509.00	Ft.

Wt. of String 132,000 Lbs.

Pipe in Hole 156 Jts.

Pipe on Racks 60 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	26					
Size	8 3/4					
Mfg.	REED					
Type	SCM					
Nozzle No.	3					
Nozzle Size	12					
Ser. No.	586186					
Depth Out						
Depth In	5320					
Total Ftg.	189					
Total Hr. Run	34¾					
Cond. of Bit						
Reamer No.						
Reamer Type						

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	500	800	1100
Weight	9.3	9.2	9.3
Visc.-Sec.	45	44	44
W.L.-C.C.			13.8
FL TR. CK.			2/32
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5469	5509	40	D			65	20	1100	6	52	5	—	(5)

Deviation Record: Depth 5484 | Dev. 10° | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	700	3						DRILLING
700	730	½						SURVEY
730	1200	4½						DRILLING

No. 5447

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF BOOT ARC RAT PASS K-35 | Date: NOV 29 1970

Location — Ld. 67 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Weather: High 10 Winds | Road Conditions: NIL | Nearest Town: AKLAVICK | Water - Source: LAKE | Miles Hauled: 1/2 | Pumped: | Camp Distance from Rig: 15-0 | Reason for Extra L. Plant: STANDBY

OPERATOR: BANFF OIL CO

Rig No. 3 IDECO DWKS 525 | Drill Pipe String: No. 2, Size 4½ | Tool Joint: 5¾ O.D., Type Tbd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Bulat

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	"	"	"
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	ST-C	36#	22	930.80	1320	927	360 sks PERMAFROST
							150 sks Oilwell

MORNING TOUR

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual		5¼	7
Reaming	5¼	2½	5¼
Conditioning Mud & Circulating	¼		¼
Trips	2		2
Lubricate Rig	¼	1¼	¼
Deviation Survey			1
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other	¼		¼
Fishing			

DRILLING ASSEMBLY AT END OF TOUR

NO.			
50	Stands D.P.	4625.48	Ft.
	Singles D.P.		Ft.
21	D.C. 2⅞ I.D. 6¼ O.D.	603.69	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Sub DRILLCO	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	20.99	Ft.
	Total	5310.00	Ft.

Wt. of String: 130,000 Lbs.
Pipe in Hole: 150 Jts.
Pipe on Racks: 66 Jts.
Total Pipe on Lease: 216 Jts.

BIT RECORD

Bit No.	26
Size	8¾
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586186
Depth Out	
Depth In	5294
Total Ftg.	16
Total Hr. Run	5¼
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	1:00	4:00	7:00
Weight		9.3	9.3
Visc.-Sec.		40	38
W.L.-C.C.			14.4
FL TR. CK.			2/32
PH		9.0	9.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Steen

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
5294	5310	16	R			68	6	1100	6	53			

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼						Finish Changing STABILIZER IN STRING OF COLLARS
12:15	12:30	¼						Rig SERVICE & BOP & Motor shut offs
12:30	2:30	2						Run in with BIT #26
2:30	2:45	¼						Ber cir Clean to Bottom.
2:45	8:00	5¼						REAM RAT HOLE

Fuel 4' 5"

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
50	Stands D.P.		Ft.
1	Singles D.P.	4706.51	Ft.
21	D.C. 2⅞ I.D. 6¼ O.D.	603.69	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Sub DRILLCO	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	34.04	Ft.
	Total	5355.05	Ft.

Wt. of String: 130,000 Lbs.
Pipe in Hole: 151 Jts.
Pipe on Racks: 65 Jts.
Total Pipe on Lease: 216 Jts.

BIT RECORD

Bit No.	REAM 26	26
Size	8 3/4	8 3/4
Mfg.	REED	REED
Type	SCM	SCM
Nozzle No.	3	3
Nozzle Size	12	12
Ser. No.	586186	586186
Depth Out		
Depth In	5294	5320
Total Ftg.	26	35
Total Hr. Run	7¾	5¼
Cond. of Bit	REAM	IN
Reamer No.	—	
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker T.N.T. 16 hrs.
Trucker DRIVER 16
Trucker Daryl Krause

MUD RECORD

Time	9:00	12:00	3:00
Weight	9.3	9.3	9.3
Visc.-Sec.	38	40	45
W.L.-C.C.		14.6	
FL TR. CK.		-/32	
PH	9.0	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		1500 #	
BENEX		6 #	
CAUSTIC		50 #	

Driller: M Steen

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
5310	5320	10	R			65	6	1000	6	50	5	—	(5)
5320	5355	35	D			65 20	1000		6	50	5	—	

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:30	2½						REAM RAT HOLE
10:30	10:45	¼						RIG SERVICE, CHECK BOPS & MOTOR SHUT OFF
10:45	4:00	5¼						DRILLING

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
50	Stands D.P.		Ft.
0	Singles D.P.	4738.31	Ft.
21	D.C. 2⅞ I.D. 6¼ O.D.	603.69	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Sub DRILLCO	10.76	Ft.
	Bit or C.B.		Ft.
	Kelly Down	39.24	Ft.
	Total	5392.00	Ft.

Wt. of String: 130,000 Lbs.
Pipe in Hole: 152 Jts.
Pipe on Racks: 64 Jts.
Total Pipe on Lease: 216 Jts.

BIT RECORD

Bit No.	26
Size	8 3/4
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586186
Depth Out	
Depth In	5320
Total Ftg.	72
Total Hr. Run	12¼
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	5:00	8:00	11:00
Weight	9.2	9.2	9.3
Visc.-Sec.	47	45	45
W.L.-C.C.	15.0		14.8
FL TR. CK.	-/32		2/32
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Steen

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
5355	5392	37	D			65	20	1000	6	50	5		(5)

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
5363	11°	~~5392~~	5392	11°				

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:30	½						DRILLING
4:30	5:00	½						SURVEY
5:00	11:30	6½						DRILLING
11:30	12:00	½						SURVEY

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.	MIC092
No. of Lines	8
Size	1¼
Feet Slipped	135
Feet Cut Off	45
Present Length	4869
Ton. Mi. or Trips Since Last Cut	351
Cumulative Ton. Mi. or Trips	3618
No. of Days From Spud	86
Cumulative Rotating Hrs.	509

No. 5985

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF Oguiland Rot Pass K-35 — Date: Nov 28 1970

Location — Lsd 67 Sec. 57 Twp 135 Rge 122 W. 5 M.

Weather Condition: -0 — Road Conditions: N,I — Nearest Town: PKLDUICK — Water - Source: LAKE, Miles Hauled: 5, Pumped — Camp Distance from Rig: 15-0, Reason for Extra L. Plant: STANDBY

OPERATOR: BANFF Oil Co

Rig No. 3 EDGE DWKS 525 — Drill Pipe String: No. 2, Size 4½ — Tool Joint 5-3/4 O.D. — Type Tbd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: A. MacHolland

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Guld

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	"	"	"
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming full		1½	
Conditioning Mud & Circulating	1½		
Trips	4	1¾	2
Lubricate Rig		¼	
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring	2½	3½	3¼
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other		1	9¼
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals		8	8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 Size 1 1/8

Feet Slipped 135'

Feet Cut Off 45'

Present Length 4865'

Ton Mi. or Trips Since Last Cut 280

Cumulative Ton Mi. or Trips 35-47

No. of Days From Spud 35

Cumulative Rotating Hrs. 489

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
49	Stands D.P.	Ft.	Bit No.	1C
	Singles D.P. 4612.61	Ft.	Size	6 3/16 & 5 1/2
	D.C.		Mfg.	
	I.D. O.D.	Ft.	Type	DDL-W
	D.C. 2⅞ 6¼		Nozzle No.	
21	I.D. O.D. 603.69	Ft.	Nozzle Size	
	Stb. Body O.D.	Ft.	Ser. No.	33-70
	Stb. Body O.D. Core Bits	62.86 Ft.	Depth O.	
	Rmr. Body O.D.	Ft.	Depth In	5294
	Subs DRILLCO	10.76 Ft.	Total Ftg.	6
	Bit or C.B.	Ft.	Total Hr. Run	2½
	Kelly Down	10.16 Ft.	Cond. of Bit	1 0 0 D
	Total	5-300,00 Ft.	Reamer No.	
Wt. of String	122,000 Lbs.		Reamer Type	
Pipe in Hole	~~146~~ 147 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
Pipe on Racks	~~70~~ 69 Jts.		Trucker	
Total Pipe on Lease	216 Jts.		Trucker	
			Trucker	

MUD RECORD

Time				
Weight				
Visc.-Sec.				
W.L.-C.C.				
FL TR. CK.				
PH				
SD. Cont. %				
Pressure Gradient				

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Dozen

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5294	5-300	6	C			80	12-	75-0	5"	62			

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1⁰⁰	2⁰⁰	2						Run in with Core #1 Strap in
2⁰⁰	3³⁰	1½						Ber-Cir To Botton
3³⁰	6⁰⁰	2½						Goreing
6⁰⁰	8⁰⁰	2						Trip for core #1

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
49	Stands D.P. 4612.61	Ft.	Bit No.	2C
	Singles D.P.	Ft.	Size	6 3/16 X 3½
	D.C. 2⅞ 6¼		Mfg.	
	I.D. O.D.	Ft.	Type	DDL-W
	D.C.		Nozzle No.	
21	I.D. O.D. 603.69	Ft.	Nozzle Size	
	Stb. Body O.D.	Ft.	Ser. No.	33-70
	Stb. Body O.D.	Ft.	Depth Out	
	Rmr. Body O.D.		Depth In	5300
	Subs O.D.	10.76 Ft.	Total Ftg.	10
	STARS Bit or C.B.	62.86 Ft.	Total Hr. Run	3½
	Kelly Down	20.08 Ft.	Cond. of Bit	1N
	Total	5310.00 Ft.	Reamer No.	
Wt. of String	130,000 Lbs.		Reamer Type	
Pipe in Hole	147 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
Pipe on Racks	69 Jts.		Trucker	15 hrs. J.M.T.
Total Pipe on Lease	216 Jts.		Trucker	15 hrs. Driver
			Trucker	A. Loaine

MUD RECORD

Time	9⁰⁰	12⁰⁰	3⁰⁰
Weight	T	9.2	9.2
Visc.-Sec.	R	38	37
W.L.-C.C.			
FL TR. CK.	I		
PH	P	9.0	9.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Jph. McCallum

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5300	5310	10	C			80	14	675	6	—	5	63	S

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	¼						Rig Service, Check Bops, Motors Shut Off Recovery Core No. 1 & Service Bbls.
8¹⁵	9¹⁵	1						
9¹⁵	11⁰⁰	1¾						Run in W/ Core No. 2
11⁰⁰	12³⁰	1½						Clean To Bottom 12' of Fill
12³⁰	4⁰⁰	3½						Coring No. 2

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
49	Stands D.P. 4612.61	Ft.	Bit No.	2C
	Singles D.P.	Ft.	Size	6 3/16 X 3½
	D.C. 2⅞ 6¼		Mfg.	
	I.D. O.D.	Ft.	Type	DDL-W
	D.C.		Nozzle No.	
21	I.D. O.D. 603.69	Ft.	Nozzle Size	
	Stb. Body O.D.	Ft.	Ser. No.	33-70
	Stb. Body O.D.	Ft.	Depth Out	5320
	Rmr. Body O.D.		Depth In	5300
	Subs O.D.	10.76 Ft.	Total Ftg.	20
	STAR Bit or C.B.	62.86 Ft.	Total Hr. Run	9¼
	Kelly Down	29.08 Ft.	Cond. of Bit	
	Total	5-319,00 Ft.	Reamer No.	
Wt. of String	130,000 Lbs.		Reamer Type	
Pipe in Hole	147 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
Pipe on Racks	69 Jts.		Trucker	
Total Pipe on Lease	216 Jts.		Trucker	
			Trucker	

MUD RECORD

Time	5⁰⁰	8⁰⁰	11⁰⁰
Weight	9.2		
Visc.-Sec.	37		
W.L.-C.C.			
FL TR. CK.			
PH	9.0		
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		500 #	
BENEX		2 #	

Driller: M Dozen

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5310	5319	9	C			80	14	675	6	—	5	63	S

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	7¹⁵	3¼						Coring No. 2
7¹⁵	9¹⁵	2						Break Core Off Bottom And Hoist
9¹⁵	11¹⁵	2						Recovey Core #2 Service Bbls & Stand In Derrick
11¹⁵	12⁰⁰	¾						~~Fish~~ changing Stabilizer In String Of Collors

No. 5984

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF HOWITT ARCO RAT PASS K35 — Date: NOV 27 1970

Location — Lsd. 67 Sec. 5-9 Twp. 135 Rge. 22 W. 5 M.

Weather Condition: -30 — Road Conditions: N.I — Nearest Town: HAKLUCK — Water - Source: LAKE — Miles Hauled: 1/2 — Pumped — Camp Distance from Rig: 15-0 — Reason for Extra L. Plant: STANDBY

OPERATOR: BANFF OIL CO

Rig No. 3 IDECO DWKS 525 — Drill Pipe String: No. 2, Size 4½ — Tool Joint: 5-3/4 O.D., Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W McGowan

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Swild

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING / TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST-C	36#	22	930.80	13.20	927	360 sks PERMAFROST
							150 sks Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7½	7½	
Reaming			
Conditioning Mud & Circulating			
Trips		1/4	2½
Lubricate Rig		1/4	1/4
Deviation Survey	½		
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			2
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			3¼
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals			8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.	M10092
No. of Lines	8
Size	9/16
Feet Slipped	135
Feet Cut Off	45
Present Length	4865
Ton Mi. or Trips Since Last Cut	138
Cumulative Ton. Mi. or Trips	3405
No. of Days From Spud	34
Cumulative Rotating Hrs.	479¾

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
49	Stands D.P.	4612.61 Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
20	D.C. 2 7/8 6 1/4 I.D. O.D.	574.22 Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILL COLLARS O.D.	45.45 Ft.
	Bit or C.B.	Ft.
	Kelly Down	26.72 Ft.
	Total	5259.00 Ft.

Wt. of String 122,000 Lbs. — Pipe in Hole 147 Jts. — Pipe on Racks 69 Jts. — Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	25
Size	8 3/4
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586324
Depth Out	
Depth In	5086
Total Ftg.	173
Total Hr. Run	34¼
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	1.00	4.00	7.00
Weight	9.1	9.1	9.2
Visc.-Sec.	42	42	42
W.L.-C.C.			15.2
FL TR. CK.			
PH	10.0	10.0	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5226	5259	33	D			70	20	800			5	68	

Deviation Record: Depth 5240 — Dev. 10¾ — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	3.00	3						DRILL
3.00	3.30	½						SURVEY
3.30	8.00	4½						DRILL
								FUEL 3' 7"

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
49	Stands D.P.	Ft.
2	Singles D.P.	4644.16 Ft.
	D.C. I.D. O.D.	Ft.
20	D.C. 2 7/8 6 1/4 I.D. O.D.	574.22 Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILL COLLARS O.D.	45.45 Ft.
	Bit or C.B.	Ft.
	Kelly Down	30.17 Ft.
	Total	5294.00

Wt. of String 122,000 Lbs. — Pipe in Hole 149 Jts. — Pipe on Racks 67 Jts. — Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	25
Size	8 3/4
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586324
Depth Out	5294
Depth In	5086
Total Ftg.	208
Total Hr. Run	41¾
Cond. of Bit	1-1-1
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker 13 hrs T.N.T
Trucker Drive 13 hrs
Trucker Darryl Krause

MUD RECORD

Time	9.00	12.00	3.00
Weight	9.2	9.1	9.1
Visc.-Sec.	38	41	40
W.L.-C.C.			
FL TR. CK.			
PH	8.5	9.5	9.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		

Driller: M Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5259	5294	35	D			70	20	800	6	60			(S)

Deviation Record

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	11.45	3¾						DRILLING
11.45	12.00	¼						RIG SERVICE CHECK BOPS & MOTOR SHUT OFF
12.00	3.45	3¾						DRILLING
3.45	4.00	¼						HOIST OUT

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILL COLLARS O.D.	Ft.
	Bit or C.B.	62.86 Ft.
	Kelly Down	Ft.
	Total	Ft.

Wt. of String Lbs. — Pipe in Hole Jts. — Pipe on Racks Jts. — Total Pipe on Lease Jts.

BIT RECORD

Bit No.	1C
Size	6 9/16 x 3½
Mfg.	
Type	OOL-W
Nozzle No.	
Nozzle Size	
Ser. No.	33-70
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	5.00	8.00	11.00
Weight			
Visc.-Sec.			
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4.00	6.30	2½						HOIST OUT
6.30	8.00	1½						BREAK DOWN MAST OF STABERZER AND LAY DOWN SAME
8.00	9.00	1						PICK UP CORE BBLS.
9.00	9.15	¼						RIG SERVICE / B.O.P / Moto-shut off
9.15	10.00	¾						Pick up Rotary hole collars and JARS.
10.00	12.00	2						Work on chains in drawworks

No. 5983

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF PACIT DALO RAT PRESKEY

Location — Lsd. 62 Sec. 59 Twp. 135 Rge. 22 W. WM.

Date: Nov 26 1970

Weather Condition: -30 | Road Conditions: N.I | Nearest Town: AKLAVICK | Water - Source: LAKE | Miles Hauled: 3/5 | Pumped | Camp Distance from Rig: 150 yds | Reason for Extra L. Plant: STANDBY

OPERATOR: DANFF OIL Co

SIGNATURE OF OPERATOR'S REPRESENTATIVE: C Mulhallcard

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Sinclair

Rig No.	Drill Pipe String No.	Drill Pipe String Size	Tool Joint	Type Thd.
3 IDECO DWKS 525	2	4½	5-3/4 O.D.	FH

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	oil well	214-P	14
2.	"	"	"
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST-C	36#	22	930.80	13.20	927	360 sks Permafrost
							150 sk Oil well

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7¼	12¾	4¼
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig	¼	¼	¼
Deviation Survey	½	1	½
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 Size 1/8

Feet Slipped 135

Feet Cut Off 45

Present Length 4865

Ton Mi. or Trips Since Last Cut: ~~205~~ 67

Cumulative Ton Mi. or Trips: ~~3477~~ 3334

No. of Days From Spud: 33

Cumulative Rotating Hrs.: 464¾

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
49	Stands D.P.		Ft.
2	Singles D.P.	4487.97	Ft.
	D.C.		
	I.D. O.D.		Ft.
20	D.C. 2¼ I.D. 6¼ O.D.	574.22	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DAILED	49.45	Ft.
	Bit or C.B.		Ft.
	Kelly Down	39.36	Ft.
	Total	5147.00	Ft.

Wt. of String: 120,000 Lbs.

Pipe in Hole: 143 Jts.

Pipe on Racks: 73 Jts.

Total Pipe on Lease: 216 Jts.

BIT RECORD

Bit No.	25
Size	8¾
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586324
Depth Out	
Depth In	5086
Total Ftg.	61
Total Hr. Run	12¾
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker:

Trucker:

Trucker:

MUD RECORD

Time	1:00	4:00	7:00
Weight	9.2	9.2	9.2
Visc.-Sec.	39	40	40
W.L.-C.C.		17.4	
FL TR. CK.		7/32	
PH	9.5	10.0	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		

Driller: M Bacon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5108	5147	39	D			70	25	1100	6	53			C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:15	1¼						DRILL
1:15	1:30	¼						Rig SERVICE ✓ BOP ✓ Motor shut offs
1:30	2:00	½						SURVEY (mis Run Clock stop)
2:00	8:00	6						DRILL

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
48	Stands D.P.		Ft.
1	Singles D.P.	4549.50	Ft.
	D.C.		
	I.D. O.D.		Ft.
20	D.C. 2⅛ I.D. 6¼ O.D.	574.22	Ft.
	D.C.		
	I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs Drilled	45.45	Ft.
	Bit or C.B.		Ft.
	Kelly Down	20.74	Ft.
	Total	5190.00	Ft.

Wt. of String: 120,000 Lbs.

Pipe in Hole: 145 Jts.

Pipe on Racks: 71 Jts.

Total Pipe on Lease: 216 Jts.

BIT RECORD

Bit No.	25
Size	8¾
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586324
Depth Out	
Depth In	5086
Total Ftg.	104
Total Hr. Run	19½
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker: T.N.T. 14 Hrs.

Trucker: DRIVER 14 Hrs.

Trucker: Daryl Krause

MUD RECORD

Time	9:00	12:00	3:00
Weight	9.2	9.2	9.2
Visc.-Sec.	37	45	43
W.L.-C.C.		15.8	
FL TR. CK.		7/32	
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		1000#	
BENEX		4#	

Driller: L. McCarthy

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5147	5190	43	D			70	25	1100	6	53			S

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
5147	—		5178	10½°				

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30	½						SURVEY (MIS RUN CLOCK STOPPED)
8:30	8:45	¼						RIG SERVICE, CHECK BOPS, & MOTOR SHUT OFFS.
8:45	2:00	5¼						DRILLING
2:00	2:30	½						SURVEY
2:30	4:00	1½						DRILLING

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
48	Stands D.P.		Ft.
0	Singles D.P.	4581.12	Ft.
	D.C.		
	I.D. O.D.		Ft.
20	D.C. 2⅛ I.D. 6¼ O.D.	574.22	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED	45.45	Ft.
	Bit or C.B.		Ft.
	Kelly Down	25.21	Ft.
	Total	5226	Ft.

Wt. of String: 122,000 Lbs.

Pipe in Hole: 146 Jts.

Pipe on Racks: 70 Jts.

Total Pipe on Lease: 216 Jts.

BIT RECORD

Bit No.	25
Size	8¾
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586324
Depth Out	
Depth In	5086
Total Ftg.	140
Total Hr. Run	26¾
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker:

Trucker:

Trucker:

MUD RECORD

Time	5:00	8:00	11:00
Weight	9.2	9.2	9.1
Visc.-Sec.	43	42	42
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Bacon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5190	5226	36	D			70	25	1100	6	53			S

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
5202	10½°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	6:30	2½						DRILLING
6:30	7:00	½						SURVEY
7:00	8:30	1½						DRILLING
8:30	8:45	¼						RIG SERVICE ✓ BOP ✓ Motor shut offs
8:46	12:00	3¼						DRILL

No. 5982

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: Bruce Heart Area Hot Lks K-35 | Date: Nov 25 1972

Location — Lsd. 07 Sec. 34 Twp. 132 Rge. 32 W. 5 M.

Weather Condition: -45 | Road Conditions: - | Nearest Town: AKELUSIC | Water - Source: Lake | Miles Hauled: 1/2 | Pumped: | Camp Distance from Rig: 150 | Reason for Extra L. Plant: Camp

OPERATOR: Bruce Oil Ltd

Rig No. 3 — Type: DWKS 525 | Drill Pipe String: No. 2 Size 4½ | Tool Joint 5¾ O.D. | Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Euid

PUMPS No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214-P	14
2.	"	"	"
3.			

LAST CASING / TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	ST-C	36	22	933.30	13.20	927	To Surface Pipe
							150 Offset

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7½	1	5½
Reaming	fill		¼
Conditioning Mud & Circulating			
Trips		3½	1½
Lubricate Rig		¼	¼
Deviation Survey	½		
Test B.O.P.			
Cut Off Drilling Line		¾	½
Repair Rig		½	
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other		B	
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M-10092
No. of Lines 8 Size 1/8
Feet Slipped 135
Feet Cut Off 45
Present Length 4865
Ton Mi. or Trips Since Last Cut 67
Cumulative Ton Mi. or Trips 3334
No. of Days From Spud 32
Cumulative Rotating Hrs. 443½

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
47	Stands D.P.	4426.49 Ft.
	Singles D.P.	Ft.
20	D.C. 2⅞ x 1¼ I.D. O.D.	574.22 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILLCO	55.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	39.69 Ft.
	Total	5096.00 Ft.
	Wt. of String	135,000 Lbs.
	Pipe in Hole	141 Jts.
	Pipe on Racks	75 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD	
Bit No.	24
Size	8¾
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	576187
Depth Out	
Depth In	4768
Total Ftg.	312
Total Hr. Run	49
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	12:00	4:00	7:00
Weight	9.2	9.2	9.2
Visc.-Sec.	39	40	44
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	1500#		
Ben-Ex	1#		

Driller: [signature]

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5034	5080	46	D			70	25	1100	6"	53			C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	5060	9¾							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	5:00	5						DRILL
5:00	5:30	½						SURVEY
5:30	8:00	2½						DRILL

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
47	Stands D.P.	4426.49 Ft.
	Singles D.P.	Ft.
20	D.C. 2⅞ x 1¼ I.D. O.D.	574.22 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILLCO	45.45 Ft.
	Bit or C.B.	Ft.
	Kelly Down	39.84 Ft.
	Total	5086.00 Ft.
	Wt. of String	125000 Lbs.
	Pipe in Hole	141 Jts.
	Pipe on Racks	75 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD		
Bit No.	24	25
Size	8¾	8¾
Mfg.	REED	REED
Type	SCM	SCM
Nozzle No.	3	3
Nozzle Size	12	12
Ser. No.	576187	586324
Depth Out	5086	
Depth In	4768	5086
Total Ftg.	318	
Total Hr. Run	50¼	
Cond. of Bit	1 1	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	9:00	12:00	3:00
Weight			
Visc.-Sec.			
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: [signature]

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5080	5086	6	D			70	25	1100	6	53			

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:15	1¼						DRILL
9:15	9:30	¼						Rig SERVICE
9:30	10:00	½						work on AIR LINES
10:00	12:30	2½						Pull To change BITS
12:30	1:00	½						Help haul torque TO PLANE
1:00	1:30	½						LAY down shock sub
1:30	2:30	1						Help put in NEW torque
2:30	3:15	¾						RUN in collars
3:15	4:00	¾						Slip line
								LEASE WORK: UNLOAD WATER; LOAD FUEL
								TANK & HAUL FUEL FROM RIVER

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
47	Stands D.P.	Ft.
1	Singles D.P.	4456.98 Ft.
20	D.C. 2⅞ x 1¼ I.D. O.D.	574.22 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILLCO	45.45 Ft.
	Bit or C.B.	Ft.
	Kelly Down	31.36 Ft.
	Total	5108.00 Ft.
	Wt. of String	120,000 Lbs.
	Pipe in Hole	142 Jts.
	Pipe on Racks	74 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD		
Bit No.	25	
Size	8¾	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	586324	
Depth Out		
Depth In	5086	
Total Ftg.	22	
Total Hr. Run	5½	
Cond. of Bit	IN	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	5:00	8:00	11:00
Weight	T	9.1	9.0
Visc.-Sec.	R	36	38
W.L.-C.C.			
FL TR. CK.	I		
PH	P	9.0	9.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		500#	
BENEX		2#	

Driller: [signature]

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
5086	5108	22	D			70	20	1100	6	53			S

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:30	½						SLIP 45' OF LINE
4:30	6:00	1½						RUN IN W/BIT NO. 25
6:00	6:15	¼						BREAK CIRC & CLEAN TO BOTTOM.
6:15	6:30	¼						RIG SERVICE & CHECK BOPS
6:30	12:00	5½						DRILLING

No. 5981

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF ROCKY ACRO BY PASS - K-36

Location — Lsd. 07 Sec. 29 Twp. 135 Rge. 22 W. 5M.

Date: NOV 24 1970

Weather Condition: -42 Road Conditions: CLEAR

Nearest Town: ARLBUTUS

Water - Source: LAKE Miles Hauled: 1/2 Pumped:

Camp Distance from Rig: 150 FEET Reason for Extra L. Plant: STANDBY

OPERATOR: BANFF OIL LTD

Rig No. 3 — 1000 DWKS 525

Drill Pipe String: No. 4 Size 4½

Tool Joint: 5¾ O.D. Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Sidal

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	OILWELL	214-P	14
2.	"	"	"
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8		36#	22	930.80	13.20	927	360 SKS PERMA FROST
	ST-C						150 SKS OIL WELL

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7	7¼	7¼
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig		¼	¼
Deviation Survey	1	½	½
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK: A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M10692

No. of Lines 8 Size 1 1/8

Feet Slipped 40

Feet Cut Off 75

Present Length 7955

Ton Mi. or Trips Since Last Cut 551

Cumulative Ton Mi. or Trips 2199

No. of Days From Spud 31

Cumulative Rotating Hrs. 429 ¼

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
4/5	Stands D.P.		Ft.
17	Singles D.P.	4301.59	Ft.
	D.C. 8" x 2¼		
20	I.D. O.D.	574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	17.59	Ft.
	Total	4949	Ft.
Wt. of String	128,000		Lbs.
Pipe in Hole	137		Jts.
Pipe on Racks	79		Jts.
Total Pipe on Lease	216		Jts.

BIT RECORD: Bit No. 24; Size 8¾; Mfg. REED; Type SCM; Nozzle No. 3, Size 12; Ser. No. 576187; Depth Out; Depth In 4768; Total Ftg. 181; Total Hr. Run 27; Cond. of Bit; Reamer No.; Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.: Trucker; Trucker; Trucker

MUD RECORD

Time	1:00	4:00	7:00
Weight	9.2	9.2	
Visc.-Sec.	40	40	
W.L.-C.C.	18.2		
FL TR. CK.	3/32		
PH	10.5	10.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	150#		
BENEX	6#		
CAUSTIC	5#		

Driller: Ronnie Nash

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4894	4949	55	D			70	25	1100	6"	53			P

Deviation Record: Depth 4909; Dev. 1°; Direction

Depth 4940; Dev. 0¾; Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:30	1½						DRILL
1:30	2:00	½						SURVEY
2:00	6:00	4:00						DRILL
6:00	6:30	½						SURVEY
6:30	8:00	1½						DRILL
								FUEL 53

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
46	Stands D.P.	4332.71	Ft.
	Singles D.P.		Ft.
	D.C. 8" x 2¾	6¼	
20	I.D. O.D.	574.22	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	24.47	Ft.
	Total	4987	Ft.
Wt. of String	128,000		Lbs.
Pipe in Hole	138		Jts.
Pipe on Racks	78		Jts.
Total Pipe on Lease	216		Jts.

BIT RECORD: Bit No. 24; Size 8¾; Mfg. REED; Type SCM; Nozzle No. 3, Size 12; Ser. No. 4768; Depth Out; Depth In 4768; Total Ftg. 209; Total Hr. Run 34¼; Cond. of Bit 1N; Reamer No.; Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.: Trucker JNT 10; Trucker Driver 10; Trucker Bud Herbert

MUD RECORD

Time	900	1200	300
Weight	9.2	9.2	9.2
Visc.-Sec.	40	41	40
W.L.-C.C.		18.0	
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4949	7987	~~3~~ 38	D			70	25	1100	6	53			

Deviation Record: Depth 4971; Dev. 9¾; Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:15	2¼					DRILL
10:15	10:30	¼					RIG SERVICE / BOP. / Motor shut off
10:30	11:45	1¼					DRILL
11:45	12:15	½					SURVEY
12:15	4:00	3¾					DRILL

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
2/6	Stands D.P.		Ft.
5	Singles D.P.	473.32	Ft.
	D.C. 8" x 2¼	6¼	
20	I.D. O.D.	574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	39.46	Ft.
	Total	5024	Ft.
Wt. of String	128,000		Lbs.
Pipe in Hole	139		Jts.
Pipe on Racks	77		Jts.
Total Pipe on Lease	216		Jts.

BIT RECORD: Bit No. 24; Size 8¾; Mfg. REED; Type SCM; Nozzle No. 3, Size 12; Ser. No. 4768; Depth Out; Depth In 4768; Total Ftg. 36; Total Hr. Run 4¼; Cond. of Bit; Reamer No.; Reamer Type

Water Charges — Reg. Hrs. O.T. Hrs.: Trucker; Trucker; Trucker

MUD RECORD

Time	5:00	8:00	11:00
Weight		9.2	9.2
Visc.-Sec.		40	40
W.L.-C.C.			
FL TR. CK.		~~10.5~~	
PH		~~10.5~~ 10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4987	5024	37	D			70	25	1100	6"	63			C

Deviation Record: Depth 5002; Dev. 9¾; Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	6:15	2¼						DRILL
6:15	6:45	½						SURVEY
6:45	11:45	5						DRILL
11:45	12:00	¼						RIG SER

No. 5980

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: BANFF HOTEL HEAD SKI PASS

Location — Lsd. 6 Sec. 5 Twp. 35 Rge. 22 W. 5 M.

Date: Nov 23 1970

Weather Condition: -35 Road Conditions: MTA Nearest Town: HIGH RIVER

Water — Source: LAKE Miles Hauled: 1/2 Pumped: Camp Distance from Rig: 150-180

Reason for Extra L. Plant: STANDBY

OPERATOR: BANFF OIL LTD

Rig No. 3 IDEAL DWKS 535 | Drill Pipe String: No. 3 Size 5 1/2 | Tool Joint 5 3/4 O.D. | Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. Mulhallan

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Ludd

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	OIL WELL	214 - P	14
2.	OIL WELL	214 - P	14
3.			

	Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
LAST CASING	9 5/8	ST-C	36#	22	923.30	B.30	927	360 SKS PERMAFROST
TUBING OR LINER								150 SKS "G" NEAT

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	5 3/4	7	7 1/4
Reaming			
Conditioning Mud & Circulating			
Trips	2		
Lubricate Rig		1/4	1/2
Deviation Survey		3/4	1/4
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other Circ	1/4		
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M 10042

No. of Lines 5 Size 1 1/5

Feet Slipped 90

Feet Cut Off 45

Present Length 195 55

Ton Mi. or Trips Since Last Cut 2 155 55

Cumulative Ton Mi. or Trips 2 128

No. of Days From Spud 30

Cumulative Rotating Hrs. 207 3/4

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
44	Stands D.P.	Ft.	Bit No.	24
5	Singles D.P.	476.19 Ft.	Size	8 3/4
	D.C.		Mfg.	REED
20	2 1/2 x 6 1/2 I.D. O.D.	574.32 Ft.	Type	SCM
	D.C.		Nozzle No.	3
	I.D. O.D.	Ft.	Nozzle Size	12
	Stb. Body O.D.	Ft.	Ser. No.	576187
	Stb. Body O.D.	Ft.	Depth Out	
	Rmr. Body O.D.	Ft.	Depth In	4768
	Subs DRILL O.D.	55.60 Ft.	Total Ftg.	40
	Bit or C.B.	Ft.	Total Hr. Run	5 3/4
	Kelly Down	32.99 Ft.	Cond. of Bit	
	Total	4808 Ft.	Reamer No.	
Wt. of String	122 000 Lbs.		Reamer Type	
Pipe in Hole	133 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
Pipe on Racks	83 Jts.		Trucker	
Total Pipe on Lease	216 Jts.		Trucker	
			Trucker	

MUD RECORD

Time	1:00	4:00	7:30
Weight		9.2	
Visc.-Sec.	1	39	
W.L.-C.C.	K	18.0	
FL TR. CK.	X	2/32	
PH	X	9,5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC SODA	50#		

Driller: Ronnie Hall

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4768	4808	40	D			70	25	1100	6"	53			C

Deviation Record: Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	3:00	2						TRIP FOR BIT
3:00	3:15	1/4						BREAK CIRC
3:15	8:00	5 3/4						DRILL
								FOR 24 HRS

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
44	Stands D.P.	Ft.	Bit No.	24
2	Singles D.P.	417.38 Ft.	Size	8 3/4
	D.C.		Mfg.	REED
	I.D. O.D.	Ft.	Type	SCM
	D.C. 2 1/2 x 6 1/4		Nozzle No.	3
20	I.D. O.D.	574.32 Ft.	Nozzle Size	12
	Stb. Body O.D.	Ft.	Ser. No.	576187
	Stb. Body O.D.	Ft.	Depth Out	
	Rmr. Body O.D.	Ft.	Depth In	4768
	Subs DRILL O.D.	55.60 Ft.	Total Ftg.	80
	Bit or C.B	Ft.	Total Hr. Run	12 3/4
	Kelly Down	41.80 Ft.	Cond. of Bit	1 N
	Total	4848.00 Ft.	Reamer No.	
Wt. of String	123,000 Lbs.		Reamer Type	
Pipe in Hole	135 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
Pipe on Racks	81 Jts.		Trucker	F.O.T. 10
Total Pipe on Lease	216 Jts.		Trucker	Drivers 14
			Trucker	Bud Herbert

MUD RECORD

Time	9:00	12:00	3:00
Weight	9.3	9.2	9.2
Visc.-Sec.	45	44	43
W.L.-C.C.		17.3	
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
Caustic	50#		
Peltex	50#		

Driller: M Brown

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4808	4848	40	D			70	25	1100	6	53			C

Deviation Record: Depth 4810 | Dev. 1° | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:00	1						DRILL
9:00	9:15	1/4						RIG SERVICE / BOP / MOTOR SHUT OFF
9:15	9:30	1/4						SURVEY (MIS Run) (clock stop) ?
9:30	9:45	1/4						SURVEY (~~MIS Run~~) ~~clock stop~~ ?
9:45	3:15	5 1/2						DRILL
3:15	3:30	1/4						SURVEY
3:30	4:00	1/2						DRILL
								HELP NORWELL OPERATOR, WORK ON NORWELL, HAUL FUEL & DRLG CHEM FROM RIVER

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
45	Stands D.P.	Ft.	Bit No.	24
3	Singles D.P.	423.80 Ft.	Size	8 3/4
	D.C.		Mfg.	REED
	I.D. O.D.	574.32 Ft.	Type	SCM
	D.C.		Nozzle No.	3
	I.D. O.D.	Ft.	Nozzle Size	12
	Stb. Body O.D.	Ft.	Ser. No.	576187
	Stb. Body O.D.	Ft.	Depth Out	
	Rmr. Body O.D.	Ft.	Depth In	4768
	Subs DRILL O.D.	55.60 Ft.	Total Ftg.	126
	Bit or C.B.	Ft.	Total Hr. Run	20
	Kelly Down	23.33 Ft.	Cond. of Bit	I N
	Total	4894 Ft.	Reamer No.	
Wt. of String	124 000 Lbs.		Reamer Type	
Pipe in Hole	136 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
Pipe on Racks	80 Jts.		Trucker	
Total Pipe on Lease	216 Jts.		Trucker	
			Trucker	

MUD RECORD

Time	5:00	8:00	11:00
Weight	9.2	9.2	9.2
Visc.-Sec.	42	40	38
W.L.-C.C.		18	
FL TR. CK.		2/32	
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller:

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4848	4884	36	D			70	25	1100	6"	53			C

Deviation Record: Depth 4877 | Dev. 10° | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	8:15	4 1/4						DRILL
8:15	8:30	1/4						RIG SER.
8:30	9:00	1/2						SURVEY
9:00	12:00	3						DRILL

No. 5980

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: BANFF ANTE Rem Rat Pass

Date: Nov 23 19 76

Location — Ld. 60 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Weather Condition: -35 | Road Conditions: N/A | Nearest Town: High Level | Water — Source: Lake | Miles Hauled: ½ | Pumped: | Camp Distance from Rig: 150 150. | Reason for Extra L. Plant: Economy

OPERATOR: Banff Oil Ltd

Rig No. 3 IDECO DWKS 525

Drill Pipe String: No. 2, Size 2½

Tool Joint 5¾ O.D. | Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: A. Micheelsen

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Ewald

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oil Well	214 - P	14
2.	Oil Well	214 - P	14
3.			

	Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
LAST CASING	9⅝	ST-C	36#	22	922.30	B.20	927	360 Sks Permafrost
TUBING OR LINER								150 Sks Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling, Actual	5¾	7	11¼
Reaming			
Conditioning Mud & Circulating			
Trips	2		
Lubricate Rig		¼	½
Deviation Survey		¾	¼
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other Rig Check	¼		
Fishing			

COMPLETION WORK: A. Perforating; B. Tubing Trips; C. Swabbing; D. Testing; E. Additional

Totals: 8 | 8

TIME SUMMARY (Office Use Only)

Day Work

Hrs. W/DP

Hrs. WO/DP

Hrs. Standby

Total Day Work

WIRE LINE RECORD

Reel No. M10042

No. of Lines 5 Size 1½

Feet Slipped 90

Feet Cut Off 45

Present Length 495.56

Ton Mi. or Trips Since Last Cut ~~2449.55~~

Cumulative Ton Mi. or Trips 2128

No. of Days From Spud 30

Cumulative Rotating Hrs. 407.50

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
44	Stands D.P.		Ft.
5	Singles D.P.	2446.19	Ft.
	D.C.		
20	2¾ x 6¼ I.D. O.D.	574.32	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILOD.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	32.99	Ft.
	Total	4808	Ft.

Wt. of String 133 000 Lbs. | Pipe in Hole 133 Jts. | Pipe on Racks 83 Jts. | Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	24
Size	6 3/4
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	576187
Depth Out	
Depth In	4768
Total Ftg.	40
Total Hr. Run	5¾
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker | Trucker | Trucker

MUD RECORD

Time	1 00	4.60	7.30
Weight		9,2	
Visc.-Sec.	1	39	
W.L.-C.C.	K	18,0	
FL TR. CK.	X	2/32	
PH	X	9,5	
SD. Cont. %	Y		
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		

Driller: Ronnie Ewald

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4768	4808	40	D			70	25	1100	6"	53			C

Deviation Record: Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	2:00	2						Trip for Bit
2:00	2:15	¼						Break Circ
2:15	8:00	5¾						Drill
8:00								

Fuel 2"

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
44	Stands D.P.		Ft.
2	Singles D.P.	4176.38	Ft.
	D.C.		
20	2¾ 6¼ I.D. O.D.	572.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILOD.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	41.80	Ft.
	Total	4848.00	Ft.

Wt. of String 123,000 Lbs. | Pipe in Hole 135 Jts. | Pipe on Racks 81 Jts. | Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	24
Size	8¾
Mfg.	BEED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	576187
Depth Out	
Depth In	4768
Total Ftg.	80
Total Hr. Run	12¾
Cond. of Bit	IN
Reamer No.	
Reamer Typ	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker FNT. 10 | Trucker Driver 14 | Trucker Bud Herbert

MUD RECORD

Time	9 00	12 00	3 00
Weight	9.3	9,2	9.2
Visc.-Sec.	45	44	43
W.L.-C.C.		12.3	
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
Caustic	50#		
Poltex	50#		

Driller: M Brown

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4808	4848	40	D			70	25	1100	6	53			C

Deviation Record: Depth 4810 | Dev. 10 | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	9.00	1						DRILL
9 00	9 15	¼						Rig SERVICE / BOP / Motor shut off
9 15	9 30	¼						SURVEY (MIS Run) (clock stop) ?
9 30	9 45	¼						SURVEY (~~MIS Run~~) ~~clock stop~~ ?
9 45	3 15	5½						DRILL
3 15	3 30	¼						SURVEY
3 30	4 00	½						DRILL

HELP Nadwell operator, Work on Nadwell, Have fuel & Drill Chem from Rig

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
45	Stands D.P.		Ft.
3	Singles D.P.	4239.80	Ft.
	D.C.		
	I.D. O.D.	574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILOD.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	23.35	Ft.
	Total	4994	Ft.

Wt. of String 124 000 Lbs. | Pipe in Hole 136 Jts. | Pipe on Racks 80 Jts. | Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	24
Size	8¾
Mfg.	BEED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	576187
Depth Out	
Depth In	4768
Total Ftg.	126
Total Hr. Run	30
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker | Trucker | Trucker

MUD RECORD

Time	5 00	8 00	11 00
Weight	9.2	9.2	9.2
Visc.-Sec.	42	40	38
W.L.-C.C.		18	
FL TR. CK.		2/32	
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4848	4884	36	D			70	25	1100	6"	53			C

Deviation Record: Depth 4877 | Dev. 10° | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	8:15	4¼						DRILL
8:15	8:30	¼						Rig Ser.
8:30	9:00	½						SURVEY
9:00	12:00	3						DRILL

No. 5979

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: BANFF HARDY ARCO ET AL FISS

Location — Lsd. 07 Sec. 29 Twp. 13S Rge. 22 W. 5 M.

Date: NOV 22 19 72

Weather Condition: - 10 | Road Conditions: WET | Nearest Town: ARLETTE

Water - Source: LAKE | Miles Hauled: 1/2 | Pumped: | Camp Distance from Rig: 150 FEET | Reason for Extra L. Plant: STARTED UP

OPERATOR: BANFF OIL LTD

Rig No. 3 IDECO DWKS 535 | Drill Pipe String: No. 3, Size 4½ | Tool Joint: 5¾ O.D., Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: C. Mulholland

SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	OILWELL	214-P	14
2.	OILWELL	214-P	14
3.			

LAST CASING / TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	ST-C	36#	22	930.50	13.20	927	360 SKS PREM + CMT
							150 SKS OIL WELL

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	3	7½	6¼
Reaming			
Conditioning Mud & Circulating			
Trips			1
Lubricate Rig		¼	¼
Deviation Survey		¼	½
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	9	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M 10092

No. of Lines 8 Size 1/8

Feet Slipped 45

Feet Cut Off 90

Present Length 4955

Ton Mi. or Trips Since Last Cut 234

Cumulative Ton Mi. or Trips 2074

No. of Days From Spud 29

Cumulative Rotating Hrs. 338¾

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
43	Stands D.P.	4621.62	Ft.
	Singles D.P.		Ft.
20	D.C. 2 7/8 6¼ I.D. O.D.	574.32	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs Bent O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	32.56	Ft.
	Total	4689	Ft.
	Wt. of String	122,000	Lbs.
	Pipe in Hole	129	Jts.
	Pipe on Racks	87	Jts.
	Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	23	
Size	8¾	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	586179	
Depth Out		
Depth In	4534	
Total Ftg.	155	
Total Hr. Run	23¼	
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker: ____ Trucker: ____ Trucker: ____

MUD RECORD

	1:00	4:00	7:00
Time			
Weight	9.4	9.3	9.3
Visc.-Sec.	52	54	53
W.L.-C.C.		18.0	
FL TR. CK.		2/32	
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	1000 #		
RENEX	4 #		

Driller: Bernie Sarb

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
4634	4689	55	D			70	25	1100	6"	53			C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	8:00	8:00						DRILL
								FUEL 4'

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
42	Stands D.P.		Ft.
1	Singles D.P.	905.90	Ft.
20	D.C. 2 7/8 6¼ I.D. O.D.	574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs Bent O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	46.28	Ft.
	Total	4728	Ft.
	Wt. of String	122,000	Lbs.
	Pipe in Hole	130	Jts.
	Pipe on Racks	86	Jts.
	Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	23	
Size	8¾	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	586179	
Depth Out		
Depth In	4534	
Total Ftg.	204	
Total Hr. Run	34¾	
Cond. of Bit	IN	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker: TNT 11 Trucker: Driver 11 Trucker: Bud Herbert

MUD RECORD

	9:00	12:00	3:00
Time			
Weight	9.4	9.3	9.2
Visc.-Sec.	48	45	44
W.L.-C.C.		16.6	
FL TR. CK.		2/32	
PH		10.5	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Wm Hudson

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
4689	4728	39	D			70	25	1100	6	53			C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
4691	8							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼						DRILL
8:15	8:30	¼						RIG SERVICE / BOP / ROTATE + BOOT + FT
8:30	8:45	¼						~~FT~~ SURVEY
8:45	4:00	2¼						DRILL

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
44	Stands D.P.	4114.93	Ft.
	Singles D.P.		Ft.
20	D.C. 2 7/8 6¼ I.D. O.D.	574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs Bent O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	23.25	Ft.
	Total	4768	Ft.
	Wt. of String	122,000	Lbs.
	Pipe in Hole	132	Jts.
	Pipe on Racks	84	Jts.
	Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	23	
Size	8¾	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	586179	
Depth Out	4768	
Depth In	4534	
Total Ftg.	234	
Total Hr. Run	41	
Cond. of Bit	1-1-1	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker: ____ Trucker: ____ Trucker: ____

MUD RECORD

	5:00	8:00	11:00
Time			
Weight	9.2	9.1	
Visc.-Sec.	43	39	
W.L.-C.C.	17.0		
FL TR. CK.	2/32		
PH	10.0	10	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
4728	4768	40	D			70	25	1100	6"	53			C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
4753	8°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	8:00	4						DRILL
8:00	8:15	¼						RIG SER.
8:15	8:45	½						SURVEY
8:45	11:00	2¼						DRILL
11:00	12:00	1						TRIP FOR BIT.

No. 5978

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: BANFF ROOT A ARCO KAY PASS

Location — Lsd. 62 Sec. 55 Twp. 135 Rge. 22 W. 5 M.

Date: Nov 21 19 80

Weather Condition: -5 Road Conditions: GOOD Nearest Town: GRANDE PRAIRIE Water - Source: LAKE Miles Hauled: 1/4 Pumped: Camp Distance from Rig: LEASE Reason for Extra L. Plant: STANDBY

OPERATOR: BANFF OIL LTD

Rig No. 3 — DWKS 525

Drill Pipe String: No. 2 Size 4½

Tool Joint: 5¾ O.D. Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: A Mulholland

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A Gould

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	CITI WEIR	214-P	14
2.	OILWELL	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	ST-C	36#	22	930.60	13.20	927	360 SKS PEACE RIVER
							150 SKS OIL WELL

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	4½	7½	7½
Reaming			
Conditioning Mud & Circulating			
Trips	3		
Lubricate Rig	¼	¼	¼
Deviation Survey		¼	¼
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other: SERVICE RIG	¼		
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	4	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.	M10093
No. of Lines	8 Size ⅛
Feet Slipped	90
Feet Cut Off	45
Present Length	4955
Ton Mi. or Trips Since Last Cut	434
Cumulative Ton Mi. or Trips	9074
No. of Days From Spud	22
Cumulative Rotating Hrs.	366¼

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
41	Stands D.P.		Ft.
D	Singles D.P.	384.32	Ft.
20	D.C. 2⅞ x 6¼ I.D. O.D.	574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED O.D.	55.10	Ft.
	Bit or C.B.		Ft.
	Kelly Down	3796	Ft.
	Total	4555	Ft.

Wt. of String 120,000 Lbs. — Pipe in Hole 125 Jts. — Pipe on Racks 91 Jts. — Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	23
Size	8¾
Mfg.	REED
Type	SC-mm
Nozzle No.	3
Nozzle Size	12
Ser. No.	586179
Depth Out	
Depth In	4524
Total Ftg.	31
Total Hr. Run	4½
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker — Trucker — Trucker

MUD RECORD

Time	1:00	4:00	7:00
Weight	9.3	9.3	
Visc.-Sec.	43	44	
W.L.-C.C.			
FL TR. CK.			
PH	10	10	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Bernie Koch

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SCL-S Par'el-P Com'd-C
4524	4555	31	D			70	25	1100	6"	53			C

Deviation Record: Depth / Dev. / Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	12:15	1/4						REG SER.
12:15	3:15	3						TRIP FOR BIT
3:15	3:30	¼						BRAKE CHK.
3:30	8:00	4½						DRILL

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
42	Stands D.P.	3928.96	Ft.
	Singles D.P.		Ft.
20	D.C. 2⅞ x 6¼ I.D. O.D.	574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	3923	Ft.
	Total	4598.00	Ft.

Wt. of String 120,000 Lbs. — Pipe in Hole 126 Jts. — Pipe on Racks 90 Jts. — Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	23
Size	8¾
Mfg.	REED
Type	SC-mm
Nozzle No.	3
Nozzle Size	12
Ser. No.	586179
Depth Out	
Depth In	4524
Total Ftg.	74
Total Hr. Run	12
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker: ENT. 8 Hrs.
Trucker: Bruce 8 Hrs.
Trucker: Reed Hester 10 Hrs.

MUD RECORD

Time	9:00	12:00	3:00
Weight	9.3		
Visc.-Sec.	42		
W.L.-C.C.			
FL TR. CK.			
PH	10		
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	1280#		
BENEX	5#		

Driller: M Hansen

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SCL-S Par'el-P Com'd-C
4555	4598	43	D			70	25	1100	6	53			

Deviation Record: Depth 4517 / Dev. ¾ / Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
5:00	10:15	2¼						DRILL
10:15	10:30	¼						RIG SERVICE / BOP / MOTOR SLOT -42
10:30	10:45	¼						SURVEY
10:45	4:00	5¼						DRILL

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
42	Stands D.P.	3940.42	Ft.
D	Singles D.P.		Ft.
20	D.C. 2⅞ x 6¼ I.D. O.D.	574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLED O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	1376	Ft.
	Total	4634	Ft.

Wt. of String 122,000 Lbs. — Pipe in Hole 126 Jts. — Pipe on Racks 88 Jts. — Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	23
Size	8¾
Mfg.	REED
Type	SC-mm
Nozzle No.	3
Nozzle Size	12
Ser. No.	586179
Depth Out	
Depth In	4524
Total Ftg.	110
Total Hr. Run	19½
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker — Trucker — Trucker

MUD RECORD

Time	5:00	8:00	11:00
Weight		9.4	9.4
Visc.-Sec.		51	50
W.L.-C.C.		18.2	
FL TR. CK.		3/32	
PH		9.5	10
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		

Driller

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SCL-S Par'el-P Com'd-C
4598	4634	36	D			70	25	1100	6"	53			C

Deviation Record: Depth 4629 / Dev. 8° / Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	9:45	5¾						DRILL
9:45	10:00	¼						RIG SER.
10:00	10:15	¼						SURVEY
10:15	12:00	1¾						DRILL

No. 5977

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF ROBERT ARCO ANT PASS

Location — Lsd. 62 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Date: NOV 20 1975

Weather Condition: -14 S NOSE

Road Conditions: GOOD

Nearest Town: ALIANCE

Water - Source: LAKE Miles Hauled: ½ Pumped:

Camp Distance from Rig: 1320 FEET

Reason for Extra L. Plant: STANDBY

OPERATOR: BANFF OIL LTD

Rig No.: DWKS 535

Drill Pipe String: No. 2 Size 4½

Tool Joint: 5¾ O.D. Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: C Mucklestone

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	OILWELL	214-P	14
2.	OILWELL	214-P	14
3.			

	Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
LAST CASING	9⅝	STC	36	22	930.30	13.20	927	360 SKS PERMAFROST
TUBING OR LINER								150 SKS OILWELL

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve.
Rig Up & Tear Down			
Drilling Actual	5¾	6¼	7¾
Reaming		¼	
Conditioning Mud & Circulating			
Trips	4	5	
Lubricate Rig		¼	
Deviation Survey	¼	½	¼
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig		¼	
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other	1		
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. N10092

No. of Lines 8 Size 7/8

Feet Slipped 90

Feet Cut Off 45

Present Length 4955

Ton Mi. or Trips Since Last Cut 309

Cumulative Ton Mi. or Trips 1959

No. of Days From Spud 27

Cumulative Rotating Hrs. 341 3/4

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
40	Stands D.P.	Ft.
D	Singles D.P.	380.3 Ft.
20	D.C. 2¾ x 6¼ I.D. O.D.	574.92 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRT. O.D.	55.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	33.79 Ft.
	Total	4467. Ft.
Wt. of String	120000	Lbs.
Pipe in Hole	122	Jts.
Pipe on Racks	94	Jts.
Total Pipe on Lease	216	Jts.

BIT RECORD		
Bit No.	21	22
Size	8¾	8¾
Mfg.	REED	REED
Type	YHG	YHG
Nozzle No.	3	3
Nozzle Size	12	12
Ser. No.	777322	370500
Depth Out	4467	
Depth In	4427.	4417
Total Ftg.	40	
Total Hr. Run	8	
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	1:00	4:00	7:00
Weight	9.3	"	"
Visc.-Sec.	46	"	"
W.L.-C.C.	16.3	"	"
FL TR. CK.	2/32	"	"
PH	9.5	"	"
SD. Cont. %		"	"
Pressure Gradient		"	"

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50		

Driller: Kevin Yaremko

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4453	4467	14	D			85	25	800			5	65	S

Deviation Record: Depth 4473

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:45	2¾						DRLG
2:45	3:00	¼						SURVEY (WIRE RUN) CLOCK STOPPED
3:00	5:30	2½						TRIP OUT
5:30	6:30	1						CLEAN MUD TANKS & SERV. SHACK SUB
6:30	8:00	1½						TRIP IN

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
41	Stands D.P.	3834.56 Ft.
	Singles D.P.	Ft.
20	D.C. 2¾ x 6¼ I.D. O.D.	574.22 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILLCO	55.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	28.62 Ft.
	Total	4493.04 Ft.
Wt. of String	120,000	Lbs.
Pipe in Hole	123	Jts.
Pipe on Racks	93	Jts.
Total Pipe on Lease	216	Jts.

BIT RECORD	
Bit No.	22
Size	8¾
Mfg.	REED
Type	YHG
Nozzle No.	3
Nozzle Size	12
Ser. No.	876500
Depth Out	
Depth In	4467
Total Ftg.	26
Total Hr. Run	6¼
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker TNT 8

Trucker Drives 8

Trucker Bud Neufeld

MUD RECORD			
Time	9:00	12:00	2:00
Weight	~~9.2~~	9.2	9.2
Visc.-Sec.	47	48	44
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M. H.

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4467	4493	26	D			75	30	800			5	6 x 6½	

Deviation Record: Depth 4467 Dev. 5¾

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼						RIG SERVICE / BOP / MOTOR SHUTS OFF
8:15	8:45	½						RUN IN
8:45	9:00	¼						~~SURVEY~~ BOTTOM ~~TRIP~~ ~~OUT~~ RUN CLEAN TO BOTTOM
9:00	9:15	¼						SURVEY (WIRE RUN)
9:15	9:30	¼						SURVEY
9:30	9:45	¼						CHANGE PUMPS
9:45	2:00	6¼						DRILL

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
41	Stands D.P.	Ft.
5	Singles D.P.	3865.62 Ft.
20	D.C. 2¾ x 6¼ I.D. O.D.	574.22 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRT. O.D.	55.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	28.56 Ft.
	Total	4524 Ft.
Wt. of String	130,000	Lbs.
Pipe in Hole	124	Jts.
Pipe on Racks	92	Jts.
Total Pipe on Lease	216	Jts.

BIT RECORD	
Bit No.	22
Size	8¾
Mfg.	REED
Type	YHG
Nozzle No.	3
Nozzle Size	12
Ser. No.	876500
Depth Out	4524
Depth In	4417
Total Ftg.	67
Total Hr. Run	14
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	5:00	8:00	12:00
Weight	9.2	9.3	9.3
Visc.-Sec.	49	52	45
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4493	4524	31	D			75	30	1100	6	53			C

Deviation Record: Depth 4527 Dev. 8⅛

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	11:45	7¾						DRILL
11:45	12:00	¼						SURVEY.

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF Dev. T DRLG RAT PASS

Location: — Lsd. 62 Sec. 57 Twp. 135 Rge. 22 W. 5 M.

Date: Nov 19 1970

Weather Condition: FAIR — Road Conditions: Good — Nearest Town: Blueberry — Water - Source: LAKE, Miles Hauled: 5, Pumped: — Camp Dastance from Rig: 150 — Reason for Extra L. Plant: START R.J.

OPERATOR: BANFF O.I Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Fuld

Rig No. 3 — FDEO DWKS 5525

Drill Pipe String: No. — Size 4½

Tool Joint 5¾ O.D. — Type Thd. FH

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214-P	14
2.	Oilwell	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Cr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	ST-C	36#	22	930.80	13.20	927	360 SKs PREMIX FRAC
							150 SKs OIL WELL

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7¾	5	5¼
Reaming			
Conditioning Mud & Circulating			
Trips		1½	1¼
Lubricate Rig	¼	¼	¼
Deviation Survey		¼	¼
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other		1	½
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 Size 1/5

Feet Slipped 90

Feet Cut Off 45

Present Length 4955

Ton Mi. or Trips Since Last Cut 397

Cumulative Ton Mi. or Trips 1670

No. of Days From Spud 26

Cumulative Rotating Hrs. 330

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
40	Stands D.P.		Ft.
1	Singles D.P.	3771.91	Ft.
	D.C.		
	I.D. O.D.		Ft.
20	D.C. 6¼ 2⅞ I.D. O.D.	574.22	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILL O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	11.27	Ft.
	Total	4412.00	Ft.

Wt. of String 120,000 Lbs.

Pipe in Hole 121 Jts.

Pipe on Racks 95 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	20
Size	8¾
Mfg.	REED
Type	SCSC
Nozzle No.	3
Nozzle Size	12
Ser. No.	558993
Depth Out	
Depth In	4375
Total Ftg.	37
Total Hr. Run	8½
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	100	4:00	700
Weight	9.3	9.4	
Visc.-Sec.	47	44	
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Ross Bank

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4378	4413	35	D			50	40	800			5	68	S

Deviation Record — Depth — Dev. — Direction — Depth — Dev. — Direction — Depth — Dev. — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼						Rig SERVICE
1215	800	7¾						DRILL

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
40	Stands D.P.		Ft.
1	Singles D.P.	3771.91	Ft.
	D.C.		
	I.D. O.D.		Ft.
20	D.C. 6¼ 2⅞ I.D. O.D.	574.22	Ft.
	Stb. Body O.D.		Ft.
	Sta. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILL O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	25.27	Ft.
	Total	4427.00	Ft.

Wt. of String 120,000 Lbs.

Pipe in Hole 121 Jts.

Pipe on Racks 95 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	20
Size	8¾
Mfg.	REED
Type	SCSC
Nozzle No.	3
Nozzle Size	12
Ser. No.	558993
Depth Out	4427
Depth In	4375
Total Ftg.	52
Total Hr. Run	13¼
Cond. of Bit	1 1 I
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker: F.W.T. Co.

Trucker: Drive Test

Trucker: Red Heber

MUD RECORD

Time	900	1200	300
Weight	9.3	9.4	T
Visc.-Sec.	44	43	R
W.L.-C.C.			I
FL TR. CK.			P
PH	10.5	10.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M. Gibson

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4413	4427	14	D			50	40	800			5	64	S

Deviation Record — Depth 4427 — Dev. — Direction — Depth — Dev. — Direction — Depth — Dev. — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	945	1¾						DRILL
945	1000	¼						Rig SERVICE / BOP / Motor shut off
1000	115	3¼						DRILL
115	130	¼						SURVEY (MIS RUN)
130	300	1½						TRIP f/or BIT #20
300	400	1						Change BIT REIMER. change STAB'L
								Rubber

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
40	Stands D.P.		Ft.
0	Singles D.P.	38-2.29	Ft.
	D.C.		
	I.D. O.D.		Ft.
20	D.C. 6¼ 2⅞ I.D. O.D.	574.22	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILL O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	17.79	Ft.
	Total	4453	Ft.

Wt. of String 120,000 Lbs.

Pipe in Hole 122 Jts.

Pipe on Racks 94 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	21
Size	8¾
Mfg.	REED
Type	YHC
Nozzle No.	3
Nozzle Size	12
Ser. No.	777322
Depth Out	
Depth In	4427
Total Ftg.	26
Total Hr. Run	5¼
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time			
Weight	T	9.4	9.3
Visc.-Sec.	R	42	42
W.L.-C.C.	I		15.2
FL TR. CK.	P		2/32
PH		10.0	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4427	4453	26	D			55	25	900			5	63	S

Deviation Record — Depth 4441 — Dev. — Direction — Depth — Dev. — Direction — Depth — Dev. — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼						Finish changing STABILIZER. Rubber
415	600	1¾						Run in with BIT #21
600	615	¼						Ber Circ. clean to Bottom
615	930	3¼						DRILL
930	945	¼						Rig Ser.
945	1000	¼						SURVEY (MIS RUN CLOCK STOPED)
1000	1200	2						DRILL

No. 5475

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Bonnie Agnes Rat Pass — Date: Nov 15 1978

Location — Lsd. 07 Sec. 59 Twp. 23S Rge. 22 W. 5 M.

Weather Condition: Snow +12 — Road Conditions — Nearest Town: Hazlehurst — Water - Source: Lake — Miles Hauled: ½ — Pumped — Camp Distance from Rig: 150 Yards — Reason for Extra L. Plant: Storage

OPERATOR: Bonnie Oil Ltd

Rig No. 3 Dreco 535 — Drill Pipe String: No. 5, Size 4½ — Tool Joint: 5¾ O.D., Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E Mitchell

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: H Bamford

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oil Well	214-P	14
2.	Oil Well	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	ST-C	36#	22	930.30	11.20	937	360 Sks Permafrost
							150 Sks Oil well

TIME DISTRIBUTION — HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7½	7¾	2½
Reaming			
Conditioning Mud & Circulating			
Trips			4
Lubricate Rig	½	¼	
Deviation Survey	¼		¼
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			1
Service Rig			¼
Fishing			
COMPLETION WORK: A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 — Size 1¼

Feet Slipped ~~50~~ 90

Feet Cut Off ~~NIL~~ 45

Present Length ~~5280~~ 4955

Ton Mi. or Trips Since Last Cut 308

Cumulative Ton Mi. or Trips 1561

No. of Days From Spud 25

Cumulative Rotating Hrs. 312

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
39	Stands D.P.		Ft.
5	Singles D.P.	367.21	Ft.
	D.C. 2 7/8 6¼ I.D. O.D.		
20		574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILL O.D.	55.60	Ft.
	Bit or C.B.	3.47	Ft.
	Kelly Down	14.50	Ft.
	Total	4325	Ft.

Wt. of String 115,000 Lbs. — Pipe in Hole 118 Jts. — Pipe on Racks 98 Jts. — Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	19
Size	8¾
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586177
Depth Out	
Depth In	4197
Total Ftg.	128
Total Hr. Run	22½
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	1:00	4:00	7:00
Weight	9.3	9.3	9.3
Visc.-Sec.	50	47	48
W.L.-C.C.		16.2	14.2
FL TR. CK.		2/32	1/32
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Bonnie Rocak

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4280	4325	45	D			50	30	1100	6	53			C

Deviation Record: Depth 4319 — Dev. ⅞ — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼						Rig Serv.
12:15	6:30	6¼						Drill.
6:30	6:45	¼						Survey
6:45	8:00	1¼						Drill
								Fuel 5'3"

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
39	Stands D.P.		Ft.
2	Singles D.P.	3708.85	Ft.
	D.C. 2 7/8 6¼ I.D. O.D.		
20		574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILL O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	23.33	Ft.
	Total	4362.00	Ft.

Wt. of String 115,000 Lbs. — Pipe in Hole 119 Jts. — Pipe on Racks 97 Jts. — Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	19
Size	8¾
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586177
Depth Out	
Depth In	4197
Total Ftg.	168
Total Hr. Run	30¼
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. 8 — O.T. Hrs.
Trucker TNT
Trucker Lewis 10
Trucker Bud Herbert

MUD RECORD

Time	9:00	12:00	3:00
Weight	9.2	9.2	9.3
Visc.-Sec.	46	45	45
W.L.-C.C.	14.8	14.6	
FL TR. CK.	3/32	2/32	
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4325	4362	37	D			50	80	1100	6	53			C

Deviation Record

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	12:45	4¾						Drill.
12:45	1:00	¼						Rig Service ✓ BOP ✓ Motor shut off
1:00	4:00	3						Drill

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
39	Stands D.P.		Ft.
D	Singles D.P.	3708.85	Ft.
	D.C. 2 7/8 6¼ I.D. O.D.		
20		574.22	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILL O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	39.33	Ft.
	Total	4375	Ft.

Wt. of String 120,000 Lbs. — Pipe in Hole 130 Jts. — Pipe on Racks 96 Jts. — Total Pipe on Lease 226 Jts.

BIT RECORD

Bit No.	19	20
Size	8¾	9 7/8
Mfg.	REED	REED
Type	SCM	SC 56
Nozzle No.	3	3
Nozzle Size	12	12
Ser. No.	586177	582993
Depth Out	4375	
Depth In	4197	4375
Total Ftg.	178	3
Total Hr. Run	32¼	½
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	5:00	8:00	11:00
Weight		T	T
Visc.-Sec.		R	R
W.L.-C.C.		I	I
FL TR. CK.		P	P
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4362	4378	16	D			50	30	1100	6	53			C

Deviation Record: Depth 4375 — Dev. ⅞ 3½ — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	6:00	2						Drill
6:00	6:15	¼						Survey
6:15	9:00	2¾						Trip for B.T # 19.
9:00	10:00	1						Slip & Cut Line 45'
10:00	11:30	1½						Pick up Reamer Bit #20
11:30	11:45	¼						Ream Bridge Coals
11:45	12:00	¼						Drill

No. 5474

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Banff Hawk Rock Bass

Date: Nov 17 1970

Location — Lsd. 07 Sec. 29 Twp. 15S Rge. 22 W. 5 M.

Weather Condition: 35 | Road Conditions | Nearest Town: Arcadia | Water — Source: Lake | Miles Hauled: 3 | Pumped | Camp Distance from Rig: 150 Trpr. | Reason for Extra L. Plant: Statutory

OPERATOR: Banff Oil Ltd

Rig No.: Rock DWKS 225

Drill Pipe String: No. 2 Size 4½

Tool Joint: 5 3/4 O.D. | Type Thd. 7 I H

SIGNATURE OF OPERATOR'S REPRESENTATIVE: C Michelland

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A Bamford

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oil Well	214-P	14
2.	Oil Well	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST-C	36#	22	930.30	13.20	927	360 Sks Permafrost
							150 Sks Oil well

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	4½	12	
Reaming			
Conditioning Mud & Circulating		1	
Trips	1¼	4½	
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other	2	1	
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals		8	

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.	M10092
No. of Lines	8 Size 1/4
Feet Slipped	45
Feet Cut Off	Nil
Present Length	500
Ton Mi. or Trips Since Last Cut	800
Cumulative Ton Mi. or Trips	1253
No. of Days From Spud	24
Cumulative Rotating Hrs.	294¼

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
38	Stands D.P.	Ft.
5	Singles D.P.	3532.91 Ft.
20	D.C. 2 1/2 x 6¼ I.D. O.D.	574.22 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Hyd. O.D.	55.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	18.27 Ft.
	Total	4230 Ft.
	Wt. of String	114,000 Lbs.
	Pipe in Hole	115 Jts.
	Pipe on Racks	101 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD	
Bit No.	19
Size	8 3/4
Mfg.	Reed
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586177
Depth Out	4230
Depth In	4197
Total Ftg.	33
Total Hr. Run	4¾
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges | Reg. Hrs. | O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	1:00	4:00	7:00
Weight	A	9.3	9.2
Visc.-Sec.		44	43
W.L.-C.C.	R		
FL TR. CK.			
PH	I	10.5	10.0
SD. Cont. %			
Pressure Gradient	P		

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Bernie Hauch

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4197	4230	33	D			50	30	1100	6"	65			C

Deviation Record | Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	12:15	¼						Pick Up Collar
12:15	1:30	1¼						Run In Hole With Bit # 19
1:30	2:15	¾						Bernie Circ & Clean To Bottom
2:15	7:00	4¾						Drill
7:00	8:00	1						Rig Pipe Tongs, Up, Work It Tight To Drill

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
38	Stands D.P.	Ft.
1	Singles D.P.	3586.98 Ft.
20	D.C. 2 7/8 6¼ I.D. O.D.	574.22 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILLCO.	55.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	18.80 Ft.
	Total	4235.00 Ft.
	Wt. of String	114,000 Lbs.
	Pipe in Hole	115 Jts.
	Pipe on Racks	101 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD	
Bit No.	19
Size	8¾
Mfg.	Reed
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586177
Depth Out	
Depth In	4197
Total Ftg.	38
Total Hr. Run	7¼
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges | Reg. Hrs. | O.T. Hrs.
Trucker FNT. 9 | 12
Trucker Driper
Trucker Bud Herbert

MUD RECORD

Time	900	1200	300
Weight			9.3
Visc.-Sec.	TIP		40
W.L.-C.C.			
FL TR. CK.			
PH			9.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Green

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4230	4235	5	D			50	25	1100	6	53			C

Deviation Record | Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	10.00	2						Pull out to check Bit
10.00	11.00	1						check Bit Rig Service Put on Junk Sub
11.00	1.30	2½						Run in with same Bit an Junk Sub
1.30	2.30	1						Break Cir. Cir to Bottom To Clean
2.30	4.00	1½						Drill

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
38	Stands D.P.	Ft.
1	Singles D.P.	3614.71 Ft.
20	D.C. 2 7/8 x 6¼ I.D. O.D.	574.22 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	3.47 Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILLCO.	55.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	32.00 Ft.
	Total	4280 Ft.
	Wt. of String	114,000 Lbs.
	Pipe in Hole	116 Jts.
	Pipe on Racks	100 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD	
Bit No.	19
Size	8¾
Mfg.	Reed
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586177
Depth Out	
Depth In	4197
Total Ftg.	83
Total Hr. Run	15
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges | Reg. Hrs. | O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	5:00	8:00	11:00
Weight	9.3	9.3	9.1
Visc.-Sec.	40	42	65
W.L.-C.C.	15.4	14.0	16.2
FL TR. CK.	3	3	3
PH	9.5	9.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
Caustic	50#		

Driller: Sum Kind Diesel

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4235	4280	45	D			50	30	1100	6	53			C

Deviation Record | Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4.00	4.15	¼						Repair Oil line on Drawworks
4.15	12.00	7¾						Drill

No. 5434

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF ~~Aquit~~ ASCO KAT PASS - K-35

Date: Nov 16 19 70

Location — Lsd. 07 Sec. 29 Twp. 65 Rge. 22 W. 5 M.

Weather Condition: -15 | Road Conditions | Nearest Town: ARCTIC | Water - Source: LAKE | Miles Hauled: 2 | Pumped | Camp Distance from Rig: 150 YARDS | Reason for Extra L. Plant: STANDBY

OPERATOR: BANFF OIL LTD

Rig No.: IDECO DWKS 535

Drill Pipe String: No. 2, Size 4½

Tool Joint: 5¾ O.D., Type Thd. 4½ XH

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	OILWELL	214-P	14
2.	OILWELL	214-P	14
3.			

LAST CASING - TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	ST-C	36#	22	930.50	13.20	927	360 SKS PERMAFROST
							150 SKS OILWELL

SIGNATURE OF OPERATOR'S REPRESENTATIVE: A. Micholland

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: J. Bamford

TIME DISTRIBUTION—HOURS

	Morn.	Day	Eve.
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips		6	
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging	8		
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other		2	
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	

TIME SUMMARY (Office Use Only)

Day Work

Hrs. W/DP

Hrs. WO/DP

Hrs. Standby

Total Day Work

WIRE LINE RECORD

Reel No. M 10042

No. of Lines 8 Size 1/3

Feet Slipped 44

Feet Cut Off NIL

Present Length 500

Ton Mi. or Trips Since Last Cut 695

Cumulative Ton Mi. or Trips 1348

No. of Days From Spud 23

Cumulative Rotating Hrs. 279¼

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	MUD RECORD
38	Stands D.P.	3552.23 Ft.	Bit No.	Time
	Singles D.P.	Ft.	Size	Weight
20	D.C. 2⅞ x 6¼ I.D. O.D.	570.63 Ft.	Mfg.	Visc.-Sec.
	D.C. I.D. O.D.	Ft.	Type	W.L.-C.C.
	Stb. Body O.D.	Ft.	Nozzle No. / Size	FL TR. CK.
	Stb. Body O.D.	Ft.	Ser. No.	PH
	Rmr. Body O.D.	Ft.	Depth Out	SD. Cont. %
	Subs BRIDGE O.D.	55.10 Ft.	Depth In	Pressure Gradient
	Bit or C.B.	Ft.	Total Ftg.	
	Kelly Down	18.94 Ft.	Total Hr. Run	Mud & Chemicals Added: Type / Amt. / Type / Amt.
	Total	4197 Ft.	Cond. of Bit	
Wt. of String	109,000 Lbs.		Reamer No.	
Pipe in Hole	114 Jts.		Reamer Type	
Pipe on Racks	102 Jts.		Water Charges Reg. Hrs. O.T. Hrs.	
Total Pipe on Lease	216 Jts.		Trucker	
			Trucker	
			Trucker	Driller: Francis Reed

FOOTAGE: From — To 4197 — Ftge.

DR-D RM-R Core-C | Core No. | FORMATION (SHOW CORE RECOVERY) | Rotary RPM | Wt. on Bit 1000 Lbs. | Pump Press | Pump No. 1: Liner Size, S.P.M. | Pump No. 2: Liner Size, S.P.M. | Method Run: SGL-S Par'el-P Com'd-C

Deviation Record: Depth / Dev. / Direction | Depth / Dev. / Direction | Depth / Dev. / Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	8	8						Logging & Side Wall Coring
								DIL 4184-928'
								BHCSGRC
								Changed Oil In Floor Motors
								Fed. 41 C"

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	MUD RECORD
38	Stands D.P.	3552.23 Ft.	Bit No.	Time
	Singles D.P.	Ft.	Size	Weight
20	D.C. 2⅞ x 6¼ I.D. O.D.	570.63 Ft.	Mfg.	Visc.-Sec.
	D.C. I.D. O.D.	Ft.	Type	W.L.-C.C.
	Stb. Body O.D.	Ft.	Nozzle No. / Size	FL TR. CK.
	Stb. Body O.D.	Ft.	Ser. No.	PH
	Rmr. Body O.D.	Ft.	Depth Out	SD. Cont. %
	Subs BRIDGE O.D.	55.10 Ft.	Depth In	Pressure Gradient
	Bit or C.B.	Ft.	Total Ftg.	
	Kelly Down	18.94 Ft.	Total Hr. Run	Mud & Chemicals Added: Type / Amt. / Type / Amt.
	Total	4197 Ft.	Cond. of Bit	
Wt. of String	110,000 Lbs.		Reamer No.	
Pipe in Hole	114 Jts.		Reamer Type	
Pipe on Racks	102 Jts.		Water Charges Reg. Hrs. O.T. Hrs.	
Total Pipe on Lease	216 Jts.		Trucker F.W.T. 10	
			Trucker Bruce Hall	
			Trucker Reed Herbert	Driller

FOOTAGE: From — To 4197 — Ftge.

DR-D RM-R Core-C | Core No. | FORMATION (SHOW CORE RECOVERY) | Rotary RPM | Wt. on Bit 1000 Lbs. | Pump Press | Pump No. 1: Liner Size, S.P.M. | Pump No. 2: Liner Size, S.P.M. | Method Run: SGL-S Par'el-P Com'd-C

Deviation Record: Depth / Dev. / Direction | Depth / Dev. / Direction | Depth / Dev. / Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	930	1½						Logging Side wall Coring
930	1030	1						Rig up To Run magnet and Junk
1030	100	2½						Run in with magnet and Junk Sub
100	300	2						Fish for logging guns
300	400	1						Pull out of hole w magnet
								Fishing Re-perforate gun (as in side wall Coring)

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	MUD RECORD
38	Stands D.P.	3552.23 Ft.	Bit No.	Time
	Singles D.P.	Ft.	Size	Weight
20	D.C. 2⅞ x 6¼ I.D. O.D.	570.63 Ft.	Mfg.	Visc.-Sec.
	D.C. I.D. O.D.	Ft.	Type	W.L.-C.C.
	Stb. Body O.D.	Ft.	Nozzle No. / Size	FL TR. CK.
	Stb. Body O.D.	Ft.	Ser. No.	PH
	Rmr. Body O.D.	Ft.	Depth Out	SD. Cont. %
	Subs BRIDGE O.D.	55.10 Ft.	Depth In	Pressure Gradient
	Bit or C.B.	Ft.	Total Ftg.	
	Kelly Down	18.94 Ft.	Total Hr. Run	Mud & Chemicals Added: Type / Amt. / Type / Amt.
	Total	4197 Ft.	Cond. of Bit	
Wt. of String	114,000 Lbs.		Reamer No.	
Pipe in Hole	114 Jts.		Reamer Type	
Pipe on Racks	102 Jts.		Water Charges Reg. Hrs. O.T. Hrs.	
Total Pipe on Lease	216 Jts.		Trucker	
			Trucker	
			Trucker	Driller

FOOTAGE: From — To 4197 — Ftge.

DR-D RM-R Core-C | Core No. | FORMATION (SHOW CORE RECOVERY) | Rotary RPM | Wt. on Bit 1000 Lbs. | Pump Press | Pump No. 1: Liner Size, S.P.M. | Pump No. 2: Liner Size, S.P.M. | Method Run: SGL-S Par'el-P Com'd-C

Deviation Record: Depth / Dev. / Direction | Depth / Dev. / Direction | Depth / Dev. / Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	530	1½						Pull out of hole with Magnet.
530	600	½						Clean up magnet.
600	930	2½						Run in with magnet
930	945	¾						Clean & Work Magnet
945	1115	2						Try & Cut Magnet
1115	~~1200~~	~~¾~~						Circ. Out Junk Sub & Magnet & Lay Down Same
	1200	¾						(Recovered Perforate Gun)
~~1200~~								Lay Down One Collar (Bent)

No. 5472

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6.

Lease Well Name: Banff Petrol Free Hat Pass

Location — Lsd. 07 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Date: Nov 15 19 73

Weather Condition: -10 Road Conditions: — Nearest Town: Fairview

Water - Source: Lake Miles Hauled: 3/4 Pumped: Camp Distance from Rig: 150 Yards

Reason for Extra L. Plant: Standby

OPERATOR: Banff Oil Ltd.

Rig No. 3 TRUE DWKS 525

Drill Pipe String: No. 3 Size 4½

Tool Joint: 5 3/4 O.D. Type Thd. 4½ FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: C Mulholland

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: H Bamford

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oil Well	214-P	14
2.	Oil Well	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST-C	36	22	930.50	13.20	927	360 SKS Permafrost
							150 SKS Oil Well

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down	¾		
Drilling Actual	3	7¼	4¾
Reaming			
Conditioning Mud & Circulating			
Trips			2
Lubricate Rig		¼	
Deviation Survey		½	¼
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			¾
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK: A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	4	8	12

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 Size 1¼

Feet Slipped 45

Feet Cut Off NIL

Present Length 5002

Ton Mi. or Trips Since Last Cut 456

Cumulative Ton Mi. or Trips 1135

No. of Days From Spud 22

Cumulative Rotating Hrs. 279¼

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
37	Stands D.P.	3457.76	Ft.
	Singles D.P.		Ft.
20	D.C. 6¼ I.D. 2 13/16 O.D.	590.63	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	29.01	Ft.
	Total	4132	Ft.

Wt. of String 100,000 Lbs.

Pipe in Hole 111 Jts.

Pipe on Racks 105 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	15
Size	8¾
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586325
Depth Out	
Depth In	3934
Total Ftg.	179
Total Hr. Run	24¼
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	11:00	4:00	7:00
Weight	9.3	9.4	9.3
Visc.-Sec.	42	42	43
W.L.-C.C.		14.4	
FL TR. CK.		2/32	
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Morris Ward

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4052	4113	61	D			50	40	1100	6"	53			C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	8:00	5						Drill
								Change Oil in 2, Light Plant Motor
								" " Standby Pump Motors.

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
37	Stands D.P.		Ft.
2	Singles D.P.	352.081	Ft.
20	D.C. 2⅞ 6¼ I.D. O.D.	570.63	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILCO O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	21.76	Ft.
	Total	4169.00	Ft.

Wt. of String 109,000 Lbs.

Pipe in Hole 113 Jts.

Pipe on Racks 103 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	18
Size	8¾
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586325
Depth Out	
Depth In	3934
Total Ftg.	235
Total Hr. Run	31½
Cond. of Bit	1N
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker FNT 18

Trucker Dixie 18

Trucker Red Deer

MUD RECORD

Time	9:00	12:00	5:00
Weight	9.3	9.3	9.3
Visc.-Sec.	42	42	42
W.L.-C.C.		14.6	14.2
FL TR. CK.		2/32	2/32
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: M Green

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4113	4169	56	D			50	40	1100	6	53			C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	4123	8°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:15	1¼						Drill
9:15	9:30	¼						Rig Service / 130 P.P. / Motor shut off
9:30	9:45	¼						Survey Miss Run
9:45	10:00	¼						Survey 8°
10:00	4:00	6						Drill

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
38	Stands D.P.	3552.23	Ft.
	Singles D.P.		Ft.
20	D.C. 2⅞ 6¼ I.D. O.D.	570.63	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILCO O.D.	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	18.94	Ft.
	Total	4197	Ft.

Wt. of String 109,000 Lbs.

Pipe in Hole 114 Jts.

Pipe on Racks 102 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	18
Size	8¾
Mfg.	REED
Type	SCM
Nozzle No.	3
Nozzle Size	12
Ser. No.	586325
Depth Out	4197
Depth In	3934
Total Ftg.	263
Total Hr. Run	36¼
Cond. of Bit	2-1
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	5:00	8:00	11:00
Weight	9.4	9.4	T
Visc.-Sec.	43	42	R
W.L.-C.C.	14.6		I
FL TR. CK.	2/32		P
PH	10.5	10.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
4169	4197	28	D			50	40	1100	6"	53			C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	4197	8°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	7:15	3¼						Drill
7:15	7:30	¼						Survey Miss Run.
7:30	9:00	1½						Drill
9:00	9:15	¼						Survey.
9:15	11:15	2:00						Trip Out To Core
11:15	11:45	½						Rig Up Loggers
11:45	12:00	¼						Logg Eng.

No. 5471

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF HOTEL RACE RAT PASS

Location — Lsd. 10 Sec. 21 Twp. 35 Rge. 22 W. 5 M.

Date: NOV 14 1970

Weather Condition: SNOW 0 Road Conditions: —

Nearest Town: FAIRVIEW Water - Source: LAKE Miles Hauled: Pumped: Camp Distance from Rig: 150 YDS. Reason for Extra L. Plant: STAND BY

OPERATOR: BANFF OIL LTD

Rig No. 2 DWKS 525

Drill Pipe String: No. 2 Size 4 1/2

Tool Joint 5 3/4 O.D. Type Thd. F H

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Arnold Hansen

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A Bamford

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	OILWELL	214-P	14
2.	OILWELL	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	S1-C	36#	22	930.30	13.20	927	360 SKS PERMAFROST
							150 SKS. 0 CLASS G

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	4	7 1/4	
Reaming			
Conditioning Mud & Circulating			
Trips	3 3/4		
Lubricate Rig		1/4	
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other	1/4		
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals			

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M1100 A

No. of Lines 8 Size 1 1/2

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud 30

Cumulative Rotating Hrs. 259 1/4

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		Ft.
35	Stands D.P.	
5	Singles D.P.	3002.13
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.65
	D.C. I.D. O.D.	
	Stb. Body O.D.	
	Stb. Body O.D.	
	Rmr. Body O.D.	
	Subs DART DRL COLL	55.60
	Bit or C.B.	
	Kelly Down	13.64
	Total	3942

Wt. of String 105,000 Lbs.

Pipe in Hole 106 Jts.

Pipe on Racks 113 Jts.

Total Pipe on Lease 219 Jts.

BIT RECORD

Bit No.	17	18
Size	8 3/4	8 3/4
Mfg.	REED	REED
Type	SCM	SCM
Nozzle No.	3	3
Nozzle Size	12	12
Ser. No.	551017	553625
Depth Out	3934	
Depth In	3742	3934
Total Ftg.	192	
Total Hr. Run	23 1/4	1 1/2
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	1:00	4:00	7:00
Weight	9.5	X	9.2
Visc.-Sec.	44	R	43
W.L.-C.C.			
FL TR. CK.		Y	
PH	10.5	R	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: R Cameron Jack

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2913	3942	29	D			50	40	1100	6"	53			SGL

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:30	2 1/2						DRILL
2:30	6:15	3 3/4						TRIP FOR BIT & STUCK OIL
6:15	6:30	1/4						BREAK CIRC & CEMENT BOTTOM
6:30	8:30	1 1/2						DRILL

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		Ft.
35	Stands D.P.	
2	Singles D.P.	3332.61
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63
	D.C. I.D. O.D.	
	Stb. Body O.D.	
	Stb. Body O.D.	
	Rmr. Body O.D.	
	Subs DART DRL COLL	55.60
	Bit or C.B.	
	Kelly Down	39.15
	Total	3999.00

Wt. of String 108,000 Lbs.

Pipe in Hole 108 Jts.

Pipe on Racks 108 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	18	
Size	8 3/4	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	584325	
Depth Out		
Depth In	3934	
Total Ftg.	65	
Total Hr. Run	9 1/4	
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker F.C.T.

Trucker Drake

Trucker Reed Market

MUD RECORD

Time	9:00	12:00	3:00
Weight	9.2	9.2	9.2
Visc.-Sec.	43	43	43
W.L.-C.C.	14.2	14.0	14.2
FL TR. CK.	14.0	2/32	2/32
PH	10.0	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		

Driller: M Hansen

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3942	3999	57	D			50	40	1100	6	53			

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	11:30	3 1/2						DRILL
11:30	11:45	1/4						RIG SERVICE & B.O.P.
11:45	4:00	4 1/4						DRILL

Change oil in #2 lightplant. 1100 HRS.

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		Ft.
36	Stands D.P.	
5	Singles D.P.	3391.74
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63
	D.C. I.D. O.D.	
	Stb. Body O.D.	
	Stb. Body O.D.	
	Rmr. Body O.D.	
	Subs DART DRL COLL	55.60
	Bit or C.B.	
	Kelly Down	30.02
	Total	4052

Wt. of String 105,000 Lbs.

Pipe in Hole 109 Jts.

Pipe on Racks 107 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	18	
Size	8 3/4	
Mfg.	REED	
Type	SCM	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	584325	
Depth Out		
Depth In	3934	
Total Ftg.	118	
Total Hr. Run	11 1/4	
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	5:00	8:00	11:00
Weight	9.2	9.3	9.3
Visc.-Sec.	43	45	44
W.L.-C.C.	14.2		15.2
FL TR. CK.	2/32		2/32
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3999	4052	53	D			50	40	1100	6"	53			C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
4021	7/8							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	8:15	4 1/4						DRILL
8:15	8:20	1/4						RIG SER
8:20	9:15	3/4						SURVEY (SAND LINE SURVEY WAS FROZEN)
9:15	12:00	2 3/4						DRILL

No. 5470

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: BOWEE Rigeur ARCO Sun Pass — Date: NOV 13 19 70

Location — Lsd. 07 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Weather Condition: FAIR 0 — Road Conditions: N'SL — Nearest Town: ATKINSVILLE — Water - Source: LAKE, Miles Hauled: ½, Pumped — Camp Distance from Rig: 150 YARDS - Reason for Extra L. Plant: STANDBY

OPERATOR: BOWEE OIL LTD

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A Bamford

Rig No. 3 Loco DWKS 525 — Drill Pipe String: No. 2, Size 4½ — Tool Joint: 5 3/4 O.D., Type Thd. FH

PUMPS No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	OIL WELL	214-P	14
2.	OIL WELL	214-P	14
3.			

LAST CASING TUBING OR LINER	Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
	9 5/8	ST+C	36#	22	930.50	12.20	927	560 SKS PERMAFROST
								150 SKS DILWELL

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	6	7½	4½
Reaming			
Conditioning Mud & Circulating			
Trips	1 3/4		
Lubricate Rig		¼	¼
Deviation Survey		¼	½
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Rig Check	4	¾	
Perforating			
Tubing Trips			
Swabbing			
Testing			
Additional			
	8	8	3

TIME SUMMARY (Office Use Only)

Day Work
Hrs. W/DP
Hrs. WO/DP
Hrs. Standby

LINE RECORD

Size
Length
Mi. or Trips since Last Cut
Cumulative Ton Mi. or Trips
No. of Days From Spud
Cumulative Rotating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
33	Stands D.P.	Ft.	Bit No.	17
0	Singles D.P.	3145.02 Ft.	Size	8 3/4
20	D.C. 2¾ x 6¼ I.D. O.D.	570.63 Ft.	Mfg.	REED
	D.C. I.D. O.D.	Ft.	Type	SCM
	Stb. Body O.D.	Ft.	Nozzle No.	3
	Stb. Body O.D.	Ft.	Nozzle Size	12
	Rmr. Body O.D.	Ft.	Ser. No.	856067
	Subs DRILLCOLD.	55.10 Ft.	Depth Out	
	Bit or C.B.	Ft.	Depth In	3742
	Kelly Down	15.75 Ft.	Total Ftg.	45
	Total	3757 Ft.	Total Hr. Run	6
Wt. of String	104,000 Lbs.		Cond. of Bit	IN
Pipe in Hole	101 Jts.		Reamer No.	
Pipe on Racks	115 Jts.		Reamer Type	
Total Pipe on Lease	216 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
			Trucker	
			Trucker	
			Trucker	

MUD RECORD			
Time	1.00	4.30	7.00
Weight	1	9.2	9.2
Visc.-Sec.	1	46	44
W.L.-C.C.	R	12	
FL TR. CK.	1	3/32	
PH	9	10.5	10.5
SD. Cont. %	9		
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Ronnie Keck

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3742	3787	45	D			50	40	1100	6	53			SA

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	1.45	1¾						RUN IN WITH BIT # 17
1.45	2.00	¼						BREAK CIRC & CLEAN TO BOTTOM
2.00	8.00	6						DRILL

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
34	Stands D.P.	Ft.	Bit No.	17
1	Singles D.P.	320.23 Ft.	Size	8¾
20	D.C. 2¾ x 6¼ I.D. O.D.	570.63 Ft.	Mfg.	REED
	D.C. I.D. O.D.	Ft.	Type	SCM
	Stb. Body O.D.	Ft.	Nozzle No.	3
	Stb. Body O.D.	Ft.	Nozzle Size	12
	Rmr. Body O.D.	Ft.	Ser. No.	856067
	Subs DRILLCOLD.	55.10 Ft.	Depth Out	
	Bit or C.B.	Ft.	Depth In	3742
	Kelly Down	23.54 Ft.	Total Ftg.	135
	Total	3857.00 Ft.	Total Hr. Run	13½
Wt. of String	104,000 Lbs.		Cond. of Bit	IN
Pipe in Hole	103 Jts.		Reamer No.	
Pipe on Racks	113 Jts.		Reamer Type	
Total Pipe on Lease	216 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
			Trucker TNT	6
			Trucker Quinn	12
			Trucker Fred Herbert	

MUD RECORD			
Time	9.00	12.00	3.00
Weight	9.2	9.2	9.2
Visc.-Sec.	44	45	45
W.L.-C.C.	12.4		
FL TR. CK.	2/32	2/32	
PH	10.0	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: A Bamford

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3787	3857.70	D				50	40	1100	6	53			

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	3811	6¼							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	10.45	2¾						DRILL
10.45	11.15	½						SURVEY 6¼° RIG SERVICE & BOP
11.15	4.00	4¾						& MOTOR SHUT-OFF. ALL O.K.
								DRILL

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
35	Stands D.P.	320.44 Ft.	Bit No.	17
	Singles D.P.	Ft.	Size	8¾
20	D.C. 2¾ x 6¼ I.D. O.D.	570.63 Ft.	Mfg.	REED
	D.C. I.D. O.D.	Ft.	Type	SCM
	Stb. Body O.D.	Ft.	Nozzle No.	3
	Stb. Body O.D.	Ft.	Nozzle Size	12
	Rmr. Body O.D.	Ft.	Ser. No.	856067
	Subs DRILLCOLD.	55.10 Ft.	Depth Out	
	Bit or C.B.	Ft.	Depth In	3742
	Kelly Down	16.33 Ft.	Total Ftg.	~~34~~ 171
	Total	3913 Ft.	Total Hr. Run	~~2~~ 24
Wt. of String	105,000 Lbs.		Cond. of Bit	
Pipe in Hole	105 Jts.		Reamer No.	
Pipe on Racks	111 Jts.		Reamer Type	
Total Pipe on Lease	216 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
			Trucker	
			Trucker	
			Trucker	

MUD RECORD			
Time	5.00	8.00	11.00
Weight	9.3	9.3	9.4
Visc.-Sec.	45	42	60
W.L.-C.C.	12		14.3
FL TR. CK.	2/32		3/32
PH	10.5	9.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		
1 INCH STREAM OF WATER			

Driller

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3857	3913	56	D			50	40	1100	6	53			SA

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	3904	6¼							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4.00	10.00	6.00						DRILL
10.00	10.15	¼						RIG SERVICE
10.15	10.45	½						SURVEY
10.45	12.00	1¼						DRILL

No. 5469

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BANFF AGEUT ARGO RAT PASS

Location — Lsd. 62 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Date: NOV 12 1970

Weather Condition: O | Road Conditions: GOOD | Nearest Town: ARLINE | Water - Source: LAKE | Miles Hauled: 1/2 | Pumped: | Camp Distance from Rig: 150 YDS. | Reason for Extra Long Plant: STANDBY

OPERATOR: BANFF OIL LTD

Rig No. S DRCO DWKS 525 | Drill Pipe String No. 2 Size 4½ | Tool Joint 5¾ O.D. | Type Thd. FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Lehod

SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	OILWELL	214-P	14
2.	OILWELL	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	STAC	36	22	930.30	13.20	927	360 SKS PERMAFROST
							150 SKS OILWELL

TIME DISTRIBUTION — HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	8	7¼	6½
Reaming			
Conditioning Mud & Circulating			
Trips			1
Lubricate Rig		½	¼
Deviation Survey		¼	¼
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other		¼	
Fishing			
COMPLETION WORK: A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.	#1 100-92
No. of Lines	9 Size 1/5
Feet Slipped	45
Feet Cut Off	1171
Present Length	5900
Ton Mi. or Trips Since Last Cut	357
Cumulative Ton Mi. or Trips	951
No. of Days From Spud	19
Cumulative Rotating Hrs.	216¾

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		Ft.
32	Stands D.P.		
5	Singles D.P.	3021.76	Ft.
20	D.C. 2⅞ x 6½ I.D. O.D.	590.63	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILCO	55.68	Ft.
	Bit or C.B.		Ft.
	Kelly Down	22.01	Ft.
	Total	3670	Ft.

Wt. of String 103,000 Lbs. | Pipe in Hole 97 Jts. | Pipe on Racks 119 Jts. | Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	16	
Size	8¾	
Mfg.	REED	
Type	SC56	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	663242	
Depth Out		
Depth In	3560	
Total Ftg.	110	
Total Hr. Run	19¾	
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	1.00	4.00	7:00
Weight	9.1	9.2	9.2
Visc.-Sec.	41	49	48
W.L.-C.C.		12.8	12.3
FL TR. CK.		3/32	2/32
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	1000 #		
BENEX	4		

Driller: Bernie Lesak

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3625	3670	45	D			50	40	1100	6"	54			SR

Deviation Record: Depth | Dev. | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	3:00	8						DRILL

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		Ft.
32	Stands D.P.		
2	Singles D.P.	305.32	Ft.
20	D.C. 2⅞ x 6¼ I.D. O.D.	570.63	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILCO	55.10	Ft.
	Bit or C.B.		Ft.
	Kelly Down	27.57	Ft.
	Total	3707.60	Ft.

Wt. of String 103000 Lbs. | Pipe in Hole 98 Jts. | Pipe on Racks 118 Jts. | Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	16	
Size	8¾	
Mfg.	REED	
Type	SC56	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	663242	
Depth Out		
Depth In	3560	
Total Ftg.	147	
Total Hr. Run	27	
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker: ELC 8
Trucker: Driver 5
Trucker: Bud Herbert

MUD RECORD

Time	9:00	12:00	3:00
Weight	9.3	9.3	9.3
Visc.-Sec.	44	46	45
W.L.-C.C.		13.4	12.8
FL TR. CK.	2/32	2/32	2/32
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	1700#		
BENEX	7 #		

Driller: Marvin Hanson

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3670	3687	17	D			50	40	1100	6	53	-	-	D

Deviation Record: Depth 3687 | Dev. 7° | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	11:45	3¾						DRILL.
11:45	12:30	¾						RIG SERVICE & BOP. & MOTOR SHUT OFF
12:30	4:00	3½						ALL O.K. SURVEY 7°. CLEAN MUD TANK
								DRILL

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		Ft.
33	Stands D.P.	3052.68	Ft.
	Singles D.P.		Ft.
20	D.C. 2⅞ x 6¼ I.D. O.D.	570.63	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILCO	55.10	Ft.
	Bit or C.B.		Ft.
	Kelly Down	32.79	Ft.
	Total	3742	Ft.

Wt. of String 104,000 Lbs. | Pipe in Hole 99 Jts. | Pipe on Racks 117 Jts. | Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	16	
Size	8¾	
Mfg.	REED	
Type	SC56	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	663242	
Depth Out	3742	
Depth In	3560	
Total Ftg.	182	
Total Hr. Run	33½	
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	5:00	8:00	11:00	
Weight	9.3	9.2	T	
Visc.-Sec.	47	53	&	
W.L.-C.C.	13.2	14.1	T	
FL TR. CK.	2/32	2/32	P	
PH	10.5	10.5		
SD. Cont. %				
Pressure Gradient				

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3707	3742	35	D			50	40	1100	6"	53			SR

Deviation Record: Depth 3742 | Dev. 7° | Direction | Depth | Dev. | Direction | Depth | Dev. | Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	10:30	6½						DRILL
10:30	10:45	¼						RIG SER
10:45	11:00	¼						SURV 7°
11:00	12:00	1						TRIP OUT

GEOLOGICAL BRANCH

No. 5468

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: Banff Agnew Hard Pass — Date: Nov 11 19 70

Location — Lsd. 67 Sec. 54 Twp. 135 Rge. 22 W. 5 M.

Weather Condition — Road Conditions NIL — Nearest Town ATLIN — Water - Source LAKE — Miles Hauled 1/2 Pumped — Camp Distance from Rig 150 YARDS — Reason for Extra L. Plant STANDBY

OPERATOR: Banff Oil Ltd.

Rig No. 3 — 1000 DWKS 525

Drill Pipe String No.	Size	Tool Joint	Type Thd.
2	4½	5-3/4 O.D.	FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Nichols

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A Bamford

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	OILWELL	214F	14
2.	OILWELL	214-P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	STC	36	22	930.40	13.20	927	CEMENTED W/ 360 SKS
							PERMAFROST, 250 SKS
							OILWELL

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	6	4½	
Reaming			
Conditioning Mud & Circulating			
Trips	1¼	3¼	
Lubricate Rig		½	
Deviation Survey	3¼		
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Ware Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	9		

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.	M10692
No. of Lines	8 Size 1 1/8
Feet Slipped	45
Feet Cut Off	NIL
Present Length	5906
Ton Mi. or Trips Since Last Cut	
Cumulative Ton Mi. or Trips	
No. of Days From Spud	17
Cumulative Rotating Hrs.	198

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
31	Stands D.P.	2997.17	Ft.
	Singles D.P.		Ft.
20	D.C. 2 Rig 6¼ I.D. O.D.	570.63	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLCO	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	36.60	Ft.
	Total	3560	Ft.
Wt. of String		102,000	Lbs.
Pipe in Hole		93	Jts.
Pipe on Racks		123	Jts.
Total Pipe on Lease		216	Jts.

BIT RECORD	
Bit No.	15
Size	8¾
Mfg.	REED
Type	SCSC
Nozzle No.	3
Nozzle Size	12
Ser. No.	582977
Depth Out	3560
Depth In	3442
Total Ftg.	118
Total Hr. Run	17 3/4
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	12.00	3.00	7.30
Weight	9.0	9.2	
Visc.-Sec.	51	50	
W.L.-C.C.	12.2	14.4	
FL TR. CK.	2/32	2/32	
PH	11	11	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Reggie Bank

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3515	3560	45	D			50	40	1100	6	54			SC

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	3533	6°		3560					

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:30	2:30	2½						DRILL
2:30	3:00	½						SURVEY
3:00	6:30	3½						DRILL
6:30	6:45	¼						SURVEY
6:45	8:00	1¼						TRIP FOR BIT

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
30	Stands D.P.		Ft.
1	Singles D.P.	2928.42	Ft.
20	D.C. 2 7½ 6¼ I.D. O.D.	570.63	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLCO	55.10	Ft.
	Bit or C.B.		Ft.
	Kelly Down	28.85	Ft.
	Total	3584.00	Ft.
Wt. of String		103,000	Lbs.
Pipe in Hole		94	Jts.
Pipe on Racks		122	Jts.
Total Pipe on Lease		216	Jts.

BIT RECORD	
Bit No.	16
Size	8¾
Mfg.	REED
Type	SCSC
Nozzle No.	3
Nozzle Size	12
Ser. No.	663242
Depth Out	
Depth In	3560
Total Ftg.	24
Total Hr. Run	4¾
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker TNT 6
Trucker Lewis 3
Trucker Bud Herbert

MUD RECORD			
Time	9.00	12.00	2.00
Weight	9	9.2	9.1
Visc.-Sec.	41	42	42
W.L.-C.C.	1	14.8	
FL TR. CK.	10	2/32	2/32
PH		10.6	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driver has OK on this Late. Driller Working on water tank

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3580	3584	24	D			50	40	1100	6	53			

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:45	¾						TRIP FOR BIT
8:45	9:15	½						RIG SERVICE & BOP & MOTOR SHUT 111 PSI
9:15	11:45	2½						RUN IN SLOW CLEAN 10' FEET OF FILL
11:45	4:00	4¼						DRILL

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
32	Stands D.P.	2990.79	Ft.
	Singles D.P.		Ft.
20	D.C. 2 7½ 6¼ I.D. O.D.	570.63	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs DRILLCO	55.60	Ft.
	Bit or C.B.		Ft.
	Kelly Down	9.58	Ft.
	Total	3625	Ft.
Wt. of String		103,000	Lbs.
Pipe in Hole		96	Jts.
Pipe on Racks		120	Jts.
Total Pipe on Lease		216	Jts.

BIT RECORD	
Bit No.	16
Size	8¾
Mfg.	REED
Type	SCSC
Nozzle No.	3
Nozzle Size	12
Ser. No.	663242
Depth Out	
Depth In	3560
Total Ftg.	65
Total Hr. Run	11¾
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	6	8	10
Weight	9.2	9.1	9.1
Visc.-Sec.	41	41	41
W.L.-C.C.			
FL TR. CK.	10.5	10.5	10.5
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3584	3625	41	D			50	40	1100	6"	64			SC

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	3625	6½°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	11:00	7						DRILL
11:00	11:15	¼						REG SER.
11:15	11:30	¼						SURVEY
11:30	12:00	½						DRILL

No. 5428

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Banff Aquit. Arco Bat Pool — Date: K-35

Location — Lsd. 12 Sec. 29 Twp. 135 Rge. 22 W. 5 M. — Nov 10 19 70

Weather Condition: -15 — Road Conditions — Nearest Town: Inuvik — Water - Source: Lake, Miles Hauled: 2, Pumped — Camp Distance from Rig: 150 yds. — Reason for Extra L. Plant: Standby

OPERATOR: Banff Oil Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: C. Sokol

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Reid

Rig No. 3 Oilfield DWKS 525 — Drill Pipe String: No. 2, Size 4½ — Tool Joint: 5¾ O.D., Type Thd. F.H.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	STFC	36#	22	930.80	13.20	927	cemented w/ 360 sks.
							pozmix post & 150 sks.
							oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	5 7/4	4	7 3/2
Reaming		1¼	
Conditioning Mud & Circulating			
Trips	1 3/4	1 3/8	
Lubricate Rig		¼	¼
Deviation Survey	½	¼	
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other Circ & Cond		¼	
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	4	8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No. M10093
No. of Lines 8 Size 1/5
Feet Slipped 45'
Feet Cut Off N.L.
Present Length 495-5'
Ton Mi. or Trips Since Last Cut ~~4180~~
Cumulative Ton Mi. or Trips 804
No. of Days From Spud 17
Cumulative Rotating Hrs. 180¼

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
30	Stands D.P.	2804.48 Ft.
	Singles D.P.	Ft.
	D.C.	
	I.D. O.D.	Ft.
20	D.C. 2 2/8 6 1/4 I.D. O.D.	570.63 Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Dilbco	55.66 Ft.
	Bit or C.B.	Ft.
	Kelly Down	11.29 Ft.
	Total	3442.00 Ft.

Wt. of String 102,000 Lbs.
Pipe in Hole 90 Jts.
Pipe on Racks 126 Jts.
Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	14
Size	8 3/4
Mfg.	REED
Type	SC56
Nozzle No.	3
Nozzle Size	12
Ser. No.	777214
Depth Out	3442
Depth In	3207
Total Ftg.	235
Total Hr. Run	27¾
Cond. of Bit	8-8-0
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	1:00	4:00	7:00
Weight	9.1	9.1	
Visc.-Sec.	44	43	
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		500#	
BENEX		2#	

Driller: Don MacCarthur

FOOTAGE

From	To	Fge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3396	3442	46	D			50	40	1100	6	54			(S)

Deviation Record: Depth 3439, Dev. 6°, Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	5:30	5½						DRILLING
5:30	6:00	½						SURVEY
6:00	6:15	¼						DRILLING
6:15	8:00	1¾						HOIST OUT

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
30	Stands D.P.	Ft.
5	Singles D.P.	2835.84 Ft.
	D.C.	
	I.D. O.D.	Ft.
20	D.C. 2 2/8 6 1/4 I.D. O.D.	570.63 Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Dilbco	54.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	7.63 Ft.
	Total	3471 Ft.

Wt. of String 102,000 Lbs.
Pipe in Hole 91 Jts.
Pipe on Racks 125 Jts.
Total Pipe on Lease 211 Jts.

BIT RECORD

Bit No.	15
Size	8¾
Mfg.	REED
Type	SC56
Nozzle No.	3
Nozzle Size	12
Ser. No.	552979
Depth Out	
Depth In	3442
Total Ftg.	29
Total Hr. Run	4
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker: T.N.T.
Trucker: Orwig
Trucker: Bud Hibert

MUD RECORD

Time	9:00	12:00	3:00
Weight		9.2	9.2
Visc.-Sec.		45	47
W.L.-C.C.			
FL TR. CK.			
PH		10	9
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		

Driller: Dennis Droge

FOOTAGE

From	To	Fge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3443	3470	28	D			50	40	1100	6"	54			5D

Deviation Record: Depth 3470, Dev. 6½, Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼						RIG SER CHECK MOTOR SHUT OFF BOYS
8:15	8:45	½						PUT NEW BOTTOM ROLLERS IN BOTTOM REAMER
8:45	10:15	1½						RUN IN HOLE WITH BIT #15
10:15	11:45	1½						BRK CIRC & REAM UNDER GAUGE HOLE
11:45	3:45	4						DRLG
3:45	4:00	¼						SURVEY

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
30	Stands D.P.	Ft.
2	Singles D.P.	2867.06 Ft.
	D.C.	
	I.D. O.D.	Ft.
20	D.C. 2 2/8 6 1/4 I.D. O.D.	570.63 Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs DRILCO	54.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	21.72 Ft.
	Total	3515.00 Ft.

Wt. of String 102,000 Lbs.
Pipe in Hole 92 Jts.
Pipe on Racks 124 Jts.
Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	15
Size	8¾
Mfg.	REED
Type	SC56
Nozzle No.	3
Nozzle Size	12
Ser. No.	552979
Depth Out	
Depth In	3442
Total Ftg.	73
Total Hr. Run	11¾
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	5:00	7:00	10:00
Weight	9.1	9.1	9.1
Visc.-Sec.	45	47	48
W.L.-C.C.		12.2	
FL TR. CK.			
PH	9.5	9.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50		

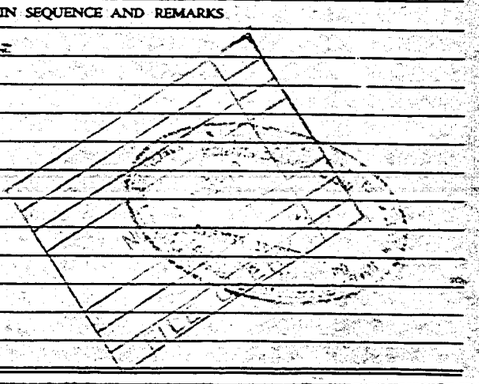
Driller: M. Hagen

FOOTAGE

From	To	Fge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3470	3515	45	D			50	40	1100	6	54			(S)

Deviation Record: Depth, Dev., Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼						RIG SERVICE
4:15	R 00	7 3/4						DRILL



No. 5466

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: Banff Crest Bow Port Pad K-35 — Date: Nov 9 1970

Location — Lsd. 07 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Weather Condition: -10 — Road Conditions: — — Nearest Town: Cluny — Water - Source: Lake — Miles Hauled: 1/2 — Pumped: — — Camp Distance from Rig: 1500 yds. — Reason for Extra L. Plant: Standby

OPERATOR: Gulf Oils Co.

Rig No. 3 — Derrick DWKS 225 — Drill Pipe String: No. 3, Size 4 1/2 — Tool Joint 5 3/4 O.D. — Type Thd. F.H.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Lehoux

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST&C	36#	22	936.88	13.20	927	Cemented w/ 360 sks
							permafrost + 150 sks
							oilwell.

MORNING TOUR

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7 1/4	7 1/4	7 1/2
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig		1/4	1/4
Deviation Survey	3/4	1/2	1/4
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.	M100-92
No. of Lines	8 Size 1 1/8
Feet Slipped	45
Feet Cut Off	NIL
Present Length	4955
Ton Mi. or Trips Since Last Cut	95
Cumulative Ton Mi. or Trips	719
No. of Days From Spud	116
Cumulative Rotating Hrs.	1102 3/4

DRILLING ASSEMBLY AT END OF TOUR

NO.		
28	Stands D.P.	2618.55 Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs	55.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	30.22 Ft.
	Total	3275.00 Ft.
Wt. of String	100,000	Lbs.
Pipe in Hole	84	Jts.
Pipe on Racks	132	Jts.
Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	14		
Size	8 3/4		
Mfg.	REED		
Type	SC56		
Nozzle	No.	3	
	Size	12	
Ser. No.	777214		
Depth Out			
Depth In	3207		
Total Ftg.	68		
Total Hr. Run	7 1/4		
Cond. of Bit	IN		
Reamer No.			
Reamer Type			

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker ____ Trucker ____ Trucker ____

MUD RECORD

Time	1:00	4:00	7:00
Weight	9.1	9.1	9.1
Visc.-Sec.	42	40	40
W.L.-C.C.			17.6
FL TR. CK.			2/32
PH	10.0	10.0	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
Gel	500#		

Driller: L. McCutcheon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3207	3275	68	D			50	40	1100	6	54			SC

Deviation Record: Depth 3223 — Dev. 4 1/4° — Direction — Depth 3254 — Dev. 5° — Direction — Depth — Dev. — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:45	2 3/4						DRILLING
2:45	3:00	1/4						SURVEY
3:00	5:30	2 1/2						DRILLING
5:30	6:00	1/2						SURVEY
6:00	8:00	2						DRILLING
								Fuel 560

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
29	Stands D.P.	2711.33 Ft.
	Singles D.P.	Ft.
	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.62 Ft.
20	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs	55.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	8.04 Ft.
	Total	3346 Ft.
Wt. of String	102,000	Lbs.
Pipe in Hole	87	Jts.
Pipe on Racks	129	Jts.
Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	14		
Size	8 3/4		
Mfg.	REED		
Type	SC56		
Nozzle	No.	3	
	Size	12	
Ser. No.	777214		
Depth Out			
Depth In	3207		
Total Ftg.	119		
Total Hr. Run	14 1/2		
Cond. of Bit			
Reamer No.			
Reamer Type			

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker TNT — Trucker Driver E — Trucker Bud Herkel

MUD RECORD

Time	9:00	12:00	3:00
Weight	9.2	9.0	9.0
Visc.-Sec.	47	45	45
W.L.-C.C.			
FL TR. CK.			
PH	9.5	9.0	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		

Driller: Dennis Gaak

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3275	3346	71	D			50	40	1100	6	54			SC

Deviation Record: Depth 3315 — Dev. 5 3/4° — Direction — Depth 3346 — Dev. 5 3/4° — Direction — Depth — Dev. — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:45	3/4						DRILL.
8:45	9:00	1/4						RIG SER. & WORK SOUT OFF BOPS
9:00	11:45	2 3/4						TRIPS
11:45	12:00	1/4						SURVEY
12:00	3:45	3 3/4						DRILL.
3:45	4:00	1/4						SURVEY
								USE TWO POWER SAWS TO CLEAN UP AT RIVER
								3 RANGES 6 HRS

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
29	Stands D.P.	Ft.
1	Singles D.P.	2743.03
	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.62 Ft.
20	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs	55.60 Ft.
	Bit or C.B.	Ft.
	Kelly Down	26.74 Ft.
	Total	3396.39 Ft.
Wt. of String	102,000	Lbs.
Pipe in Hole	88	Jts.
Pipe on Racks	128	Jts.
Total Pipe on Lease	216	Jts.

BIT RECORD

Bit No.	14		
Size	8 3/4		
Mfg.	REED		
Type	SC56		
Nozzle	No.	3	
	Size	12	
Ser. No.	777214		
Depth Out			
Depth In	3207		
Total Ftg.	189		
Total Hr. Run	22		
Cond. of Bit	IN		
Reamer No.			
Reamer Type			

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker ____ Trucker ____ Trucker ____

MUD RECORD

Time	5:00	8:30	11:00
Weight	9.1	9.2	9.1
Visc.-Sec.	46	47	43
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
REDEX	2#		

Driller: L. McCutcheon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3346	3396	50	D			50	40	1100	6	54			(SC)

Deviation Record: Depth 3377 — Dev. 5 3/4° — Direction — Depth — Dev. — Direction — Depth — Dev. — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	8:30	4 1/2						DRILLING
8:30	8:45	1/4						SURVEY
8:45	9:00	1/4						RIG SERVICE & CHECK BOPS MOTOR SHUT OFF
9:00	12:00	3						DRILLING

No. 5465

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: Gen. Aquitaine Acres Rat Lake A-35

Date: Nov 8 1970

Location — Lsd. 07 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Weather Condition | Road Conditions | Nearest Town: Grimshaw | Water - Source: Well | Miles Hauled: 1/2 | Pumped | Camp Distance from Rig: 150 yds | Reason for Extra L. Plant: Flooding

OPERATOR: Bow Valley Oil Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Schaub

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Reid

Rig No. 3 | Gardner Denver 525

Drill Pipe String: No. 2 | Size 4 1/2

Tool Joint: 5 3/4 O.D. | Type Thd. F.H.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Gilwell	214B	14
2.	Gilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST&C	36#	22	930.80	13.20	927	cemented w/ 365 sks premium + 150 sks neat

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	5	4 1/4	
Reaming 2:00	1		3 1/4
Conditioning Mud & Circulating			
Trips	1 1/4	2 1/2	2 1/2
Lubricate Rig		3/4	1/4
Deviation Survey	1/4	1/4	
Test B.O.P.			
Cut Off Drilling Line	1/2		
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill-Stem Test			
Other		3/4	1 1/2
Fishing			

COMPLETION WORK

A. Perforating	
B. Tubing Trips	
C. Swabbing	
D. Testing	
E. Additional	
Totals	8 8 5

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.	M1802
No. of Lines	8 Size 1/8
Feet Slipped	45
Feet Cut Off	NIL
Present Length	4955
Ton Mi. or Trips Since Last Cut	95
Cumulative Ton Mi. or Trips	719
No. of Days From Spud	15
Cumulative Rotating Hrs.	140 3/4

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
27	Stands D.P.	Ft.
1	Singles D.P.	25.56.87 Ft.
21	D.C. 2 7/8 & 6 1/4 I.D. O.D.	600.10 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drill Collars	10.48 Ft.
	Bit or C.B.	Ft.
	Kelly Down	20.55 Ft.
	Total	3188.00 Ft.
	Wt. of String	98,000 Lbs.
	Pipe in Hole	82 Jts.
	Pipe on Racks	134 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD	
Bit No.	13 RR
Size	8 3/4
Mfg.	REED
Type	SCM
Nozzle No.	
Nozzle Size	
Ser. No.	856015
Depth Out	
Depth In	3160
Total Ftg.	28
Total Hr. Run	5
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges: Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	4:00	5:00	7:00
Weight	9.1	9.1	9.1
Visc.-Sec.	40	38	40
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		150 #	
BENEX		6 #	

Driller: L. McCutcheon

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3160	3188	28	D			55	30	550	6	68			(S)
							25						

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	3160	4°		3176	4 3/4				

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:30	1/2						SLIP 45' OF DRILLING LINE
12:30	1:45	1 1/4						RUN IN
1:45	2:45	1						BREAK CIRC & CLEAN TO BOTTOM 15'
2:45	5:00	2 1/4						DRILLING
5:00	5:15	1/4						SURVEY
5:15	8:00	2 3/4						DRILLING
								Spud 3:40

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
27	Stands D.P.	Ft.
5	Singles D.P.	2556.87 Ft.
21	D.C. 2 7/8 & 6 1/4 I.D. O.D.	600.10 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	10.48 Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	39.55 Ft.
	Total	3207 Ft.
	Wt. of String	95,000 Lbs.
	Pipe in Hole	82 Jts.
	Pipe on Racks	134 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD		
Bit No.	13 RR	
Size	8 3/4	
Mfg.	REED	
Type	SCM	
Nozzle No.	NIL	
Nozzle Size		
Ser. No.	956067	
Depth Out	3207	
Depth In	3160	
Total Ftg.	~~3188~~	47
Total Hr. Run	9 1/4	
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges: Reg. Hrs. O.T. Hrs.
Trucker T N T 6
Trucker Drive 10
Trucker Red Herbert

MUD RECORD			
Time	9:00	12:00	3:00
Weight	9.1	9.0	/
Visc.-Sec.	41	42	/
W.L.-C.C.			R
FL TR. CK.			
PH	10.5	10.0	/
SD. Cont. %			
Pressure Gradient			Q

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Bernie Lacek

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3188	3207	19	D			55	25	550	6	68			SB

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	3207	5 3/4							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	12:15	4 1/4						DRILL.
12:15	12:30	1/4						RIG SER. & MOTOR SCUFF & ROPE
12:30	12:45	1/4						SURVEY.
12:45	2:15	1 1/2						PULL OUT
2:15	3:15	1						RUN IN COLLARS & PULL BACK OUT
3:15	4:00	3/4						PICK & MAKE UP STIFF HOOK UP
								B. RANGER 8 HRS HELP HAUL FUEL

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
27	Stands D.P.	Ft.
1	Singles D.P.	25.56.87 Ft.
20	D.C. 2 7/8 & 6 1/4 I.D. O.D.	576.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drill Collars	55.60
	Bit or C.B.	Ft.
	Kelly Down	23.90 Ft.
	Total	3207.00 Ft.
	Wt. of String	100,000 Lbs.
	Pipe in Hole	82 Jts.
	Pipe on Racks	134 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD		
Bit No.	14	
Size	8 3/4	
Mfg.	REED	
Type	SC56	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	777214	
Depth Out		
Depth In	3034	
Total Ftg.	173	
Total Hr. Run	3 3/4 REAM.	
Cond. of Bit	IN	
Reamer No.		
Reamer Type		

Water Charges: Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	5:00	8:00	11:00
Weight	/		9.1
Visc.-Sec.	/		43
W.L.-C.C.	R		
FL TR. CK.	R		
PH	/		10.0
SD. Cont. %	/		
Pressure Gradient	Q		

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: L. McCutcheon

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3034	3207	173	R			50	5	800	6	-	5	70	(S)

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:30	1 1/2						PICK & MAKE UP STIFF HOOK UP.
5:30	8:00	2 1/2						RUN IN & LAYED DOWN 5 SINGLES
8:00	8:15	1/4						RIG SERVICE & CHECK BOPS
8:15	12:00	3 3/4						REAM TO BOTTOM/IAL STIFF HOOK UP.

No. 5464

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Bonanza Oasis Brec. Flat Pass K-55 — Date: Nov. 7, 1970

Location — Lsd. 6 Sec. 5 Twp. 36 Rge. 22 W. 5 M.

Weather Condition: +5 — Road Conditions:

Nearest Town: Swan River — Water - Source: Lake — Miles Hauled: 1/2 — Pumped: — Camp Distance from Rig: 1500 — Reason for Extra L. Plant: Standby

OPERATOR: Bonanza Oil Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Schaub

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

Rig No. 3 — Drill Pipe String: No. 2, Size 4½ — Tool Joint: 5 3/4 O.D., Type Thd. F.H. — DWKS 525

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	STFC	36#	22	930.80	13.20	927	cemented w/ 360 sks.
							perm. post to 150 sks
							w/ hull 12

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	3½	4¼	6
Reaming Drill	4¼		
Conditioning Mud & Circulating			
Trips	2¼	3	1¼
Lubricate Rig		¼	¼
Deviation Survey		¾	½
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other	2	¼	
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	4	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M-10092

No. of Lines 8 — Size 1/8

Feet Slipped Nil

Feet Cut Off Nil

Present Length 5000

Ton Mi. or Trips Since Last Cut 624

Cumulative Ton Mi., or Trips 624

No. of Days From Spud 14

Cumulative Rotating Hrs. 131½

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
26	Stands D.P.	Ft.
1	Singles D.P.	21.64.12 Ft.
21	D.C. 2 2/8 x 6 4/4 I.D. O.D.	600.10 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Sub Drilco	10.48 Ft.
	Bit or C.B.	Ft.
	Kelly Down	29.30 Ft.
	Total	3104.00 Ft.

Wt. of String 106,000 lbs.

Pipe in Hole 79 Jts.

Pipe on Racks 137 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	11	
Size	8 3/4	
Mfg.	REED	
Type	SS1G	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	686449	
Depth Out		
Depth In	3083	
Total Ftg.	21	
Total Hr. Run	3 1/2	
Cond. of Bit	1 1	
Reamer No.		
Reamer Tyne		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	5:00	7:00
Weight	9.1	9.1
Visc.-Sec.	44	43
W.L.-C.C.	15.4	
FL TR. CK.	2/32	
PH	10.0	10.0
SD. Cont. %		
Pressure Gradient		

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Lorne McCutcheon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3083	3104	21	D			70	25	1100	6	54			(5)

Deviation Record: Depth 3083 — Dev. 4½° — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	2 00	2						TRY TO RETIVE SURVEY BBL
2 00	4 15	2 1/4						HOIST OUT CHANGED BIT RUN IN.
4 15	4 30	1/4						BREAK CIRC & CLEAN TO BOTTOM 5'
4 30	8 00	3 1/2						DRILLING

Fuel 4.35

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
26	Stands D.P.	Ft.
0	Singles D.P.	2495.93 Ft.
21	D.C. 2 1/2 x 6 1/4 I.D. O.D.	600.10 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. body O.D.	10.48 Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	20.54 Ft.
	Total	3127 Ft.

Wt. of String 106,000 Lbs.

Pipe in Hole 80 Jts.

Pipe on Racks 136 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	11	12
Size	8 3/4	8 3/4
Mfg.	REED	SMITH
Type	SS1G	SS5
Nozzle No.	3	3/
Nozzle Size	12	12
Ser. No.	686449	AV 878
Depth Out	3105	
Depth In	3083	3105
Total Ftg.	22	22
Total Hr. Run	3 3/4	4
Cond. of Bit	5-1-1	IN
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker TNT 8

Trucker Grimes Co

Trucker Bud Herbert

MUD RECORD

Time	9:00	12:00	3:00
Weight	A	9.1	9.1
Visc.-Sec.		44	44
W.L.-C.C.	R		
FL TR. CK.			
PH	T	10.0	9.5
SD. Cont. %	R		
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		

Driller: Bernie Leach

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3104	3127	23	D			55	25	1100	6"	54			5

Deviation Record: Depth 3105 — Dev. 4½° — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼						DRILL
8:15	8:30	¼						RIG SER & MOTOR SHUT OFF & BOPS
8:30	8:45	¼						SURVEY
8:45	11:45	3						TRIP FOR BIT
11:45	12:00	¼						BRACK CIRC.
12:30	4:00	4¼						DRILL.

USE TWO POWER SAWS TO CLEAN UP AT RIVER

B. RANGER 8 HRS. CLEAN UP

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
27	Stands D.P.	2525.95
	Singles D.P.	Ft.
21	D.C. 2 1/2 x 6 1/4 I.D. O.D.	600.10 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	10.48 Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	22.47 Ft.
	Total	3160.30 Ft.

Wt. of String 106,000 Lbs.

Pipe in Hole 81 Jts.

Pipe on Racks 135 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	12
Size	8 3/4
Mfg.	SMITH
Type	555
Nozzle No.	3
Nozzle Size	12
Ser. No.	AV 978
Depth Out	3160
Depth In	3105
Total Ftg.	55
Total Hr. Run	10
Cond. of Bit	2-1-1
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	5:00	8:00	11:00
Weight	9.1	9.1	
Visc.-Sec.	44	44	
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Lorne McCutcheon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3127	3160	33	D			55	25	1100	6"	54			(5)

Deviation Record: Depth 3146 — Dev. 4 1/8 — Direction — Depth 3160 — Dev. 4° — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	7:45	3 3/4						DRILL
7:45	8:00	¼						SURVEY
8:00	8:15	¼						RIG SERVICE & CHECK BOPS
8:15	10:30	2 1/2						DRILLING
10:30	10:45	¼						SURVEY
10:45	12:00	1 1/4						HOIST OUT

No. 5424

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: Banff Imperial Rec. Bat Hse K-35

Location — Lsd. 07 Sec. 29 Twp. 135 Rge. 22 W. 5 M. | Date: Nov 16 19 50

Weather Condition: +15 | Road Conditions | Nearest Town: Innisfail | Water - Source: Lake | Miles Hauled: 1/2 | Pumped | Camp Distance from Rig | Reason for Extra L. Plant: Flooding Conditions

OPERATOR: Banff Oil Ltd.

Rig No. 3 Gardner DWKS 525 | Drill Pipe String: No. 2, Size 4½ | Tool Joint: Type Thd. F.H., 5 3/4 O.D.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Lehart

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

PUMPS No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	STEC	36#	22	930.80	13.20	927	cemented w/ 36 sks pump plug + 150 sks oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling - Actual	4½	2¾	7
Reaming Roll	4¼		¼
Conditioning Mud & Circulating			
Trips	2½	2½	
Lubricate Rig		¼	
Deviation Survey	¼	¼	1½
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other	1½	3¼	1¼
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.	M10092
No. of Lines	8 Size 1 1/8
Feet Slipped	NIL
Feet Cut Off	NIL
Present Length	5000
Ton Mi. or Trips Since Last Cut	474
Cumulative Ton Mi. or Trips	474
No. of Days From Spud	13
Cumulative Rotating Hrs.	117 44

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		Ft.
25	Stands D.P.	
1	Singles D.P.	2370.00 Ft.
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drl. Collars	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	12.07 Ft.
	Total	3003.00 Ft.

Wt. of String 105,000 Lbs.
Pipe in Hole 76 Jts.
Pipe on Racks 140 Jts.
Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	8	9
Size	8 3/4	8 3/4
Mfg.	REED	REED
Type	SCMG	SSIG
Nozzle No.	3	3
Nozzle Size	12	12
Ser. No.	777216	684956
Depth Out	2950	
Depth In	2590	2950
Total Ftg.	360	53
Total Hr. Run	30	3½
Cond. of Bit	9-2-1	1N1
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

	1:00	4:00	7:00
Time			
Weight	9.2	T	9.0
Visc.-Sec.	44	R	43
W.L.-C.C.	15.0	I	
FL TR. CK.	2½2	P	
PH	10.0		10.0
SD. Cont.	Emerflow		9.0
Pressure Gradient	Mudflow		10.1

4 gals per min.

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		1500#	
RENEX		4#	

Driller: John McCutcheon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2945	3003	58	D			80	45	1100	6	54	5		(5)

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	1 00	1						DRILLING
1 00	1 15	¼						SURVEY (MISS. RUN)
1 15	2 30	1 ¼						TRIP FOR BIT
2 30	3 00	½						CLEAN MUD TANK - (SUCTION)
3 00	4 15	1 ¼						RUN IN
4 15	4 30	¼						BREAK CIRC & CLEAN TO BOTTOM.
4 30	8 00	3½						DRILLING

fuel 5 ft.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		Ft.
25	Stands D.P.	
0	Singles D.P.	2401.6 Ft.
20	D.C. 2¾ x 6¼ I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drl. Coll.	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	11.5 Ft.
	Total	3034 Ft.

Wt. of String 105,000 Lbs.
Pipe in Hole 77 Jts.
Pipe on Racks 139 Jts.
Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	9	10
Size	8 3/4	8 3/4
Mfg.	REED	REED
Type	SSIG	SCMG
Nozzle No.	3	3
Nozzle Size	12	12
Ser. No.	684956	856067
Depth Out	3034	
Depth In	2950	3034
Total Ftg.	84	
Total Hr. Run	6¼	
Cond. of Bit	8-2-1	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker T.W.T. Driving 6½
Trucker
Trucker Bed Inspect.

MUD RECORD

	9:00	12:00	3:00
Time			
Weight	9.1	T	
Visc.-Sec.	43		
W.L.-C.C.		R	
FL TR. CK.			
PH	9.5	I	
SD. Cont. %			
Pressure Gradient		P	

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		
GEL	1500#		
BENEX	6#		

Driller: Bernie Scott

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3003	3034	31	D			80	45	1200	6"	54			55

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
3034	4¼							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:15	2¼						DRILL.
10:15	10:30	¼						RIG SER. MOOR SHUT OFF & BOPS
10:30	11:00	½						DRILL.
11:00	11:15	¼						SURVEY.
11:15	12:15	1						PULL OUT OF HOLE
12:15	2:30	2¼						LAY DOWN STAB. HOOK UP, PICK UP COLLARS
~~2:30~~	~~4:00~~	~~1½~~						~~BOTTOM HOLE & STAB.~~
2:30	4:00	1½						BOTTOM HOLE & STABILIZER.
								RUN IN HOLE

USEING TWO POWER SAW TO CLEAN UP AT RIVER

B. RANGER. UNLOAD GEL. + CLEAN UP. 9 HRS.

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		Ft.
26	Stands D.P.	2433.20 Ft.
	Singles D.P.	Ft.
21	D.C. 2 7/8 x 6 1/4 I.D. O.D.	660.10 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drl. Coll.	10.48 Ft.
	Bit or C.B.	Ft.
	Kelly Down	39.20 Ft.
	Total	3083.88 Ft.

Wt. of String 105,000 Lbs.
Pipe in Hole 78 Jts.
Pipe on Racks 138 Jts.
Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	10
Size	8 3/4
Mfg.	REED
Type	SCMG
Nozzle No.	3
Nozzle Size	12
Ser. No.	856067
Depth Out	
Depth In	3034
Total Ftg.	49
Total Hr. Run	7
Cond. of Bit	1-1-1
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

	5:00	8:00	11:00
Time			
Weight	9.1	9.1	9.1
Visc.-Sec.	45	40	43
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.0	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Jim McCutcheon

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
3034	3083	49	D			55	30	1100	6	54			(5)

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
3052	4°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼						BREAK CIRC & CLEAN TO BOTTOM 2' FILL
4:15	7:00	2¾						DRILL
7:00	7:15	¼						SURVEY
7:15	11:30	4¼						DRILL
11:30	11:45	¼						DROP SURVEY
11:45	12:00	¼						TRY RETIVE SURVEY BELS

No. 5462

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Bank Point Bro. Pat Lse K-35 Date: Nov 5 1920

Location — Lsd. 12 Sec. 39 Twp. 135 Rge. 22 W. 5 M.

Weather Condition: +10 Road Conditions: Nearest Town: Onoway Water - Source: lake Miles Hauled: 1/2 Pumped: Camp Distance from Rig: 1/2 mile Reason for Extra L. Plant: Standby

OPERATOR: Bank Oil Co.

Rig No. 3 Idico DWKS 525 | Drill Pipe String: No. 2, Size 4 1/2 | Tool Joint: 5 3/4 O.D. Type Tbd. F.H.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Schaub

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Ewell

PUMPS No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214 P	14
2.	Oilwell	214 P	12
3.			

LAST CASING TUBING OR LINER	Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
	9 5/8	S.T.C	36#	22	930.80	13.20	927	cemented w 350 sks. gems. flot + 150 sks. oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	8	7 1/2	7 3/4
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig		1/4	1/4
Deviation Survey		1/4	
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.	M 10092
No. of Lines	8
Size	1 1/8
Feet Slipped	Nil
Feet Cut Off	Nil
Present Length	5000
Ton Mi. or Trips Since Last Cut	354
Cumulative Ton Mi. or Trips	354
No. of Days From Spud	12
Cumulative Rotating Hrs.	103 1/2

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
23	Stands D.P.	2152.05 Ft.
	Singles D.P.	Ft.
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drilled	502.1 Ft.
	Bit or C.B.	Ft.
	Kelly Down	8.11 Ft.
	Total	2781.09 Ft.
Wt. of String	68,000 Lbs.	
Pipe in Hole	169 Jts.	
Pipe on Racks	147 Jts.	
Total Pipe on Lease	216 Jts.	

BIT RECORD	
Bit No.	8
Size	8 3/4
Mfg.	REED
Type	SCMG
Nozzle No.	3
Nozzle Size	12
Ser. No.	777216
Depth Out	
Depth In	2590
Total Ftg.	191
Total Hr. Run	13 3/4
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	1:00	4:00	7:00
Weight	8.9	9.1	9.1
Visc.-Sec.	37	43	51
W.L.-C.C.		17.4	16.2
FL TR. CK.			
PH	10.5	10.0	10.0
SD. Cont. %	overflow		
Pressure Gradient	underflow 10.1		
	4 gal per min.		

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		2500#	
BENEX		10#	

Driller: Mr. Bruce Gauthier

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2653	2781	128	D			60	45	1100	6	54			S

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	8:00	8						DRILLING

Fuel 3.10

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
23	Stands D.P.	Ft.
0	Singles D.P.	2218.85
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drilled	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	30.23 Ft.
	Total	2865 Ft.
Wt. of String	100,000 Lbs.	
Pipe in Hole	71 Jts.	
Pipe on Racks	145 Jts.	
Total Pipe on Lease	216 Jts.	

BIT RECORD	
Bit No.	8
Size	8 3/4
Mfg.	REED
Type	SCMG
Nozzle No.	3
Nozzle Size	12
Ser. No.	777216
Depth Out	
Depth In	2590
Total Ftg.	275
Total Hr. Run	21 1/4
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker TNT 17
Trucker Bruce 1/4
Trucker Bud Herbert

MUD RECORD			
Time	9:00	12:00	3:00
Weight	9.1	9.1	9.2
Visc.-Sec.	50	48	45
W.L.-C.C.			
FL TR. CK.			
PH	9.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC	50#		
GEL	1000#		
BEN-EX	4#		

Driller: Bernie Sacks

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2781	2865	84	D			60	45	1100	6	54			SA

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	2812	3 1/4							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:15	2 1/4						DRILL
10:15	10:30	1/4						RIG SER CHECK MOTOR SHUT OFF + BOPS
10:30	10:45	1/4						SURVEY
10:45	400	5 1/4						DRILL.

USEING TWO POWER SAWS.

BOB RANGER (CLEAN UP BY RIVER) 12 HRS.

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
24	Stands D.P.	Ft.
2	Singles D.P.	2307.95
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drilled	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	16.23 Ft.
	Total	2945.07 Ft.
Wt of String	100,000 Lbs.	
Pipe in Hole	74 Jts.	
Pipe on Racks	142 Jts.	
Total Pipe on Lease	216 Jts.	

BIT RECORD	
Bit No.	8
Size	8 3/4
Mfg.	REED
Type	SCMG
Nozzle No.	3
Nozzle Size	12
Ser. No.	777216
Depth Out	
Depth In	2590
Total Ftg.	355
Total Hr. Run	29
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD			
Time	5:00	9:00	11:00
Weight	9.2	9.2	9.2
Visc.-Sec.	45	44	43
W.L.-C.C.			
FL TR. CK.			
PH	10.0	10.0	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Mr. Bruce Gauthier

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2865	2945	80	D			60	45	1100	6	54	5	—	S

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	10:30	6 1/2						DRILLING
10:30	10:45	1/4						RIG SERVICE + CHECK BOPS MOTOR SHUT OFF
10:45	12:00	1 1/4						DRILLING

No. 5461

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: Bantl Aquit Rec Pat Lau. Rge R35

Location — Lsd. 61 Sec. 59 Twp. 135 Rge. 22 W. 5 M. Nov. 4 19.70

Weather Condition: O Road Conditions: Nearest Town: Lacombe Water - Source: Lake Miles Hauled: 1/2 Pumped: Camp Distance from Rig: 1 Mile to Stan Reason for Extra L. Plant: Standby

OPERATOR: Bantl Oil Co.

Rig No. 3 Oilwell DWKS 525

Drill Pipe String: No. 2 Size 4½

Tool Joint: 5 3/4 O.D. Type Tbd. F.H.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Lebak

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	STOC	36#	22	930.80	13.20	927	cemented w/ 360sx premium + 1.5% Oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down		16	
Drilling Actual	3 1/2	6 1/2	5 3/4
Reaming	1/4	1/4	1/2
Conditioning Mud & Circulating			
Trips	2	1	1 1/2
Lubricate Rig		1/4	1/4
Deviation Survey	1/4	1/4	
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig	2		
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.	M10092
No. of Lines	8 Size 1 1/8
Feet Slipped	NIL
Feet Cut Off	NIL
Present Length	5000
Ton Mi. or Trips Since Last Cut	354
Cumulative Ton Mi. or Trips	354
No. of Days From Spud	11
Cumulative Rotating Hrs.	80 1/4

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
20	Stands D.P.	Ft.
1	Singles D.P.	1901.73 Ft.
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drlco	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	18.43 Ft.
	Total	2541.00 Ft.

Wt. of String 88,000 Lbs.

Pipe in Hole 61 Jts.

Pipe on Racks 155 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD		
Bit No.	6	7
Size	8 3/4	8 3/4
Mfg.	Smith	Smith
Type	SDGH	SDGH
Nozzle No.	5	3
Nozzle Size	12	12
Ser. No.	DL391	DL345
Depth Out	2512	
Depth In	2385	2512
Total Ftg.	127	29
Total Hr. Run	7 1/4	2 1/2
Cond. of Bit	5-2-1	IN
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	100	400	700
Weight	9.4	9	9+
Visc.-Sec.	40	38	42
W.L.-C.C.		1	12.2
FL TR. CK.		8	
PH	9.0		9.0
SD. Cont.			
Pressure Gradient		11.3 #/gal	9.3 #/gal
	3 1/2 gals/min.		

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		1000#	
BENEX		4#	

Driller: J. McDonald

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2500	2541	41	D			70	40	1100	6	54			(5)

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	2512	3 1/4							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:30	1:00	1						DRILLING
1:00	1:15	1/4						SURVEY
1:15	2:45	1 1/2						TRIP FOR BIT & RUN IN COLLARS.
2:45	4:45	2						CHANGED WASH PIPE & PACKING
4:45	5:15	1/2						RUN IN
5:15	5:30	1/4						BREAK CIRC & CLEAN TO BOTTOM 30'
5:30	8:00	2 1/2						DRILLING
								Fuel 430

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
21	Stands D.P.	1964.21 Ft.
	Singles D.P.	Ft.
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drlco	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	4.95 Ft.
	Total	2590 Ft.

Wt. of String 90,000 Lbs.

Pipe in Hole 63 Jts.

Pipe on Racks 153 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD		
Bit No.	7	
Size	8 3/4	
Mfg.	Smith	
Type	SDGH	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	DL345	
Depth Out	2590	
Depth In	2512	
Total Ftg.	78	
Total Hr. Run	9	
Cond. of Bit	8-2-1	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker TNT 13

Trucker Gravey Tr.

Trucker Bud Herbert

MUD RECORD			
Time	9:00	12:00	3:00
Weight	9.2	9+	T
Visc.-Sec.	45	42	
W.L.-C.C.			R
FL TR. CK.			I
PH	10	9.5	9
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt	Type	Amt.
CAUSTIC	50#		
GEL	1000#		
BEN-EX	4#		
Bolt Pays		Truck Labour for 13 hrs only	

Driller: Bernie Boeck

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2541	2590	49	D			75	400	1100	6"	54			SB

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	2590	1 3/4							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:45	2 3/4						DRILL
10:45	11:00	1/4						RIG SER. CHECK MOTOR SHUT OFF & BOPS
11:00	2:45	3 3/4						DRILL
2:45	3:00	1/4						SURVEY
3:00	4:00	1						TRIP
								using 2 power saws to clean up By River
								BOB RANGER (CLEAN UP BY RIVER 12 HRS.

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
21	Stands D.P.	Ft.
1	Singles D.P.	1995.97
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Drlco	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	36.23 Ft.
	Total	2653.00 Ft.

Wt. of String 90,000 Lbs.

Pipe in Hole 64 Jts.

Pipe on Racks 152 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD		
Bit No.	9	
Size	8 3/4	
Mfg.	Reed	
Type	SCSG	
Nozzle No.	3	
Nozzle Size	12	
Ser. No.	727316	
Depth Out		
Depth In	2590	
Total Ftg.	63	
Total Hr Run	5 3/4	
Cond. of Bit	1-1	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	5:00	8:00	11:00
Weight	A	9.2	9.1
Visc.-Sec.		40	37
W.L.-C.C.	R		
FL TR. CK.	T		
PH	P	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: J. McDonald

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2590	2653	63	D			60	45	1000	6	52			5

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:30	1 1/2						FENESIM ~~FINISH~~. TRIP
5:30	6:00	1/2						BREAK CIRC & CLEAN TO BOTTOM.
6:00	9:00	3						DRILLING
9:00	9:15	1/4						RIG SERVICE
9:15	12:00	2 3/4						DRILLING

No. 5460

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Gen'l Petroleum Rec Rat Pass — Date: R-35 Dec. 3 1970

Location — Lsd. 6 Sec. 29 Twp. 135 Rge. 22 W. 5 M.

Weather Condition | Road Conditions | Nearest Town: Lomond | Water — Source: Lake | Miles Hauled: 1/2 | Pumped | Camp Distance from Rig: 1.5 Reason for Extra L. Plant: Standby

OPERATOR: Gen'l Petroleum

SIGNATURE OF OPERATOR'S REPRESENTATIVE: C. Schaub

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Sulc

Rig No. 3 Delaco DWKS 525 | Drill Pipe String: No. 2, Size 4½ | Tool Joint: Type Thd. F.H. 5 3/4 O.D.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST+C	36#	22	930.80	13.20	927	cemented w/ 360 sks permaboss + 150 sks oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	5 3/4	6	6 1/4
Reaming 2.00	1 1/4		1/4
Conditioning Mud & Circulating			
Trips	13/4	2 1/2	1
Lubricate Rig		1/4	1/2
Deviation Survey	1/4	1/4	
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 Size 1/9

Feet Slipped NIL

Feet Cut Off NIL

Present Length 5000

Ton Mi. or Trips Since Last Cut 256

Cumulative Ton Mi. or Trips 256

No. of Days From Spud 10

Cumulative Rotating Hrs. 64 1/2

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
18	Stands D.P.	1682.05 Ft.
	Singles D.P.	Ft.
	D.C.	
	I.D. O.D.	Ft.
20	D.C. 2 7/8 6 1/4 I.D. O.D.	572.63 Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Bullnose	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	14.11 Ft.
	Total	2317.00 Ft.
	Wt. of String	82,000 Lbs.
	Pipe in Hole	54 Jts.
	Pipe on Racks	162 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD

Bit No.	5
Size	8 3/4
Mfg.	REED
Type	5516
Nozzle No.	3
Nozzle Size	12
Ser. No.	777233
Depth Out	
Depth In	2203
Total Ftg.	114
Total Hr. Run	5 3/4
Cond. of Bit	1N1
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker ____ Trucker ____ Trucker ____

MUD RECORD

Time	7:00	4:00	7:00
Weight	T	9.4	9.4
Visc.-Sec.	R	35	45
W.L.-C.C.			
FL TR. CK.			
PH	P	8.0	10.0
SD. Cont. %			9.3
Pressure Gradient			11.1

4 gals per min

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL		2000#	
CAUSTIC		50#	
BENEX		8#	

Driller: [illegible]

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2203	2317 03	114	D			80	40	800			5	128	S

Deviation Record: Depth 2203 — Dev. 1 3/4° — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	1/4						SURVEY
12:15	2:00	1 3/4						TRIP FOR BIT
2:00	2:15	1/4						BREAK CIRC & CLEAN TO BOTTOM.
2:15	8:00	5 3/4						DRILLING
								fuel 4.50

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
18	Stands D.P.	Ft.
0	Singles D.P.	1744.63 Ft.
20	D.C. 2 7/8 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Bullnose	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	19.53 Ft.
	Total	2385 Ft.
	Wt. of String	85,000 Lbs.
	Pipe in Hole	56 Jts.
	Pipe on Racks	160 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD

Bit No.	5
Size	8 3/4
Mfg.	REED
Type	5516S
Nozzle No.	3
Nozzle Size	12
Ser. No.	777233
Depth Out	2385
Depth In	2203
Total Ftg.	182
Total Hr. Run	11 3/4
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker T.M.T. Trucker Grimes Bx. Trucker Beech Herbert.

MUD RECORD

Time	9:00	12:00	3:00
Weight	9.5	9.5	T
Visc.-Sec.	37	38	
W.L.-C.C.			R
FL TR. CK.			
PH	10.5	10.0	I
SD. Cont. %			P
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	2100#		
BENEX	8#		
CAUSTIC	20#		

Driller: Bernie Sack

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2317	2385	68	D			80	40	1200	6"	58			52

Deviation Record: Depth 2385 — Dev. 2 1/4° — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	1/4						RIG SER CHECK MOTOR SHUT OFFS BOPS.
8:15	2:15	6						DRILL
2:15	2:30	1/4						SURVEY
2:30	4:00	1 1/2						TRIP FOR BIT
								Missing 2 prawn lines
								BOB BANGER (CLEAN UP AT RIVER) 12 hours

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
19	Stands D.P.	Ft.
2	Singles D.P.	183.28 Ft.
20	D.C. 2 7/8 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs Bullnose	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	39.88 Ft.
	Total	2500.00 Ft.
	Wt. of String	86,000 Lbs.
	Pipe in Hole	59 Jts.
	Pipe on Racks	157 Jts.
	Total Pipe on Lease	216 Jts.

BIT RECORD

Bit No.	6
Size	8 3/4
Mfg.	SMITH
Type	SDGHJ
Nozzle No.	3
Nozzle Size	12
Ser. No.	DT391
Depth Out	
Depth In	2385
Total Ftg.	115
Total Hr. Run	6 1/4
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker ____ Trucker ____ Trucker ____

MUD RECORD

Time	5:00	8:00	11:00
Weight	9.5	9.3	9.3
Visc.-Sec.	44	35	38
W.L.-C.C.			
FL TR. CK.			
PH	10.0	9.5	9.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	500#		
BENEX	2#		

Driller: [illegible]

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
2385	2500	115	D			70	40	1100	6	54			51

Deviation Record

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1						RUN IN WITH BIT # 6
5:00	5:15	1/4						BREAK CIRC & CLEAN TO BOTTOM — 10' FILL
5:15	9:15	4						DRILL
9:15	9:45	1/2						RIG SERVICE SET UP CATHEAD
								CHECK BOPS & MOTOR SHUT OFFS
9:45	12:00	2 1/4						DRILLING

No. 5459

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Bluff Point Pinekat Pool — Date: Nov 25 19 70

Location — Lsd. 22 Sec. 22 Twp. 125 Rge. 22 W. 5 M.

Weather Condition: Windy Road Conditions: Icing — Nearest Town: Drumheller — Water - Source: Lake — Miles Hauled: 5 — Pumped — Camp Distance from Rig: 1 Mile — Reason for Extra L. Plant: Tandem

OPERATOR: Can. Q.O. & G. Co.

Rig No. 3 Quinton DWKS 525 — Drill Pipe String: No. 4 Size 3½ — Tool Joint: 5 3/4 O.D. Type Thd. F.H.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Lehak

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Quintan	214P	14
2.	Quintan	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9⅝	STC	36	22	920.80	13.20	927	Cemented w/ 350 sk.
							pump plug @ 150 sk.
							w/ 100 sk.

MORNING TOUR

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	3¾	6	7¾
Reaming			
Conditioning Mud & Circulating			
Trips	3/4	7½	
Lubricate Rig		¼	1/4
Deviation Survey	1/4		
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig	2¼		
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			1/4
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D Testing			
E. Additional			
Totals	X	X	X

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M10092

No. of Lines 8 Size 1 1/8

Feet Slipped W.L.

Feet Cut Off W.L.

Present Length 3000

Ton Mi. or Trips Since Last Cut 153

Cumulative Ton-Mi. or Trips 153

No. of Days From Spud 9

Cumulative Rotating Hrs. 46 1/2

DRILLING ASSEMBLY AT END OF TOUR

NO.		
13	Stands D.P.	Ft.
2	Singles D.P.	1277.2 Ft.
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	39.7 Ft.
	Total	1938.63 Ft.

Wt. of String 82,000 Lbs.

Pipe in Hole 46 Jts.

Pipe on Racks 180 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	3
Size	8 3/4
Mfg.	Reed
Type	SS16
Nozzle No.	3
Nozzle Size	12
Ser. No.	783491
Depth Out	1938
Depth In	153
Total Ftg.	1785
Total Hr. Run	12 1/4
Cond. of Bit	5-2-1
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	1:00	4:00	7:00
Weight		9.4	9.4
Visc.-Sec.		42	46
W.L.-C.C.		11.0	11.1
FL TR. CK.		2.8	2.4
PH		10.5	10.5
SD. Cont. %		Trace	Trace
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: J. McDuffee

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
1813	1938	125	D			46	40	700	6"	62			C

Deviation Record: Depth 1938 — Dev. 1 1/2° — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	2:15	3½						REPAIR CIRCULATING HOSE IF FOUND
2:15	6:00	3 3/4						TO REPLACE WITH NEW
7:00	7:15	¼						DRILL
7:15	8:00	¾						SURVEY
								TRIP TO PIT

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.		
16	Stands D.P.	Ft.
2	Singles D.P.	1558.20 Ft.
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	23.96 Ft.
	Total	2203.00 Ft.

Wt. of String 86,000 Lbs.

Pipe in Hole 50 Jts.

Pipe on Racks 166 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	4
Size	9 3/4
Mfg.	Reed
Type	SS16
Nozzle No.	3
Nozzle Size	12
Ser. No.	783491
Depth Out	2203
Depth In	1938
Total Ftg.	265
Total Hr. Run	13 3/4
Cond. of Bit	7-2-1
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	9:00	12:00	3:00
Weight	1	10.1	9.6
Visc.-Sec.		57	43
W.L.-C.C.	R		
FL TR. CK.			
PH	A	10.5	10.5
SD. Cont. %	P		
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Harris Sack

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
1938	2094	156	D			75	3/0	1200	6"	62			SB

Deviation Record: Depth — Dev. — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼						Rig Svr. Check Motor Shut Off & Rops
8:15	9:45	1½						Finish Trip
9:45	10:00	¼						Break Circ
10:00	4:00	6						Drill
								R. Ranger - Repair Rod on Camp from Drilling

DRILLING ASSEMBLY AT END OF TOUR

NO.		
16	Stands D.P.	Ft.
2	Singles D.P.	1558.20 Ft.
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	23.96 Ft.
	Total	2203.00 Ft.

Wt. of String 86,000 Lbs.

Pipe in Hole 50 Jts.

Pipe on Racks 166 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	4
Size	9 3/4
Mfg.	Reed
Type	SS16
Nozzle No.	3
Nozzle Size	12
Ser. No.	783491
Depth Out	2203
Depth In	1938
Total Ftg.	265
Total Hr. Run	13 3/4
Cond. of Bit	7-2-1
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	5:00	8:00	11:00
Weight	9.6	9.6	9.6
Visc.-Sec.	40	40	38
W.L.-C.C.			
FL TR. CK.			
PH	10.0	10.0	10.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL			

1" STREAM OF WATER

Driller: J. McDuffee

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'l-P Com'd-C
2094	2203	109	D			80	40	1200	6"	62			S

Deviation Record: Depth — Dev. — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼						Rig Svr.
4:15	12:00	7 3/4						Drill.

No. 5458

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Banff Imperial Bear Pt. Pass. Date: K-35

Location — Lsd. 12 Sec. 29 Twp. 25 Rge. 22 W. 5 M. Dec 1, 19 70

Weather Condition: +35 Road Conditions: Nearest Town: Invermere

Water - Source: Creek Miles Hauled: 2 Pumped: Camp Distance from Rig: 1 Reason for Extra L. Plant: Standby

OPERATOR: Banff Oil Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Schaub

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

Rig No. 3 Idecc DWKS 525 | Drill Pipe String: No. 2, Size 4½ | Tool Joint: 5¾ O.D., Type Thd. F.H.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	STac	36	22	930.80	13.20	927	cemented w/ 350 sks.
							pumped ahead of 150 sks.
							oilwell

TIME DISTRIBUTION — HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7¾	3¾	6¼
Reaming			
Conditioning Mud & Circulating			
Trips		2½	
Lubricate Rig		¼	
Deviation Survey	¼	¼	
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig		1	1¾
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other Ream	1	¼	
Fishing			
COMPLETION WORK: A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.	M 10092
No. of Lines	8
Size	1 1/8
Feet Slipped	—
Feet Cut Off	—
Present Length	2000
Ton Mi. or Trips Since Last Cut	113
Cumulative Ton Mi. or Trips	112
No. of Days From Spud	8
Cumulative Rotating Hrs.	29

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
9	Stands D.P.	840.72 Ft.	Bit No.	2
	Singles D.P.	Ft.	Size	8 3/4
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.	Mfg.	REED
	D.C. I.D. O.D.	Ft.	Type	S516
	Stb. Body O.D.	Ft.	Nozzle No.	1 2
	Stb. Body O.D.	Ft.	Nozzle Size	10 11
	Rmr. Body O.D.	Ft.	Ser. No.	686387
	Subs DRILL O.D.	50.21 Ft.	Depth Out	
	Bit or C.B.	Ft.	Depth In	1030
	Kelly Down	18.44 Ft.	Total Ftg.	450
	Total	1480.00 Ft.	Total Hr. Run	14¼
Wt. of String	75,000 Lbs.		Cond. of Bit	1N
Pipe in Hole	77 Jts.		Reamer No.	
Pipe on Racks	189 Jts.		Reamer Type	
Total Pipe on Lease	216 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
			Trucker	
			Trucker	
			Trucker	

MUD RECORD

Time	1:00	4:00	7:00
Weight	9.1	9.2	9.5
Visc.-Sec.	44	45	60
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: A. Field

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
1253	1480	227	D			90	40	1700	6	54			S

Deviation Record: Depth 1283, Dev. 1°, Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 30	½						DRILLING
12 30	12 45	¼						SURVEY
12 45	8 00	7¼						DRILLING

125' heavy 3 wire #17, light cord to Banff's mud logging trailer

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		
10	Stands D.P.	Ft.	Bit No.	2	3
5	Singles D.P.	965.59 Ft.	Size	8 3/4	8 3/4
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.	Mfg.	REED	REED
	D.C. I.D. O.D.	Ft.	Type	S516	S516
	Stb. Body O.D.	Ft.	Nozzle No.	2 1/	3/
	Stb. Body O.D.	Ft.	Nozzle Size	11 10	11
	Rmr. Body O.D.	Ft.	Ser. No.	626387	777230
	Subs DRILL O.D.	50.21 Ft.	Depth Out	1531	
	Bit or C.B.	Ft.	Depth In	1030	1531
	Kelly Down	8.50 Ft.	Total Ftg.	501	64
	Total	1595 Ft.	Total Hr. Run	15¾	2¼
Wt. of String	75,000 Lbs.		Cond. of Bit		
Pipe in Hole	31 Jts.		Reamer No.		
Pipe on Racks	185 Jts.		Reamer Type		
Total Pipe on Lease	216 Jts.		Water Charges	Reg. Hrs.	O.T. Hrs.
			Trucker	TNT	14
			Trucker	Bruce	14
			Trucker	Bud Herbert	

MUD RECORD

Time	9:00	12:00	3:00
Weight	9.2	A	9.5
Visc.-Sec.	55	R	75
W.L.-C.C.		R	
FL TR. CK.		Y	
PH	10.5	R	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

1" STREAM OF WATER

Driller: Bernie Reed

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
1480	1596	116	D			85	40	1100	6	54			S

Deviation Record: Depth 1532, Dev. 1¼°, Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼						RIG SER
8:15	9:45	1½						DRILL
9:45	10:00	¼						SURVEY
10:00	12:30	2½						TRIP FOR BIT
12:30	12:45	¼						BRAKE CIRC & CLEAN TO BOTTOM 5' FILL
12:45	2:00	1¼						DRILL
2:30	3:00	1¼						REPLACE ORING ON TOP OF SUBSUB
3:00	4:00	1						DRILL

30 RANGER TIE DOWN REPAIRS ON CAMP
WIND 20-50 MILES PER HR & HOWL FROM RIVER GEL & OTHER SOURCES.

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
12	Stands D.P.	Ft.	Bit No.	2
2	Singles D.P.	118.4.73 Ft.	Size	8 3/4
20	D.C. 2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.	Mfg.	REED
	D.C. I.D. O.D.	Ft.	Type	S516
	Stb. Body O.D.	Ft.	Nozzle No.	3/
	Stb. Body O.D.	Ft.	Nozzle Size	11
	Rmr. Body O.D.	Ft.	Ser. No.	777230
	Subs DRILL O.D.	50.21 Ft.	Depth Out	
	Bit or C.B.	Ft.	Depth In	1531
	Kelly Down	7.93 Ft.	Total Ftg.	282
	Total	1813.00 Ft.	Total Hr. Run	8 1/2
Wt. of String	78,000 Lbs.		Cond. of Bit	1/1
Pipe in Hole	28 Jts.		Reamer No.	
Pipe on Racks	178 Jts.		Reamer Type	
Total Pipe on Lease	216 Jts.		Water Charges	Reg. Hrs. O.T. Hrs.
			Trucker	
			Trucker	
			Trucker	

MUD RECORD

Time	5:00	8:00	11:00
Weight	9.2		
Visc.-Sec.	35	40	
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: A. McCarthur

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
1596	1813	217	D			40	3590	1100	6	51			S

Deviation Record: Depth —, Dev. —, Direction —

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	10:15	6 1/4						DRILLING
10:15	12:00	1 3/4						REPAIR O/L STAND PIPE (UNION WASHED)

No. 5457

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: Banff Apiat Creek Pat Well No. A-35

Location — Lsd. 67 Sec. 32 Twp. 35 Rge. 22 W. 5 M.

Date: Oct 31 1970

Weather Condition | Road Conditions | Nearest Town: Edmonton | Water - Source: Well | Miles Hauled: 2 | Pumped: | Camp: Distance from Rig: 15 Yards | Reason for Extra L. Plant: Remoteness

OPERATOR: Banff Oil Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E Schaeb

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A Field

Rig No. 2 | Address: DWKS 525 | Drill Pipe String: No. 2, Size 4½ | Tool Joint: 5¾ O.D. | Type Thd.: F.H.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
9 5/8	ST+C	36	22	923.80	13.20	927	cemented w/ 300 sks. pozmix, gyp + 150 sks. oilwell

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve.
Rig Up & Tear Down			
Drilling Actual	4½	¼	6½
Reaming Drill	2¾		1¼
Conditioning Mud & Circulating			
Trips		3¾	
Lubricate Rig	¼	¼	¼
Deviation Survey		¼	
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other	1½	3½	
Fishing			

COMPLETION WORK: A. Perforating; B. Tubing Trips; C. Swabbing; D. Testing; E. Additional

Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. M 10092

No. of Lines 8 Size 1 1/8

Feet Slipped

Feet Cut Off 0

Present Length 5000

Ton Mi. or Trips Since Last Cut 17

Cumulative Ton Mi. or Trips 17

No. of Days From Spud 7

Cumulative Rotating Hrs. 11 1/4

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
7	Stands D.P.	653.54 Ft.
	Singles D.P.	Ft.
	D.C.	
	I.D. O.D.	Ft.
12	D.C. 2 7/8 6 1/4	337.45 Ft.
	I.D. O.D.	
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	29.01 Ft.
	Total	1020.00 Ft.

Wt. of String 50,000 Lbs.

Pipe in Hole 21 Jts.

Pipe on Racks 195 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD	
Bit No.	1
Size	8 3/4
Mfg.	SMITH
Type	SDGH
Nozzle No.	1 2
Nozzle Size	10 11
Ser. No.	CM819
Depth Out	
Depth In	927
Total Ftg.	93
Total Hr. Run	4½
Cond. of Bit	1/1
Reamer No.	
Reamer Type	

Water Charges: Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD	
Time	7:00
Weight	8.1
Visc.-Sec.	38
W.L.-C.C.	
FL TR. CK.	
PH	10.5
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: L. Mc. McCutcheon

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
927	1020	93	D			150	15	800	6	60	5		(5)

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼						Rig Service
12:15	3:00	2¾						Drill out Float, Cement, Shoe & 10'
3:00	3:30	½						Clean Tanks.
3:30	8:00	4½						Drilling
								Fuel 5.60

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
3	Stands D.P.	281.04 Ft.
1	Singles D.P.	Ft.
	D.C.	
20	2 7/8 x 6 1/4 I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	25.12 Ft.
	Total	927 Ft.

Wt. of String 70,000 Lbs.

Pipe in Hole 9 Jts.

Pipe on Racks 207 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD		
Bit No.	1	2
Size	8 3/4	8 3/4
Mfg.	SMITH	REED
Type	SDGH	SS16
Nozzle No.	2/ 2/	1/ 2/
Nozzle Size	10 11	10 11
Ser. No.	CM819	6263-87
Depth Out	1030	
Depth In	927	1030
Total Ftg.	103	
Total Hr. Run	4¾	
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges: Reg. Hrs. O.T. Hrs.

Trucker INT. 7

Trucker Downer 12

Trucker Red Deer

MUD RECORD	
Time	8:00
Weight	8.7
Visc.-Sec.	38
W.L.-C.C.	
FL TR. CK.	
PH	10.5
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Bernie Laab

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
1020	1030	10	D			150	15	800	6"	60			5

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	1030	7 1/3							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼						Ream
8:15	8:30	¼						Rig Ser ✓ Motor Shut Off & Bops.
8:30	8:45	¼						Survey.
8:45	11:30	2¾						Trip Out (Tight Hole)
11:30	3:00	3½						Lay Down Collars (Bottom Hole) Pick & Make Up Stiff Hookup & Pick Up Nine Collars
3:00	4:00	1						Run In & Lay 12 Singles Down.
								Bob Ranger 12 Hours. (Help Pick Up Collars & Lay Down Pipe)

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
6	Stands D.P.	Ft.
2	Singles D.P.	622.34 Ft.
	D.C. 2 7/8 6 1/4	
20	I.D. O.D.	570.63 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs 12 1/4 LDD	50.21 Ft.
	Bit or C.B.	Ft.
	Kelly Down	9.82 Ft.
	Total	1253.00 Ft.

Wt. of String 72,000 Lbs.

Pipe in Hole 20 Jts.

Pipe on Racks 196 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD	
Bit No.	2
Size	8 3/4
Mfg.	REED
Type	5516
Nozzle No.	1 2
Nozzle Size	10 11
Ser. No.	1686387
Depth Out	
Depth In	1030
Total Ftg.	223
Total Hr. Run	6 1/2
Cond. of Bit	IN
Reamer No.	
Reamer Type	

Water Charges: Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	5:00	8:00	11:00
Weight	8.7	8.9	9.0
Visc.-Sec.	39	42	44
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: L. Mc. McCutcheon

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
1030	1253	223	D			90	35	1200	6	54			(5)

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼						Rig Ser
4:15	5:30	1¼						Ream
5:30	12:00	6½						Drlg.

No. 5456

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: Bonnie Point Area Rat Fau. R-35

Location — Lsd. 67 Sec. 29 Twp. 135 Rge. 22 W. 5 M.

Date: Oct 30 1970

Weather Condition | Road Conditions | Nearest Town: Inuvik | Water - Source: Creek | Miles Hauled: 2 | Pumped | Camp Distance from Rig: 150 yds. | Reason for Extra L. Plant: Standby

OPERATOR: Gulf Oil Co.

Rig No. 3 | DWKS: Ideco 525

Drill Pipe String: No. 2 | Size 4½

Tool Joint: 5¾ O.D. | Type Thd. F.H.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. McLarty

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Ewald

PUMPS No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER	Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
	9 5/8	STFC MAYN.	36#	22	930.30	13.20	927	Cemented w/ 360 sk permafrost + 150 sk oilwell

TIME DISTRIBUTION—HOURS

	Morn.	Day	Eve.
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips			1
Lubricate Rig			
Deviation Survey			
Test B.O.P.			1½
Cut Off Drilling Line			
Repair Rig			1
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement	8		
Drill Stem Test			
Other		8	4½
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	5

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.

No. of Lines | Size

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud

Cumulative Rotating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	Stands D.P.		Ft.
	Singles D.P.		Ft.
	D.C. I.D.	O.D.	Ft.
	D.C. I.D.	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Rmr. Body	O.D.	Ft.
	Subs	O.D.	Ft.
	Bit or C.B.		Ft.
	Kelly Down		Ft.
	Total		Ft.
Wt. of String			Lbs.
Pipe in Hole			Jts.
Pipe on Racks			Jts.
Total Pipe on Lease	216		Jts.

BIT RECORD: Bit No. | Size | Mfg. | Type | Nozzle No. | Nozzle Size | Ser. No. | Depth Out | Depth In | Total Ftg. | Total Hr. Run | Cond. of Bit | Reamer No. | Reamer Type

Water Charges: Reg. Hrs. | O.T. Hrs. | Trucker | Trucker | Trucker

MUD RECORD: Time | Weight | Visc.-Sec. | W.L.-C.C. | FL TR. CK. | PH | SD. Cont. % | Pressure Gradient

Mud & Chemicals Added

Type	Amt.	Type	Amt.
GEL	4100 #		
CAUSTIC	50 #		

Driller: Louis Trudeau

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	8:00	8						W.O.C.
								Footage 3.60

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
10	Stands D.P.	361.08	Ft.
	Singles D.P.		Ft.
12	D.C. 2⅞ x 6¼ I.D.	O.D. 337.45	Ft.
	D.C. I.D.	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Rmr. Body	O.D.	Ft.
	Subs	O.D.	Ft.
	Bit or C.B.		Ft.
	Kelly Down	28.47	Ft.
	Total		Ft.
Wt. of String	46,000		Lbs.
Pipe in Hole	18		Jts.
Pipe on Racks	198		Jts.
Total Pipe on Lease	216		Jts.

BIT RECORD: Bit No. | Size | Mfg. | Type | Nozzle No. | Nozzle Size | Ser. No. | Depth Out | Depth In | Total Ftg. | Total Hr. Run | Cond. of Bit | Reamer No. | Reamer Type

Water Charges: Reg. Hrs. | O.T. Hrs. | Trucker Ent 12 | Trucker Gulf 15 | Trucker Bird Parker

MUD RECORD: Time | Weight | Visc.-Sec. | W.L.-C.C. | FL TR. CK. | PH | SD. Cont. % | Pressure Gradient

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Louis Trudeau

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2:00	12:00	4						Cut Off Casing & Weld On Bowl & Pressure Test.
12:00								Head Up Split Bops & Put All New Rings
	4:00	4						In. & Pup Flang on Bottom

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	Stands D.P.		Ft.
	Singles D.P.		Ft.
	D.C. I.D.	O.D.	Ft.
	D.C. I.D.	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Rmr. Body	O.D.	Ft.
	Subs	O.D.	Ft.
	Bit or C.B.		Ft.
	Kelly Down		Ft.
	Total		Ft.
Wt. of String			Lbs.
Pipe in Hole			Jts.
Pipe on Racks			Jts.
Total Pipe on Lease			Jts.

BIT RECORD: Bit No. 1 | Size 8¾ | Mfg. SMITH | Type 506H | Nozzle No. 1 2 | Nozzle Size 10 11 | Ser. No. CM819 | Depth Out | Depth In 927 | Total Ftg. | Total Hr. Run | Cond. of Bit | Reamer No. | Reamer Type

Water Charges: Reg. Hrs. | O.T. Hrs. | Trucker | Trucker | Trucker

MUD RECORD: Time | Weight | Visc.-Sec. | W.L.-C.C. | FL TR. CK. | PH | SD. Cont. % | Pressure Gradient

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Louis Trudeau

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	7:30	3½						Head Up Put New Rubber On Blind Rams
7:30	8:00	½						Pressertest Blind Rams to 1000# OK.
8:00	9:00	1						Work on Hydril Line Conn.
9:00	10:00	1						Run In
10	10:30	½						Press Test Pipe Rams & Manifold. At 1150 Held OK.
10:30	11:00	½						Press Test Hydril & Kelly Cock. At 1050 Held OK.
11:00	11:15	¼						Check Motor Shut Offs.
11:15	12:00	¾						Stream Out Flareline Manifold.

No. 5416

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Banff Aquist Bow Pat Pool K-35

Location — Ld. 61 Sec. 29 Twp. 135 Rge. 22 W. 5 M.

Date: Oct 29 to 30

Weather Condition: O Road Conditions: Nearest Town: Drumheller Water - Source: Creek Miles Hauled: 2 Pumped: Camp Distance from Rig: 15 yards Reason for Extra L. Plant: Standby

OPERATOR: Banff Oil Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Lebsack

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Gould

Rig No. 3 Oilwell DWKS 525

Drill Pipe String: No. 2, Size 4½

Tool Joint: 5¾ O.D. Type Tbd. F.H.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming	3¼		
Conditioning Mud & Circulating	1	½	
Trips	1¼		
Lubricate Rig	¼	¼	
Deviation Survey	¼		
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing	2	3¾	
Waiting on Cement		4	8
Drill Stem Test			
Other			
Fishing			

COMPLETION WORK

A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.

No. of Lines Size

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud

Cumulative Rotating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
6	Stands D.P.	561.08	Ft.
	Singles D.P.		Ft.
12	D.C. 2⅞ 2¼ I.D. O.D.	337.45	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
1	Subs O.D.	3.51	Ft.
	Bit or C.B.		Ft.
	Kelly Down	24.96	Ft.
	Total	927.00	Ft.
Wt. of String	46,000		Lbs.
Pipe in Hole	18		Jts.
Pipe on Racks	198		Jts.
Total Pipe on Lease	216		Jts.

BIT RECORD

Bit No.	8
Size	12¼
Mfg.	Reed
Type	HT3-R
Nozzle No.	
Nozzle Size	
Ser. No.	684254
Depth Out	927
Depth In	850
Total Ftg.	77
Total Hr. Run	3½
Cond. of Bit	2-1-1
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	1:00	4:00	7:00
Weight	11.0	11.0	
Visc.-Sec.	61	62	
W.L.-C.C.			
FL TR. CK.			
PH	9.0	9.0	
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Jack McCarthy

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
850	927	67	R.			180	20	150	6	67			S

Deviation Record: Depth 927 — Dev. 1° — Direction

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼						Rig Service
12:15	3:30	3¼						Reaming 8¾ to 12¼
3:30	3:45	¼						Circ prior to Dummy Trip
3:45	4:15	½						6 stand Dummy Trip.
4:15	5:00	¾						Circ prior to Run 9⅝ casing
5:00	5:15	¼						~~Hole~~ Survey
5:15	6:00	¾						~~Rig to Run Casing~~ @ Hoist
								To Run casing
6:00	8:00	2						Rig to Run Casing & Run Casing

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
6	Stands D.P.	561.08	Ft.
	Singles D.P.		Ft.
12	D.C. 2⅞ 2¼ I.D. O.D.	332.45	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs O.D.		Ft.
	Bit or C.B.		Ft.
	Kelly Down	33.47	Ft.
	Total	927	Ft.
Wt. of String	46,000		Lbs.
Pipe in Hole	18		Jts.
Pipe on Racks	198		Jts.
Total Pipe on Lease	216		Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker: T.W.T. 16 hrs

Trucker: Driver 16 hrs

Trucker: Bud Herbert

MUD RECORD

Time			
Weight			
Visc.-Sec.			
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Bernie Sacal

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record: Depth — Dev. — Direction

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼						Rig Ser.
8:15	10:00	1¾						Run Casing
10:00	10:30	½						Circ & Working Casing
10:30	12:00	1½						Run Cement & Pump Plug Down
12:00	4:00	4						W.O.C.

I make 12 hours Run Casing & Cement

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	Stands D.P.		Ft.
	Singles D.P.		Ft.
	D.C. I.D. O.D.		Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs O.D.		Ft.
	Bit or C.B.		Ft.
	Kelly Down		Ft.
	Total		Ft.
Wt. of String			Lbs.
Pipe in Hole			Jts.
Pipe on Racks			Jts.
Total Pipe on Lease			Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time			
Weight			
Visc.-Sec.			
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Jack McCarthy

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record: Depth — Dev. — Direction

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	12:00	8						W.O.C.

No. 5454

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: Banff Agwt Area Rat Pass K-35

Date: Oct. 28 19 70

Location — Lsd. 6 Sec. 29 Twp. 13S Rge. 22 W. 5 M.

Weather Condition | Road Conditions | Nearest Town: Invermere | Water - Source: Creek, Miles Hauled: 2, Pumped | Camp Distance from Rig: 1 Swings: Standing | Reason for Extra L. Plant

OPERATOR: Banff Oil Co.

Rig No. 3 Ideco DWKS 525 | Drill Pipe String: No. 2, Size 4½ | Tool Joint: Type Thd. F.H., 5¾ O.D.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Leland

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Field

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING / TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	3¼	[illegible]	
Reaming	1½	6¼	6¼
Conditioning Mud & Circulating			
Trips	1¼	1½	1½
Lubricate Rig	¼	¼	¼
Deviation Survey	¼		
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other Rig Service	1½		
Fishing			

COMPLETION WORK: A. Perforating; B. Tubing Trips; C. Swabbing; D. Testing; E. Additional

Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.

No. of Lines — Size

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud

Cumulative Rotating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
3	Stands D.P.	Ft.
1	Singles D.P.	312.30 Ft.
	D.C. I.D. O.D.	Ft.
12	D.C. 2 7/8 6¼ I.D. O.D.	337.45 Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
1	Rmr. Body O.D.	4.00 Ft.
1	Subs O.D.	3.51 Ft.
	Bit or C.B.	Ft.
	Kelly Down	22.74 Ft.
	Total	680.00 Ft.

Wt. of String 46,000 Lbs.

Pipe in Hole 10 Jts.

Pipe on Racks 206 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD		
Bit No.	6	7
Size	8 3/4	12 ¼
Mfg.	HW.	SMITH
Type	X16	
Nozzle No.	—	
Nozzle Size	—	
Ser. No.	22369	9007
Depth Out	927	
Depth In	877	658
Total Ftg.	50	22
Total Hr. Run	5¼	1½
Cond. of Bit	3-1-1	
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	1:00	4:00	7:00
Weight	11.0	T.	11.0
Visc.-Sec.	43	R	45
W.L.-C.C.			
FL TR. CK.			
PH	9.5	P	9.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: [illegible]

FOOTAGE From	To	Fage.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
895	927	32	D			180	10	150	6	67			(S)
658	680	22	R			100	20						

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	927	2°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼						Rig Service
12:15	3:30	3¼						Drilling
3:30	3:45	¼						Survey
3:45	5:00	1¼						Trip Out For Reamer
5:00	6:30	1½						Pick up Reamer, Lay down 9 Singles
6:30	8:00	1½						Clean to Top of Rat Hole = 180' Fill
								Reaming 12¼

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
4	Stands D.P.	1 Ft.
5	Singles D.P.	405.97 Ft.
	D.C. I.D. O.D.	Ft.
12	D.C. 2 7/8 6¼ I.D. O.D.	357.45 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
1	Rmr. Body O.D.	4.00 Ft.
1	Subs O.D.	3.51 Ft.
	Bit or C.B.	Ft.
	Kelly Down	29.07 Ft.
	Total	780 Ft.

Wt. of String 46,000 Lbs.

Pipe in Hole 9 Jts.

Pipe on Racks 207 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD		
Bit No.	7-R	
Size	12¼	
Mfg.	Smith	
Type	Reamer	
Nozzle No.		
Nozzle Size		
Ser. No.	9007	
Depth Out		
Depth In	658	
Total Ftg.	122	
Total Hr. Run	7¾	
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker F.N.T. 6

Trucker Downes 12

Trucker Bud Herbert

MUD RECORD			
Time	9:00	12:00	3:00
Weight	11.1	11.3	11.3
Visc.-Sec.	53	56	52
W.L.-C.C.			
FL TR. CK.			
PH	9.5	9.8	9.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Ronnie Lacel

FOOTAGE From	To	Fage.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
680	780	100	D			80	20	150	6"	67			SB.

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼						Rig Service
8:15	1:00	4¾						Ream To 12¼
1:00	2:30	1½						Trip To Check Reamer (OK)
2:30	4:00	1½						Ream 8¾ To 12¼
								Waiting Power Saw

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
5	Stands D.P.	Ft.
1	Singles D.P.	499.69 Ft.
	D.C. I.D. O.D.	Ft.
12	D.C. 2 7/8 x 6¼ I.D. O.D.	337.45 Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
1	Rmr. Body O.D.	Ft.
1	Subs O.D.	3.51 Ft.
	Bit or C.B.	Ft.
	Kelly Down	19.34 Ft.
	Total	850.00 Ft.

Wt. of String 46,000 Lbs.

Pipe in Hole 16 Jts.

Pipe on Racks 200 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD		
Bit No.	7-R	8
Size	12¼	12¼
Mfg.	Smith	Reed
Type	Reamer	YT3-R
Nozzle No.		
Nozzle Size		
Ser. No.	9007	684254
Depth Out	850	
Depth In	658	850
Total Ftg.	192	10
Total Hr. Run	13¾	1¼
Cond. of Bit		
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	5:00	8:00	11:00
Weight	11.5	11.5	T
Visc.-Sec.	55	57	R
W.L.-C.C.			
FL TR. CK.			
PH	9.0	9.0	P
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: [illegible]

FOOTAGE From	To	Fage.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
780	850	80	R			80/min	20	150	6"	67			(S)

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼						Rig Service
4:15	10:15	6						Ream (8¾ To 12¼)
10:15	11:45	1½						TRIP FOR BIT
11:45	12:00	¼						DRILLING 12¼ (REAM)

No. 5453

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well No. Banff Imperial Am. Pat Rod #35

Location — Lsd. 6 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Date Oct 27 19 71

Weather Condition -22 Road Conditions

Nearest Town Provost

Water - Source Rock. Miles Hauled 2 Pumped

Camp Distance from Rig 150 yds. Reason for Extra L. Plant Standby.

OPERATOR: Banff Oil Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Schaub

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Lisinski

Rig No. 3 — 53 DWKS

Drill Pipe String No.	Size
2	4½

Tool Joint: Type Thd. F.H. O.D. 5 3/4

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214P	14
2.	Oilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	1 1/2	6	6
Reaming	4 3/4		
Conditioning Mud & Circulating			
Trips	1 1/4	1	1 1/4
Lubricate Rig	1/4	3/4	1/4
Deviation Survey	1/4	3/4	1/2
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	5	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.

No. of Lines Size

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud

Cumulative Rotating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
3	Stands D.P.		Ft.
1	Singles D.P.	312.30	Ft.
	D.C. I.D. O.D.		Ft.
12	D.C. 2 7/8 6 1/8 I.D. O.D.	332.45	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs O.D.		Ft.
	Bit or C.B.		Ft.
	Kelly Down	39.25	Ft.
	Total	689.00	Ft.
Wt. of String		45,700	Lbs.
Pipe in Hole		10	Jts.
Pipe on Racks		206	Jts.
Total Pipe on Lease		216	Jts.

BIT RECORD		
Bit No.	3	4
Size	12 1/4	8 3/4
Mfg.	Smith	Smith
Type		5D64
Nozzle No.		
Nozzle Size		
Ser. No.	9007	DL348
Depth Out	658	
Depth In	505	658
Total Ftg.	153	31
Total Hr. Run	8 1/4	1 1/2
Cond. of Bit	1-1-1	IN
Reamer No.		
Reamer Type	3 cutter	

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	1:00	4:00	7:00
Weight	10.8	10.8	10.8
Visc.-Sec.	42	43	45
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	12.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: L. McCutcheon

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
0	658	8½	R			120	20	200	6	70			(S)
658	689	31	D.			90	10	200	6	70			

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	658	2°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	1/4						Rig Service
12:15	5:00	4 3/4						Reaming pilot Hole (Rough)
5:00	5:15	1/4						Survey
5:15	6:30	1 1/4						Trip for pilot Bit = 8 3/4
6:30	8:00	1 1/2						Drilling

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
5	Stands D.P.		Ft.
2	Singles D.P.	529.81	Ft.
12	D.C. 2 7/8 6 1/4 I.D. O.D.	337.45	Ft.
	D.C. I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs O.D.		Ft.
	Bit or C.B.		Ft.
	Kelly Down	27.74	Ft.
	Total	895.00	Ft.
Wt. of String		45,200	Lbs.
Pipe in Hole		17	Jts.
Pipe on Racks		199	Jts.
Total Pipe on Lease		216	Jts.

BIT RECORD		
Bit No.	5	6
Size	8 3/4	8 3/4
Mfg.	HW	HW
Type	X16	X16
Nozzle No.	-	—
Nozzle Size	-	—
Ser. No.	23714	22269
Depth Out	877	
Depth In	752	877
Total Ftg.	125	18
Total Hr. Run	5 1/4	2
Cond. of Bit	5-1-1	IN
Reamer No.		
Reamer Type		

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	6:00	9:00	12:00
Weight	11	11	11
Visc.-Sec.	39	46	46
W.L.-C.C.			
FL TR. CK.			
PH	9.5	8.5	8.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
Caustic	50#		
½" Steelbm Water			

Driller: B. Bennie Rud

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
658	800	111	D			180	10	150	6	65			(S)

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	689	1°		721	1½°		752	1½°	

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	1/4						Rig Ser.
8:15	8:30	1/4						Survey
8:30	11:00	2 1/2						Drill
11:00	11:15	1/4						Survey
11:15	1:30	2 1/4						Drill
1:30	1:45	1/4						Survey
1:45	2:45	1						Trip for Bit
2:45	4:00	1 1/4						Drill

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
800	895	95	D			180	10	150	6	67			(S)

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	814	¼°		877	1½°				

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	1/4						Rig Ser.
4:15	4:30	1/4						Survey
4:30	8:30	4						Drill
8:30	8:45	1/4						Survey
8:45	10:30	1 1/4						Trip for Bit & Measured out
10:30	12:30	2						Drilling No. change

No. 5452

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well No. Banff Aquist Area Pat Pass K35 — Date

Location — Lsd. 6 Sec. 59 Twp. 35 Rge. 22 W. 5 M. — Oct 26 1970 — Weather Condition 25- — Road Conditions — Nearest Town Innisfail — Water - Source Creek, Miles Hauled 2, Pumped — Camp Distance from Rig 150 yds, Reason for Extra L. Plant Standby.

OPERATOR: Banff Oil Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Sekulsky

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A Swift

Rig No. 3 — 525 DWKS — Oilwell

Drill Pipe String: No. 2, Size 4½

Tool Joint: Type Thd. F.H., 5¾ O.D.

PUMPS No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214 P	14
2.	Oilwell	214 P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	5¾	6½	11½
Reaming			3½
Conditioning Mud & Circulating			
Trips	1¼	½	2½
Lubricate Rig	¼	¼	¼
Deviation Survey	¾	¾	¼
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8	8	8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.

No. of Lines — Size

Feet Slipped

Feet Cut Off

Present Length

Run Mi. or Trips Since Last Cut

Cumulative Run Mi. or Trips

No. of Days From Spud

Cumulative Operating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		Ft.
1	Stands D.P.		
2	Singles D.P.	156.18	Ft.
	D.C.		
	I.D. O.D.		Ft.
12	D.C. 2⅞ 6¼ I.D. O.D.	337.45	Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
1	Sub Bell O.D.	3.51	Ft.
	Bit or C.B.		Ft.
	Kelly Down	7.86	Ft.
	Total	505.00	Ft.

Wt. of String 50,000 Lbs.

Pipe in Hole 5 Jts.

Pipe on Racks 211 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD			
Bit No.	1S		
Size	12¼		
Mfg.	Reed		
Type	Y3T-R		
Nozzle No.			
Nozzle Size			
Ser. No.	686077		
Depth Out	505		
Depth In	65		
Total Ftg.	440		
Total Hr. Run	18		
Cond. of Bit	2-2-1		
Reamer No.			
Reamer Type			

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	1:00	4:00	6:00
Weight	10.4	10.3	10.3
Visc.-Sec.	38	40	42
W.L.-C.C.			
FL TR. CK.			
PH	10.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
Gel		100#	

Driller L. McLauthlin

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
400	505	105	D			100	20	200	6	70			S

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	443	½°		474	1¼°		505	1½°	

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼						Rig Service
12:15	1:30	1¼						Drill 12¼ Hole
1:30	1:45	¼						Survey
1:45	3:30	1¾						Drill
3:30	3:45	¼						Survey
3:45	6:30	2¾						Drill
6:30	6:45	¼						Survey
6:45	8:00	1¼						Hoist out to pipe

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		Ft.
3	Stands D.P.	281.04	Ft.
	Singles D.P.		Ft.
12	D.C. 2¼ 6¼ I.D. O.D.	337.75	Ft.
	D.C.		
	I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
	Rmr. Body O.D.		Ft.
	Subs O.D.		Ft.
	Bit or C.B.		Ft.
	Kelly Down	21.51	Ft.
	Total	640	Ft.

Wt. of String 47,000 Lbs.

Pipe in Hole 4 Jts.

Pipe on Racks 207 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD			
Bit No.	2		
Size	8¾		
Mfg.	Smith		
Type	SDGH		
Nozzle No.	-		
Nozzle Size			
Ser. No.	DL-387		
Depth Out			
Depth In	505		
Total Ftg.	135		
Total Hr. Run	6½		
Cond. of Bit	IN		
Reamer No.			
Reamer Type			

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	9:00	12:00	3:00
Weight	10.6	10.9	10.8
Visc.-Sec.	44	43	41
W.L.-C.C.			
FL TR. CK.			
PH	10	8	9
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
Caustic	50#		

Driller Bernie Faul

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
505	640	135	D			160	20	150	6"	67			

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	564	1½		596	1¾		627	⅞	

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼						Rig Service
8:15	8:45	½						Run to Hole (Wash 8¾ Bit)
8:45	10:00	1¼						Pilot Hole
10:00	10:15	¼						Survey
10:15	12:00	1¾						Drill P.H.
12:00	12:15	¼						Survey
12:15	2:45	2½						Drill P.H.
2:45	3:00	¼						Survey
3:00	4:00	1						Drill P.H.

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		Ft.
2	Stands D.P.	187.40	Ft.
	Singles D.P.		Ft.
12	D.C. 2¼ 6¼ I.D. O.D.	332.45	Ft.
	D.C.		
	I.D. O.D.		Ft.
	Stb. Body O.D.		Ft.
	Stb. Body O.D.		Ft.
1	Rmr. Body O.D.	4.50	Ft.
1	Sub Bell	3.51	Ft.
	Bit or C.B.		Ft.
	Kelly Down	39.14	Ft.
	Total	572.00	Ft.

Wt. of String 45,000 Lbs.

Pipe in Hole 6 Jts.

Pipe on Racks 210 Jts.

Total Pipe on Lease 216 Jts.

BIT RECORD			
Bit No.	2		
Size	8¾		
Mfg.	Smith		
Type	SDGH		
Nozzle No.			
Nozzle Size			
Ser. No.	DL-367		
Depth Out	658		
Depth In	505		
Total Ftg.	153		
Total Hr. Run	8		
Cond. of Bit	6-1-1		
Reamer No.			
Reamer Type			

Water Charges — Reg. Hrs. — O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD			
Time	5:00	8:00	11:00
Weight	10.8		10.8
Visc.-Sec.	42		40
W.L.-C.C.			
FL TR. CK.			
PH	9.0		9.0
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller L. McLauthlin

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
640	658	18	D			160	20	200	6	70			(S)
505	572	67	R										

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
	658	1¾°							

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼						Rig Ser.
4:15	5:45	1½						Drill Pilot Hole
5:45	6:00	¼						Survey
6:00	8:30	2½						Trip for 12¼ Reamer
8:30	12:00	3½						Reaming pilot hole

No. 5451

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease: Bragg August Area Battle K35 — Well No.

Location — Lsd. 6 Sec. 29 Twp. 35 Rge. 22 W. 5 M. — Date: Oct 25 19 71

Weather Condition: clear — Road Conditions: good — Nearest Town: Lanigan — Water - Source: creek — Miles Hauled: 1/2 — Pumped — Camp Distance from Rig: 1 50 yds. — Reason for Extra L. Plant

OPERATOR: Bonanza Oil Co.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Lukas

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Ewing

Rig No. 3 — Drill Pipe String: No. 2, Size 4½ — Tool Joint: 5 3/4 O.D., Type Thd. F.H.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Gilwell	214P	14
2.	Gilwell	214P	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	6		6¼
Reaming			
Conditioning Mud & Circulating			
Trips			1
Lubricate Rig			
Deviation Survey	1		¾
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement	1		
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals	8		8

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No. — No. of Lines — Size — Feet Slipped — Feet Cut Off — Present Length — Ton Mi. or Trips Since Last Cut — Cumulative Ton Mi. or Trips — No. of Days From Spud — Cumulative Rotating Hrs.

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
	Stands D.P.		Ft.
	Singles D.P.		Ft.
	D.C. I.D.	O.D.	Ft.
	D.C. I.D.	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Rmr. Body	O.D.	Ft.
	Subs	O.D.	Ft.
	Bit or C.B.		Ft.
	Kelly Down		Ft.
	Total		Ft.

Wt. of String — Lbs. — Pipe in Hole — Jts. — Pipe on Racks — Jts. — Total Pipe on Lease — Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time			
Weight			
Visc.-Sec.			
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
KELZAN	10#		
CAUSTIC	100#		
SALT	[illegible]		
		25000	

Driller: [illegible]

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record — Depth — Dev. — Direction — Depth — Dev. — Direction — Depth — Dev. — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	1 00	1						DRILL OUT CEMENT
1 00	8 00	7						W.O.C.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
	Stands D.P.		Ft.
	Singles D.P.		Ft.
9	D.C. I.D.	O.D. 245 43	Ft.
	D.C. I.D.	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Rmr. Body	O.D.	Ft.
2	Subs	O.D. 5 51	Ft.
	Bit or C.B.		Ft.
	Kelly Down	40.00	Ft.
	Total	290	Ft.

Wt. of String 35,000 Lbs. — Pipe in Hole — Jts. — Pipe on Racks — Jts. — Total Pipe on Lease — Jts.

BIT RECORD

Bit No.	1 S
Size	12¼
Mfg.	Reed
Type	Y23E
Nozzle No.	
Nozzle Size	
Ser. No.	686077
Depth Out	
Depth In	65
Total Ftg.	225
Total Hr. Run	6
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time	10.00	2.00	4.00
Weight	9.8	10.5	10.6
Visc.-Sec.	42	45	46
W.L.-C.C.			
FL TR. CK.			
PH	11.5	10.5	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Bernie Beck

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
69	290	225	D			90	25	100	6	70			

Deviation Record — Depth 75 — Dev. 1¼ — Direction 103 ½ — Depth 150 ½ — Dev. ½ — Direction 207 ½ — Depth — Dev. — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	9 00	1						W.O.C.
9 00	9 30	½						DRILL
9 30	9 45	¼						SURVEY
9 45	10 30	¾						DRILL
10 30	10 45	¼						SURVEY
10 45	12 00	1¼						DRILL
12 00	12 15	¼						SURVEY
12 15	1 15	1						DRILL
1 15	1 30	¼						SURVEY
1 30	4 00	2½						DRILL
								SURVEY

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
	Stands D.P.		Ft.
1	Singles D.P.	31.25	Ft.
	D.C. I.D. 2 1/8 6¼	O.D. 337.45	Ft.
	D.C. I.D.	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Stb. Body	O.D.	Ft.
	Rmr. Body	O.D.	Ft.
	Subs Bell	O.D. 3.51	Ft.
	Bit or C.B.		Ft.
	Kelly Down	27.79	Ft.
	Total	400.03	Ft.

Wt. of String 45,000 Lbs. — Pipe in Hole 1 Jts. — Pipe on Racks 215 Jts. — Total Pipe on Lease 216 Jts.

BIT RECORD

Bit No.	1S
Size	12¼
Mfg.	Reed
Type	Y23E
Nozzle No.	
Nozzle Size	
Ser. No.	686077
Depth Out	
Depth In	65
Total Ftg.	335
Total Hr. Run	12¼
Cond. of Bit	1N
Reamer No.	
Reamer Type	

Water Charges — Reg. Hrs. — O.T. Hrs.
Trucker
Trucker
Trucker

MUD RECORD

Time		8.00	11.00
Weight		10.6	10.2
Visc.-Sec.		40	42
W.L.-C.C.			
FL TR. CK.			
PH		7.0	10.5
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.
CAUSTIC		50#	
GEL		500#	

Driller: [illegible]

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
290	400	110	D			80/90	20	200	6	70			(5)

Deviation Record — Depth 290 — Dev. ¼° — Direction — Depth 380 — Dev. 1° — Direction — Depth 412 — Dev. ¼° — Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼						RIG SER & SURVEY
[illegible]	[illegible]	[illegible]						[illegible]
4 15	6 30	2¼						DRILL
6 30	7 30	1						TRIP TO CHECK BIT
7 30	8 00	½						DRILL
8 00	8 15	¼						SURVEY
8 15	11 45	3½						DRILL
11 45	12 00	¼						SURVEY

No. 5411

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: Bantl A-9 ; T ARCO Rel Pass K-35

Location — Lsd. 67 Sec. 59 Twp. 13S Rge. 22 W. 5 M.

Date: Oct 24 19 70

Weather Condition | Road Conditions | Nearest Town: Inuvik | Water - Source | Miles Hauled | Pumped | Camp Distance from Rig 150 mgts. | Reason for Extra L. Plant

OPERATOR: Bantl Oil Co.

Rig No. 3 DWKS 525

Drill Pipe String: No. 2 Size 4½

Tool Joint: 5 3/4" O.D. Type Thd. F.H.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Schaub

SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Oilwell	214	14
2.	Oilwell	214	14
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks

MORNING TOUR

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals			

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.	
No. of Lines	Size
Feet Slipped	
Feet Cut Off	
Present Length	
Ton Mi. or Trips Since Last Cut	
Cumulative Ton Mi. or Trips	
No. of Days From Spud	
Cumulative Rotating Hrs.	

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	
Weight	
Visc.-Sec.	
W.L.-C.C.	
FL TR. CK.	
PH	
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.
SALT	31600 #		

Driller: E. Schaub

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12	8							CRIBB CELLER & CEMENT
								WORK ON PUMPS & MIX SALT.

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	
Weight	
Visc.-Sec.	
W.L.-C.C.	
FL TR. CK.	
PH	
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: E. Schaub

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
TD	67												

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
~~8:30~~	12.00	4						WORK ON KELLY
12.00	2.00	2						DIG FOR HOLE
2:00	4.00	2						RIG UP TO DRILL OUT

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	Stands D.P.	Ft.
	Singles D.P.	Ft.
	D.C. I.D. O.D.	Ft.
	D.C. I.D. O.D.	Ft.
	Stb. Body O.D.	Ft.
	Stb. Body O.D.	Ft.
	Rmr. Body O.D.	Ft.
	Subs O.D.	Ft.
	Bit or C.B.	Ft.
	Kelly Down	Ft.
	Total	Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time	
Weight	
Visc.-Sec.	
W.L.-C.C.	
FL TR. CK.	
PH	
SD. Cont. %	
Pressure Gradient	

Mud & Chemicals Added

Type	Amt.	Type	Amt.
KELZAN			250 #

Driller: Mr. McCathern

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
TD	67												

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4.00	12 00							Rig Up To Drill Out Change
								Noddle & Liner In Pump #1
								Pick Up Collars & Blow Kelly.

No. 5410

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name: BANFF RAT PASS

Date: Oct 13 19 70

Location — Lsd. 67 Sec. 6-9 Twp. 13E Rge. 22 W. 5 M.

Weather Condition | Road Conditions | Nearest Town: INVUIK | Water - Source | Miles Hauled | Pumped | Camp Distance from Rig: 11-0 yds | Reason for Extra L. Plant

OPERATOR: BANFF OIL CO

Rig No.: DWKS

Drill Pipe String: No. | Size

Tool Joint O.D. | Type Thd.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.			
2.			
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals			

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.

No. of Lines Size

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud

Cumulative Rotating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
	Stands D.P.	Ft.	Bit No.		Time	
	Singles D.P.	Ft.	Size		Weight	
	D.C. I.D. O.D.	Ft.	Mfg.		Visc.-Sec.	
	D.C. I.D. O.D.	Ft.	Type		W.L.-C.C.	
			Nozzle No.		FL TR. CK.	
			Nozzle Size		PH	
	Stb. Body O.D.	Ft.	Ser. No.		SD. Cont. %	
	Stb. Body O.D.	Ft.	Depth Out		Pressure Gradient	
	Rmr. Body O.D.	Ft.	Depth In			
	Subs O.D.	Ft.	Total Ftg.		Mud & Chemicals Added	
	Bit or C.B.	Ft.	Total Hr. Run		Type / Amt. / Type / Amt.	
	Kelly Down	Ft.	Cond. of Bit			
	Total	Ft.	Reamer No.			
	Wt. of String	Lbs.	Reamer Type			
	Pipe in Hole	Jts.	Water Charges	Reg. Hrs.	O.T. Hrs.	
	Pipe on Racks	Jts.	Trucker			
	Total Pipe on Lease	Jts.	Trucker			
			Trucker		Driller: M Sneen	

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
								Rig up Steel Building
								Rig up Mud Tanks
								Rig up Mud Tank MIXER

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
	Stands D.P.	Ft.	Bit No.		Time	
	Singles D.P.	Ft.	Size		Weight	
	D.C. I.D. O.D.	Ft.	Mfg.		Visc.-Sec.	
	D.C. I.D. O.D.	Ft.	Type		W.L.-C.C.	
			Nozzle No.		FL TR. CK.	
			Nozzle Size		PH	
	Stb. Body O.D.	Ft.	Ser. No.		SD. Cont. %	
	Stb. Body O.D.	Ft.	Depth Out		Pressure Gradient	
	Rmr. Body O.D.	Ft.	Depth In			
	Subs O.D.	Ft.	Total Ftg.		Mud & Chemicals Added	
	Bit or C.B.	Ft.	Total Hr. Run		Type / Amt. / Type / Amt.	
	Kelly Down	Ft.	Cond. of Bit			
	Total	Ft.	Reamer No.			
	Wt. of String	Lbs.	Reamer Type			
	Pipe in Hole	Jts.	Water Charges	Reg. Hrs.	O.T. Hrs.	
	Pipe on Racks	Jts.	Trucker			
	Total Pipe on Lease	Jts.	Trucker			
			Trucker		Driller: Ron Sneen	

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
32	67												

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	3:00	15						Dig Conductor Hole
3:00	4:00	1						Rig up Down Sub - Laydown

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
	Stands D.P.	Ft.	Bit No.		Time	
	Singles D.P.	Ft.	Size		Weight	
	D.C. I.D. O.D.	Ft.	Mfg.		Visc.-Sec.	
	D.C. I.D. O.D.	Ft.	Type		W.L.-C.C.	
			Nozzle No.		FL TR. CK.	
			Nozzle Size		PH	
	Stb. Body O.D.	Ft.	Ser. No.		SD. Cont. %	
	Stb. Body O.D.	Ft.	Depth Out		Pressure Gradient	
	Rmr. Body O.D.	Ft.	Depth In			
	Subs O.D.	Ft.	Total Ftg.		Mud & Chemicals Added	
	Bit or C.B.	Ft.	Total Hr. Run		Type / Amt. / Type / Amt.	
	Kelly Down	Ft.	Cond. of Bit			
	Total	Ft.	Reamer No.			
	Wt. of String	Lbs.	Reamer Type			
	Pipe in Hole	Jts.	Water Charges	Reg. Hrs.	O.T. Hrs.	
	Pipe on Racks	Jts.	Trucker			
	Total Pipe on Lease	Jts.	Trucker			
			Trucker		Driller: John McCarthy	

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1:00	6:00	2						Tear Out Floor & Tanks
6:00	7:00	1						Pick Up & Run Conductor 28L
7:00	12:00	5:00						Cement Conductor 15BL.

Ran 2jts 63.10' of 13 3/8 Insulated Csg.
Landed @ 63' K.B. Cemented Conductor
pipe w/ 180 cu. ft. Redi Mix Cement Completed
Cementing of conductor pipe @ 11:00 P.M. Oct

No. 5409

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease / Well Name

Location — Lsd. 62 Sec. 59 Twp. 135 Rge. 22 W. 5 M.

Date Oct 22 1970

Weather Condition O | Road Conditions | Nearest Town INVERMERE | Water - Source | Miles Hauled | Pumped | Camp Distance from Rig 150 yds | Reason for Extra L. Plant

OPERATOR: BARFF Oil Co

Rig No.	Drill Pipe String No.	Drill Pipe String Size	Tool Joint Type Thd.	Tool Joint O.D.
DWKS				

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.			
2.			
3.			

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Schaeb

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Ladd

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals			

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

WIRE LINE RECORD

Reel No.

No. of Lines Size

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud

Cumulative Rotating Hrs.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
	Stands D.P.	Ft.	Bit No.	
	Singles D.P.	Ft.	Size	
	D.C. I.D. O.D.	Ft.	Mfg.	
	D.C. I.D. O.D.	Ft.	Type	
	Stb. Body O.D.	Ft.	Nozzle No. / Size	
	Stb. Body O.D.	Ft.	Ser. No.	
	Rmr. Body O.D.	Ft.	Depth Out	
	Subs O.D.	Ft.	Depth In	
	Bit or C.B.	Ft.	Total Ftg.	
	Kelly Down	Ft.	Total Hr. Run	
	Total	Ft.	Cond. of Bit	
	Wt. of String	Lbs.	Reamer No.	
	Pipe in Hole	Jts.	Reamer Type	
	Pipe on Racks	Jts.	Water Charges Reg. Hrs. O.T. Hrs.	
	Total Pipe on Lease	Jts.	Trucker	

MUD RECORD

Time			
Weight			
Visc.-Sec.			
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller Marvin Green

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
								Put Doors on steel Building
								Rig up perfabs
								I Cond rigging up

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
	Stands D.P.	Ft.	Bit No.	
	Singles D.P.	Ft.	Size	
	D.C. I.D. O.D.	Ft.	Mfg.	
	D.C. I.D. O.D.	Ft.	Type	
	Stb. Body O.D.	Ft.	Nozzle No. / Size	
	Stb. Body O.D.	Ft.	Ser. No.	
	Rmr. Body O.D.	Ft.	Depth Out	
	Subs O.D.	Ft.	Depth In	
	Bit or C.B.	Ft.	Total Ftg.	
	Kelly Down	Ft.	Total Hr. Run	
	Total	Ft.	Cond. of Bit	
	Wt. of String	Lbs.	Reamer No.	
	Pipe in Hole	Jts.	Reamer Type	
	Pipe on Racks	Jts.	Water Charges Reg. Hrs. O.T. Hrs.	
	Total Pipe on Lease	Jts.	Trucker	

MUD RECORD

Time			
Weight			
Visc.-Sec.			
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller L. McCathern

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
10	17												

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 pm	12 pm							DRILL CONDUCTOR HOLE 22"
								Spud 5:00 pm 10/21/70 w/22" bucket.
								Daily dry

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD	
	Stands D.P.	Ft.	Bit No.	
	Singles D.P.	Ft.	Size	
	D.C. I.D. O.D.	Ft.	Mfg.	
	D.C. I.D. O.D.	Ft.	Type	
	Stb. Body O.D.	Ft.	Nozzle No. / Size	
	Stb. Body O.D.	Ft.	Ser. No.	
	Rmr. Body O.D.	Ft.	Depth Out	
	Subs O.D.	Ft.	Depth In	
	Bit or C.B.	Ft.	Total Ftg.	
	Kelly Down	Ft.	Total Hr. Run	
	Total	Ft.	Cond. of Bit	
	Wt. of String	Lbs.	Reamer No.	
	Pipe in Hole	Jts.	Reamer Type	
	Pipe on Racks	Jts.	Water Charges Reg. Hrs. O.T. Hrs.	
	Total Pipe on Lease	Jts.	Trucker	

MUD RECORD

Time			
Weight			
Visc.-Sec.			
W.L.-C.C.			
FL TR. CK.			
PH			
SD. Cont. %			
Pressure Gradient			

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller Marvin Green

FOOTAGE From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 pm	12 pm			-				DRILL CONDUCTOR HOLE 22" bucket

No. 5407

GUTHRIE McLAREN Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name: BOFF PAT PASS

Location — Lsd. 67 Sec. 59 Twp. 135 Rge. 22 W. W M.

Date: Oct. 21 1970

Weather Condition: D | Road Conditions | Nearest Town: INUVIK | Water - Source | Miles Hauled | Pumped | Camp Distance from Rig: 150 yds | Reason for Extra L. Plant

OPERATOR: Ranger Oil Co

Rig No. 3 DWKS

Drill Pipe String: No. | Size

Tool Joint: Type Thd. | O.D.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Lehob.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Budd 1514

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.			
2.			
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
Fishing			
COMPLETION WORK A. Perforating			
B. Tubing Trips			
C. Swabbing			
D. Testing			
E. Additional			
Totals			

TIME SUMMARY (Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

WIRE LINE RECORD

Reel No.

No. of Lines Size

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud

Cumulative Rotating Hrs.

MORNING TOUR

NO. DRILLING ASSEMBLY AT END OF TOUR

Stands D.P.		Ft.
Singles D.P.		Ft.
D.C. I.D. O.D.		Ft.
D.C. I.D. O.D.		Ft.
Stb. Body O.D.		Ft.
Stb. Body O.D.		Ft.
Rmr. Body O.D.		Ft.
Subs O.D.		Ft.
Bit or C.B.		Ft.
Kelly Down		Ft.
Total		Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time				
Weight				
Visc.-Sec.				
W.L.-C.C.				
FL TR. CK.				
PH				
SD. Cont. %				
Pressure Gradient				

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Wilkinson

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1200							Rigging up to spud

DAY TOUR

NO. DRILLING ASSEMBLY AT END OF TOUR

Stands D.P.		Ft.
Singles D.P.		Ft.
D.C. I.D. O.D.		Ft.
D.C. I.D. O.D.		Ft.
Stb. Body O.D.		Ft.
Stb. Body O.D.		Ft.
Rmr. Body O.D.		Ft.
Subs O.D.		Ft.
Bit or C.B.		Ft.
Kelly Down		Ft.
Total		Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time				
Weight				
Visc.-Sec.				
W.L.-C.C.				
FL TR. CK.				
PH				
SD. Cont. %				
Pressure Gradient				

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: L. McLaughlin

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C
0	10												

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1220	500							Rig Up.
500	1200							Daly 22" conductor hole
12								Daly day.
								Spud 5:00PM 10/21/70

EVENING TOUR

NO. DRILLING ASSEMBLY AT END OF TOUR

Stands D.P.		Ft.
Singles D.P.		Ft.
D.C. I.D. O.D.		Ft.
D.C. I.D. O.D.		Ft.
Stb. Body O.D.		Ft.
Stb. Body O.D.		Ft.
Rmr. Body O.D.		Ft.
Subs O.D.		Ft.
Bit or C.B.		Ft.
Kelly Down		Ft.
Total		Ft.
Wt. of String		Lbs.
Pipe in Hole		Jts.
Pipe on Racks		Jts.
Total Pipe on Lease		Jts.

BIT RECORD

Bit No.	
Size	
Mfg.	
Type	
Nozzle No.	
Nozzle Size	
Ser. No.	
Depth Out	
Depth In	
Total Ftg.	
Total Hr. Run	
Cond. of Bit	
Reamer No.	
Reamer Type	

Water Charges Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Trucker

MUD RECORD

Time				
Weight				
Visc.-Sec.				
W.L.-C.C.				
FL TR. CK.				
PH				
SD. Cont. %				
Pressure Gradient				

Mud & Chemicals Added

Type	Amt.	Type	Amt.

Driller: Frank Beck

FOOTAGE

From	To	Ftge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 1 S.P.M.	Pump No. 2 Liner Size	Pump No. 2 S.P.M.	Method Run SGL-S Par'el-P Com'd-C

Deviation Record

Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
								Put Perfors Up Build Stairs & Water Lines.
								Haul Pipe & Collars
								Haul Perfors Shop - Start Putting Up.
								1 Crew rigging up

A preliminary report on the palynology of the Banff-Aquitaine-Arco Rat Pass K-35 well, east flank, Richardson Mountains, District of Mackenzie (NTS 106C).

The relevant parts of any manuscript that quote or paraphrase from this report should be referred to the Western Paleontology Subdivision for possible revision.

INTRODUCTORY COMMENTS

The Banff-Aquitaine-Arco Rat Pass K-35 well is located on the east flank of the Richardson Mountains, on the west side of the Mackenzie Delta, southwest of the town of Aklavik, at 67°54'42.55"N. lat. and 135°21'56.83" W. long.. This well, together with a companion well, the Banff-Aquitaine-Arco Treeless Creek I-51 well, located a short distance to the south, was drilled in the latter half of 1970. The rig release date of the Rat Pass K-35 well was December 16th, 1970.

Rat Pass K-35 well was drilled to a total depth of 6,004 feet and bottomed in rocks of Paleozoic age. Rocks of early Cretaceous age and, between 1,930 feet and ?2,200 feet, of late Jurassic? or early Cretaceous age were also penetrated.

The lithology of the sampled portion of the section (70 feet to 2,225 feet) was comprised mainly of dark coloured shales with minor and varying amounts of siltstone, mudstone, sandstone and other rock types (chert, ironstone). Sandstone beds are commonly present between 1,190 feet and 1,930 feet, but prominent only between 1,310 feet and 1,380 feet, 1,580 and 1,620 feet and 1,740 and 1,760 feet.

Sampling of cuttings commenced at 70 feet and was continued to a depth of 1,960 feet (see appendix). Forty-three such samples were processed for palynology. In addition, palynological slides from 17 sidewall cores were provided through the kindness of Aquitaine Company of Canada and ARCO, Dallas, Texas, U.S.A.; these ranged in depth from 945 feet to 2,325 feet. Cuttings samples were unproductive below a depth of 1,920 to 1,930 feet and sidewall core samples below 1,920 feet. The advent of barren samples coincided with a change in lithology from grey black to black shale recorded between 1,930 and 1,940 feet and with a prominent decrease in the value of the resistivity curve and shift of the SP curve at about 1,930 feet.

PALYNOLOGY

Major Features

Productive samples yielded variably preserved assemblages of spores, pollen, dinoflagellates and acritarchs of early Cretaceous age. A significant portion of the residue was comprised of derived spores and pollen of Paleozoic and ?early Triassic age. Assemblages were dominated by marine elements (dinoflagellates and, to a lesser extent, acritarchs);

spores and pollen were prominent components of the assemblages only in the medial portion of the sampled interval (approximately 940 to 1,030 feet). At 1,930 to 1,940, the samples become unproductive.

Geological Age

General Comments

Geological ages of strata penetrated in the Rat Pass K-35 well are based mainly on an analysis of the dinoflagellate assemblages. Spore and pollen assemblages contribute a minor portion to age determinations because most of the species are long ranging and of little significance in refined age dating. The occurrences of species thought to be of value in age determination are plotted on Figure 1. These biostratigraphically significant species and genera comprise 86 dinoflagellate entities and 21 spore and pollen entities selected from a total assemblage of approximately 110 dinoflagellates and acritarchs and 65 spore and pollen species. These species permit the recognition of six biostratigraphic divisions.

In assessing the geological age of the strata in the well, greatest reliance has been placed on the first appearance in the well of a species. Caving of material downhole and the possible contamination of sidewall cores by drilling mud make assessment of the final appearance of a species in the well difficult. Where basal ranges of species are utilized for age determinations, serious consideration of all relevant information has been made.

Age determination has been complicated further by the occurrence in this well of many species hitherto not published in the literature, or for which there are no reliable published ranges. Published ranges of species have been supplemented by the experience of the writer and by work now in progress at other localities in and east of the Mackenzie Delta region.

Age Determinations

Albian Division - Strata of Albian age are present between 70 feet and 1,090 feet. Because no diagnostic late Albian pollen, spore and dinoflagellate species are present, this interval is probably of early and middle Albian age. The following dinoflagellate species are present in this interval:

Oligosphaeridium sp. cf. *O. irregulare* (Pocock) Davey & Williams*
Oligosphaeridium complex (White) Davey & Williams
Lunulodinium n. g., n. sp. Brideaux & McIntyre MS name.*
Hystrichosphaeridium sp. cf. *H. recurvatum polypes* Cookson & Eisenack

Deflandrea sp. cf. *D. perlucida* Alberti
Cyclonephelium distinctum Cookson & Eisenack
"*Broomea*" *jaegeri* Alberti
Oligosphaeridium pulcherrimum (Deflandre & Cookson) Davey & Williams
Dingodinium cerviculum Cookson & Eisenack
Gardodinium eisenacki Alberti
Fromea amphora Cookson & Eisenack
Oligosphaeridium anthophorum (Cookson & Eisenack) Davey & Williams
O. sp. cf. *O. albertense* (Pocock) Davey & Williams*
Microdinium opacum Brideaux
Hystrichokolpoma ferox (Deflandre)
Palaeostomocystis fragilis Cookson & Eisenack
Oligosphaeridium? sp. A. of Brideaux
Hystrichosphaeridium sp. A. of Brideaux
Hystrichosphaeridium cylindratum Brideaux

and 41 other species, including many considered new.

Spore and pollen species present in this interval include:

Rouseisporites (Triporoletes) reticulatus Pocock*
Rouseisporites (Triporoletes) laevigatus Pocock*
Rouseisporites (Triporoletes) sp. A.
Cicatricosisporites australiensis (Cookson) Pontie
C. augustus Singh
C. hughesi Dettmann
C. pseudotripartitus (Bolkhovitina) Dettmann
Reticulisporites elongatus Singh
Pilosisporites verus Delcourt & Sprumont*
Peromonolites peroreticulatus Brenner *non* Levet-Carette
Tigrisporites scurrandus Norris
Coronatisporites valdensis (Couper) Dettmann
Trilobosporites minor Pocock*

and several other species.

Those species marked by asterisks (*) are not known to range into rocks younger than middle Albian.

Aptian?-Albian Division - Strata assigned to this age are recognized between 1,130 and 1,180 feet. Dinoflagellate species making their appearance in this interval include:

Operculodinium sp. A.*
Tenua sp. cf. *T. hystrix* Eisenack
Oligosphaeridium totum var. *totum* Brideaux*
Oligosphaeridium? sp. B. of Brideaux*
Prolixosphaeridium sp. A.
Exochosphaeridium? sp. A.
Scriniodinium sp. A. (in part, *S. apatelum* Cookson & Eisenack)

and eight other species.

Coronifera oceanica Cookson & Eisenack appears only in this interval, and the following species, among others, make what is interpreted as a final appearance:

Oligosphaeridium sp. cf. *O. irregulare* (Pocock) Davey & Williams*
Systematophora sp. A.
Fromea amphora Cookson & Eisenack*
Oligosphaeridium anthophorum* (Cookson & Eisenack) Davey & Williams
*Hystrichokolpoma ferox** (Deflandre)
Oligosphaeridium? sp. A. of Brideaux*
*Oligosphaeridium pulcherrimum** (Deflandre & Cookson) Davey & Williams

*Tigrisporites scurrandus** Norris, makes its final appearance at 1,130 feet in this interval, of the spores and pollen species. Those species marked by asterisks are not known to occur in strata of an age older than Aptian or early Albian.

Barremian-?Aptian Division - The strata between 1,210 feet and 1,360 feet are assigned a Barremian-?Aptian age. Two dinoflagellate species, *Sirmiodinium grossi* Alberti and *Pseudoceratium? nudum* Gocht first appear in this interval. The following dinoflagellate species make their last appearance in this interval:

Deflandrea sp. cf. *D. perlucida* Alberti
Oligosphaeridium sp. E. (aff. *Hystrichosphaeridium asterigium* Gocht)
Gonyaulacysta helicoidea Eisenack & Cookson

D. cf. *D. perlucida* and *G. helicoidea* have been recorded from strata no older than Barremian.

Neocomian I (?Hauterivian) Division - Strata assigned to this division are likely no older than and likely of Huterivian age. They are recognized between 1,380 and 1,530 feet. Dinoflagellate species making their first appearance in this interval include:

Leptodinium sp. B.
Leptodinium sp. C.
Cleistosphaeridium? sp. F.

Dinoflagellate species which apparently make their final appearance in the section penetrated by the Rat Pass K-35 well include:

Dictyopyxidia sp. A.
Gardodinium eisenacki Alberti*
Leptodinium sp. D.
Operculodinium sp. A.
Pseudoceratium? nudum Gocht*
Wallodinium sp. cf. *W. krutzschi** (Alberti) Loeblich and Loeblich
Leptodinium sp. A.
Leptodinium sp. B.
Leptodinium sp. C.
Leptodinium sp. D.

Of the spores and pollen, *Trilobosporites minor* Pocock, makes its final appearance in this well. Asterisked species are not known to occur in strata older than Hauterivian age.

Neocomian II (Berriasian-Valanginian?) - Strata between 1,550 feet and 1,690 feet are assigned a Neocomian, pre-Hauterivian age. Two new dinoflagellate species occur in a sidewall core at 1,600 feet, *Systematophora?* sp. C. and *Cleistosphaeridium?* sp. G. Dinoflagellate species considered to make their final appearance in the section include:

Oligosphaeridium complex (White) Davey & Williams
"Doidyx" sp. A. (aff. *Circulodinium* sp.)
Cyclonephelium distinctum Cookson & Eisenack
Tenua sp. C. (aff. *Circulodinium hirtellum* Alberti)

A trilete spore species, *Rogalskaisporites cicatricosus* (Rogalska) Danzé-Corsin & Laveine, occurs in this interval at 1,620-1,630 feet.

Neocomian III (Berriasian-Valanginian?) - Strata between 1,710 feet and the last productive sample at 1,920-1,930 feet are considered Neocomian, probably pre-Hauterivian, in age. Species of dinoflagellates first appearing in this interval include:

Exeodinia? sp. A.
Gonyaulacysta sp. E.
Gonyaulacysta sp. F.
Gonyaulacysta sp. G.
"Proximo-chorate" type A.
"Apiculate acritarch" type A.

Sirmiodinium grossi Alberti and *Scriniodinium* sp. A. (in part *S. apatelum* Cookson & Eisenack) make final appearances at 1,710 feet and 1,765 feet respectively. One spore species, *Tigrisporites* sp. A. is restricted to this interval.

To summarize, the following ages have been assigned to strata in the Rat Pass K-35 well:

70 to 1,090 feet	Albian (early and middle Albian)
1,130 to 1,180 feet	Aptian?-Albian (early Albian)
1,210 to 1,360 feet	Barremian-Aptian?
1,380 to 1,530 feet	Neocomian, probably Hauterivian
1,550 to 1,690 feet	Neocomian, probably pre-Hauterivian
1,710 to 1,930 feet	Neocomian, pre-Hauterivian
1,930 to 2,325 feet	indeterminate, but possibly ?late Jurassic-early Cretaceous in part
2,325 to 6,004 feet	not sampled

Other Interpretations

Influxes of long ranging species occur at various depths in the Rat Pass K-35 well, between 300 and 370 feet, at 945 feet, and at 1,025 feet. Many long ranging species disappear from the section at 1,325 feet and at 1,710 feet. One possible interpretation is that such events, because they are unrelated to the well defined changes in geological age, indicate the presence of unconformities. However, no marked changes in lithology occur at these depths, except at 1,710 feet, where the dominant lithology shifts from shale to sandstone. Furthermore, other occurrences at 945 feet and 1,025 feet coincide with the depth of sidewall core samples. The type of sample may be influencing the productivity and giving rise to spurious influxes of species.

Dinoflagellates dominate the assemblages in both numbers and diversity of species, except between 940 and 1,030 feet. In this interval, numerical abundance of spores and pollen and dinoflagellates and acritarchs is approximately equal; the number of spore and pollen species rise markedly only to decline as abruptly below 1,030 feet. This influx of continental material may signal a shallowing of the water depths, although the depositional environment remains marine through the examined portion of the well. A second interpretation is that water depths did not decrease but that the source of the continental material shifted closer to the depositional site so that more material became available for incorporation into the assemblages from land plants.

Setting of casing at 928 feet may also have contributed to this increase in spores and pollen. The quality of the residues improves markedly in the first sidewall core at 945 feet and in the first washed cuttings at 960 feet. If these data are spurious, interpretations made from them might be erroneous.

Wayne W. Brideaux

Wayne W. Brideaux

Paleontology Subdivision,
Institute of Sedimentary and Petroleum Geology,
Calgary,

APPENDIX

List of Samples

Sidewall Cores:

945', 1,025', 1,130', 1,180', 1,250', 1,325', 1,380', 1,445', 1,530',

1,600', 1,660', 1,710', 1,765', 1,920', 2,025', 2,225', 2,325'.

Cuttings Samples

70-90'	1,010-1,020'
110-130'	1,040-1,050'
150-170'	1,080-1,090'
190-210'	1,140-1,150'
230-250'	1,210-1,220'
280-300'	1,280-1,290'
330-350'	1,350-1,360'
370-390'	1,410-1,420'
410-430'	1,470-1,480'
450-470'	1,500-1,510'
500-520'	1,550-1,560'
590-610'	1,620-1,630'
630-650'	1,680-1,690'
690-700'	1,730-1,740'
750-760'	1,800-1,810'
780-800'	1,830-1,840'
830-840'	1,870-1,880'
910-920'	1,900-1,910'
930-940'	1,920-1,930'
960-970'	1,930-1,940'
990-1,000'	1,950-1,960'

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Log No NWT-368 Net Footage 6354

Province NORTHWEST TERRITORIES

Well Name BANFF RAT PASS K-35

Location N67° 54' 43" W135° 21' 57"

Area Elevation K.B. 80 G.R. 67

Commenced Oct. 21, 1970 Completed Dec. 13, 1970

Status D & A Producing Fm.

Total Depth 6004 Oldest Fm. Silurian-Ordovician

Casing 13" @ 63' 9" @ 927'

Mechanical Logs Used To Adjust Lithology

GR-S

Sample Quality

Poor

Remarks

Studied By No. 15 5-73

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MECHANICAL LOGS

The log is shown for correlation only and should not be used for engineering computations.

When Dual Induction log is used, the resistivity curve on the original E-Log may or may not have been run on a Logarithmic scale.

Mud Nature

Bit Size

Logs Used To Adjust Lithology

GR-S

Location N67° 54' 43" W135° 21' 57" Well Name BANFF RAT PASS K-35

1 FM TOPS, OIL STAIN, FOOTNOTES	2 POROSITY TYPES	3 POROSITY GRADES	4 LITHOLOGY	5 CRYSTAL, GRAIN or FRAGMENT SIZE	6 ROUNDING, DIAG. TYPE	7 SORTING, D 10, DEGREE	8 PERCENT of FRAMEWORK	9 DESCRIPTION	DST RESULTS / DST INTERVAL / CORE INTERVAL
								Spl Study Starts @ 150' in Quaternary	
Q							3	Sh dk brn to blk,fis,carb,pt slty,carb pl rmn,	
							2	wood frag,tr shell frag,thn ss strg,vf to	
							2	f gr,scat vcol cht pbl	
200					a	W	5	Ss lt gy-brn,arg,slty,carb flk,calc,sid;Sh	
							3	lt brn-gy,slty,vf sd gr,sid;Sltst red-brn,	
					a	W	8	v arg,carb pl rmn;Sh dk gy,mic-mica,fis	
	x				a	P	8	carb pl rmn,scat vcol cht pbl;Ss red to	
	x				a	M	4	clr qtz,sl sil,cly mtx,fri,hem stn,vcol	
	x				a	M	9	cht pbl;Sh m to dk gy,fis;Sltst red-brn,	
	x				a	M	9	arg,carb pl fos,tr Foram S-1	
	x				a	M	9	S-1	
	x				a	M	9	S-1	
	x				a	M	9	Sltst red-brn,arg,sil,vf to f sd gr,carb flk;	
300	x				a	M	3	Ss clr qtz,sil,red cly mtx;Fe stn,vcol	
	x				a	M	2	cht pbl to 10 mm;Clyst lt gy & red-brn mot,	
	x				a	W	8	pt slty,sl mica,tr carb,thn ss strg	
	x				a	W	6	Ss lt brn,vf to f gr,arg,slty,hem pel,calc &	
	x				a	W	9	sid cmt,scat mica flk	
	x						1	C-1	
	x				a	W	7	Sh lt to m gy,fis,mica,slty;Sltst red-brn,	
	x				a	W	7	arg,sid,vf sd gr,scat mica flk,tr carb;Ss	
							2	red-brn,f gr,sid cmt;Ss red-brn,vf to f	
							1	gr,slty,red cly mtx Fe stn;Clyst lt gy	
400					a	W	4	to red-brn,pt Fe stn,slty,mica/inthd ss	

Location

Well No.

Studied By No. 15

5-73

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GR-S

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FM TOPS, OIL STAIN, FOOTNOTES	POROSITY TYPES	POROSITY GRADES	LITHOLOGY	CRYSTAL, GRAIN or FRAGMENT SIZE	ROUNDING, DIAG. TYPE	SORTING, DIAG. DEGREE	PERCENT of FRAMEWORK	DESCRIPTION	DST RESULTS / DST INTERVAL / CORE INTERVAL
1	2	3	4	5	6	7	8	9	

Spl Study Starts @ 150' in Quaternary

Q

Sh dk brn to blk,fis,carb,pt slty,carb pl rmn, wood frag,tr shell frag,thn ss strg,vf to f gr,scat vcol cht pbl

Ss lt gy-brn,arg,slty,carb flk,calc,sid;Sh lt brn-gy,slty,vf sd gr,sid;Sltst red-brn, v arg,carb pl rmn;Sh dk gy,mic-mica,fis carb pl rmn,scat vcol cht pbl;Ss red to clr qtz,sl sil,cly mtx,fri,hem stn,vcol cht pbl;Sh m to dk gy,fis;Sltst red-brn, arg,carb pl fos,tr Foram — S-1 S-1 S-1

Sltst red-brn,arg,sil,vf to f sd gr,carb flk; Ss clr qtz,sil,red cly mtx;Fe stn,vcol cht pbl to 10 mm;Clyst lt gy & red-brn mot, pt slty,sl mica,tr carb,thn ss strg

Ss lt brn,vf to f gr,arg,slty,hem pel,calc & sid cmt,scat mica flk — C-1

Sh lt to m gy,fis,mica,slty;Sltst red-brn, arg,sid,vf sd gr,scat mica flk,tr carb;Ss red-brn,f gr,sid cmt;Ss red-brn,vf to f gr,slty,red cly mtx Fe stn;Clyst lt gy to red-brn,pt Fe stn,slty,mica/intbd ss strg;Ss clr qtz,f gr,sl sil,fri,red cly incl

Sh gy,mic-mica,fis,pt slty,tr carb flk,pl rmn;Sltst brn-gy,arg,mica,carb,sid,vf sd gr;Ss brn-gy,arg,slty,mica,sid

Sh dk gy to blk,mic-mica,fis,carb,slty,sdy, thn vf ss strg

K1

Ss clr to lt gy qtz,vf to f gr,sl sil,fri, scat glau,tr pyr,pt bcm arg,slty,gy sh ptg, scat carb flk — S-1

Ss clr qtz,vf to m gr,sl sil,fri — S-1

Ss brn-gy,vf to f gr,sl sid,arg,slty,carb flk

Ss clr qtz,f gr,scat vf to m gr,sl sil, fri,tr carb flk — S-1 S-2 S-1

Sltst dk brn-gy,v arg,mica,carb,scat vf sd, dk gy sh ptg

Sh dk gy,mic-mica,fis,slty,carb;Ss gy,arg, carb,v slty

Ss brn-gy,vf gr,slty,arg,carb,calc & sid cmt;
Ss clr qtz,tr argl gr,sl sil,fri

Sh dk gy,mic-mica,sl fis,carb pl rmn,slty
Thn sltst strg/vf sd gr
Tr Foram

Sltst brn-gy,arg,carb pl rmn,dk gy sh ptg/ intbd ss gy,arg,carb,slty

Sh lt to m brn-gy,mic-mica,fis,scat carb flk & Fe-st frag,thn sltst strg

Sltst gy,arg,carb,vf sd gr,pyr;Ss lt gy, arg,slty,carb flk,dol

Sltst lt brn-gy,carb,mica,v arg,brn-gy sh ptg
Ss lt gy to clr qtz,tr carb flk
Sh lt to m brn-gy,mic-mica,fis,slty,vf sd gr, thn sltst strg,abnt Fe-st frag

Thn ss strg lt gy,glau

Ss lt gy,vf to f gr,arg,slty,carb flk
Sh lt to m brn-gy,flky,fis,pt slty,Fe-st frag;Thn ss strg lt gy,vf to f gr,glau

Intbd sltst brn-gy,v arg,carb,vf sd gr, scat Fe-st frag

Ss lt gy,vf to f gr,arg,slty,gy sh ptg

Sltst brn-gy,arg,carb flk,vf sd gr,scat Fe-st frag,gy sh ptg;Sh gy,fis,carb, slty,Fe-st frag;Ss lt gy,vf gr,arg,slty

Location

Well Nam

Studied By No. 15

5-73

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1 FM TOPS, OIL STAIN, FOOTNOTES	2 POROSITY TYPES	3 POROSITY GRADES	4 LITHOLOGY	5 CRYSTAL, GRAIN or FRAGMENT SIZE	6 ROUNDING, DIAG. TYPE	7 SORTING, DIAG. DEGREE	8 PERCENT of FRAMEWORK	9 DESCRIPTION	DST RESULTS / CORE INTERVAL
Q					a	W	3	Spl Study Starts @ 150' in Quaternary	
							3	Sh dk brn to blk,fis,carb,pt slty,carb pl rmn, wood frag,tr shell frag,thn ss strg,vf to f gr,scat vcol cht pbl	
					a	W	5	Ss lt gy-brn,arg,slty,carb flk,calc,sid;Sh	
200							1	lt brn-gy,slty,vf sd gr,sid;Sltst red-brn,	
	x				a	W	3	v arg,carb pl rmn;Sh dk gy,mic-mica,fis	
	x				a	W	8	carb pl rmn,scat vcol cht pbl;Ss red to	
	x				a	M	4	clr qtz,sl sil,cly mtx,fri,hem stn,vcol	
	x				a	M	9	cht pbl;Sh m to dk gy,fis;Sltst red-brn,	
	x				a	M	6	arg,carb pl fos,tr foram S-1	
	x				a	M	6	S-1	
	x				a	M	6	S-1	
	x				a	M	2	Sltst red-brn,arg,sil,vf to f sd gr,carb flk;	
300	x				a	M	3	Ss clr qtz,sil,red cly mtx;Fe stn,vcol	
	x						2	cht pbl to 10 mm;Glyst lt gy & red-brn mot,	
	x				a	W	8	pt slty,sl mica,tr carb,thn ss strg	
	x				a	W	6	Ss lt brn,vf to f gr,arg,slty,hem pel,calc &	
	x				a	W	9	sid cmt,scat mica flk C-1	
							1	Sh lt to m gy,fis,mica,slty;Sltst red-brn,	
	x				a	W	7	arg,sid,vf sd gr,scat mica flk,tr carb;Ss	
	x				a	W	7	red-brn,f gr,sid cmt;Ss red-brn,vf to f	
	x						2	gr,slty,red cly mtx fe stn;Glyst lt gy	
400	x						1	to red-brn,pt fe stn,slty,mica/inthd ss	
	x				a	W	4	strg;Ss clr qtz,f gr,sl sil,fri,red cly	
	x				a	W	3	incl	
	x				a	W	5		
	x				a	W	3		
	x				a	W	2	Sh gy,mic-mica,fis,pt slty,tr carb flk,pl	
	x				a	W	1	rmn;Sltst brn-gy,arg,mica,carb,sid,vf	
	x				a	W	4	sd gr;Ss brn-gy,arg,slty,mica,sid	
	x				a	W	4	Sh dk gy to blk,mic-mica,fis,carb,slty,sdy,	
	x						2	thn vf ss strg	
500	x				a	W	9	Ss clr to lt gy qtz,vf to f gr,sl sil,fri, S-1	
01	x				a	W	7	scat glau,tr pyr,pt bcm arg,slty,gy sh ptg,	
K1	x				a	W	7	scat carb flk	
	x				a	W	8		
	x				a	W	6		
	x				a	W	8		
	x				a	M	6	Ss clr qtz,vf to m gr,sl sil,fri S-1	
	x				a	M	6	S-1	
	x				a	M	9	Ss brn-gy,vf to f gr,sl sid,arg,slty,carb flk	
	x				a	M	6	Ss clr qtz,f gr,scat vf to m gr,sl sil, S-1	
600	x				a	M	6	fri,tr carb flk S-2	
	x				a	M	9	S-1	
	x				a	M	2	Sltst dk brn-gy,v arg,mica,carb,scat vf sd,	
							1	dk gy sh ptg	
					a	W	3	Sh dk gy,mic-mica,fis,slty,carb;Ss gy,arg,	
					a	W	3	carb,v slty	
							1		
							2		
							1		
700							2		
	x				a	M	8	Ss brn-gy,vf gr,slty,arg,carb,calc & sid cmt;	
	x						2	Ss clr qtz,tr argl gr,sl sil,fri	
							1		
							0	Sh dk gy,mic-mica,sl fis,carb pl rmn,slty	
							1	Thn sltst strg/vf sd gr	
							1	Tr Foram	
	x				a	W	3	Sltst brn-gy,arg,carb pl rmn,dk gy sh ptg/	
	x				a	W	3	intbd ss gy,arg,carb,slty	
800							1		
					a	W	3		
					a	W	3		
	x				a	W	4		
							2		
					a	W	6		
					a	W	5		
							1	Sh lt to m brn-gy,mic-mica,fis,scat carb flk &	
							0	Fe-st frag,thn sltst strg	
900					a	W	4	Sltst gy,arg,carb,vf sd gr,pyr;Ss lt gy,	
							1	arg,slty,carb flk,dol	
							1		
							0	Sltst lt brn-gy,carb,mica,v arg,brn-gy sh ptg	
					a	W	3	Ss lt gy to clr qtz,tr carb flk	
							1	Sh lt to m brn-gy,mic-mica,fis,slty,vf sd gr,	
							0	thn sltst strg,abnt Fe-st frag	
1000							0		
							0		
							1	Thn ss strg lt gy,glau	
							0		
							0		
							1		
							0		
					a	M	1	Ss lt gy,vf to f gr,arg,slty,carb flk	
					a	M	1	Sh lt to m brn-gy,flky,fis,pt slty,Fe-st	
1100							3	frag;Thn ss strg lt gy,vf to f gr,glau	
							1		
							1	Intbd sltst brn-gy,v arg,carb,vf sd gr,	
					a	W	2	scat Fe-st frag	
							0		
							0		
							1		
							1		
							2		
					a	M	6	Ss lt gy,vf to f gr,arg,slty,gy sh ptg	
					a	M	3		
1200					a	M	6		
					a	M	6		
					a	M	6		
					a	W	1		
					a	W	2	Sltst brn-gy,arg,carb flk,vf sd gr,scat	
							1	Fe-st frag,gy sh ptg;Sh gy,fis,carb,	
					a	W	4	slty,Fe-st frag;Ss lt gy,vf gr,arg,slty	
					a	W	3		

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1	2	3	4	5	6	7	8	9
FM TOPS, OIL STAIN, FOOTNOTES	POROSITY TYPES	POROSITY GRADES	LITHOLOGY	CRYSTAL, GRAIN or FRAGMENT SIZE	ROUNDING, DIAG. TYPE	SORTING, DIAG. DEGREE	PERCENT of FRAMEWORK	DESCRIPTION

Spl Study Starts @ 150' in Quaternary

Sh dk brn to blk,fis,carb,pt slty,carb pl rmn, wood frag,tr shell frag,thn ss strg,vf to f gr,scat vcol cht pbl

Ss lt gy-brn,arg,slty,carb flk,calc,sid;Sh lt brn-gy,slty,vf sd gr,sid;Sltst red-brn, v arg,carb pl rmn;Sh dk gy,mic-mica,fis carb pl rmn,scat vcol cht pbl;Ss red to clr qtz,sl sil,cly mtx,fri,hem stn,vcol cht pbl;Sh m to dk gy,fis;Sltst red-brn, arg,carb pl fos,tr foram — S-1 S-1 S-1

Sltst red-brn,arg,sil,vf to f sd gr,carb flk; Ss clr qtz,sil,red cly mtx;Fe stn,vcol cht pbl to 10 mm;Clyst lt gy & red-brn mot, pt slty,sl mica,tr carb,thn ss strg

Ss lt brn,vf to f gr,arg,slty,hem pel,calc & sid cmt,scat mica flk — C-1

Sh lt to m gy,fis,mica,slty;Sltst red-brn, arg,sid,vf sd gr,scat mica flk,tr carb;Ss red-brn,f gr,sid cmt;Ss red-brn,vf to f gr,slty,red cly mtx fe stn;Clyst lt gy to red-brn,pt fe stn,slty,mica/intbd ss strg;Ss clr qtz,f gr,sl sil,fri,red cly incl

Sh gy,mic-mica,fis,pt slty,tr carb flk,pl rmn;Sltst brn-gy,arg,mica,carb,sid,vf sd gr;Ss brn-gy,arg,slty,mica,sid

Sh dk gy to blk,mic-mica,fis,carb,slty,sdy, thn vf ss strg

Ss clr to lt gy qtz,vf to f gr,sl sil,fri, scat glau,tr pyr,pt bcm arg,slty,gy sh ptg, scat carb flk — S-1

Ss clr qtz,vf to m gr,sl sil,fri — S-1 S-1

Ss brn-gy,vf to f gr,sl sid,arg,slty,carb flk

Ss clr qtz,f gr,scat vf to m gr,sl sil, fri,tr carb flk — S-1 S-2 S-1

Sltst dk brn-gy,v arg,mica,carb,scat vf sd, dk gy sh ptg

Sh dk gy,mic-mica,fis,slty,carb;Ss gy,arg, carb,v slty

Ss brn-gy,vf gr,slty,arg,carb,calc & sid cmt; Ss clr qtz,tr argl gr,sl sil,fri

Sh dk gy,mic-mica,sl fis,carb pl rmn,slty
Thn sltst strg/vf sd gr
Tr Foram

Sltst brn-gy,arg,carb pl rmn,dk gy sh ptg/ intbd ss gy,arg,carb,slty

Sh lt to m brn-gy,mic-mica,fis,scat carb flk & Fe-st frag,thn sltst strg

Sltst gy,arg,carb,vf sd gr,pyr;Ss lt gy, arg,slty,carb flk,dol

Sltst lt brn-gy,carb,mica,v arg,brn-gy sh ptg

Ss lt gy to clr qtz,tr carb flk

Sh lt to m brn-gy,mic-mica,fis,slty,vf sd gr, thn sltst strg,abnt Fe-st frag

Thn ss strg lt gy,glau

Ss lt gy,vf to f gr,arg,slty,carb flk

Sh lt to m brn-gy,flky,fis,pt slty,Fe-st frag;Thn ss strg lt gy,vf to f gr,glau

Intbd sltst brn-gy,v arg,carb,vf sd gr, scat Fe-st frag

Ss lt gy,vf to f gr,arg,slty,gy sh ptg

Sltst brn-gy,arg,carb flk,vf sd gr,scat Fe-st frag,gy sh ptg;Sh gy,fis,carb, slty,Fe-st frag;Ss lt gy,vf gr,arg,slty

Ss lt gy,pred vf to f gr,scat m gr,sb rd,

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fri,tr carb flk

Sltst dk brn-gy,v arg,mica,carb,scat vf sd, dk gy sh ptg

Sh dk gy,mic-mica,fis,slty,carb;Ss gy,arg, carb,v slty

Ss brn-gy,vf gr,slty,arg,carb,calc & sid cmt; Ss clr qtz,tr argl gr,sl sil,fri

Sh dk gy,mic-mica,sl fis,carb pl rmn,slty
Thn sltst strg/vf sd gr
Tr Foram

Sltst brn-gy,arg,carb pl rmn,dk gy sh ptg/ intbd ss gy,arg,carb,slty

Sh lt to m brn-gy,mic-mica,fis,scat carb flk & Fe-st frag,thn sltst strg

Sltst gy,arg,carb,vf sd gr,pyr;Ss lt gy, arg,slty,carb flk,do.

Sltst lt brn-gy,carb,mica,v arg,brn-gy sh ptg
Ss lt gy to clr qtz,tr carb flk
Sh lt to m brn-gy,mic-mica,fis,slty,vf sd gr, thn sltst strg,abnt Fe-st frag

Thn ss strg lt gy,glau

Ss lt gy,vf to f gr,arg,slty,carb flk
Sh lt to m brn-gy,flky,fis,pt slty,Fe-st frag;Thn ss strg lt gy,vf to f gr,glau

Intbd sltst brn-gy,v arg,carb,vf sd gr, scat Fe-st frag

Ss lt gy,vf to f gr,arg,slty,gy sh ptg

Sltst brn-gy,arg,carb flk,vf sd gr,scat Fe-st frag,gy sh ptg;Sh gy,fis,carb, slty,Fe-st frag;Ss lt gy,vf gr,arg,slty

Ss lt gy,pred vf to f gr,scat m gr,sb rd, arg,glau,slty,carb

Sh m to dk gy,flky,fis,sl carb;Ss lt gy, arg,slty,carb,Fe-st frag C-1

Sltst brn-gy,arg,carb,gy sh ptg,vf sd gr
Sh brn-gy to gy,fis,slty,carb

Ss lt gy,arg,slty,carb,Fe-st frag

Ss lt gy,vf gr,pt grdg to sltst,arg,carb

Sh brn-gy to gy,fis,slty,carb,vf sd gr;Sltst gy,arg,carb,vf sd gr

Ss brn,vf gr,grdg to sltst,sid cmt,glau,tr Foram;Sltst brn-gy to gy,arg,tr sid,scat sb rd f sd gr,thn vf ss strg,gy sh ptg
Ss gy,sl s&p,arg,slty,glau C-1 C-1

Sh gy,mic-mica,fis,carb flk,pl rmn,scat shell frag,Foram,vf to f rd sd gr
Ss gy,sl s&p,vf to f gr,scat m gr,glau, arg,slty C-1 C-1
Sh gy,mic-mica,carb,slty,thn ss strg

Sltst gy to brn-gy,vf sd gr

Ss gy,arg,glau,slty
Sh m to dk gy,mic-mica,carb,thn sltst strg
Tr cht pbl to 3 mm
Tr Foram

Ss clr qtz,lt brn,fri,sl sil,scat glau

Sh blk,bit,hd,blky,sil;Sh blk,bit,hd, blky,sil,pt/vf sd gr;Ss clr qtz,hd, sil,blk arg mat;Sh blk,bit,hd,blky, sil,blk cht frag,v sl dol S-1 S-1 S-1

Cht dk gy to blk,arg,bit,sl dol,pyr;Sh

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						Sh brn-gy to gy,fis,slty,carb,vf sd gr;Sltst gy,arg,carb,vf sd gr		
1600								
	a	W				Ss brn,vf gr,grdg to sltst,sid cmt,glau,tr foram;Sltst brn-gy to gy,arg,tr sid,scat sb rd f sd gr,thn vf ss strg,gy sh ptg		
	a	M				Ss gy,sl s&p,arg,slty,glau		
	a	M					C-1	
	a	M					C-1	
1700								
			F			Sh gy,mic-mica,fis,carb flk,pl rmn,scat shell frag,Foram,vf to f rd sd gr		
	a	M				Ss gy,sl s&p,vf to f gr,scat m gr,glau, arg,slty	C-1	
	a	M					C-1	
x	a	M				Sh gy,mic-mica,carb,slty,thn ss strg		
1800						Sltst gy to brn-gy,vf sd gr		
	a	W				Ss gy,arg,glau,slty		
	a	W				Sh m to dk gy,mic-mica,carb,thn sltst strg		
			F			Tr cht pbl to 3 mm		
						Tr Foram		
1900	x							
	x	a	W			Ss clr qtz,lt brn,fri,sl sil,scat glau		
		a	W				S-1	
		a	W				S-1	
33	x	a	W				S-1	
D2	x	a	W			Sh blk,bit,hd,blky,sil;Sh blk,bit,hd, blky,sil,pt/vf sd gr;Ss clr qtz,hd,		
		a	W			sil,blk arg mat;Sh blk,bit,hd,blky,		
		a	W			sil,blk cht frag,v sl dol		
2000								
		M	?			Cht dk gy to blk,arg,bit,sl dol,pyr;Sh		
						blk,bit,hd,sil,pt slty,scat blk cht frag		
						Scat f sd gr		
	v	M	?			Cht blk,arg,bit,pt lchd/sil cmt	L-1,S-1	
	v	M	?					
	v	M	?				L-1,S-1	
	v	M	?					
		M	?					
		M	?					
2100	v	M	?			Sh gn-gy to gy-brn,flky,fis,pt si slty,thn ss strg,intbd/cht blk,v arg & sh blk, hd,sil,bit		
		M	?					
		M	?					
		M	?					
2200								
						Sh gy-brn,pt yel,flky,fis,slty		
		a	W			Ss brn-gy,v arg,slty,thn gy-brn sh ptg		
		a	W			Ls lt brn,arg,slty,vf sd gr		
2300			N			Sh gy-brn,flky,fis,slty,scat vf sd		
		a	W					
		a	W			Ss brn-gy,arg,slty,glau,scat dk gy cht		
		a	W					
65						Sltst brn-gy,arg,gy-brn sh ptg,vf sd gr		
S-C		M	?			Cht blk,arg,bit,dol/intbd blk sh,bit		
		M	?					
		a	W			Ss brn-gy,pt slty,pt dk cht gr		
2400	v	M	?					
		M	?					
	v	D	?			Dol lt to dk brn-gy,arg,bit,pyr,scat vug;Sh		
		M	?			blk,bit,sl sil,dol		
		M	?					
		D	?				M-1	
		D	?					
						Sh gy-brn,flky,fis,slty,tr vf sd gr		
						Sh blk,hd,sl sil,dol,bit		
2500		M	?			Cht dk gy to blk,arg,dol,bit		
		M	?					
		D	?			Dol lt to dk gy,arg,dk gy cht,pyr/intbd	M-4	
		D	?			sh blk,dol,sil,sl bit		
		D	?					
		D	?				M-1	
		D	?			Sh m to dk gy,hd,sl dol & sil,pyr	M-2	
		M	?					
		D	?				M-3	
		D	?					
2600		D	?			Dol wh to lt gy,scat pyr		
		D	?			Sh blk,hd,dol,sl bit;Dol lt to dk gy,arg		
		M	?					
		M	?					
		D	?			Dol wh to gy/blk sh bnd		
		D	?					
		D	?			Sh gy to blk,hd,dol,sl bit,frac/calcM-1,F-1,C-1		
		M	?			cmt;Dol lt to m gy,arg,blk cht frag;Sh dk		
		M	?			gy-blk,blky,bit,dk gy to blk cht frag		
						Sh blk,blky,bit,pt dol/blk cht frag		
2700								
		D	?			Cht wh to lt gy & dk brn-gy mot;Dol gy to	M-2	
		D	?			brn-gy,arg,blk sh ptg,cht incl	M-1	
	fv	D	?			Wh to lt gy-brn,pt arg,sil,scat pyr,		
	fv	D	?			pt frac/sil & calc cmt	M-1	
	fv	D	?					
		M	?					
						Sh lt gn-gy,hd,sil,sl dol/intbd blk		
						sh,hd,dol		
2800								
		F				Thn dol strg,gy,pt frac/wh dol cmt	C-1	
		M				Thn bnd lt gy cht,v arg,sl dol		
		M						
2900		M						
		M						
		M	?			Cht lt gy,arg,v sl dol,tr gn-gy sh ptg		
						Sh blk,hd,dol,sl bit		
						Scat dk gy to blk cht frag		

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S-0

			M	2	?				Cht blk,arg,bit,dol/intbd blk sh,bit
			M	4	?				
			a	w		3			Ss brn-gy,pt slty,pt dk cht gr
2400	v		M	2	?				
	v		M		?				
			D	6	?				Dol lt to dk brn-gy,arg,bit,pyr,scat vug;Sh
			M	3	?				blk,bit,sl sil,dol
						0			
			M	2	?				
			D	2	?				M-1
			D	1	?				
						0			Sh gy-brn,flky,fis,slty,tr vf sd gr
						0			Sh blk,hd,sl sil,dol,bit
2500			M	2	?				Cht dk gy to blk,arg,dol,bit
			M	2	?				
			D	2	?				Dol lt to dk gy,arg,dk gy cht,pyr/intbd M-4
			D	1	?				sh blk,dol,sil,sl bit
			D	2	?				
			D	5	?				M-1
			D	2	?				Sh m to dk gy,hd,sl dol & sil,pyr M-3
			M	1	?				M-3
			D	1	?				
			D	2	?				
2600			D	2	?				Dol wh to lt gy,scat pyr
			M	1		0			Sh blk,hd,dol,sl bit;Dol lt to dk gy,arg
			M	1		0			
			D	7	?				Dol wh to gy/blk sh bnd
			D	5	?				
			D	4	?				Sh gy to blk,hd,dol,sl bit,frac/calc M-1,F-1,C-1
			M	1		0			cmt;Dol lt to m gy,arg,blk cht frag;Sh dk
			M	1		0			gy-blk,blky,bit,dk gy to blk cht frag
						0			Sh blk,blky,bit,pt dol/blk cht frag
2700						0			
			D	2	?				Cht wh to lt gy & dk brn-gy mot;Dol gy to M-3
			D	7	?				brn-gy,arg,blk sh ptg,cht incl M-1
	fv		D	8	?				wh to lt gy-brn,pt arg,sil,scat pyr,
	fv		D	9	?				pt frac/sil & calc cmt M-1
	fv		D	4	?				
			M	2	?				
						0			Sh lt gn-gy,hd,sil,sl dol/intbd blk
						0			sh,hd,dol
						0			
2800						0			
			F	1		0			Thn dol strg,gy,pt frac/wh dol cmt C-1
						0			
						0			
			M	1		0			Thn bnd lt gy cht,v arg,sl dol
			M	1		0			
						0			
2900						0			
			M	1		0			
			M	6	?				Cht lt gy,arg,v sl dol,tr gn-gy sh ptg
						0			Sh blk,hd,dol,sl bit
						0			Scat dk gy to blk cht frag
			M	1		0			
						0			Thn dol strg dk gy,arg
3000			D	3	?				Dol m to dk gy,vf xl,arg,sil
			D	7	?				Dk gy to blk,micxl to vf xl,arg,blk sh ptg
			D	8	?				Lt to m gy,pt dk gy,arg,sil M-1
			D	2	?				Sh dk gy to blk,hd,dol,sil
	f		D	5	?				Dol lt to dk gy,sl arg,frac/wh sil cmt F-1,S-1
			D	4	?				Sh dk gy to blk,hd,dol,scat dol rhmb & M-1
			M	1		0			blk cht frag,pyr,tr frac/wh dol cmt
	fv		D	4	?				Dol m to dk gy,arg,blk sh ptg,blk cht frag M-1
	fv		D	5	?				M-1
			D	6	?				M-1
3100			M	3	?				Cht dk gy to blk,arg,sl bit;Sh blk,hd,dol
			D	4	?				bnd thru
	v		D	4	?				
			D	2	?				
			D	3	?				
			M	6	?				Cht blk,sl arg,tr pyr,tr frac/wh dol cmt
			D	6	?				Dol wh & lt to dk gy mot,arg,sil pt/blk M-3
			D	7	?				cht frag & blk sh ptg M-1
			D	1	?				Sh blk,hd,sl bit,dol,blk cht frag,pyr
			M	2	?				Cht blk,pt dk gy,tr frac & lchd/wh dol
3200	fv		M	6	?				cmt F-1,C-1
	fv		M	5	?				Sh blk,hd,dol,sl bit,pt sks F-1,C-1
			M	6	?				Cht blk,arg,frac/wh calc cmt F-2,C-2
			M	1		0			
			M	8	?				
	f		M	7	?				
			D	2	?				
	f		M	4	?				Brec dk gy to blk cht frag & lt to D-2,F-3,C-2
	f		D	3	?				m gy dol,cmt/wh dol;Cht blk,dol,arg;Dol lt M-6
	f		D	3	?				to m gy,sil,blk cht frag M-5
3300			D	3	?				Sh blk,hd,sil,dol,blk cht frag M-3
						0			
			M	3	?				Cht blk,arg,dol
	f		M	2	?				Frac/wh dol cmt,thn dol strg lt to D-2,F-1,C-1
			M	7	?				m gy D-3
	f		M	6	?				D-2,F-1,C-1
			M	5	?				Dol dk brn-gy to blk,micxl to vf xl,v arg, D-3
			D	6	?				scat blk cht frag,tr frac/wh dol cmt M-1
	f		M	6	?				Sh blk,hd,dol,blk cht frag/intbd cht D-1
	f		M	2	?				blk,arg,dol
3400	f		M	4	?				D-1,F-1,C-1
			M	3	?				
			D	8	?				Dol dk brn-gy to blk,micxl to vf xl,v arg M-1
	vf		D	8	?				Dol wh to lt gy,vf to f xl,tr arg,pt M-1,L-2,C-1
			D	5	?				sil,pt lchd & tr frac/wh dol & calc cmt M-2
	v		D	5	?				M-1,L-1,C-1
			D	2	?				
	f		D	2	?				Cht blk,pt dol,frac/wh dol cmt F-1,C-1,M-2
	f		M	7	?				Cht blk,arg,dol,blk sh ptg,scat pyr D-1
			M	5	?				D-1
3500			D	6	?				Dol dk brn to blk,micxl to vf xl,v arg,sl M-1
			D	2	?				sil,blk sh ptg
			D	4	?				M-2
			D	3	?				Cht blk,arg,blk sh ptg,scat pyr M-3
			M	9	?				
	f		M	8	?				
	f		M	6	?				Cht m to dk brn-gy,pt sl arg,pt frac & lchd/
	fv		M	8	?				wh dol & tr sil cmt,indst fos shad F-1,L-1,C-2
	vf		M	9	?				L-1,S-1
	vf		M	6	?				L-2,S-1
3600	f		M	6	?				
	vf		M	9	?				L-2,S-1
	vf		M	6	?				Cht dk brn-gy to blk,arg,scat pyr,pt L-1,S-1
	f		M	7	?				frac/wh sil cmt,thn blk sh ptg;Sh blk,hd,
			D	7	?				sl bit,dol,sks;Dol lt gy to dk brn-gy, M-1
	vf		D	8	?				micxl to f xl,sl arg,bit,dd asph M-1,L-1,S-1
			D	3	?				mat,pt lchd/wh dol & sil cmt,tr frac M-1
			D	4	?				Sh dk gy to blk,hd,sl bit,dol,sil;Dol dk
			D	4	?				brn-gy,micxl to f xl,sl arg,bit,sl sil
3700	vf		D	4	?				M-1,L-1,C-1
			D	7	?				M-1
	xv		D	8	?				Dol dk brn-gy to blk,sil,tr arg,bit,scat M-1
	xv		D	9	?				vug M-1
	xv		D	6	?				M-1
			D	3	?				Intbd sh blk,dol
			D	5	?				
			D	3	?				Dol dk gy to blk,sl arg,bit,sil,pt M-1,L-2,C-1

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								Cht blk,sl arg,tr pyr,tr frac/wh dol cmt	
								Dol wh & lt to dk gy mot,arg,sil pt/blk cht frag & blk sh ptg	M-2 M-1
								Sh blk,hd,sl bit,dol,blk cht frag,pyr	
								Cht blk,pt dk gy,tr frac & lchd/wh dol cmt	F-1,C-1
3200	fv	M	5	?				Sh blk,hd,dol,sl bit,pt sks	F-1,C-1
	fv	M	6	?				Cht blk,arg,frac/wh calc cmt	F-2,C-2
		M	1	0					
		M	8	?					
	f	M	7	?					
		D	2	?					
	f	M	3	?				Brec dk gy to blk cht frag & lt to m gy dol,cmt/wh dol;Cht blk,dol,arg;Dol lt to m gy,sil,blk cht frag	D-2,F-3,C-2 M-6 M-1
	f	D	2	?				Sh blk,hd,sil,dol,blk cht frag	M-3
3300		M	3	0				Cht blk,arg,dol	
	f	M	4	?				Frac/wh dol cmt,thn dol strg lt to m gy	D-2,F-1,C-1 D-2
		M	7	?					D-2,F-1,C-1
	f	M	6	?				Dol dk brn-gy to blk,micxl to vf xl,v arg, scat blk cht frag,tr frac/wh dol cmt	D-3 M-1
		D	2	?				Sh blk,hd,dol,blk cht frag/intbd cht blk,arg,dol	D-1
	f	M	6	?					D-1,F-1,C-1
	f	M	2	?					
	f	M	4	?					
3400		M	3	?					
		D	3	?				Dol dk brn-gy to blk,micxl to vf xl,v arg	M-1
	vf	D	2	?				Dol wh to lt gy,vf to f xl,tr arg,pt sil,pt lchd & tr frac/wh dol & calc cmt	M-1,L-2,C-1 M-2
	v	D	5	?					M-1,L-1,C-1
		D	3	?					
	f	M	2	?				Cht blk,pt dol,frac/wh dol cmt	F-1,C-1,M-2
	f	M	7	?				Cht blk,arg,dol,blk sh ptg,scat pyr	D-1
		M	5	?					D-1
		D	6	?				Dol dk brn to blk,micxl to vf xl,v arg,sil,blk sh ptg	M-1 M-2
3500		D	2	?					
		D	4	?					M-2
		D	2	?				Cht blk,arg,blk sh ptg,scat pyr	M-2
	f	M	9	?					
	f	M	6	?				Cht m to dk brn-gy,pt sl arg,pt frac & lchd/wh dol & tr sil cmt,indst fos shad	F-1,L-1,C-2
	fv	M	8	?					L-1,S-1
	vf	M	9	?					L-2,S-1
	vf	M	9	?					
	f	M	9	?					
3600	vf	M	6	?					L-2,S-1
	vf	M	9	?					L-2,S-1
	vf	M	9	?				Cht dk brn-gy to blk,arg,scat pyr,pt frac/wh sil cmt,thn blk sh ptg;Sh blk,hd, sl bit,dol,sks;Dol lt gy to dk brn-gy, micxl to f xl,sl arg,bit,dd asph	L-1,S-1 M-1 M-1,L-1,S-1
	f	M	7	?					M-1
	vf	D	8	?					M-1
		D	9	?				mat,pt lchd/wh dol & sil cmt,tr frac	M-1
		D	3	?				Sh dk gy to blk,hd,sl bit,dol,sil;Dol dk brn-gy,micxl to f xl,sl arg,bit,sl sil	
	vf	D	4	?					M-1,L-1,C-1
3700		D	7	?					M-1
	xv	D	8	?				Dol dk brn-gy to blk,sil,tr arg,bit,scat vug	M-1
	xv	D	9	?					M-1
	xv	D	6	?					M-1
		D	3	?				Intbd sh blk,dol	
	vx	D	8	?				Dol dk gy to blk,sl arg,bit,sil,pt lchd/wh dol cmt,qtz xl	M-1,L-2,C-1 L-2,C-1
	vx	D	9	?					M-1
3800	x	D	9	?					M-1
	x	D	9	?				Dol lt to m gy,pt grdg to dk gy,arg,sl bit Pt sil,scat pyr	M-1
	fv	D	8	?				Frac & pt lchd/wh dol cmt	F-1,C-1
	f	D	8	?				Dk brn-gy to blk,arg,sl bit,tr frac	M-2
	f	D	9	?				M to dk brn-gy,pt blk,tr arg,sl bit,sil	M-1
		D	8	?				Blk cht frag,scat pyr	M-2
		D	8	?					M-1
		D	7	?					M-3
	f	D	7	?					M-2,F-1,C-1
		D	8	?					M-1
3900		D	8	?					M-3
		D	8	?					M-2
	f	D	7	?					M-1
		D	9	?					M-3
		D	7	?					M-2
		D	7	?					M-3
		D	7	?					M-2
		D	6	?					M-3
		D	8	?				Dol dk brn-gy,micxl to vf xl,sil,arg,calc Thn dk brn ls strg	M-2 M-1
4000		D	7	?					M-1
		D	6	?					
		D	3	0				Ls m to dk gy,arg,dol,sl bit,pt/thn dol strg	
		D	3	0					
		D	2	0					
		D	4	?				Dol dk brn-gy,arg,calc;Ls dk brn-gy,dol,	
		D	2	0				v arg,slty grdg to mrlst dk gy,shy,	
		D	1	?				slty,vf sd gr	
		D	1	0					
4100		D	2	0					
		D	3	?					
		D	3	?				Calc wh ?rexl,pos frac & lchd & completly cmt/wh calc	R-2
		R	0	?					
		R	6	?				Dol dk gy to blk,micxl to vf xl,tr cht frag,	D-4
		D	7	?				arg slty,pt lchd & frac/wh calc cmt	F-1,L-1,C-2
		D	7	?					M-1
		D	7	?					
		D	6	?					
		D	7	?				Lt to m gy,pt grdg to dk gy,arg,m to dk gy cht frag,sl sil	M-1 M-1
4200	fv	D	7	?				Frac & lchd/sil & tr calc cmt	M-1,F-1,S-1
		D	6	?				Intbd sh dk gy to blk,dol,pyr	M-1
	fv	D	6	?					M-1,F-1,L-1,S-2
		D	7	?					M-1
	f	D	8	?					M-1
	f	D	9	?					M-1
		D	8	?					M-1
		D	8	?					M-1
		D	8	?					M-2
4300		D	7	?					M-3
		D	7	?					M-2
		D	8	?					M-1
		D	7	?					M-3
		D	7	?					M-2
		D	7	?					M-3
		D	7	?					M-1
		D	8	?					M-2
		D	6	?					
	fv	D	8	?				Lt to m gy,pt grdg to dk gy,tr arg,frac & lchd/wh calc cmt,pyr	M-1 F-1,L-1,C-1
4400	fv	D	9	?					
	f	D	8	?				Thn ls strg	F-1,C-1
		D	2	?				Ls lt gy,sl dol,sl sil,tr qtz xl;Sh m to dk gy,dol,sil;Dol dk gy,sl calc,v arg	M-1
		D	6	?					
		D	2	?				Ls lt brn-gy,dol,sil	
		D	2	0				Lt to m brn-gy,dol,v arg,pt slty,sil,bit	M-1
		D	2	0					
		D	1	0				Sh m to dk gy,dol,pyr,slty	M-1
		D	1	0					M-1
		D	2	0					
4500		D	2	0					
		D	2	0					
		D	2	0					
		D	2	0					

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SCALE CHANGE

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4000										Dol dk brn-gy,micxl to vf xl,sil,arg,calc Thn dk brn ls strg
4100										
4200	fv									Frac & lchd/sil & tr calc cmt Intbd sh dk gy to blk,dol,pyr
4300										
4400	fv fv f									Lt to m gy,pt grdg to dk gy,tr arg,frac & lchd/wh calc cmt,pyr Thn ls strg
4500										Ls lt gy,sl dol,sl sil,tr qtz xl;Sh m to dk gy,dol,sil;Dol dk gy,sl calc,v arg Ls lt brn-gy,dol,sil Lt to m brn-gy,dol,v arg,pt slty,sil,bit Sh m to dk gy,dol,pyr,slty Sh lt to m gy,calc,sl dol,slty,thn arg ls strg Ls lt to m brn-gy,dol,sil,sl bit Lt to m gy,dol,v arg,slty,gy sh ptg,sl bit
4600										
4700	f									Ls lt gy,arg,tr dol,tr sil Ls lt brn-gy,arg,dol,slty Sh dk gy to blk dol,blk cht frag Ls lt to m gy,arg,dol,slty Sh lt to m gy,dol,scat pyr Ls lt brn-gy,arg,slty,tr vf sd gr
4800										Sh dk gy to blk,dol,sl bit,pt/blk cht frag Intbd ls lt gy,arg,slty,dol & blk sh
4900										Ls lt to m brn-gy,scat slt gr,tr arg,thn dol strg
5000	vf vf vf									Dol wh to lt gy,calc,tr arg,intbd/ls lt brn-gy, dol,slty Pt lchd & frac/wh calc cmt Lt to m gy,pt dk gy,arg,calc,pt slty Scat dk cht frag
5100	fv v									Ls m to dk brn,arg,slty,v dol Dol wh to lt gy,pt dk gy,sl arg,calc Lt to dk gy,calc,arg Pt frac & lchd/tr calc cmt
5200										Ls lt brn-gy,arg:Dol dk gy,calc,arg,slty Ls m to dk gy,arg,v dol Sh m to dk gy,calc,dol,slty,pyr
5300	f v									Ls dk gy,slty,dol,some por Dol lt brn-gy,arg,slty,sil,calc,frac/wh calc cmt/intbd blk sh ptg Lt to m brn-gy,arg,slty,sil,frac & lchd/wh calc & dol cmt,pt brec;Sh dk gy,dol,sil,slty;Ls lt brn-gy,sl arg, sil;M to dk brn-gy,arg,dol,slty,thn dol strg

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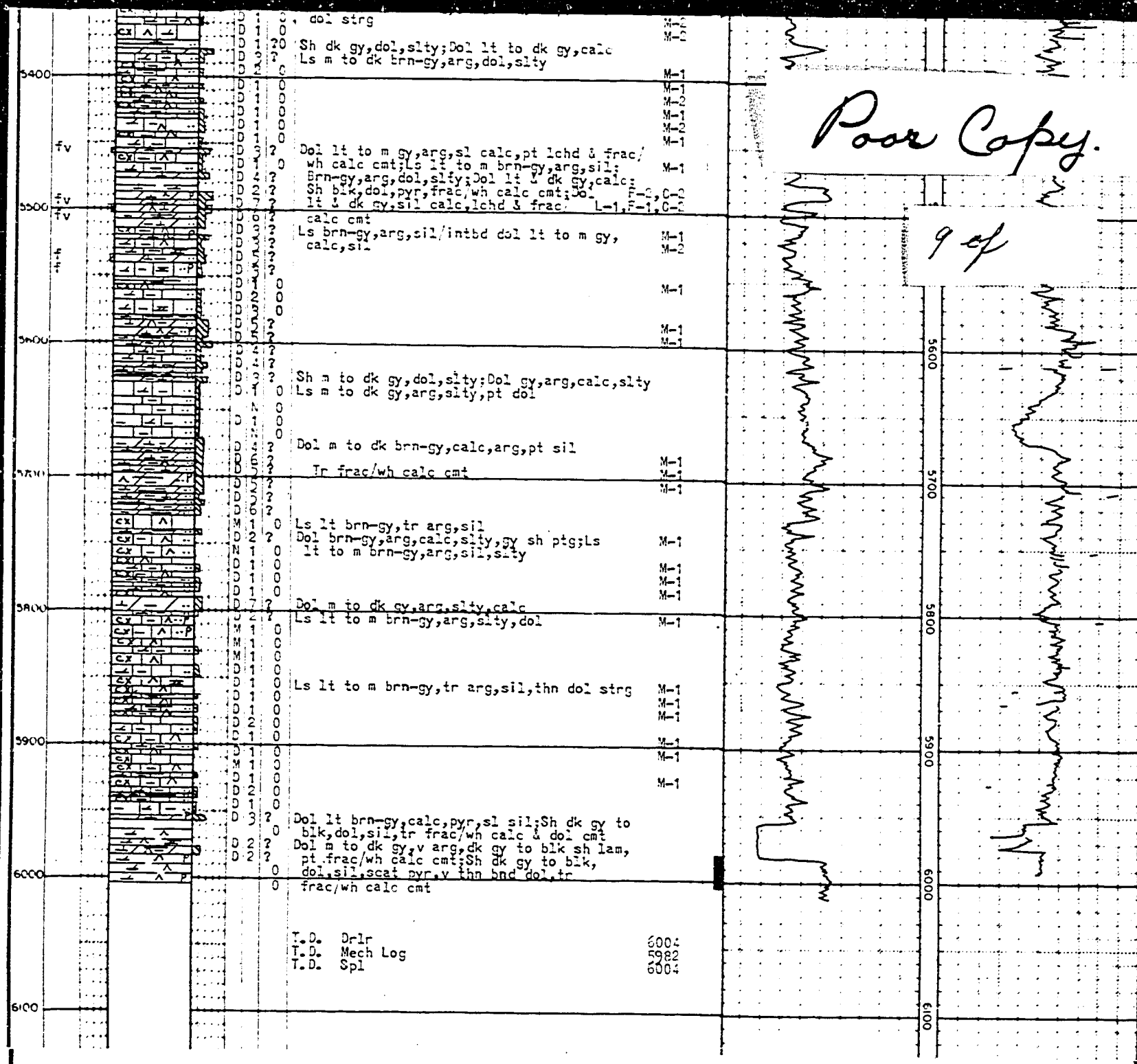
4000
Dol dk brn-gy,micxl to vf xl,sil,arg,calc — M-1
Thn dk brn ls strg — M-1
Ls m to dk gy,arg,dol,sl bit,pt/thn dol strg
Dol dk brn-gy,arg,calc;Ls dk brn-gy,dol, v arg,slty grdg to mrlst dk gy,shy, slty,vf sd gr
4100
Calc wh ?rexl,pos frac & lchd & completly cmt/wh calc — R-2
Dol dk gy to blk,micxl to vf xl,tr cht frag, arg slty,pt lchd & frac/wh calc cmt — D-4, F-1,L-1,C-2
M-1
4200
Lt to m gy,pt grdg to dk gy,arg,m to dk gy cht frag,sl sil — M-1
fv Frac & lchd/sil & tr calc cmt — M-1,F-1,C-1
Intbd sh dk gy to blk,dol,pyr — M-1
fv M-1,F-1,L-1,S-2
4300
4400
fv Lt to m gy,pt grdg to dk gy,tr arg,frac & lchd/wh calc cmt,pyr — M-1, F-1,L-1,C-1
f Thn ls strg — F-1,C-1
Ls lt gy,sl dol,sl sil,tr qtz xl;Sh m to dk gy,dol,sil;Dol dk gy,sl calc,v arg — M-1
Ls lt brn-gy,dol,sil
Lt to m brn-gy,dol,v arg,pt slty,sil,bit — M-1
Sh m to dk gy,dol,pyr,slty — M-1, M-1
4500
Sh lt to m gy,calc,sl dol,slty,thn ls strg
Ls lt to m brn-gy,dol,sil,sl bit
Lt to m gy,dol,v arg,slty,gy sh ptg,sl bit
4600
4700
f Ls lt gy,arg,tr dol,tr sil
Ls lt brn-gy,arg,dol,slty
Sh dk gy to blk dol,blk cht frag
Ls lt to m gy,arg,dol,slty
Sh lt to m gy,dol,scat pyr
Ls lt brn-gy,arg,slty,tr vf sd gr
4800
Sh dk gy to blk,dol,sl bit,pt/blk cht frag
Intbd ls lt gy,arg,slty,dol & blk sh
4900
Ls lt to m brn-gy,scat slt gr,tr arg,thn dol strg
Dol wh to lt gy,calc,tr arg,intbd/ls lt brn-gy, dol,slty
5000 vf Pt lchd & frac/wh calc cmt — F-1,L-1,C-1
vf F-1,L-2,C-1
vf Lt to m gy,pt dk gy,arg,calc,pt slty
Scat dk cht frag — M-1, M-1
Ls m to dk brn,arg,slty,v dol
Dol wh to lt gy,pt dk gy,sl arg,calc
fv Lt to dk gy,calc,arg
Pt frac & lchd/tr calc cmt
5100
v L-1
Ls lt brn-gy,arg;Dol dk gy,calc,arg,slty
Ls m to dk gy,arg,v dol
Sh m to dk gy,calc,dol,slty,pyr
5200
f Ls dk gy,slty,dol,some por — F-1,C-1
5300
v Dol lt brn-gy,arg,slty,sil,calc,frac/wh calc cmt/intbd blk sh ptg — F-1,C-1; M-1,F-1,C-1; M-1,F-1,C-1
Lt to m brn-gy,arg,slty,sil,frac & lchd/wh calc & dol cmt,pt brec;Sh dk gy,dol,sil,slty;Ls lt brn-gy,sl arg, sil;M to dk brn-gy,arg,dol,slty,thn dol strg — M-1,L-1,F-1,C-2; M-1,F-1,C-1; M-1, M-2, M-2

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4800
4900
5000
5100
5200
5300
5400
5500
5600
5700
5800
5900
6000
6100

f	D	1		0					Sh dk gy to blk dol,blk cht frag
	D	1		0					Ls lt to m gy,arg,dol,slty
	D	1		0					Sh lt to m gy,dol,scat pyr
		N		0					Ls lt brn-gy,arg,slty,tr vf sd gr
	D	1		0					
		N		0					
	D	2		0					
	D	1		0					
		N		0					
	D	1		0					
				0					Sh dk gy to blk,dol,sl bit,pt/blk cht frag
	D	1		0					Intbd ls lt gy,arg,slty,dol & blk sh
		N		0					
	D	1		0					
	D	1		0					
	D	2		0					
	D	2		0					Ls lt to m brn-gy,scat slt gr,tr arg,thn dol strg
	D	2		0					
	D	2		1					
	D	3		0					
	D	3		2					
	D	3		0					
	D	5	?						Dol wh to lt gy,calc,tr arg,intbd/ls lt brn-gy,
	D	5		0					dol,slty
vf	D	6	?						
	D	7	?						Pt lchd & frac/wh calc cmt F-1,L-1,C-1
vf	D	6	?						F-1,L-2,C-1
vf	D	6	?						
	D	8	?						Lt to m gy,pt dk gy,arg,calc,pt slty
	D	7	?						Scat dk cht frag M-1
	D	4	?						M-1
	D	4	?						Ls m to dk brn,arg,slty,v dol
	D	3	?						Dol wh to lt gy,pt dk gy,sl arg,calc
	D	7	?						Lt to dk gy,calc,arg
fv	D	8	?						Pt frac & lchd/tr calc cmt
v	D	7	?						
	D	8	?						L-1
	D	7	?						
	D	7	?						
	D	6	?						
	D	4	?						Ls lt brn-gy,arg;Dol dk gy,calc,arg,slty
	D	3		0					Ls m to dk gy,arg,v dol
	D	2		0					Sh m to dk gy,calc,dol,slty,pyr
	D	1		0					Ls dk gy,slty,dol,some por
f	D	1		0					F-1,C-1
		N		0					
	D	1		0					
	D	1		0					
	D	1

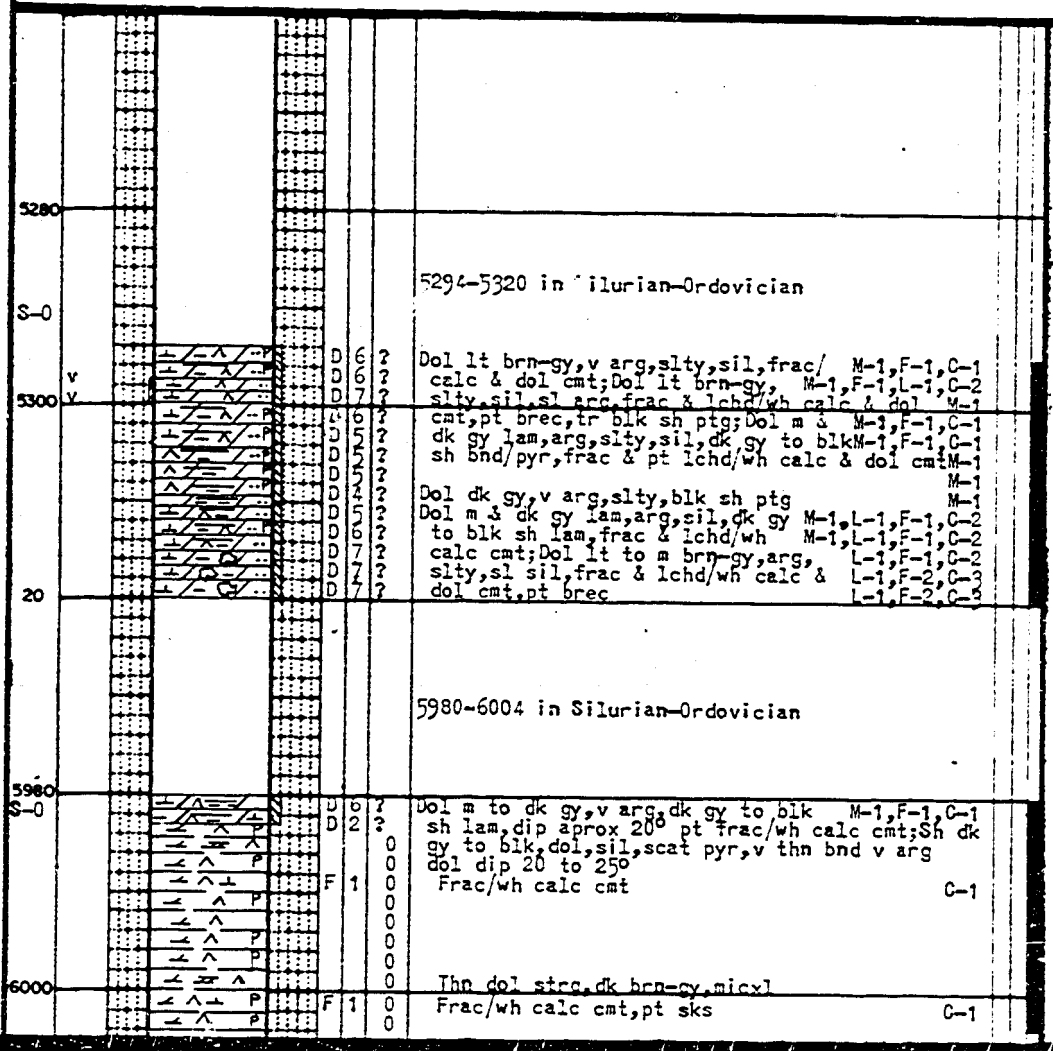


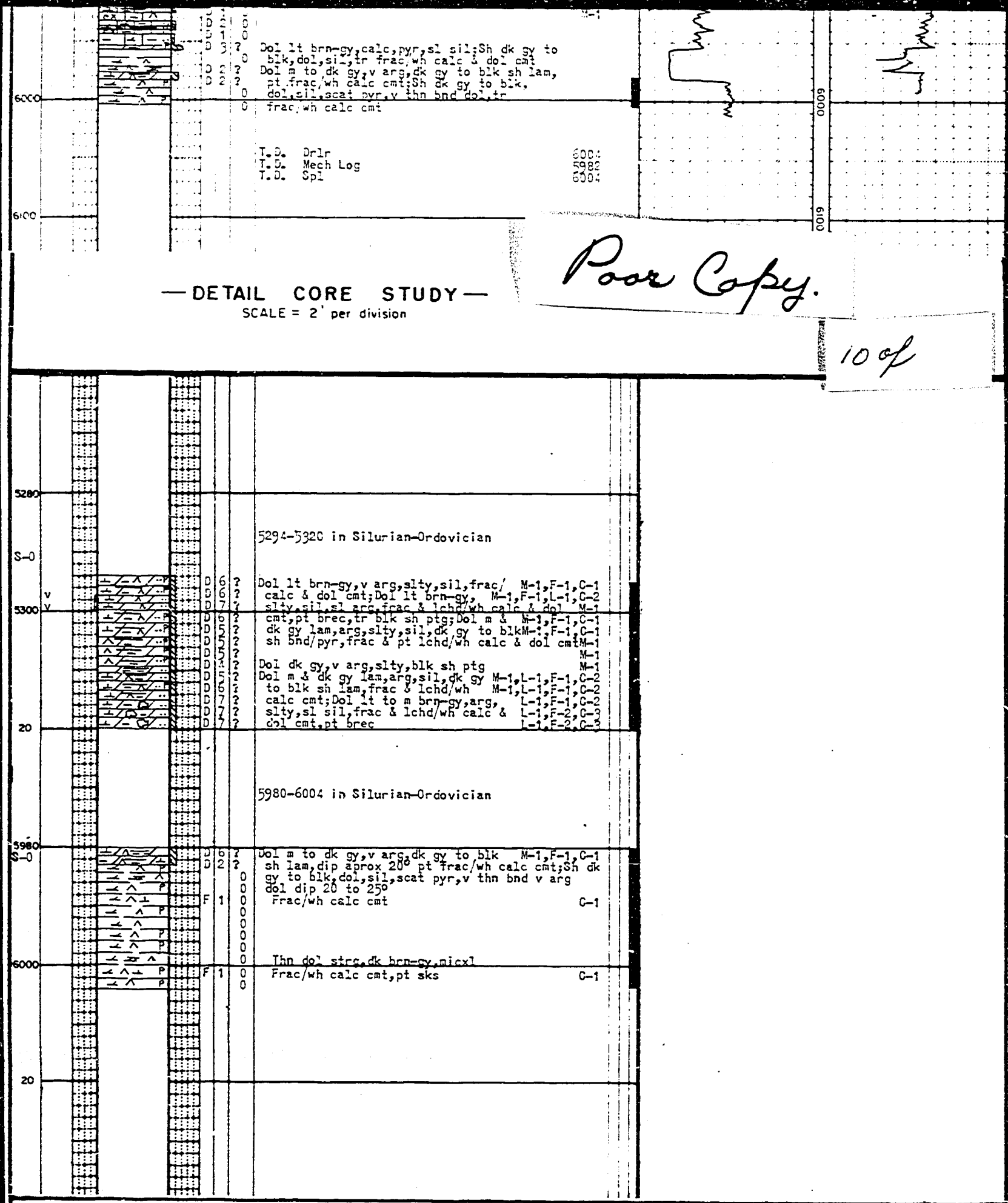
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— DETAIL CORE STUDY —

SCALE = 2' per division





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INFORMATION SUMMARY

SUMMARY OF ABBREVIATIONS
ELEV. 80 KB

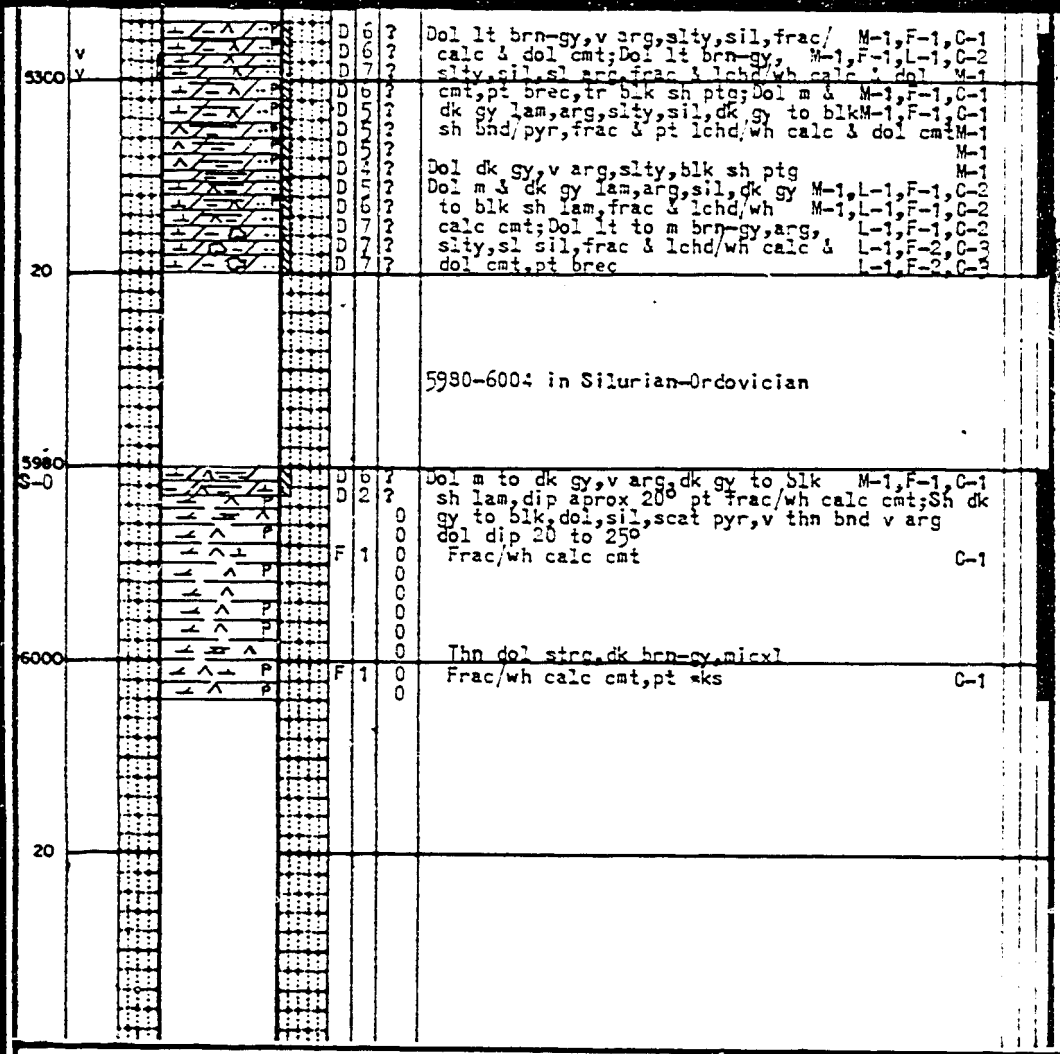
QUATERNARY		
Q	Quaternary	Spl Start
CRETACEOUS		
KI	Lower Cretaceous	501
JURASSIC		
J?	Jurassic?	1356
DEVONIAN		
D?	Devonian?	1933
SILURIAN-ORDOVICIAN		
S-O	Silurian-Ordovician	2365

DRILL STEM TESTS

3750-3804

Misrun. Rec 8' mud.

3750-3804



	D	6	?	Dol lt brn-gy,v arg,slty,sil,frac/	M-1,F-1,C-1
	D	6	?	calc & dol cmt;Dol lt brn-gy,	M-1,F-1,L-1,C-2
	D	7	?	slty,sil,sl arg,frac & lchd/wh calc & dol	M-1
	D	6	?	cmt,pt brec,tr blk sh ptg;Dol m &	M-1,F-1,C-1
	D	5	?	dk gy lam,arg,slty,sil,dk gy to blk	M-1,F-1,C-1
	D	5	?	sh bnd/pyr,frac & pt lchd/wh calc & dol cmt	M-1
	D	5	?		M-1
	D	4	?	Dol dk gy,v arg,slty,blk sh ptg	M-1
	D	5	?	Dol m & dk gy lam,arg,sil,dk gy	M-1,L-1,F-1,C-2
	D	6	?	to blk sh lam,frac & lchd/wh	M-1,L-1,F-1,C-2
	D	7	?	calc cmt;Dol lt to m brn-gy,arg,	L-1,F-1,C-2
	D	7	?	slty,sl sil,frac & lchd/wh calc &	L-1,F-2,C-3
	D	7	?	dol cmt,pt brec	L-1,F-2,C-3

5980-6004 in Silurian-Ordovician

	D	6	?	Dol m to dk gy,v arg,dk gy to blk	M-1,F-1,C-1
	D	2	?	sh lam,dip aprox 20° pt frac/wh calc cmt;Sh dk	
			0	gy to blk,dol,sil,scat pyr,v thn bnd v arg	
			0	dol dip 20 to 25°	
	F	1	0	Frac/wh calc cmt	C-1
			0		
			0		
			0		
			0		
			0	Thn dol strg,dk brn-gy,micxl	
	F	1	0	Frac/wh calc cmt,pt *ks	C-1
			0		

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INFORMATION SUMMARY

SUMMARY OF ABBREVIATIONS
ELEV. 80 KB

QUATERNARY		
Q	Quaternary	Spl Start
CRETACEOUS		
K1	Lower Cretaceous	501
JURASSIC		
J?	Jurassic?	1356
DEVONIAN		
D?	Devonian?	1933
SILURIAN-ORDOVICIAN		
S-O	Silurian-Ordovician	2365

DRILL STEM TESTS

3750-3804

Misrun. Rec 8' mud.

3750-3804

Misrun.

1900-1954

Misrun.

1907-1955

Misrun.

CORED INTERVALS

See Core Study Above

BANFF RAT PASS K-35
N67° 54' 43" W135° 21' 57"
NORTHWEST TERRITORIES, CANADA
LOG NO. NWT-368

3750-3804

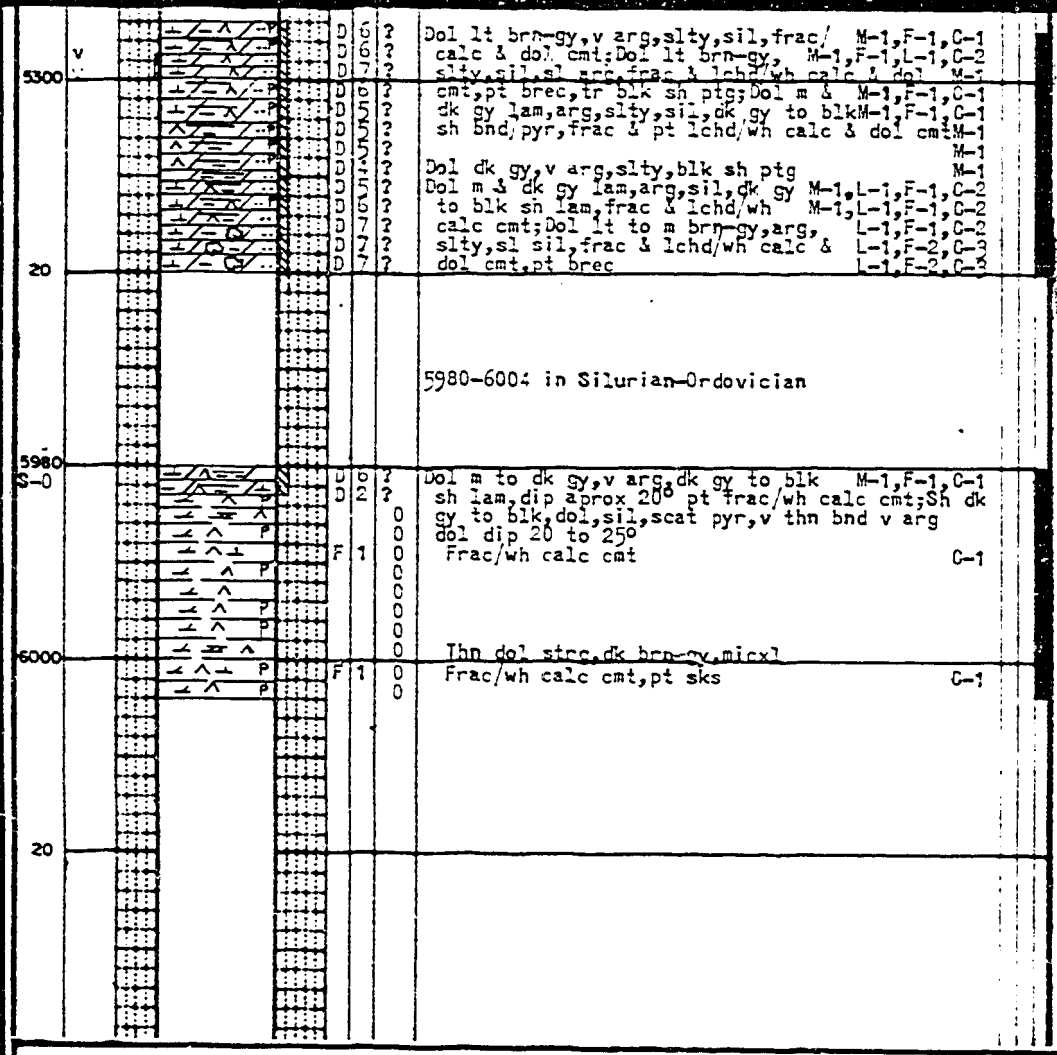
Misrun.

4978-5031

Op 1/120 SI 70/120 mins. HP 2316-2316 FP 589-778 SIP 2205.
Top pkr failed. Rec 770' mud, 450' salt wtr.

1900-1954

Misrun.



	D	6	?	Dol lt brn-gy,v arg,slty,sil,frac/	M-1,F-1,C-1
	D	6	?	calc & dol cmt;Dol lt brn-gy,	M-1,F-1,L-1,C-2
	D	7	?	slty,sil,sl arg,frac & lchd/wh calc & dol	M-1
	D	6	?	cmt,pt brec,tr blk sh ptg;Dol m &	M-1,F-1,C-1
	D	5	?	dk gy lam,arg,slty,sil,dk gy to blk	M-1,F-1,C-1
	D	5	?	sh bnd,pyr,frac & pt lchd/wh calc & dol cmt	M-1
	D	5	?		M-1
	D	4	?	Dol dk gy,v arg,slty,blk sh ptg	M-1
	D	5	?	Dol m & dk gy lam,arg,sil,dk gy	M-1,L-1,F-1,C-2
	D	6	?	to blk sh lam,frac & lchd/wh	M-1,L-1,F-1,C-2
	D	7	?	calc cmt;Dol lt to m brn-gy,arg,	L-1,F-1,C-2
	D	7	?	slty,sl sil,frac & lchd/wh calc &	L-1,F-2,C-3
	D	7	?	dol cmt,pt brec	L-1,F-2,C-3

5980-6004 in Silurian-Ordovician

	D	6	?	Dol m to dk gy,v arg,dk gy to blk	M-1,F-1,C-1
	D	2	?	sh lam,dip aprox 20° pt frac/wh calc cmt;Sh dk	
			0	gy to blk,dol,sil,scat pyr,v thn bnd v arg	
			0	dol dip 20 to 25°	
	F	1	0	Frac/wh calc cmt	C-1
			0		
			0		
			0		
			0		
			0	Thn dol strg,dk brn-gy,micxl	
	F	1	0	Frac/wh calc cmt,pt sks	C-1
			0		

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INFORMATION SUMMARY

SUMMARY OF ABBREVIATIONS
ELEV. 80 KB

QUATERNARY		
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DRILL STEM TESTS

3750-3804

Misrun. Rec 8' mud.

3750-3804

Misrun.

1900-1954

Misrun.

1907-1955

Misrun.

CORED INTERVALS

See Core Study Above

BANFF RAT PASS K-35
N67° 54' 42" W135° 21' 57"
NORTHWEST TERRITORIES, CANADA
LOG NO. NWT-368

3750-3804

Misrun.

4979-5031

Op 1/120 SI 70/120 mins. HP 2316-2316 FP 589-778 SIP 2205.
Top pkr failed. Rec 770' mud, 450' salt wtr.

1900-1954

Misrun.