

Drilling Authority No.538.....
Date Issued.....8-10-71.....

WELL NAME... ARCO et. al Mountain River H-47.....
FIELD Area:
LOCATION: Unit H Section 47 Grid 65-50-129-00
Latitude 65°46'23" Longitude 129°07'50"
U.W.L.R. 65.77306 - 129.13056
U.W.I. 300H476550129000

Rig Release Date: 13-01-72
Status: D+A
Information Release Date: 13-01-74

CHANGE OF NAME: ARCO Clarke et al Mountain River H-47

DATE RECEIVED	INDEX
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	Application to Amend a Drilling Authority.
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08-05-72	DK Application to Abandon a Well or Suspend Drilling.
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	Well History Supplement.
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	Data for Back Pressure Test on Natural Gas Wells - Monograph 7 Method.
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	M.P.R. - Oil - Calculations.
	New Oil Well Report.
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	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.....

DATE RECEIVED					
LOGS:					
Name	Run No.	Type	Interval		
H.R. D:p	1				
FDC	1				
SNP - Lith	1				
BHC-S	1				
DILH	1				
ANALYSES:					
Sample	Lab. No.	Formation	Interval		
A.O.F. Potential	Formation	Interval	MC.F.D.	Test Date	
DRILL STEM TESTS:					
No.	Formation	Interval			

Drilling Authority No. 538
N^o de l'autorisation de forage
Date Issued October 8, 1971
Date de délivrance

Well Name & No. — Nom et n° du puits	Permit No. — N° de permis	Lease No. — N° de concession
ARCO Clarke et al Mtn Iver H-47	3289	
(Permittee, Licensee, Lessee) — (Dépositaire de permis ou de licence, du concessionnaire)	Exploratory Licence No. — N° de licence de sondage	
Atlantic Richfield Canada Ltd. Canada Cities Service Ltd., Triad Petroleum Dev.	Ltd. 1821 and 1943	
(Operator) — (Exécutant)	Exploratory Licence No. — N° de licence de sondage	
Atlantic Richfield Canada Ltd.	1821 and 1943	

Unit — <i>Unité</i> H	Section 47	Grid — <i>Étendue quadrillée</i> 65-50-129-00	Latitude 65°46'23"	Longitude 129°07'50"
Unique Well Identifier — <i>Code d'ordinateur</i> 300H476550129000			Universal Well Location Reference — <i>Références universelles d'emplacement du puits</i> Lat. 65.77306° N Long. 129.13056° W	

Pool(s)
Gisement(s)

Interval(s) Open to Production
Intervalle(s) de production

Elevation: Gr. 295
Altitude du sol

Rig No. 11
N° de la Tour de forage

Contractor's Business Licence No.
N° du permis de l'entrepreneur

K.B. 308
du carré d'entraînement

Drilling Contractor Regent Drilling
Entrepreneur en forage

883

DEPT. OF MINING AFFAIRS & MINERAL DEVELOPMENT
OIL & MINERAL DIVISION
MAY 5 1972
CALGARY 21, ALBERTA
OIL CONSERVATION ENGINEER
Northwest Territories & Yukon Territory

DEPT. OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT
OIL & MINERAL DIVISION
MAY 5 1972
CALGARY 21, ALBERTA
OIL CONSERVATION ENGINEER
Northwest Territories & Yukon Territory

✓ 52-90-2 (7-71)

CEMENTING RECORD (Plug, Squeeze, etc.) CIMENTATION (ouchon, sous pression, etc.)				PERFORATING RECORD (Bullet, Jet) PERFORATION (à balles, à jet)				SERVICING RECORD (Acidizing, Fracing, etc.) ENTRETIEN (acidification, fracturation, etc.)			
Date	From - de	To - à	Remarks - Remarques	Date	From - de	To - à	Remarks - Remarques	Date	From - de	To - à	Remarks - Remarques
1-12-72	3427	3100	140 sacks				None				None
1-12-72	2640	2000	225 sacks + 3% CaCl ₂ Felt @ 2030								
1-13-72	920	570	175 sacks + 3% CaCl ₂ Felt @ 598								

DRILL STEM TESTS - ESSAIS AUX TIGES

No. - No	Date	Formation	From - de	To - à	V.O. Mins. Vitesse ouverte (minutes)	I.S.I. Mins. Première obturation (minutes)	F.S.I. Mins. Obturation définitive (minutes)	I.S.I.B.H.P. Pression de fond à l'obturateur	F.S.I.B.H.P. Pression de fond à l'obturation définitive	I.F.B.H.P. Pression de fond au forage	F.F.B.H.P. Pression de fond à l'égouttement définitif	L.H.P. Pression hydrostatique de début	F.H.P. Pression hydrostatique définitif	Remarks - Remarques
1		Bear Rock Lms	1920	2144	120	60	60	843	693	135	375	903	893	Rec 650' SW & 180' mud cut SW
2		Bear Rock Dol	2350	2515	120	60	60	1022	883	26	105	1102	1102	GT3 in 1 min at 88 MCFD & steady
3		Siluro-Ordovician	3057	3230	120	60	60	1563	1344	475	1332	1479	1467	Rec 240' mud
4		Mierun	600	900										Rec 2800' Salt water
5		Mierun	600	900										
6		Mierun	599	935										

ANALYSIS - ANALYSE

Lab. No. No de laboratoire	Sample Échantillon	From - de	To - à	Source	Remarks - Remarques	PRESENT STATUS OF WELL ÉTAT ACTUEL DU Puits			
						Oil Pétrole	Gas Gaz	Dry Sec	Susp. Travaux sus.
913-221	Core	Core #3		Core Laboratories	2455' - 2515'			X	
921-26	Gas	DST #1		Core Laboratories	1920' - 2144'				
921-26	Water	DST #1		Core Laboratories	1920' - 2144'				
E72-7574-5	Water	#2		Chem & Geol. Labs	2350' - 2515'				
E72-7718-5	Water	#3		Chem & Geol. Labs	3057' - 3230'				

Company Atlantic Richfield Canada Ltd.
Société

Signed by (Original Signed) J. K. BIRRELL
Signé par J. K. Birrell

Title Area Drilling & Production Supervisor
Titre

Date May 4, 1972

Forms to be prepared in duplicate and forwarded to the District Conservation Engineer.

Présenter les formulaires remplies à l'ingénieur en conservation du district.



Drilling Authority No. 538

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 of~~

Name and number of well ARCO Clarke et al Man River H-47
Location: Unit H Section 47 Grid 65-50-129-00
Latitude 65°46'23" Longitude 129°07'50"
From Established Reference Marker
Universal Well Location Reference Lat. 65.77306° N, Long. 129.13056° W
Permit No. 3289 Lease No. Atlantic Richfield Canada Ltd., Canada
Cities Service Ltd., Triad Petroleum Dev.
(Permittee, Licencee, Lessee) Ltd.

Date of commencement of proposed program January 13, 1972

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at --
Gas at --
Water at --
Total Depth 3427 Date of last operations January 13, 1972
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	123	136 KB	133 sz Permafrost Cmt	--
2. 9 5/8	36	605	619 KB	324 sz OWC + 3% CaCl ₂	--
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
1	3427-3100	Siluro-Ordovician Bonning	140	No feel
2	2640-2000	Bear - Bear Rock	225	Felt at 2030'
3	920-570	Imperial-Kee Scarp	175	Felt at 598'

The following logs have been run. DILL, BHC-SGrC, FD-GrC, Lithology Plot, SMC, Dipmeter
Other operations proposed.

Operations to be carried out by Agent Drilling Limited Contractor Licence No. 983
Address 12912 125 Avenue, Edmonton, Alberta Address
Responsible Agent in field Larry Bell
Dated at Edmonton, this 4 Day of May 1972
(Original Signed) J. L. BIRRELL Company Atlantic Richfield Canada Ltd.
Signed by Area Drig. & Prod. Supervisor Operator's Exploratory Licence No. 1821
Title

Note:—The District 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. M. D. Thomas
on the 11th January 1972.

Dated 8th May, 1972

W. S. Thomas
District Conservation Engineer

LAND 52-90-5 (7-71)

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

Voir au verso



No de l'autorisation de forage.

MINISTÈRE DES AFFAIRES INDIENNES ET DU NORD CANADIEN

DIVISION DU PÉTROLE ET DES MINÉRAUX

Demande d'abandon d'un puits ou de suspension du forage

Conformément au «Règlement sur les terres pétrolifères et gazifères du Canada», nous demandons l'autorisation d'abandonner le puits ci-après ou de suspendre les travaux de forage

Nom et n° du puits

Emplacement: Unité..... Section..... Étendue quadrillée.....

Latitude..... Longitude.....

Code d'ordinateur

Références universelles d'emplacement du puits.....

No de permis No de concession

(Détenant de permis ou de licence, ou concessionnaire)

Date du début d'exécution du programme projeté

PÉTROLE, GAZ ET EAU

(Profondeur)

Pétrole à

Gaz à

Eau à

Profondeur globale Date des derniers travaux.....

État actuel du puits

.....

.....

TUBAGE

Diamètre extérieur (en pouces)	Poids	Longueur	Fixation à	Sacs de ciment et d'additifs	Longueur récupérée
1.					
2.					
3.					
4.					
5.					

PROGRAMME D'ABANDON PROJETÉ

Bouchon		Formation géologique	Nombre de sacs de ciment	Remarques
No	Profondeur			
.....				
.....				
.....				
.....				
.....				
.....				
.....				
.....				
.....				

Les diagrammes suivants ont été tracés:

Autres travaux projetés

.....

Les travaux seront exécutés par No de permis de l'entrepreneur

Adresse Adresse

Agent extérieur responsable

Fait à..... le 19.....

Signé par Société.....

Titre No de licence de sondage de l'exécutant

Nota: Aviser le bureau de l'ingénieur en conservation du district avant de commencer les travaux

(A l'usage de la Division du pétrole et des minéraux)

APPROBATION

Demande étudiée et programme approuvé, sous réserve des conditions suivantes:

.....

.....

.....

.....

.....

Date 19.....

Ingénieur en conservation du district

Présenter les formules en triple exemplaire à l'ingénieur en conservation du district

ministère des Affaires indiennes et du Nord canadien.

LAND 52-90-5 (7-71)

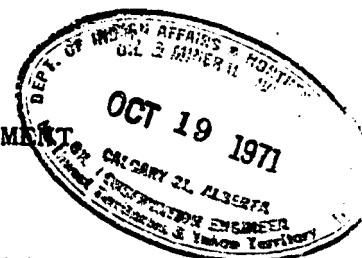
See Reverse

File No.

Drilling Authority No. 538



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION



Application to Change a Well Name

Application is made hereby to change the name of the well, recorded in the Well-names Register as—

ARCO et al Mountain River H-47

(Old name)

to ARCO Clarke et al Mtn River H-47

(Proposed new name)

Well Location

Location: Unit H Section 47 Grid 65-50-129-00

Latitude 65°46'23" Longitude 129°07'50"

Unique Well Identifier 300H476550129000

Universal Well Location Reference Lat 65.77306° N, Long 129-13056° N

Reason for Changing Well Name

The name is changed to reflect the two major participants involved in
the drilling of the well.

Dated at Edmonton this 18 day of October 1971

Signed by *[Signature]*

Title Area Drilling & Production Supervisor

Company Atlantic Richfield Canada Ltd.

(For Oil and Mineral Division use only)

APPROVED

This application has been examined and approved:

Date 19th October, 1971

[Signature]
Oil Conservation Engineer

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

Drilling Authority No.
Project No. 538



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 ... **ARCO et al Mountain River H-47**

Location: Unit ... **H** ... Section ... **47** ... Grid ... **65-50-129-00**

Latitude ... **65°46' 23"** ... Longitude ... **129°07' 50"**

Unique Well Identifier ... **300H476550129000**

Universal Well Location Reference ... **Lat. 65.77306° N., Long. 129.13056° W.**

Elevation: Ground ... **295' (estimate)** ... K.B. ... **310' (estimate)** ... feet above sea-level.

Well is expected to produce from ... **Siluro-Ordovician** ... formation at a depth

of about ... **3220** ... feet. Expected total final depth ... **3700**

Area assigned to well

(for District Conservation Engineer's use only)

Permit No. ... **3289** ... Lease No. ... Acreage ... **52,644**

Permittee, licensee, or lessee ... **Atlantic Richfield Canada Ltd. and Canada-Cities Service, Ltd.**

Explanatory Licence No. ... **1821 & 1943** ... **Triad Petroleum Dev. Ltd.**

Surface owned by Crown or ... **Crown** ...

(If alienated submit name and address of owner and occupant.)

Petroleum and natural gas rights owned by ... **Atlantic Richfield Canada Ltd.** ... **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. 13 3/8	48	H-40, ST&C	New	100	150
2. 9 5/8	36	J-55, ST&C	New	600	400
3. 4 1/2	9.5	J-55, ST&C	New	3700	750
4.	...	...	...	...	...
5.	...	...	...	...	...

Expected water, gas, and oil horizons and type of control equipment ... **Kee Scarp, Bear Rock, Siluro-Ordovician.** ... **Hydril GK Size 12" - 900 Series and Size 10" - 900 Series.**

... **Cameron SS Size 10" - 900 series.**

... **Double Gate (hydraulic).**

Well will be drilled with Rotary Rig No. ... **11-H** ... by ... **Regent Drilling Limited**

(Drilling Contractor or company)

Responsible agent of applicant:- Contractor's Business Licence No. ... **983**

At well. **Unknown at present** ... At registered office. ... **J. K. Birrell**

Address ... **11440 Kingsway Avenue, Edm.** ... Address ... **11440 Kingsway Avenue, Edmonton 19**

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

Dated at ... **Edmonton** ... this ... **8** ... day of ... **October** ... 19 **71**

Signed by ... (Original Signed) ... **J. K. BIRRELL** ... Company ... **Atlantic Richfield Canada Ltd.**

Title ... **Area Drilling & Prod. Supvr.** ... Operator's Licence No. ... **1821**

(For Oil and Mineral Division use only)

APPROVED

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

Please see attached sheet for Conditions of Approval.

Dated ... **8 Oct** ... 19 **71** ... **Ind. Affairs**

District Conservation Engineer

Forms to be submitted to District Conservation Engineer,
Department of Indian Affairs and Northern Development.

LAND 52-90-1 (7-71)



CONDITIONS OF APPROVAL FOR DRILLING AUTHORITY NO. 538

FOR ARCO ET AL MOUNTAIN RIVER H-47

1. Copies of this Drilling Authority shall be exhibited at the Drilling Rig in both the Doghouse and the Drilling Foreman's Office between spud and rig release dates.
2. The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.
3. During well drilling and testing operations, every effort shall be made to ensure 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.
4. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
5. Any additional strings of casing must be approved by the District Conservation Engineer prior to running.

Manice D. Thomas.
M. D. Thomas
District Conservation Engineer
District 2

DRILLING PROGNOSIS (EXPLORATORY)

CONFIDENTIAL

ARCO ET AL MOUNTAIN RIVER 47-H

SEPTEMBER 1, 1971

Authorization:

Telephone Charge: 072-5876-454

Region: Canadian

District: Northern

Status: Wildcat Well - Confidential. All tight hole procedures to be followed.

Location: Approximately 65°47' N, 129°07' W. Located at shot point 367, line 6 at the intersection of lines 6 and 19.

Project: Mackenzie Block. Prospect - Mountain River.

Objective: 3700' test to evaluate oil and gas potential of the Devonian Kee Scarp carbonates, the Devonian Bear Rock carbonates and the Siluro-Ordovician carbonates.

Elevations: Ground (est.) 295'. KB (est.) 310'.

Casing Program:

	<u>Hole Size</u>	<u>Description</u>	<u>Interval</u>	<u>Approx. Cmt.</u>
Surface Conductor	17 1/2"	13 3/8", 48#, H-40, ST&C	0 - 100' shale	150 sx Permafrost Cement
Surface	12 1/4"	9 5/8", 36.0#, J-55, ST&C	0 - 600'	400 sx Permafrost Cement
Production	8 3/4"	4 1/2", 9.5#, J-55, ST&C	0 - 3700'	750 sx OWC

Estimated Formation Tops: Depths based on an estimated KB elevation of 310'. Report corrected KB on first tour report.

<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>	<u>Corr. Depth</u>
Spud in Quaternary			
Cretaceous	75	+ 235	_____
Upper Devonian			
Imperial	690	- 380	_____
Middle Devonian			
Kee Scarp	790	- 480	_____
Ramparts Platform	1290	- 980	_____
Hare Indian	1410	-1100	_____
Hume	2010	-1700	_____

Estimated Formation Tops (Cont'd.):

<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>	<u>Corr. Depth</u>
Lower Devonian			
Bear Rock Limestone	2320	-2010	=====
Dolomite	2850	-2540	=====
Siluro-Ordovician			
Ronning	3220	-2910	=====
Total Depth	3700		=====

Location & Transportation:

This well will be drilled on the tentative location 65°47' N, 129°07' W.

Equipment and supplies will be loaded from a central site (Hay River, NWT) onto barges to be transported down the Mackenzie River to a staging point in the vicinity of the Sans Sault rapids. Material will be unloaded and stockpiled on matting above the high water mark to ensure no damage from flooding during the fall ice flow. The portable garage and maintenance shop may be erected at the staging point to house vehicles.

Barge transportation will be scheduled for September 1, 1971. Air transportation will be used for personnel and supplies during drilling operations.

Drilling & Mud Program:

Surface Conductor Hole 0 - 100'

Spud with 12 1/4" bit and spud mud and drill to ±100', open hole to 17 1/2", run and cement 13 3/8", 48# H-40 casing with permafrost-type cement.

Surface Hole 0 - 600'

Install 12" Hydril on 13 3/8" surface conductor; pressure test to 1000 psi and hydraulic lines to 3000 psi.

Drill out below surface conductor with a 12 1/4" medium to hard-type rock tooth-type bit and drill ahead to ±600' or below any anticipated gravel beds and into a competent formation.

Run 9 5/8", 36#, J-55 casing and cement in place with permafrost-type cement.

Main Hole

Install 10" series 900 BOP's, double ram and hydril-type, ARCO high pressure manifold and test all equipment to 2000# and hydraulic lines to 3000#. Drill out under 9 5/8" shoe with an 8 3/4" medium to hard rock tooth bit. Pressure test cement and formation to a maximum pressure equal to 0.7#/ft. gradient. This includes pressure exerted by mud column plus pressure applied.

Drilling & Mud Program (Cont'd.):

Main Hole (Cont'd.)

Continue drilling with rock tooth-type bits and a low solids mud system. Solids content and mud weight will be controlled by the use of a desilter, dumping tanks and water addition. Solids content should be maintained below 5%. A water loss of ± 10 should be controlled while drilling Kee Scarp formation and an immediate DST obtained to ensure good formation fluid samples may be recovered.

Insert-type bits will possibly be used upon reaching the hard Devonian formations.

Continue drilling to TD maintaining mud properties to ensure good samples and hole condition for testing and logging. Testing and coring to be completed at the request of the Well Site Geologist.

Logging Program:

1. Dual Induction Laterolog
2" and 5" scales total depth to surface casing. Run SP on 2" scale while going into the hole as well as when logging out. Print both runs.
2. Borehole Compensated Sonic Gamma Ray-Caliper
2" and 5" scales. Total depth to surface casing. 100-70-40 scale.

Note: Run sonic log into surface casing to obtain velocity check.
3. Compensated Formation Density Gamma Ray-Caliper
2" and 5" scale. Surface casing to total depth.
4. Sidewall Neutron Porosity Log
Limestone Porosity scale.
5. Four-Arm Digital Dipmeter
100' above Kee Scarp to total depth.
6. Synergetic Dol-Limestone Lithology Plot

Note: Well Site Geologist to be responsible for logging program and quality control. Geologist must check log reproducibility on repeat sections and before and after calibrations. Service company invoice to be signed after approval by Well Site Geologist. Well Site Geologist and Logging Engineer will fill out one copy of log quality control sheet which will be forwarded to H. V. Messineo in Dallas.

Log Distribution:

Films and field prints to be returned to Calgary by Well Site Geologist.
Field prints to be distributed according to tight hole procedures as follows:

- 1 copy - J. K. Birrell, Edmonton
- 1 copy - F. G. Rayer - Calgary
- 1 copy - Well Site Geologist/Well Site Engineer
- Copies to Partners as Required

Samples:

Catch two sets of samples at 10' intervals from surface to the top of the Kee Scarp carbonates. One set of samples to be placed in cloth bags and the other set of samples to be placed in plastic lined bags. Catch one set of cloth bagged samples from the top of the Kee Scarp to total depth. Sample interval may be reduced to 5' at the discretion of the Well Site Geologist. The samples in plastic lined sacks are to be retained by ARCO for special analysis. One set of washed samples in vials to be taken for ARCO from surface to total depth and washed samples for partners to be taken as required.

Coring Program:

1. One 60' core in Kee Scarp to be cut if staining and porosity observed in samples. If staining and porosity not observed together, one 60' strat core to be cut when porosity or oil staining observed in samples. However, if porosity or staining not present, cut one 60' core 200' below top of the Kee Scarp. If core jams off after 25 or more feet of core has been cut and recovery is satisfactory, resume drilling.
2. One 60' core to be cut at the top of the Bear Rock if porosity and staining observed in cuttings. If porosity and staining not observed, cut one 60' strat core beginning 100' below top of Bear Rock dolomite.
3. One 60' core to be cut at top of Siluro-Ordovician carbonates if porosity and staining observed in cuttings. If porosity and staining not observed, cut one 60' strat core before total depth. If core jams off after 25' or more of core has been cut and recovery is satisfactory, resume drilling to total depth.

Note: Estimate three 60' cores - total 180'.

Drill Stem Tests:

1. A drill stem test of Kee Scarp should be run if warranted by log evaluation. Test any shows associated with 20' or more porosity.

Drill Stem Tests (Cont'd.):

2. Drill stem test the Bear Rock carbonates if warranted by log evaluation. Test highest porosity zone with 20' or more porosity.
3. Drill stem test Siluro-Ordovician carbonates if warranted by log evaluation. Test any shows associated with 20' or more porosity.

Note: Drill stem tests to be run with a Johnson MFE tool and formation fluid samples to be taken on each drill stem test. Samples to be shipped to Core Lab for dissolved gas and benzene-toluene analysis. To obtain a useable sample of formation fluid sample must be taken before end of blow or just after end of blow. Estimate 2 drill stem tests.

Drilling Time:

Install drilling time recorder prior to drilling out surface casing shoe.

ENDORSED:

L. H. Durrell
Northern Area Drilling & Production Supervisor

Date: 9-1-71

Vice-President, Operations

Date: _____

Vice-President, Northern Exploration

Date: _____

APPROVED:

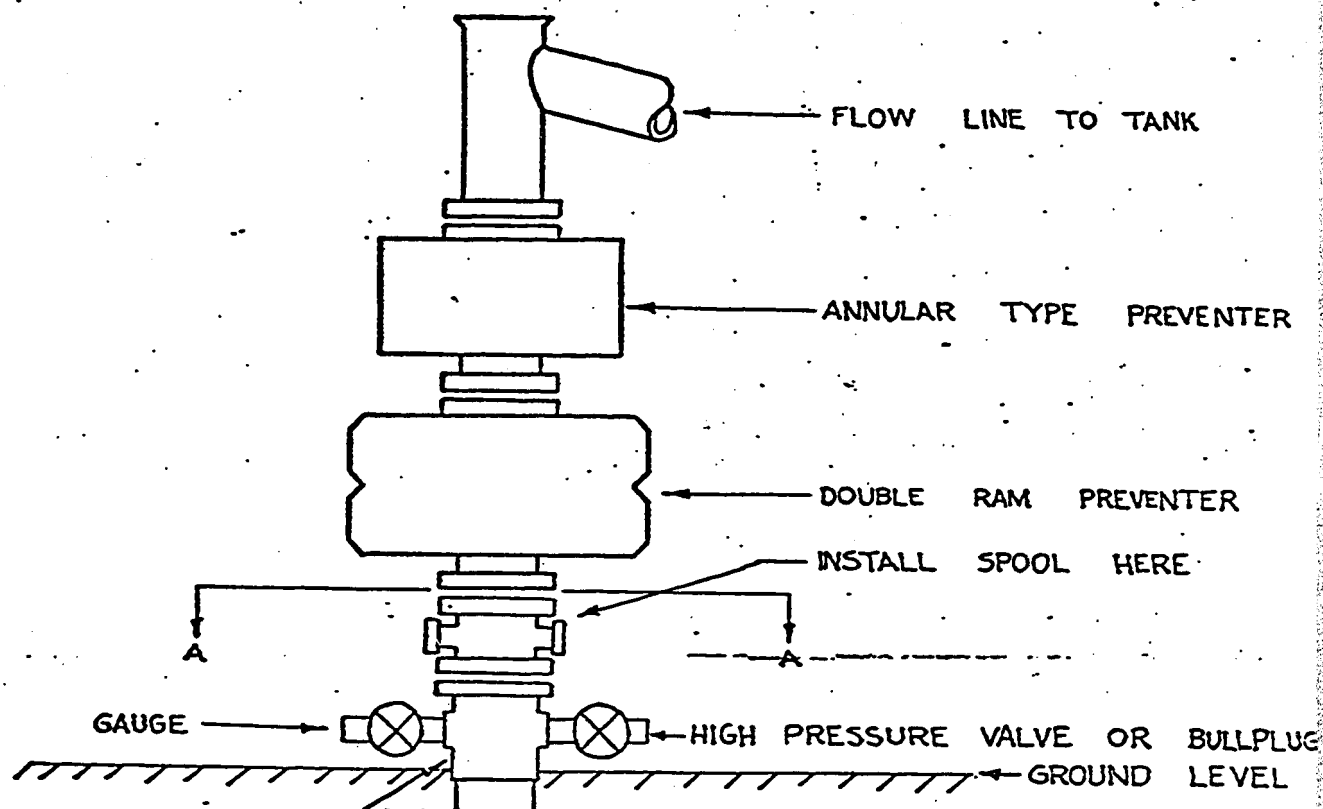
President

Date: _____

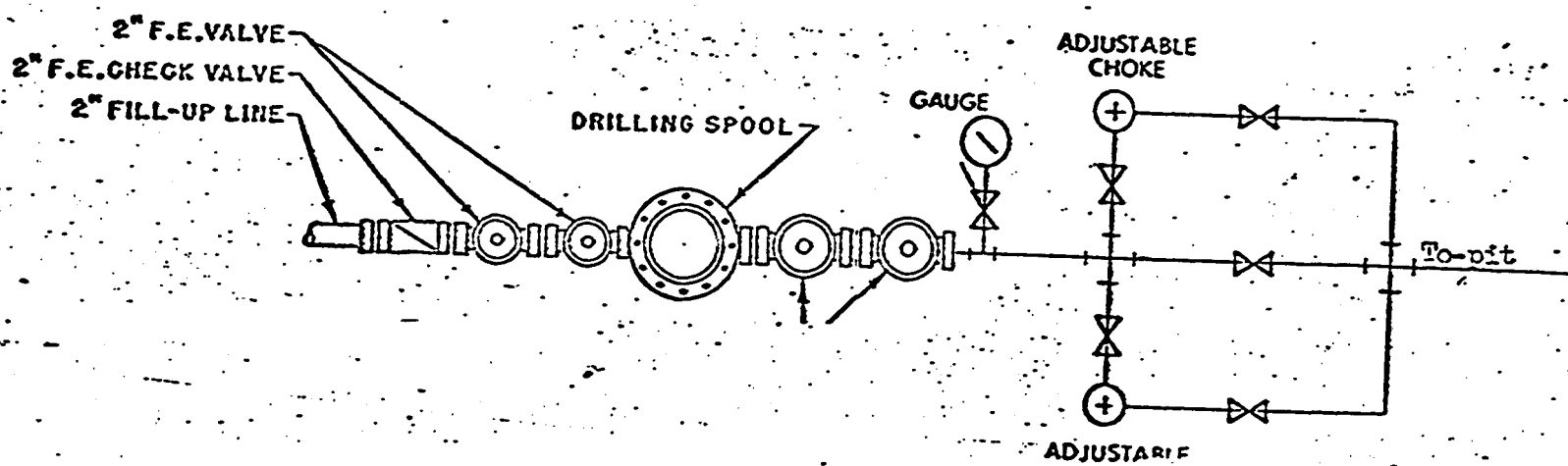
PJM:ap

ATLANTIC RICHFIELD COMPANY
BLOWOUT PREVENTER HOOKUP

— HIGH PRESSURE —



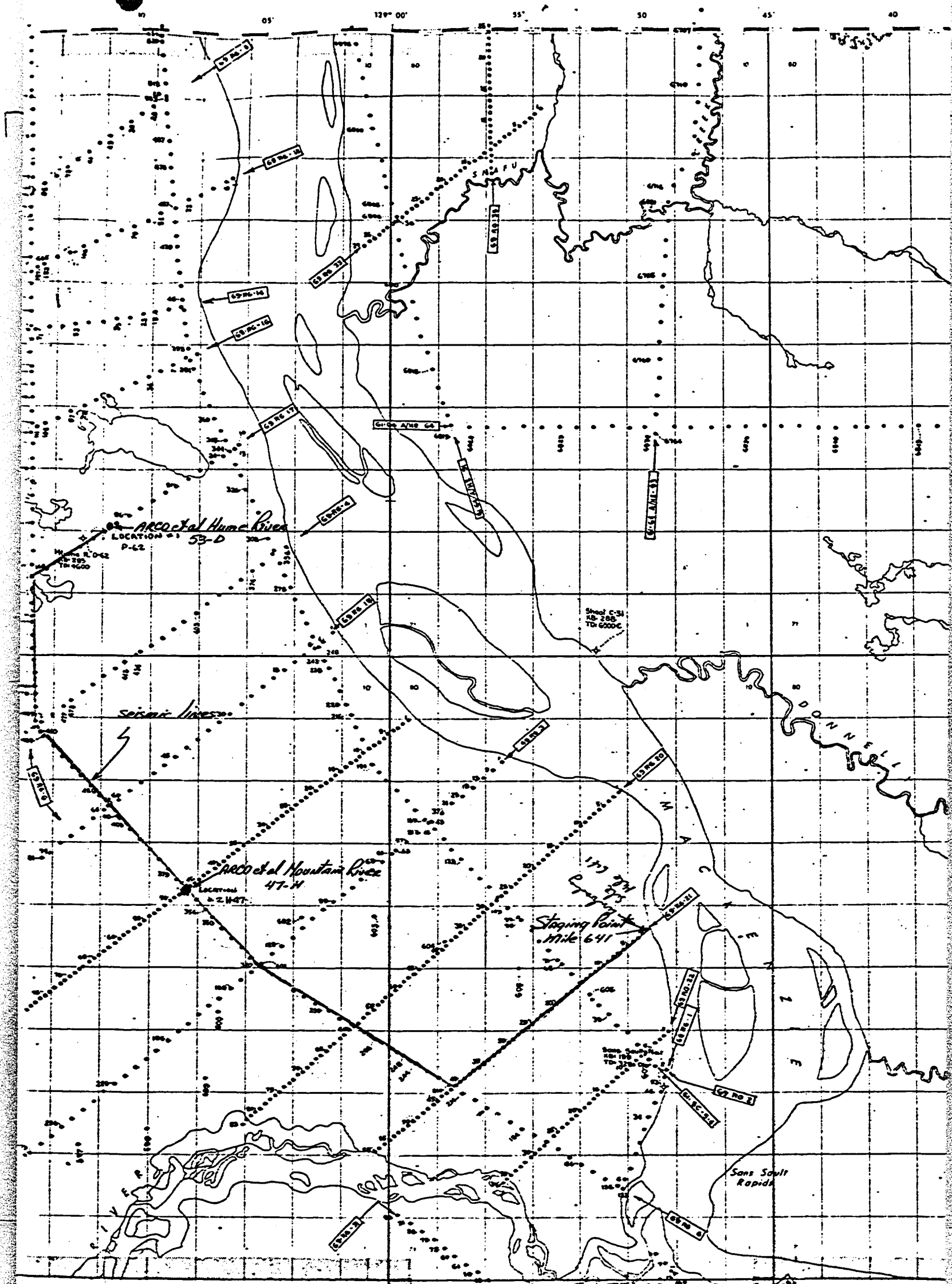
AREA OF HIGH HAZARD
(See 709 Oil and Gas Conservation Regulations)



SECTION A-A
CHOKE MANIFOLD

NOTE: THE TEST PRESSURE OF THE BLOWOUT PREVENTERS, DRILLING SPOOL AND CHOKE MANIFOLD WILL BE AT LEAST AS HIGH AS THE TEST PRESSURE OF THE OPERATOR'S CASING HEAD FLANGE, USUALLY 6000 OR 10,000 P.S.I.

ALL VALVES, NIPPLES AND CONNECTIONS FURNISHED BY CONTRACTOR



WELL SUMMARY & SAMPLE DESCRIPTION

ARCO CLARKE ET AL MOUNTAIN RIVER H-47

WELL SUMMARY AND SAMPLE DESCRIPTION

ARCO CLARKE ET AL MOUNTAIN RIVER H-47



ATLANTIC RICHFIELD CANADA LTD
D. W. Holmes & G. H. Koller
Geologists
February, 1972

F. G. Rayer
F. G. Rayer P. Geol.
District Geologist

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SECTION I - Summary of Well Data

SECTION II - Geological Summary

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SECTION I - SUMMARY OF WELL DATA

(a) WELL NAME AND NUMBER

ARCO Clarke et al Mountain River H-47

(b) PERMITTEE

Atlantic Richfield Canada Ltd.
BP Oil and Gas Ltd.
Canada-Cities Service Ltd.

(c) NAME OF OPERATOR

Atlantic Richfield Canada Ltd.
650 Guinness House, 727 - 7th Avenue S.W.,
Calgary, Alberta

(d) LOCATION

Unit H, Section 47, Grid 65°50'N, 129°00'W
Latitude 65°46'23"N, Longitude 129°07'50"W
Unique Well Identifier 300H476550129000
Universal Well Location Reference - 65.77306°N, 129.13056°W

(e) PERMIT NUMBER

3289

(f) DRILLING CONTRACTOR

Regent Rig. No. 11 (Rotary)

(g) DRILLING AUTHORITY

No. 538

(h) CLASSIFICATION

Wildcat

(i) ELEVATION

Ground 295' (Est.), KB 308' (Est.)

(j) DATE SPUDDED

December 3, 1971

(k) DATE COMPLETED DRILLING

January 9, 1972

(l) TOTAL DEPTH AND PLUGGED BACK TOTAL DEPTH

TD 3427'; PBTD Surface

(m) WELL STATUS

Dry and Abandoned

(n) DATE RIG RELEASED

January 13, 1972

(o) HOLE SIZE

12 1/4" - Surface to 624'
8 3/4" - 624' to TD (3427')

(p) CASING

(Surface) 9 5/8" to 618' with 324 sacks cement.

SECTION II - GEOLOGICAL SUMMARY

(a) Formation Tops

<u>Formation</u>	<u>Prognosis</u>	<u>Sample</u>	<u>Mechanical Log</u>	<u>Subsea Elevation</u>
Casing			617	
Cretaceous	75	30	?	
Devonian				
Imperial	690		226(?)	+ 82
Kee Scarp	790	390	387	- 79
Kee Scarp Platform	1290	710	846	- 538
Hare Indian	1410	840	945	- 637
Hume	2010	1624	1610	-1302
Bear Rock Limestone	2320	1950	1953	-1645
Bear Rock Dolomite	2850	2360	2351	-2043
Siluro-Ordovician Ronning	3220	2895	2920	-2612
Total Depth	3700	3427	3427	-3119

(b) Cored Intervals

Core No. 1	675 - 687'	Kee Scarp
Core No. 2	687 - 695'	Kee Scarp
Core No. 3	2455 - 2515'	Bear Rock Dolomite
Core No. 4	3400 - 3427'	Siluro-Ordovician (Ronning)

(c) Core Description

Core No. 1 - 675 - 687' Recovered 8.7 feet

675 - 676' Limestone, tan micrite, slightly dolomitic, some skeletal debris, stylolites, stachyodes, bulb stroms, rare amps, dense.

676 - 677.5' Limestone, grey brown, 60% is stachyodes, bulb stroms and corals, calcarenitic, dense.

677.5 - 683.7' Limestone, tan, micritic, pelletal, scattered skeletal debris, slightly brecciated in part, scattered fine fractures with trace of bleeding light oil, occasional strom fragments, dense.

<u>Depth</u>	<u>Min./Foot</u>
675' - 676'	19
676' - 677'	23
677' - 678'	24
678' - 679'	9
679' - 680'	10
680' - 681'	8
681' - 682'	8
682' - 683'	8
683' - 684'	9
684' - 685'	8
685' - 686'	8
686' - 687'	9

Core No. 2 - 687 - 695' Recovered 7.5 feet.

687 - 690' Limestone, dark grey, skeletal micrite and pelletal calcarenite, occasional stachyodes, bulb stroms, corals, trace amps, scattered very slight oil stain, dense.

690 - 694.5' Limestone, tan to grey, slightly dolomitic, pelletal micrite with scattered calcarenite interbeds, scattered stachyodes, bulb stroms, finger corals, occasional amps, trace of oil stain, dense.

<u>Depth</u>	<u>Min./Foot</u>
687' - 688'	10
688' - 689'	27
689' - 690'	22
690' - 691'	33
691' - 692'	18
692' - 693'	15
693' - 694'	41
694' - 695'	33

Core No. 3 - 2455 - 2515' Recovered 60 feet.

2455 - 2471' Dolomite, tan, micro to fine crystalline, pelletal, micritic, highly brecciated, fragments 1/4" to 1'. Fractures filled with coarse white calcite, trace of very poor porosity, scattered bleeding brown light oil and common light staining along fractures, good fluorescence, trace of dead oil.

2471 - 2486' Dolomite, light brown to tan, laminated pelletal micrite, microcrystalline to fine crystalline, very highly brecciated, fragments 1/4" to 4", fractures mostly filled with white coarse crystalline calcite, scattered poor intercrystalline and fractured porosity, common bleeding brown oil, common oil staining throughout, trace of dead oil.

2486 - 2515' Dolomite, light brown, microcrystalline, fine laminated pelletal micrite, highly brecciated, fragments 1/4" to 1', fractures filled with dolomite and coarse crystalline calcite, very poor intercrystalline and pin point porosity, trace of bleeding oil and light staining throughout, some contorted bedding.

<u>Depth</u>	<u>Min./Foot</u>
2455 - 2456'	30
2456 - 2457'	37
2457 - 2458'	33
2458 - 2459'	27
2459 - 2460'	28
2460 - 2461'	31
2461 - 2462'	29
2462 - 2463'	30
2463 - 2464'	35
2464 - 2465'	27
2465 - 2466'	40
2466 - 2467'	29
2467 - 2468'	34
2468 - 2469'	35
2469 - 2470'	34
2470 - 2471'	33
2471 - 2472'	31
2472 - 2473'	36
2473 - 2474'	33
2474 - 2475'	38
2475 - 2476'	32
2476 - 2477'	36
2477 - 2478'	26
2478 - 2479'	27
2479 - 2480'	27
2480 - 2481'	26
2481 - 2482'	25
2482 - 2483'	29
2483 - 2484'	30
2484 - 2485'	25
2485 - 2486'	25
2486 - 2487'	28
2487 - 2488'	22
2488 - 2489'	24
2489 - 2490'	25
2490 - 2491'	26
2491 - 2492'	30
2492 - 2493'	32
2493 - 2494'	32
2494 - 2495'	27
2495 - 2496'	30
2496 - 2497'	29
2497 - 2498'	30
2498 - 2499'	24
2499 - 2500'	22

<u>Depth</u>	<u>Min./Foot</u>
2500 - 2501'	25
2501 - 2502'	32
2502 - 2503'	32
2503 - 2504'	35
2504 - 2505'	30
2505 - 2506'	32
2506 - 2507'	30
2507 - 2508'	28
2508 - 2509'	31
2509 - 2510'	29
2510 - 2511'	28
2511 - 2512'	29
2512 - 2513'	35
2513 - 2514'	32
2514 - 2515'	31

Core No. 4 - 3400 - 3427' Recovered 13 feet

3400 - 3410.5' Dolomite, light brown, microcrystalline to fine crystalline skeletal micrite and calcarenite, scattered crinoidal fragments, scattered brachs, occasional horn coral and large strom, scattered small vugs, very poor porosity, some large vugs filled with coarse crystalline calcite, trace pyrite, scattered stylolites, no shows, fetid smell, salty.

3410.5 - 3413' Dolomite, light brown, microcrystalline, fine grained micritic calcarenite, trace brachs, common small pyritic crystals, occasional vug filled with white coarse calcite, dense, no shows, several fractures at base filled with calcite.

N.B. - 14 feet of this core was milled up, assume missing interval is from the base.

<u>Depth</u>	<u>Min./Foot</u>
3400 - 3401'	30
3401 - 3402'	36
3402 - 3403'	39
3403 - 3404'	48
3404 - 3405'	40
3405 - 3406'	38
3406 - 3407'	39
3407 - 3408'	31
3408 - 3409'	30

<u>Depth</u>	<u>Min./Foot</u>
3409 - 3410'	29
3410 - 3411'	25
3411 - 3412'	25
3412 - 3413'	29
3413 - 3414'	30
3414 - 3415'	29
3415 - 3416'	31
3416 - 3417'	37
3417 - 3418'	38
3418 - 3419'	37
3419 - 3420'	45
3420 - 3421'	44
3421 - 3422'	50
3422 - 3423'	45
3423 - 3424'	53
3424 - 3425'	52
3425 - 3426'	60
3426 - 3427'	57

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(1) Sample Description

- 0 - 10' Muskeg (Note: 0-230' samples essentially mud).
- 10 - 30' Sandstone, unconsolidated, medium to coarse grained.
- 30 - 60' Sandstone, as above, some dark grey black shale and coal.
- 60 - 230' Shale, dark grey black, siltstone, buff.
- 230 - 320' Shale, medium grey, silty.
- 320 - 360' Shale, medium grey, trace siltstone, trace coarse quartz grains, pink.
- 360 - 370' Siltstone, very fine sandstone, medium grey, argillaceous pyritic, trace medium to coarse sandstone laminae.
- 370 - 380' Siltstone, medium grey, argillaceous, pyritic.
- 380 - 390' Shale, medium grey, silty, pyritic.
- 390 - 400' Limestone, light brown, micro to very fine crystalline, dense, slightly dolomitic.
- 400 - 410' As above, trace medium to coarse, dense.
- 410 - 420' Limestone, light tan, fossiliferous (coral), calcite and bitumen fill porosity, with medium brown very fine crystalline micrite matrix, trace staining and fluorescence.
- 420 - 430' Limestone, medium brown, micrite, microcrystalline, dense.
- 430 - 440' Limestone, buff to medium brown, as above.
- 440 - 450' Limestone, buff to medium brown, dark grey, microcrystalline, dense, trace of dolomite.
- 450 - 460' As above, trace vugs, filled with coarse calcite.
- 460 - 470' Limestone, buff to medium brown and dark grey, microcrystalline to cryptocrystalline, dense, trace dark grey to black shale.
- 470 - 480' As above, trace dead oil.
- 480 - 490' Limestone, medium grey brown, cryptocrystalline, dense, argillaceous, trace to buff limestone as above, slight oil fluorescence on fractures.
- 490 - 500' Limestone, buff to medium brown and dark grey, microcrystalline, dense.

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(d) Sample Description

- 0 - 10' Muskeg (Note: 0-230' samples essentially mud).
- 10 - 30' Sandstone, unconsolidated, medium to coarse grained.
- 30 - 60' Sandstone, as above, some dark grey black shale and coal.
- 60 - 230' Shale, dark grey black, siltstone, buff.
- 230 - 320' Shale, medium grey, silty.
- 320 - 360' Shale, medium grey, trace siltstone, trace coarse quartz grains, pink.
- 360 - 370' Siltstone, very fine sandstone, medium grey, argillaceous pyritic, trace medium to coarse sandstone laminae.
- 370 - 380' Siltstone, medium grey, argillaceous, pyritic.
- 380 - 390' Shale, medium grey, silty, pyritic.
- 390 - 400' Limestone, light brown, micro to very fine crystalline, dense, slightly dolomitic.
- 400 - 410' As above, trace medium to coarse, dense.
- 410 - 420' Limestone, light tan, fossiliferous (coral), calcite and bitumen fill porosity, with medium brown very fine crystalline micrite matrix, trace staining and fluorescence.
- 420 - 430' Limestone, medium brown, micrite, microcrystalline, dense.
- 430 - 440' Limestone, buff to medium brown, as above.
- 440 - 450' Limestone, buff to medium brown, dark grey, microcrystalline, dense, trace of dolomite.
- 450 - 460' As above, trace vugs, filled with coarse calcite.
- 460 - 470' Limestone, buff to medium brown and dark grey, microcrystalline to cryptocrystalline, dense, trace dark grey to black shale.
- 470 - 480' As above, trace dead oil.
- 480 - 490' Limestone, medium grey brown, cryptocrystalline, dense, argillaceous, trace to buff limestone, as above, slight oil fluorescence on fractures.
- 490 - 500' Limestone, buff to medium brown and dark grey, microcrystalline, dense.

- 500 - 520' As above.
- 520 - 530' Limestone, as above, medium to dark brown, dense.
- 530 - 540' Limestone, white to light tan, abundant stroms and corals, micro to very fine crystalline, dense, trace of medium brown calcarenite, trace of porosity.
- 540 - 550' Limestone, white to light tan, fossiliferous, stroms.
- 550 - 570' Limestone, white to medium brown, trace dark grey brown, dense, trace dead oil, fossiliferous, stroms, dense.
- 570 - 580' Limestone, white to light brown, as above, dense, trace oil staining and fluorescence.
- 580 - 590' As above, trace of vuggy porosity, trace fossils, stroms, minor calcite crystals (fill vugs).
- 590 - 600' Limestone, medium brown grey, microcrystalline, dense.
- 600 - 610' Limestone, buff to medium brown grey, microcrystalline, dense, trace pyrite.
- 610 - 620' Limestone, white to medium brown, microcrystalline, dense, trace of dead oil.
- TD Surface Hole 624'
- 624 - 630' Poor sample, cement, buff white microcrystalline, chalky limestone, 10-20% light grey brown limestone, very fine crystalline, with trace of porosity and staining.
- 630 - 640' Limestone, white to buff, microcrystalline, dense.
- 640 - 650' Limestone 70% as above, 30% medium brown slightly friable limestone, slightly dolomitic, trace of porosity and staining.
- 650 - 660' As above.
- 660 - 670' Limestone, dolomitic, medium grey-brown, microcrystalline, slightly argillaceous in part, dense.
- 670 - 695' See Cores #1 and #2.
- 695 - 710' Limestone, light to medium grey-brown, microcrystalline, minor fine to medium crystalline, dense.
- 710 - 720' As above, trace shale, dark grey, waxy, slightly calcareous.
- 720 - 740' Limestone, buff to light grey-brown, microcrystalline, trace of dark grey shale partings.

740 - 800' As above, trace medium crystalline, buff, trace dolomitic.

800 - 820' Limestone, dark grey, argillaceous, microcrystalline, dense, scattered shale, dark grey, calcareous.

820 - 840' Limestone, 80% buff to light brown, microcrystalline, dense, 20% dark grey, very argillaceous, microcrystalline, dense, trace shale.

840 - 880' Limestone, grey-brown, dense shale, dark grey, calcareous in part, silty.

880 - 900' Limestone, as above, 60% siltstone, medium grey-white, argillaceous in part, calcareous, dense.

900 - 910' 80% shale, light grey-green, calcareous, silty, 20% limestone, light grey, microcrystalline, dense.

910 - 920' As above.

920 - 930' Mostly shale, as above.

930 - 970' Limestone 10%, grey, dense, light grey, pyritic, 80% siltstone, light to medium grey, calcareous.

970 - 990' 10% limestone, as above, 90% siltstone, calcareous, light to medium grey.

990 - 1000' Limestone 5%, as above, 85% siltstone, 10% light grey shale, silty, calcareous.

1000 - 1200' Siltstone, shaly, light to medium grey, calcareous, dense.

1200 - 1380' As above, trace green shale, calcareous, silty.

1380 - 1430' As above, trace light brown microcrystalline limestone, dense.

1430 - 1460' As above with 5% limestone.

1460 - 1540' Shale, grey-green, calcareous, silty.

1540 - 1550' Shale, grey-green, calcareous, silty, trace siltstone.

1550 - 1570' As above, trace limestone, medium brown, microcrystalline, dense, interbedded.

1570 - 1610' Shale, medium dark grey, trace of limestone, as above, trace pyrite.

1610 - 1620' Shale, dark grey, very slightly calcareous.

1620 - 1640' Limestone, light grey, microcrystalline, fossil fragments, brachs, pyritic, dense.

1640 - 1650' Limestone and shale, 50%, as above.

1650 - 1670' Limestone 30%, as above, 70% medium grey siltstone, slightly calcareous, dense, trace pyrite.

1670 - 1700' Limestone, medium grey brown, microcrystalline, dense, argillaceous in part, trace of shale, as above.

1700 - 1720' Limestone, buff to grey, microcrystalline, trace porosity with live oil staining.

1720 - 1730' Limestone, buff to light medium grey-brown, micro to very fine crystalline, trace oil staining and fluorescence.

1730 - 1740' Limestone, buff to light brown, microcrystalline, trace very fine crystalline, dense.

1740 - 1750' As above, trace fine to medium crystalline, with fine porosity, trace white dolomite.

1750 - 1760' As above, trace with intercrystalline porosity.

1760 - 1780' Limestone, as above, trace pyrite.

1780 - 1790' Limestone 70% as above, 30% shale light grey-green, slightly calcareous.

1790 - 1800' Shale 80%, light grey-green, slightly calcareous, 20% limestone, as above.

1800 - 1810' Shale 70%, as above, 30% limestone, as above.

1810 - 1820' Shale 40%, as above, 60% limestone, as above.

1820 - 1830' Limestone, grey-brown, microcrystalline, dense, 10-20% shale, grey-green, dark grey, slightly calcareous, trace pyrite.

1830 - 1840' Limestone 20-30%, as above, with trace fine crystalline, limestone, 70-80% shale, as above.

1840 - 1850' Shale 40%, grey-green, slightly calcareous, 60% limestone, very fine crystalline, dense, trace pyrite.

1850 - 1860' Limestone 90-95%, mostly white-cream, micro to very fine crystalline, dense, trace of pyrite, 5-10% shale as above.

1860 - 1880' Limestone 70%, light grey to medium grey, micro to very fine crystalline, argillaceous in part, 30% shale medium grey, slightly calcareous, trace of pyrite.

1880 - 1890'	Shale 80%, as above, 20% limestone, as above.
1890 - 1900'	Shale 90%, as above, 10% limestone, as above.
1900 - 1910'	Shale 90%, as above, 10% limestone, as above, trace of brachs?
1910 - 1920'	Limestone 80-90%, medium grey-brown, microcrystalline, dense, 10-20% grey-greenish.
1920 - 1930'	As above, no fossils.
1930 - 1940'	Shale 50-60%, as above, trace pyrite, 40-50% limestone, as above.
1940 - 1950'	Limestone 70%, medium grey-brown, microcrystalline, dense, limestone, white to buff, trace pelletal, chalky, 30% shale, grey-green to medium grey, trace pyrite.
1950 - 1960'	Limestone, medium grey, microcrystalline, argillaceous in part, dense.
1960 - 1970'	Limestone, light to dark brown, micro to fine microcrystalline, trace pin point porosity, trace pellets.
1970 - 1980'	Limestone, as above, common pellets.
1980 - 1990'	Limestone, medium dark grey, very argillaceous, trace shale, dark grey, calcareous.
1990 - 2000'	Limestone, buff, micro to very fine crystalline, dense, 10-20% shale, dark grey, calcareous, trace calcareous crystals, fill fractures.
2000 - 2010'	Limestone, medium dark brown, micro-crystalline, dense, trace calcite fill fractures.
2010 - 2020'	As above, argillaceous in part, trace pyrite, trace calcite fill fractures.
2020 - 2030'	As above, some light brown limestone, 5-7' with pin point porosity and staining, scattered pellets.
2030 - 2040'	Limestone, medium dark brown, microcrystalline, argillaceous in part, trace of pin point porosity, and trace of intercrystalline porosity and staining.
2040 - 2050'	Limestone, as above, trace fine crystalline, trace of pin point porosity and staining, argillaceous, as above.
2050 - 2060'	Limestone, medium dark grey-brown, microcrystalline, minor argillaceous partings.

- 2060 - 2070' As above, abundant calcite crystals (fracture fill) 10-20% of rock, limestone-chalky, oil staining, fair porosity.
- 2070 - 2080' Limestone, medium dark grey to brown, argillaceous, dense.
- 2080 - 2090' Limestone 60%, light brown, cryptocrystalline, dense, 40% limestone, medium dark grey to brown, argillaceous, trace of pin point porosity, trace of dead oil.
- 2090 - 2110' Limestone, dark brown and dark grey, argillaceous in part, trace of dead oil, dense, micro to very fine crystalline.
- 2110 - 2120' Limestone, dark brown, dense.
- 2120 - 2130' Limestone, as above, 60%; 40% dolomite, micro to very fine crystalline with trace of poor porosity, argillaceous in part.
- 2130 - 2140' Limestone, medium grey-brown, microcrystalline, dense, trace shale partings.
- 2140 - 2150' As above, trace of porosity.
- 2150 - 2170' As above, no porosity.
- 2170 - 2180' As above, minor medium crystalline, trace pellets and ostracodes.
- 2180 - 2190' Limestone, medium grey, microcrystalline, dense, trace of mottled buff and medium grey limestone, trace ostracodes.
- 2190 - 2200' Limestone, medium grey-brown, microcrystalline, dense.
- 2200 - 2230' Limestone, medium grey, microcrystalline, argillaceous in part, dense, trace of bitumin, scattered pellets.
- 2230 - 2280' Micrite, dark brown, bituminous partings common, trace of ostracodes, trace pellets, trace of porosity at 2270-80.
- 2280 - 2300' Micrite, light brown, stringers pelletal limestone with trace of porosity and dead oil, sparry, ostracodes.
- 2300 - 2340' Micrite, light-dark brown, trace fracture filled with calcite crystals, common bit partings, common pellets, dead oil.

- 2340 - 2360' Micrite, light medium brown, pelletal, trace of pin point porosity and dead oil, sparry.
- 2360 - 2400' Dolomite, microcrystalline, medium to dark brown, trace intercrystalline porosity, trace oil stain and fluorescence.
- 2400 - 2430' Dolomite, medium to dark brown, microcrystalline, some fine crystalline, trace intercrystalline porosity, scattered white coarse calcite crystals, trace green shale and pyrite, trace of porosity.
- 2430 - 2455' Dolomite, grey brown, poor porosity, trace of oil staining and fluorescence.
- 2455 - 2515' (See Core Description) Dolomite, brecciated, pelletal micrite, common white calcite crystals, filling small fractures, oil staining.
- 2515 - 2540' Dolomite, tan fine crystalline to microcrystalline, trace of pin point intercrystalline porosity, trace white calcite crystals.
- 2540 - 2580' Dolomite, light brown fine to medium crystals, poor to good intercrystalline and pin point porosity, pelletal, some white calcite crystals.
- 2580 - 2680' Dolomite, brown, micro to medium crystalline, poor to good porosity, some coarse white calcite.
- 2680 - 2710' Dolomite, tan, micro to fine crystalline, scattered white calcite crystals, poor to good porosity.
- 2710 - 2740' Dolomite, light brown, fine to micro crystalline, saccharoidal, poor to fair porosity.
- 2740 - 2770' Dolomite, brown, micro to medium crystalline, poor to good porosity, trace of pellets.
- 2770 - 2840' Dolomite, micro to fine crystalline, light grey, argillaceous in part, trace of green waxy shale interbeds, scattered intercrystalline porosity.
- 2840 - 2910' Dolomite, tan micro to fine crystalline, some dolomite, grey, very argillaceous, stringers, some shale, grey waxy, trace pyrite.
- 2910 - 2950' Dolomite, tan, microcrystalline, scattered white calcite crystals, fine crystalline, trace porosity.
- 2950 - 3000' Dolomite, light brown, microcrystalline, trace small vugs, lined with coarse dolomite.

3000 - 3070'	Dolomite, as above.
3070 - 3110'	Dolomite, light brown, fine to microcrystalline, scattered white coarse dolomite, trace of vugs.
3110 - 3130'	Dolomite, brown, microcrystalline, slightly bituminous, trace dead oil, trace intercrystalline porosity.
3130 - 3150'	Dolomite, tan, microcrystalline, saccharoidal.
3150 - 3220'	Dolomite, brown-dark brown, micro to fine crystalline, scattered coarse dolomite filling vugs.
3220 - 3290'	Dolomite, brown, micro to fine crystalline, fair vuggy porosity, saccharoidal in part.
3290 - 3320'	As above, no porosity.
3320 - 3350'	As above, trace of porosity, scattered coarse crystalline, dolomite, trace pyrite.
3350 - 3370'	Dolomite, brown, microcrystalline, dense, trace very fine crystalline, trace white coarse dolomite.
3370 - 3400'	Dolomite, brown, micro to medium crystalline, trace dead oil, fair intercrystalline and vuggy porosity.
3400 - 3427'	Cored. Dolomite brown, fine to microcrystalline micritic calcarenite, scattered brachs, crinoids, corals, trace stroms.
	(See Core Description For Detail)
3427'	TOTAL DEPTH

(e) Paleontological Determinations

None.

SECTION III - ENGINEERING SUMMARY

(a) Drill Stem Tests

Drill Stem Test No. 1: 1920 - 2144' Bear Rock Limestone

Times: 2 minutes preflow
60 minutes ISI
120 minutes flow
60 minutes FSI

Strong air blow throughout flow, gas to surface in one minute at 88 MCF/D and steady. Recovered 650' salt water and 180' mud cut salt water.

IHP 903	ISIP 843	IFP 135	
FHP 893	FSIP 693	FFP 375	BHT 86°F

Drill Stem Test No. 2: 2350 - 2515' Bear Rock Dolomite

Times: 5 minutes preflow
60 minutes ISI
120 minutes flow
60 minutes FSI

Weak air blow decreasing slightly. Recovered 240' of mud.

IHP 1102	ISIP 1022	IFP 26	
FHP 1102	FSIP 883	FFP 105	BHT 98°F

Drill Stem Test No. 3: 3057 - 3230' Siluro-Ordovician

Times: 4 minutes preflow
60 minutes ISI
120 minutes flow
60 minutes FSI

Recovered 2800' of salt water.

IHP 1479	ISIP 1563	IFP 475	
FHP 1467	FSIP 1344	FFP 1332	

Drill Stem Test No. 4: 600 - 900'

Misrun - hookwall would not set.

Drill Stem Test No. 5: 600 - 900'

Misrun - seat failure.

Drill Stem Test No. 6: 599 - 935'

Misrun - seat failure.

(b) Casing Record

Conductor Pipe - 13 3/8" to 138' with 478 sax cement.

Surface Casing - 9 5/8" to 618' with 324 sax cement.

(c) Bit Record

<u>Number</u>	<u>Type</u>	<u>Size</u>	<u>Depth In</u>	<u>Footage</u>	<u>Hours</u>	<u>Condition</u>
1A	OSC-3-RR	12 1/4	0	477	40 1/4	2-3-I
2A	OSC-1-GJ	12 1/4	484	140	23 1/4	2-2-I
1	M4-NG	8 3/4	624	51	7 1/4	1-1-I
1C	Diamond	8 23/32	675	20		Good
2	H-88	8 3/4	695	696	52 3/4	2-1-I
3	WDRJ	8 3/4	1391	63	29 1/2	3-2-I
4	WDRJ	8 3/4	1454	29	5 1/4	1-1-I
4RR	WDRJ (RR)	8 3/4	1483	132	19	Bearing loose
5	X-7-J	8 3/4	1615	118	34 1/4	1-1-I (Fair)
6	X-V-J	8 3/4	1733	269	61	2-1-I
7	SS-1-G	8 3/4	2002			
8	X-55-R	8 3/4	2228	227	43 3/4	Good
RR2	Diamond	8 23/32	2455	60	16 1/2	Good
RR8	X55R	8 3/4	2515	400	44	Good
9	X55R	8 3/4	2915	485	61 1/4	Good
RR1	Diamond	8 23/32	3400	27	18	Damaged

(d) Mud Record

<u>Date</u>	<u>Amount</u>	<u>Type</u>
12.12.71	200 lbs.	sodium bicarbonate
12.13.71	2200 lbs.	gel
	75 lbs.	CMC
	50 lbs.	caustic
12.14.71	1100 lbs.	gel
	50 lbs.	CMC
	50 lbs.	caustic
12.15.71	900 lbs.	gel
	50 lbs.	CMC
12.16.71	1800 lbs.	gel
	75 lbs.	CMC
12.17.71	1800 lbs.	gel
	100 lbs.	CMC
	50 lbs.	caustic
12.18.71		
12.19.71	900 lbs.	gel
	50 lbs.	CMC
12.20.71	1800 lbs.	gel
	50 lbs.	caustic
12.21.71	1900 lbs.	gel
	25 lbs.	caustic
12.22.71	400 lbs.	gel
	2 lbs.	rapid drill
12.23.71	500 lbs.	gel

<u>Date</u>	<u>Amount</u>	<u>Type</u>
	50 lbs.	CMC
	2 lbs.	rapid drill
12.24.71	600 lbs.	gel
	50 lbs.	CMC
	2 lbs.	rapid drill
12.25.71	900 lbs.	gel
	50 lbs.	CMC
	3 lbs.	rapid drill
	50 lbs.	caustic
12.26.71	900 lbs.	gel
	3 lbs.	rapid drill
	50 lbs.	caustic
12.27.71	1100 lbs.	gel
	50 lbs.	CMC
	4 lbs.	rapid drill
12.28.71	300 lbs.	gel
	1 lb.	rapid drill
12.29.71	300 lbs.	gel
	1 lb.	rapid drill
12.30.71	600 lbs.	gel
	50 lbs.	CMC
	1 lb.	drill aid
	1 lb.	rapid drill
12.31.71		water

<u>Date</u>	<u>Amount</u>	<u>Type</u>
01.01.72	600 lbs.	gel
	50 lbs.	caustic
	2 lbs.	rapid drill
01.02.72	300 lbs.	gel
	1 lb.	rapid drill
01.03.72		
01.04.72	1200 lbs.	gel
	4 lbs.	rapid drill
	50 lbs.	CMC
	25 lbs.	caustic
01.05.72	900 lbs.	gel
	3 lbs.	rapid drill
	50 lbs.	CMC
	25 lbs.	caustic
01.06.72	1000 lbs.	gel
	2 lbs.	rapid drill
	1 lb.	drill aid
	50 lbs.	CMC
01.07.72	500 lbs.	gel
	50 lbs.	CMC
	2 lbs.	drill aid
	50 lbs.	caustic
01.08.72	600 lbs.	gel
	50 lbs.	CMC
	2 lbs.	rapid drill
	25 lbs.	caustic

(e) Deviation Record

<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
60	1/2	1920	4 1/4
130	1/8	1950	4 1/4
250	5/8	1980	4 3/4
280	7/8	2000	4 1/8
310	1/2	2049	3 7/8
365	1/2	2079	4 3/4
427	1	2109	3 7/8
460	1	2140	3 3/4
520	7/8	2170	4
624	7/8	2200	4 1/2
871	1	2228	4 1/8
1070	1 1/8	2257	4 1/2
1289	2 1/4	2280	4 1/8
1384	4	2320	3 7/8
1419	4	2351	3 7/8
1452	4	2380	3 3/4
1488	4	2410	4
1515	4	2444	4
1545	4 3/4	2536	3 7/8
1575	4 1/2	2630	4 1/2
1600	4 3/4	2652	4
1708	4 1/4	2723	4
1740	4 1/2	2843	4 1/4
1770	4 1/8	2969	4
1800	4 1/8	3030	4
1830	4 7/8	3124	3 7/8
1860	4 3/4	3214	3 1/2
1890	4		

(f) Abandonment Plugs

Plug No. 1 - 3427 - 3100'

Plug No. 2 - 2640 - 2000'

Plug No. 3 - 920 - 570'

(g) Lost Circulation Zones

None

(h) Report of Blowouts

None

SECTION IV - LOGS

Logs - Schlumberger

1. Dual Induction-Laterolog - 3421 - 617'
2" and 5"
2. Borehole Compensated Sonic-Gamma Ray-Caliper - 3422 - 617'
2" and 5"
3. Compensated Formation Density-Gamma Ray-Caliper - 3423 - 617'
5"
4. Synergetic Dolomite-Limestone Lithology Plot - 3423 - 617'
5"
5. Sidewall Neutron Porosity Log - 3423 - 617'
5"
6. Four Arm Continuous Dipmeter - TD to surface casing.

SECTION V - ANALYSIS

- (a) Core Analysis - Core #3.
- (b) Water Analysis - DST's #1, 3, 3.
- (c) Gas Analysis - DST #1.
- (d) Oil Analysis - None.

SECTION VI - COMPLETION SUMMARY

(a) Tubing Record

None

(b) Perforation Record

None

(c) Cementation Record

Plug No. 1 - 3427 - 3100'

140 sax, in place 1-12-72

Plug No. 2 - 2640 - 2000'

225 sax, in place 1-12-72

Plug No. 3 - 920 - 570'

175 sax.

(d) Acidization and Fracturing Record

None

(e) Back Pressure and Production Tests

None.

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TEST DATA					
Formation	Zone Thickness			Ft.	
Interval	599	To	935	T.D.	3427
Type of Test	Open hole, Selective Zone				
Time Started in Hole	0930	Hrs.	Tool Opened	1300	Hrs.
First Flow		Min.	Initial Shut-In		Min.
Second Flow		Min.	Second Shut In		Min.
Third Flow		Min.	Final Shut In		Min.
Pulled Loose @	1500	Hrs.	Out of Hole	1600	Hrs.
Wt. Set/on Packers	26,000	#	Pulled Loss Wt.	5,000	=
Description of Blow During Test					
NIL					
FLUID RECOVERY Was Test Reverse Circulated Yes ☐ No ☒					
Total Fluid Recovered	565				Ft.
Description of Fluid Recovered					
565' Drilling fluid.					
GAS BLOW MEASUREMENT					
Measured With			I.D. Riser		
Type of Instrument					
Time	Sfce. Choke	Reading psi inches	M	Cubic Feet/Day	
		NIL			
REMARKS:					
Misrun, seat failure.					
RESISTIVITY CHLORIDE CONTENT					
Recovery Water	@	°F.		ppm.	
Mud Pit sample filtrate	@	°F.		ppm.	
District	Inuvik	Ticket No.	D06609	Date	January 12/72
Company	Atlantic Richfield Canada Ltd.			Test No.	6
Well Name	Arco Clark et al Mtn River			J.T. No.	6
Number	65°46'23"N 129°07'50"W			Address	650 Guinness House
Formation				Field	Mountain River
and Interval	599 - 935			Province	N.W.T.
Distribution of Reports				Co. Rep.	T. Archibald
				Technician	H. Palmer
17 - Calgary Attention: Mr. Rayer					

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JT-1 & E-13A



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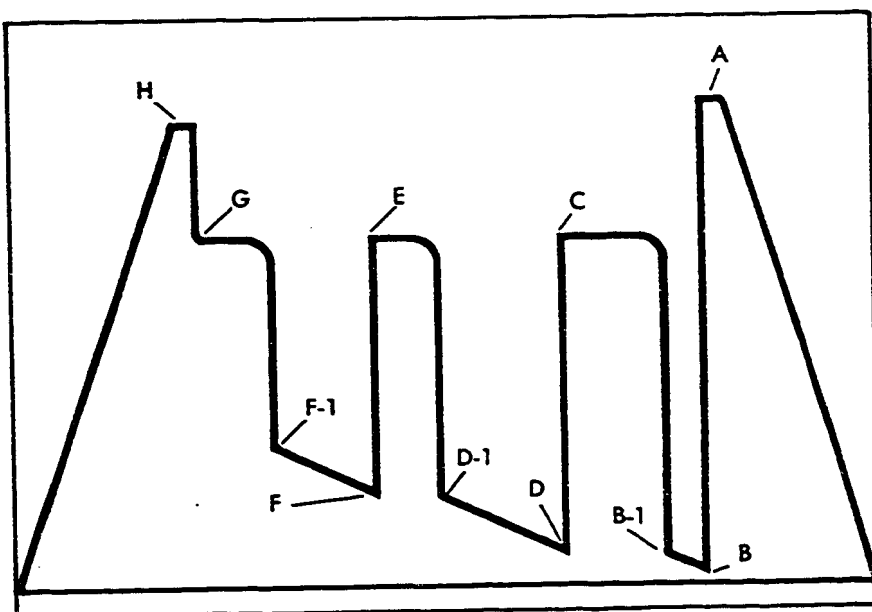
GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

FIELD
REPORT NO.

RECORDER NO.

D06609

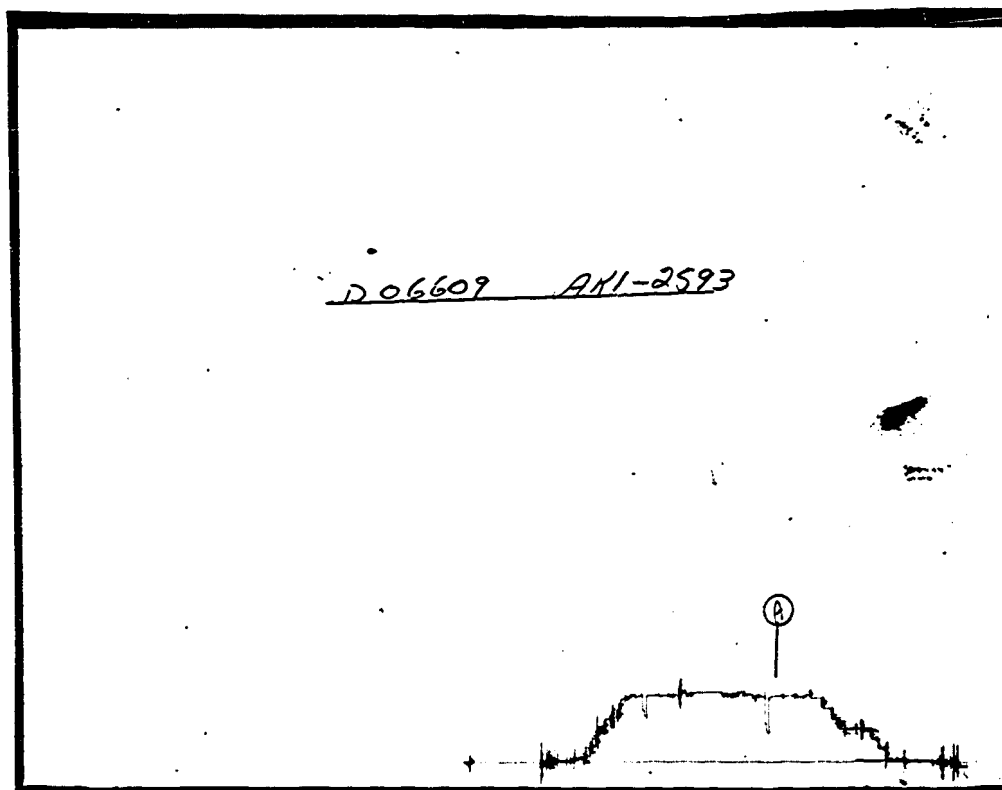
AK1-2593



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

A-1, A-2, A-3, etc. Initial Hyd. Pressures
Z—Special pressure points such as pumping pressures recorded for formation breakdown.



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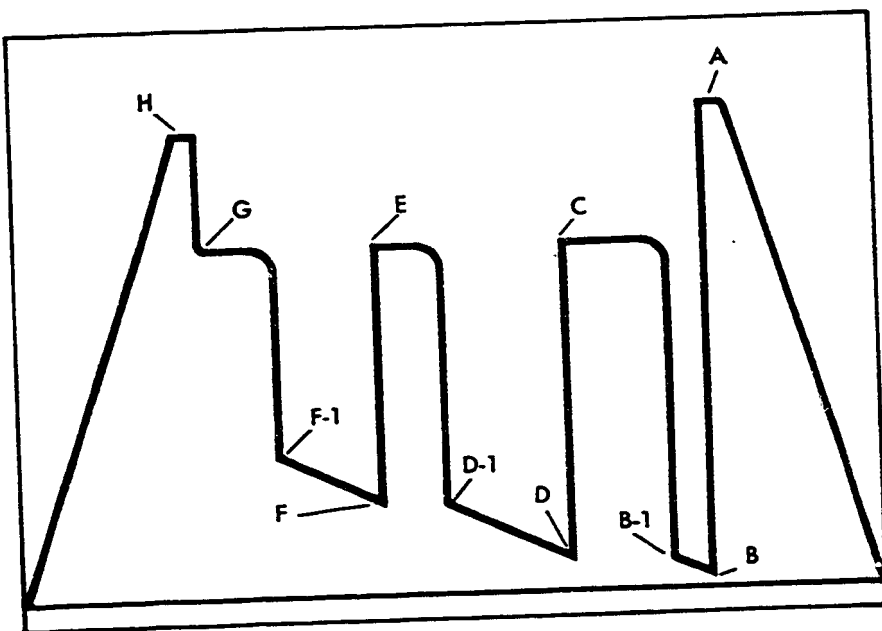
GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

FIELD
REPORT NO.

D06608

RECORDER NO.

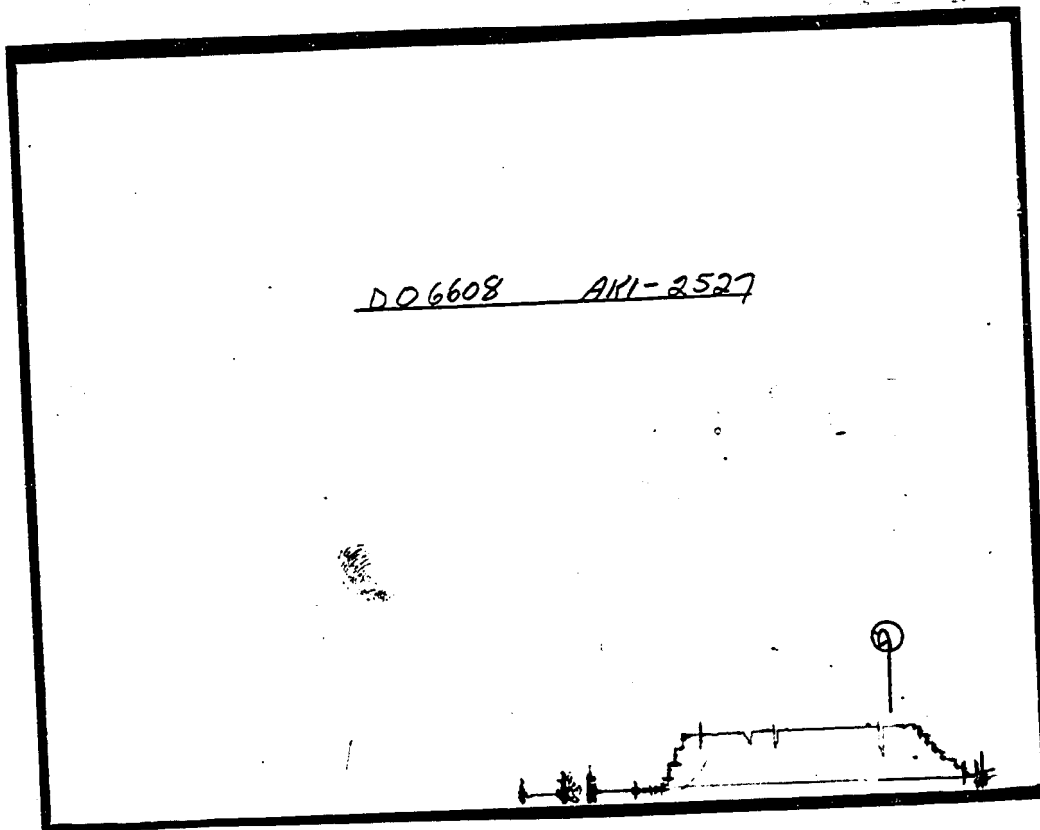
AKI-2593



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

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REMARKS: No prints made on AK1-2527.

PRESSURE INCREMENTS

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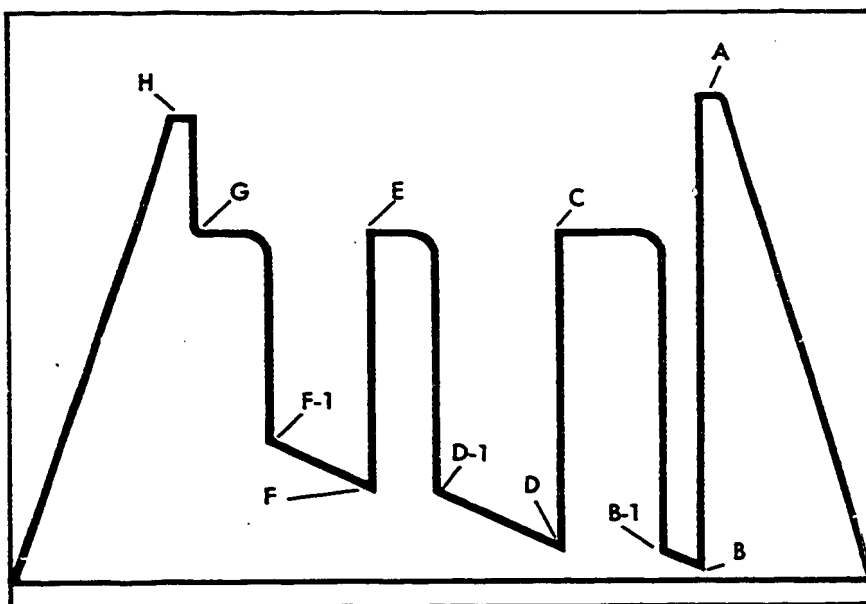
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REPORT NO.RECORDER NO.

D06607

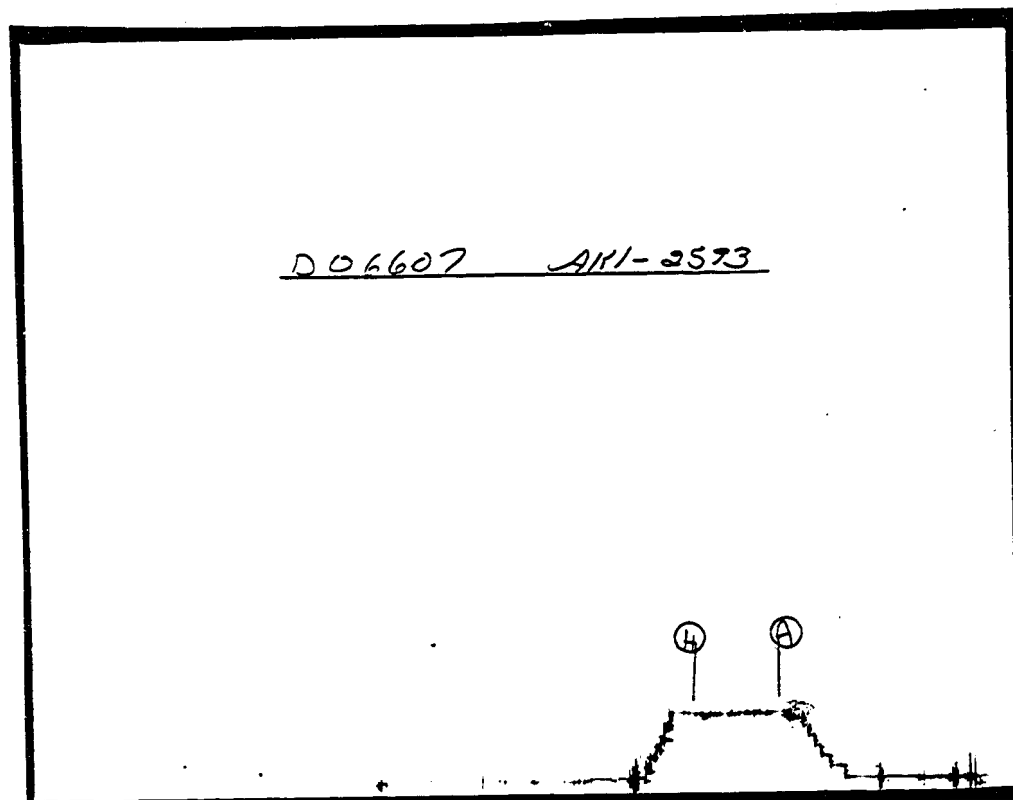
AK1-2593



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

A-1, A-2, A-3, etc. Initial Hyd. Pressures
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TEST DATA						TOOL SEQUENCE		
Formation		Zone Thickness		Ft.		Tool		O.D.
Interval	3057	To	3230	T.D.	3427			
Type of Test	Open Hole, Straddle, Bypass							
Time Started in Hole	2400	Hrs.		Tool Opened	0516	Hrs.		
First Flow	4	Min.		Initial Shut-In	60	Min.		
Second Flow	120	Min.		Second Shut In		Min.		
Third Flow		Min.		Final Shut In	60	Min.		
Pulled Loose @	0930	Hrs.		Out of Hole	1200	Hrs.		
Wt. Set/on Packers	40,000	=		Pulled Loose Wt.	10,000	=		
Description of Blow During Test Good initial puff. Good air blow on flow, decreasing to small in 90 minutes.								
FLUID RECOVERY Was Test Reverse Circulated Yes ☐ No ☒								
Total Fluid Recovered	2880	Ft.						
Description of Fluid Recovered								
90' drilling fluid.								
930' black, brackish salt water.								
1860' slightly dark, sulphurous salt water.								
GAS BLOW MEASUREMENT								
Measured With I.D. Riser								
Type of Instrument								
Time	Sfce. Choke	Reading psi inches	M Cubic Feet/Day					
			NIL					
REMARKS: Test satisfactory.								
RESISTIVITY CHLORIDE CONTENT								
Recovery Water	0.2	@	75	°F.	30,000	ppm.		
Mud Pit sample filtrate		@		°F.		ppm.		
District Inuvik Ticket No. D06606 Date January 11/72 Test No. 3 J.T. No. 3								
Company Atlantic Richfield Canada Ltd. Address 650 Guinness House								
Well Name ARCO Clark et al Mtn River Calgary 2, Alberta								
Number 65°46'23"N 129°07'50"W Field Mountain River Province N.W.T.								
Formation and Interval 3057 - 3230 Co. Rep. T. Archibald								
Distribution of Reports 17 - Mr. Rayer, Calgary Technician H. Palmer								

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JT-1 & E-13A



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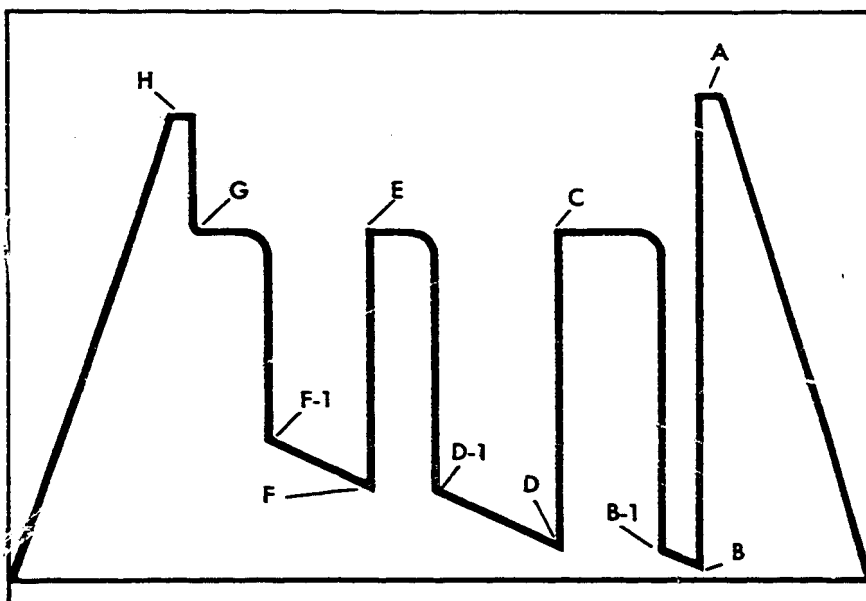
GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

FIELD
REPORT NO.

RECORDER NO.

D06606

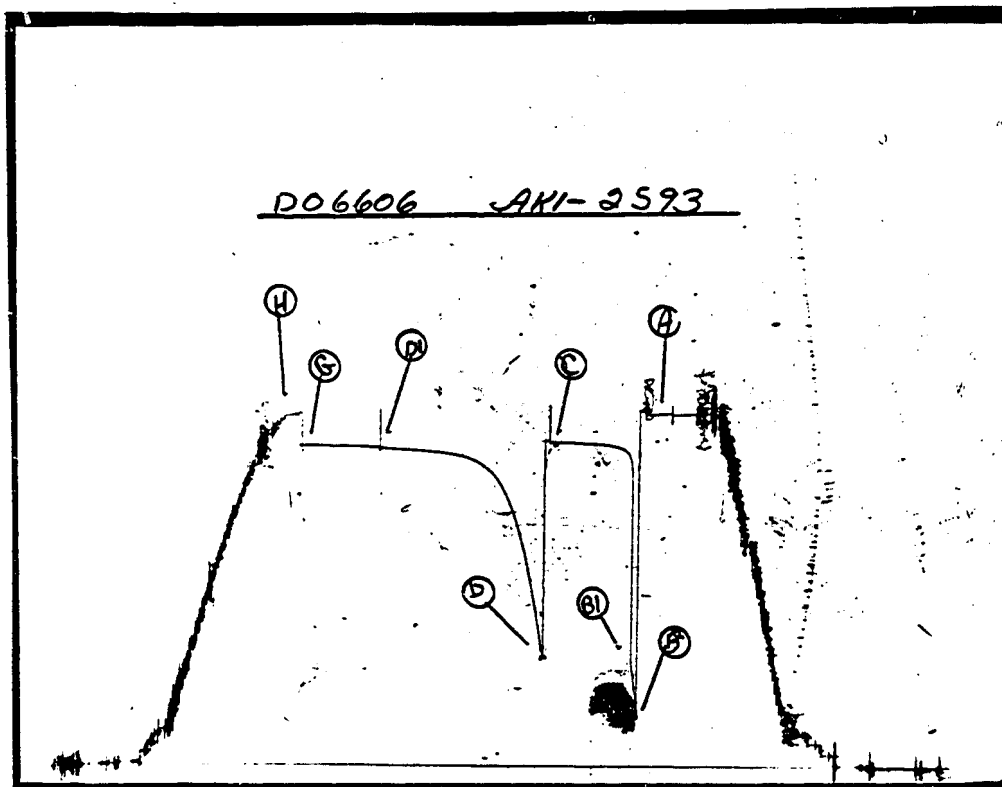
AKI-2593



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

A-1, A-2, A-3, etc. Initial Hyd. Pressures
Z—Special pressure points such as pumping pressures recorded for formation breakdown.





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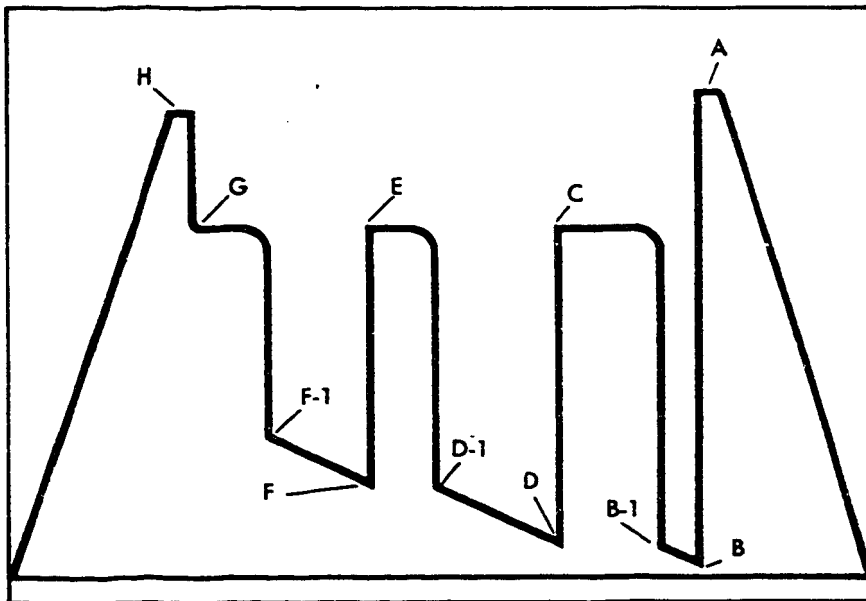
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FIELD
REPORT NO.

D06606

RECORDER NO.

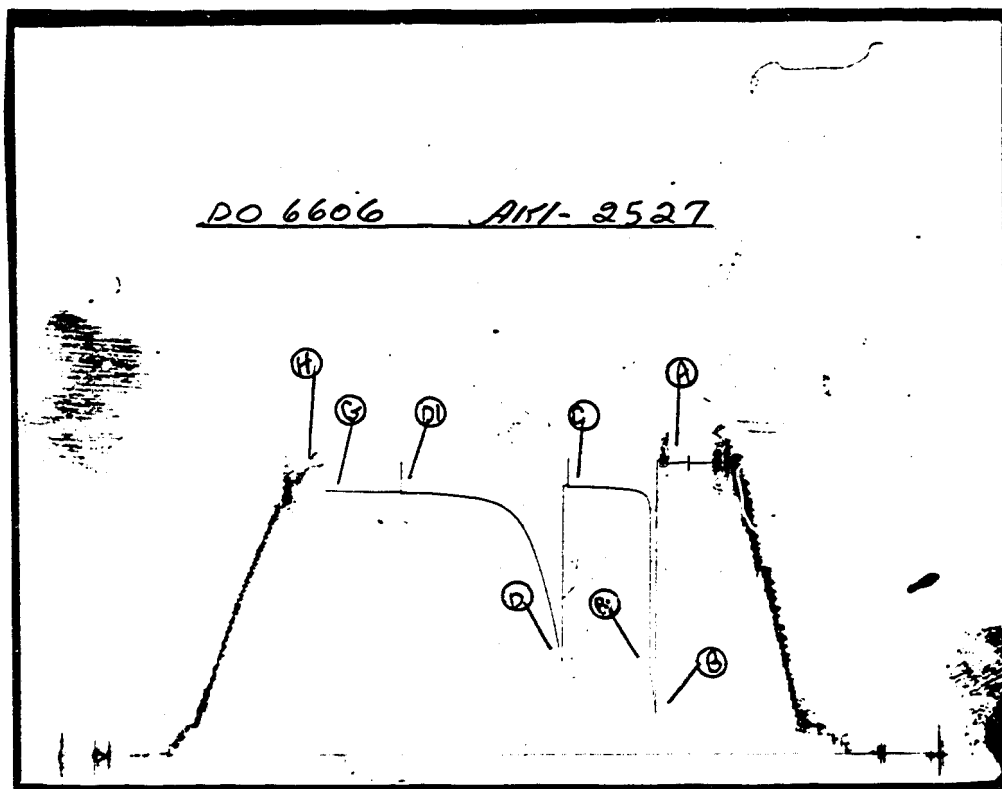
AK1-2527



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

A-1, A-2, A-3, etc. Initial Hyd. Pressures
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TEST DATA					TOOL SEQUENCE		
Formation	Zone Thickness		Fr.	Tool	Length	O.D.	
Interval	2350	To 2515	T.D. 2515	Fr.	P.O. Sub	.85	
Type of Test	Open hole, Bottom hole.						
Time Started in Hole	0030	Hrs	Tool Opened	0320	Hrs	Sub	
First Flow	5	Min	Initial Shut-In	60	Min	MFE Tool	
Second Flow	120	Min	Second Shut-In		Min	Bypass Tool	
Third Flow		Min	Final Shut-In	60	Min	Jars	
Pulled Loose ft	0730	Hrs	Out of Hole	0930	Hrs	Safety Joint	
Wt. Set on Packers	32,000	#	Packed Loose Wt	5,000	#	S.S. & Packer	
Description of Blow During Test	Small initial blow. Weak air blow on second flow, decreasing slightly near end.				Total	29.50	
					Stub	1.25	
					Perfa	10.00	
					Recorder	4.40	
					Recorder	6.00	
					Perfa	15.00	
					Sub	.90	
					Drill Collars	119.77	
					Sub	.85	
					Perf	5.00	
					B.N. & Perf	1.45	
					Total Interval	164.62	
FLUID RECOVERY							
Was Test Reverse Circulated		Yes	No	xx			
Total Fluid Recovered	240						
Description of Fluid Recovered	240' Drilling fluid.						
GAS BLOW MEASUREMENT							
Measured With		D Riser					
Type of Instrument							
Time	Steel Choke	Reading, p. inch	M Cubic Feet Day				
NIL							
TOTAL LENGTH 194.12							
Elevation 310 KB (Est.) 295 GL (Est.)							
Bottom Hole Choke Size 1/2"							
Fluid Cushion Type N11 Amt.							
MUD AND HOLE DATA							
Mud Type		Gel Chem		W.L.	9.5		
Filter Cake		2/32	Visc	41	Wt.	9.1	
Time Taken		2000 hrs.					
Contractor		Regent Drilling		Rig No.	11		
Drill Pipe Size		4 1/2" FH					
Drill Collar Size		2 3/4" ID		Length	290'		
Main Hole Size		8 3/4"					
Rat Hole Size							
REMARKS Test satisfactory.							
RESISTIVITY CHLORIDE CONTENT							
Recovery Water	ft	F.	ppm.				
Mud Pit sample filtrate	ft	F.	ppm.				
District	Inuvik	Ticker No	D06604	Date	January 3/72	Test No 2 J.T. No. 2	
Company	Atlantic Richfield Canada Ltd.						
Well Name	ARCO Clark et al Mtn. River H-47						
Number	65°46'23"N 129°07'50"W						
Formation	Field		Mountain River	Province	N.W.T.		
and Interval	2350 - 2515		Co. Rep	T. Archibald			
Distribution of Reports			Technician	H. Palmer			
17 - Calgary Attention: Mr. Rayer							

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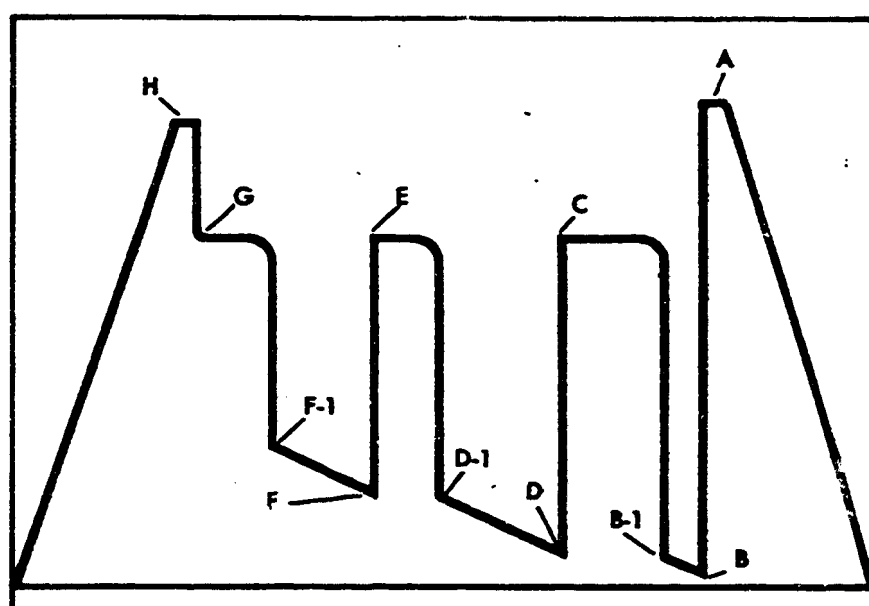
GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

FIELD
REPORT NO.

D06604

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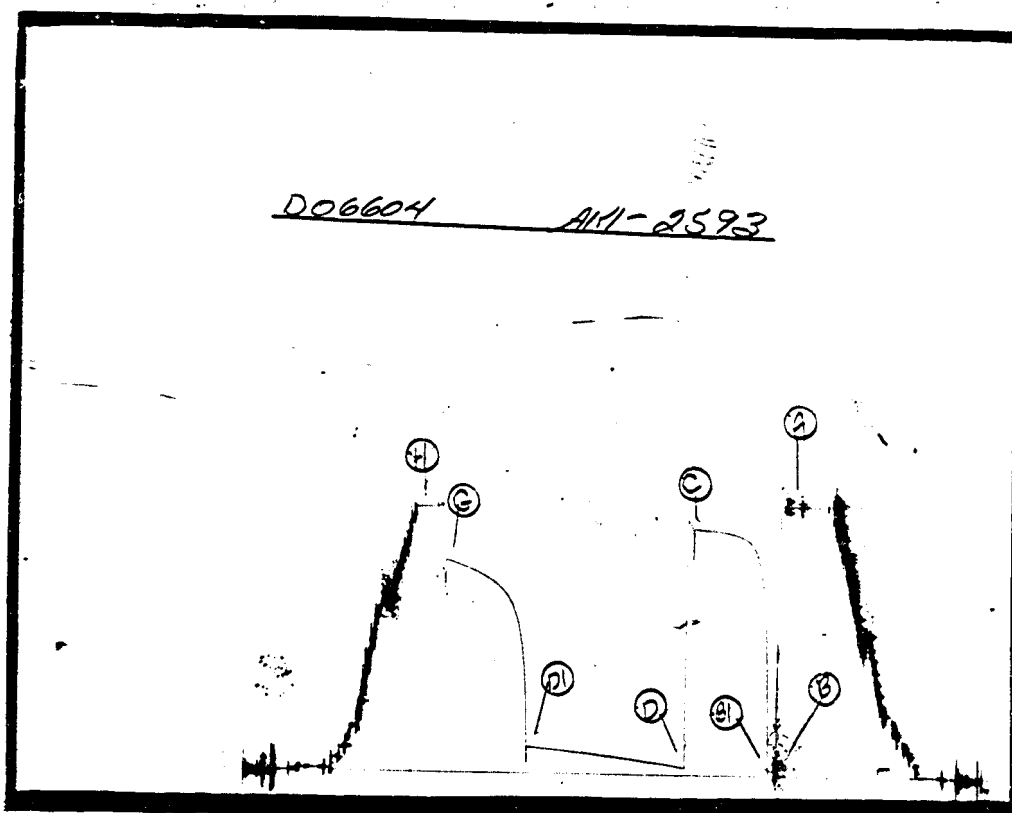
AK1-2593



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

A-1, A-2, A-3, etc. Initial Hyd. Pressures
Z — Special pressure points such as pumping pressures recorded for formation breakdown.





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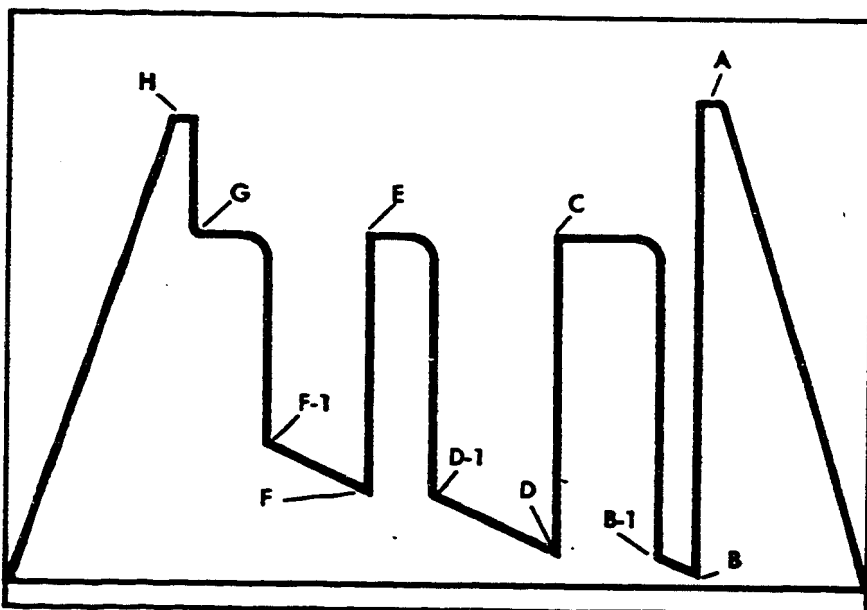
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FIELD
REPORT NO.

RECORDER NO.

D06604

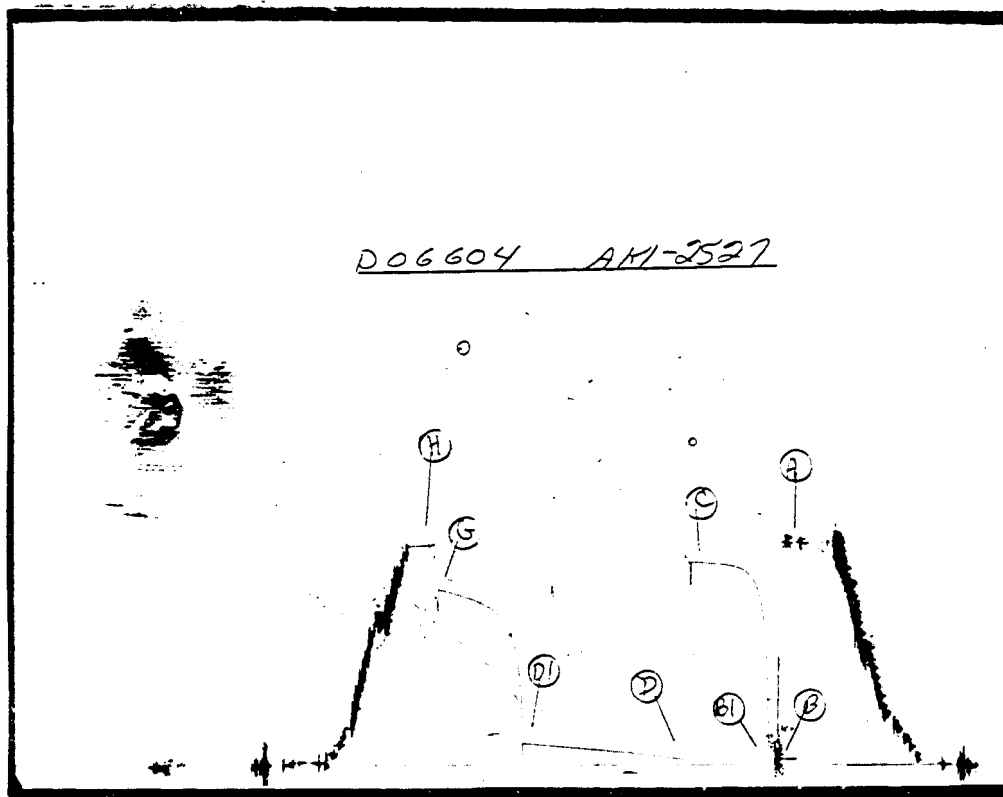
AK1-2527



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

A-1, A-2, A-3, etc. Initial Hyd. Pressures
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TEST DATA						TOOL SEQUENCE		
Formation	Zone Thickness			Ft.		Tool	Length	O.D.
Interval	1920 To	2144 T.D.	2144	Ft.		P.O. Sub	.85	
Type of Test	Open Hole, Bottom Hole					Drill Collars		
Time Started in Hole	1830 Hrs	Test Opened	2200 Hrs			D.P. Sub	.85	
First Flow	2 Min	Initial Shut-In	60 Min.			MFP Tool	9.05	
Second Flow	120 Min	Second Shut In		Min.		Bypass Tool	3.00	
Third Flow		Final Shut In	60 Min.			Jars	6.50	
Pulled Loose ft	0210 Hrs	Out of Hole	0400 Hrs			Safety Joint	1.75	
Wt. Set on Packers	30,000 =	Pulled Loose Wt.	5,000 =			S.S. & Packer	8.00	7 1/2"
Description of Blow During Test						Total	30.00	
Strong initial puff..Small gas blow on second flow, remaining steady throughout test.						Stub	1.25	
						Perfs	10.00	
FLUID RECOVERY Was Test Reverse Circulated Yes No X						Recorder	4.40	
Total Fluid Recovered	920					Perfs	15.00	
Description of Fluid Recovered						Recorder	6.00	
90' drilling fluid. 650' brackish, sulphurous salt water. 180' sulphurous, salty, slightly brackish water.						Sub	.90	
						Drill Collars	178.44	
						Sub	.85	
						Perf	5.00	
						B.N. & Perf	1.45	
						Total Interval	223.29	
GAS BLOW MEASUREMENT								
Measured With	Manometer		2" I.D. Riser					
Type of Instrument	Impact, water.							
Time	Sfce. Choke	Reading inches	M	Cubic Feet Day				
2330		0.4		88				
8' flame.								
					TOTAL LENGTH 253.29			
					Elevation (est.) 310 KB (est.) 295 GL			
					Bottom Hole Choke Size 1/2"			
REMARKS Test satisfactory.					Fluid Cushion Type N11 Amt.			
					MUD AND HOLE DATA			
					Mud Type Gel Chem W.L. 9.0			
					Filter Cake 2/32 Visc 40 Wt. 9.1			
					Time Taken 1400 hrs.			
					Contractor Regent Drilling Rig No. 11			
					Drill Pipe Size 4 1/2" FH			
					Drill Collar Size 2 3/4" ID Length 295'			
					Main Hole Size 8 3/4"			
					Rat Hole Size			
RESISTIVITY CHLORIDE CONTENT								
Recovery Water	ft	°F.	ppm.					
Mud Pit sample filtrate	ft	°F.	ppm.					
District	Inuvik	Ticket No.	D06601	Date	December 28/71	Test No.	1	J.T. No. 1
Company	Atlantic Richfield Canada Ltd.				Address	650 Guinness House		
Well Name	ARCO Clark et al Mtn River H-47				Calgary 2, Alberta			
Number	65°46'23"N 129°07'50"W				Field	Mountain River Province N.W.T.		
Formation					Co. Rep.	T. Archibald		
and Interval	1920 - 2144				Technician	R. Palmer		
Distribution of Reports					17 - Mr. Rayer, Calgary			

321 - 50TH AVENUE S.E. • CALGARY 24, ALBERTA • PH. 255-1151

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[illegible]



JOHNSTON TESTERS 321 - 50TH AVENUE S.E. • CALGARY 24, ALBERTA • PH. 255-1151
A DIVISION OF SCHLUMBERGER CANADA LIMITED

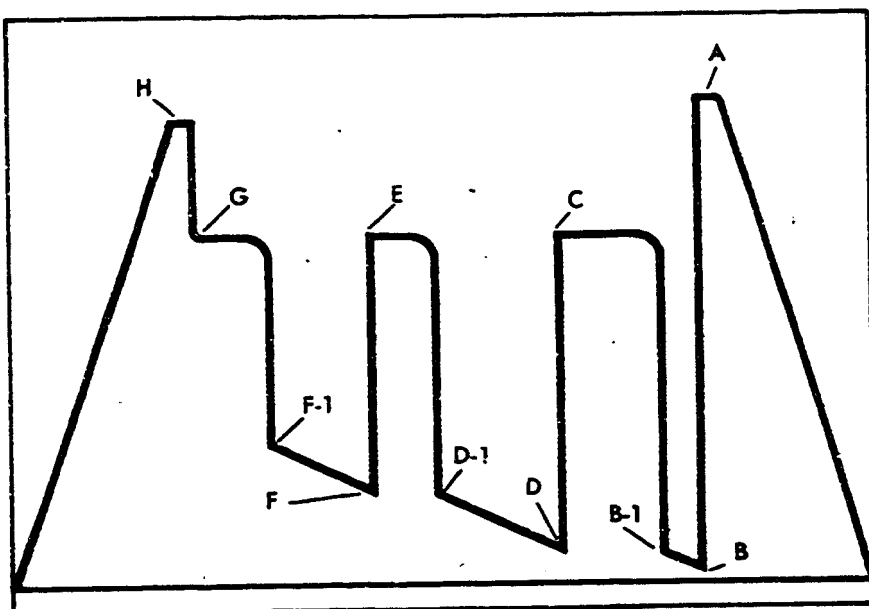
GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

FIELD
REPORT NO.

D06601

RECORDER NO.

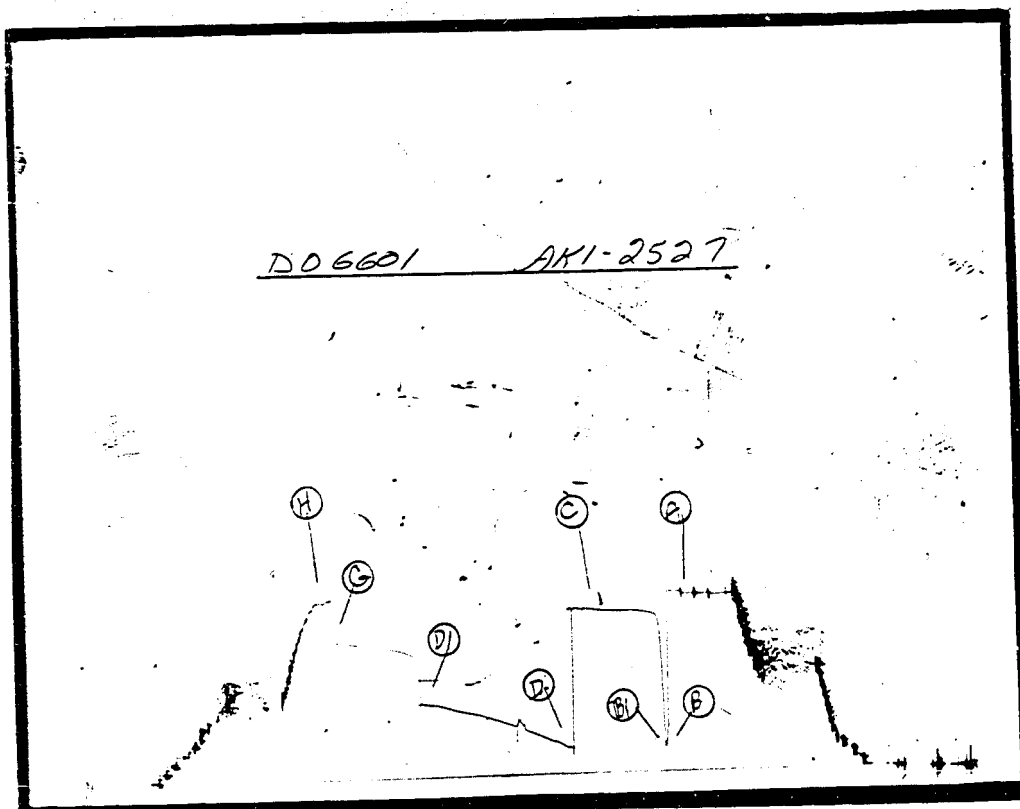
AK1-2527



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

A-1, A-2, A-3, etc. Initial Hyd. Pressures
Z - Special pressure points such as pumping pressures recorded for formation breakdown.





JOHNSTON TESTERS 321 - 50TH AVENUE S.E. • CALGARY, 24, ALBERTA • PH. 255-1151
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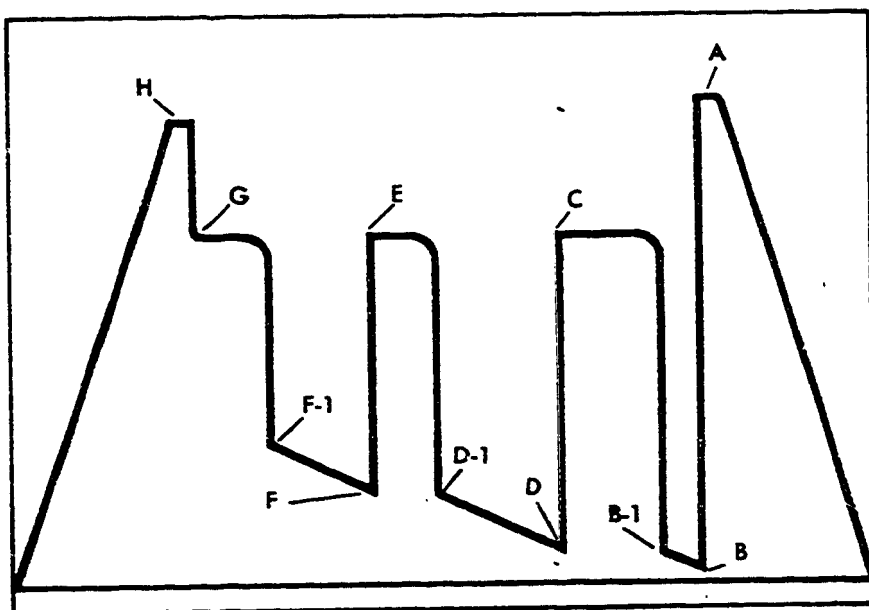
GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

FIELD
REPORT NO.

D06601

RECORDER NO.

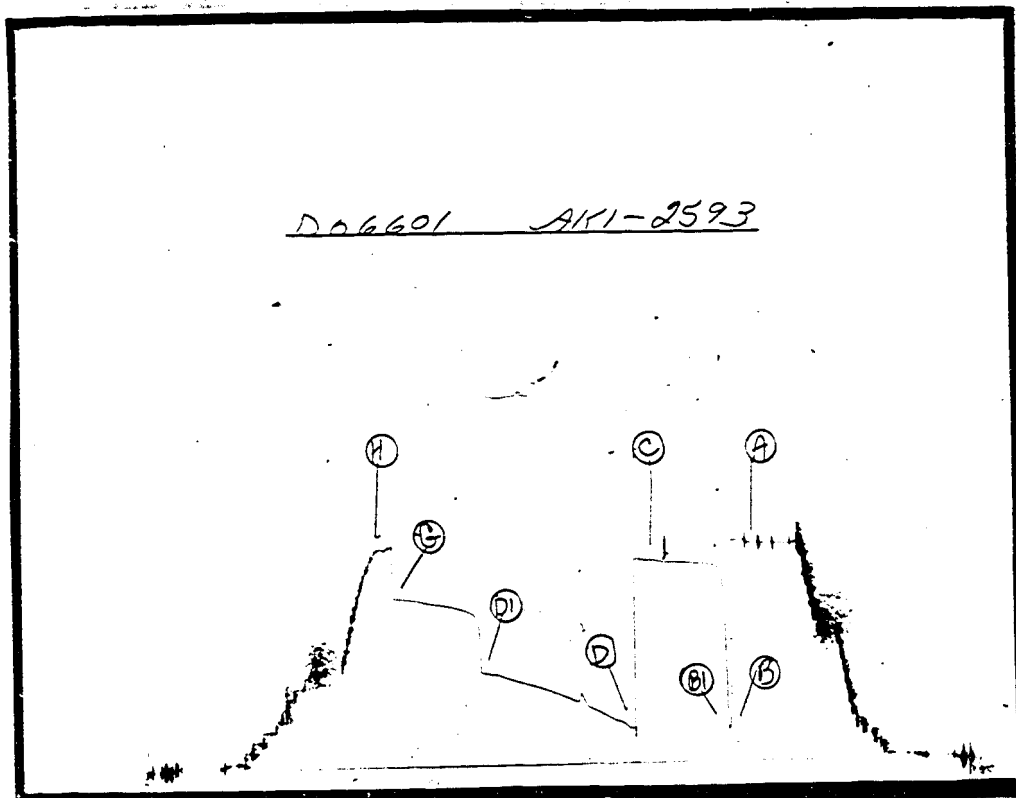
AK1-2593



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

A-1, A-2, A-3, etc. Initial Hyd. Pressures
Z — Special pressure points such as pumping pressures recorded for formation breakdown.



CONFIDENTIAL

CORE ANALYSIS REPORT

FOR

ATLANTIC RICHFIELD CANADA LTD.

**ARCO CLARK ET AL MTN RIVER H-47
WILDCAT, MOUNTAIN RIVER AREA**

CORE LABORATORIES - CANADA LTD.

Petroleum Reservoir Engineering

CALGARY - EDMONTON - REGINA

CORE LABORATORIES – CANADA LTD.

COMPANY ATLANTIC RICHFIELD CANADA LTD.
WELL ARCO CLARK ET AL MTN RIVER H-47
FIELD WILDCAT, MOUNTAIN RIVER AREA
LOCATION 65 46' 23.00 NORTH LAT.
129 07' 50.00 WEST LONG.

**FORMATION
DRILLING FLUID
ELEVATION
ANALYSIS
REMARKS**

WATER BASE MUD

FULL DIAMETER
ALL SAMPLES SANDBLASTED
PRIOR TO KH ANALYSIS.

PAGE 1 OF 2
FILE 913-221
DATE REPORT JAN. 18/72
ANALYSTS SP, MH

- - APPEARS SIMILAR TO
- - BROKEN CORE (LESS USED FOR SUMMARY PURPOSES)
- - PERMEABILITY > 10000 MD.

- PERMEABILITY ϵ
- FS - FINE SAND
- MS - MEDIUM SAND
- CS - COARSE SAND

CONG - CONGLOMERATE
DOL - DOLOMITE
SH - SHALE
LNV - LNV

SHV - SHALY
/BK - BREAK
SHV - PYROBITUMIN
CARB - CARBONACEOUS

A - ANHYDRITE
FOS - FOSSILIFEROUS
XLN - CRYSTALLINE
LAM - LAMINATIONS

V - VUGULAR
LV - LARGE VUGS
SV - SMALL VUGS
PPV - PIN POINT VUGS

I - INTERGRANULAR
STV - STYLOLITIC
HF - HORIZONTAL FRACTURE
VF - VERTICAL FRACTURE

28 - SMALL PLUG SAMPLE
 29 - SLIGHTLY
 30 - VERY
 31 - ONLY

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	

CORED INTERVAL 2455 - 2515

CORE NO. 3 2455 - 2515 REC. 60.0' 17 BOXES

[illegible]

CORE LABORATORIES — CANADA, LTD.

Petroleum Reservoir Engineering

WELL: ARCO CLARK ET AL MTN RIVER H-47

PAGE: 2 OF 2

FORMATION:

FILE: 913-221

SUMMARY INTERVAL: 2455.0 - 2515.0

TOTAL FOOTAGE: 60.0

FOOTAGE ANALYZED 18.7

FOOTAGE NOT ANALYZED: TOTAL: 41.3 DENSE .0 LOST .0 DRILLED .0 *NABR 41.3 RUBBLE .0

SUMMARY OF ANALYZED CORE:

TOTAL

BY
PERM
RANGES:

LESS THAN 0.10 Md.

0.10 0.49 Md.

0.50 0.99 Md.

1.00 9.99 Md.

GREATER THAN 9.99 Md.

FOOTAGE	% OF ANALYZED CORE	WEIGHTED AVERAGE POROS. %	POROSITY FEET	WEIGHTED AVERAGE PERM. MD.	PERM. FEET	WEIGHTED AVERAGE RESID. OIL %	WEIGHTED AVERAGE TOT. WATER %
18.7	100.00	2.43	45.38	1.59	29.82	.00	.00
.8	4.28	2.30	1.84	.05	.04	.00	.00
3.7	19.79	2.47	9.13	.37	1.35	.00	.00
3.7	19.79	1.31	4.84	.84	3.11	.00	.00
10.5	56.14	2.82	29.57	2.41	25.32	.00	.00
.0	.00	.00	.00	.00	.00	.00	.00

*NOT ANALYZED BY REQUEST

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CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. E72-7574-5

Received: Jan. 26, 1972 Reported: Feb. 2, 1972

Well: Location: Arco et al Mountain R.

Operator: ATLANTIC RICHFIELD CANADA LTD.

Field or Area: Lat. 65° 41' 23" Long. 129° 07' 50"

Elev.: K.B. Grd. Zone/Formation:

Sample Interval: 2350' - 2515'

Method of Production: D.S.T. #2

Sampled from: MFE Tool

Sampled by: Johnston Testers Date: Jan. 3, 1972

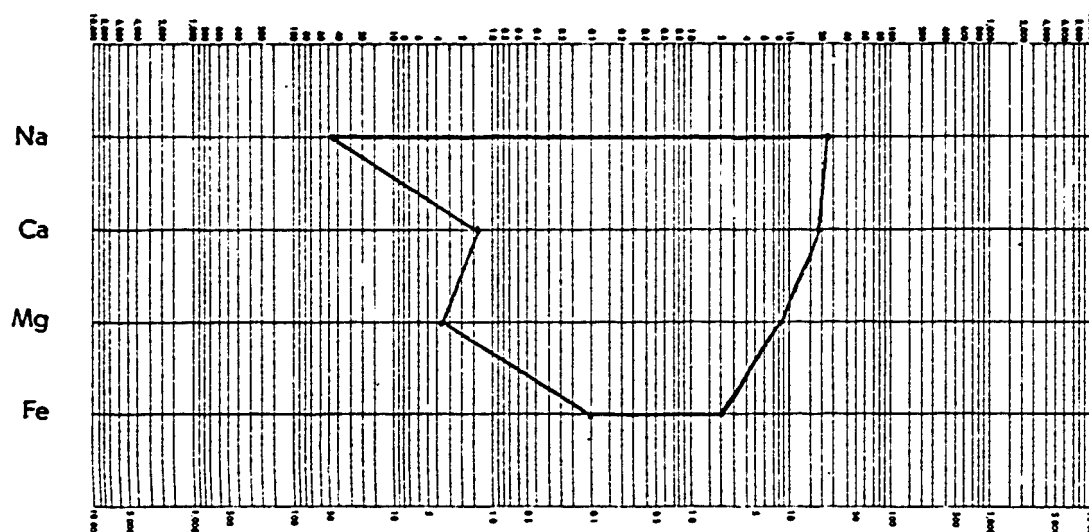
OTHER PERTINENT DATA Elevation 295' est.
Recovered 240' drilling mud.

(Signed)

	Na & K	K	Ca	Mg					SO ₄	Cl			CO ₃	HCO ₃		
Mg./L	1097		28	44					432	830			64	1110		
Meq./L	47.71		1.40	3.62					8.99	23.41			2.13	18.20		
Meq. %	45.24		1.33	3.43					8.52	22.20			2.02	17.26		

Total Solids Mg/L: By Evaporation 3,560 Fe Present Specific Gravity 1.004 @60°F Observed pH 8.7 @ 71 °F
Calculated 3,605 After Ignition 2,180 H₂S Nil Refractive Index 1.3333 @25°C Resistivity 2.49 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

Analysis determined on colorless water extracted from mud by filtering under air pressure. Large amount of organic matter present in dissolved solids.

Continued.....

C.G.L. 64

PAGE - 2 -

CHEMICAL & GEOLOGICAL LABORATORIES LIMITED

OPERATOR: ATLANTIC RICHFIELD CANADA LTD.

REPORT NUMBER: E72-7574-1/-5

DATE SAMPLED: Jan. 3, 1972

DATE RECEIVED: Jan. 26, 1972

DATE REPORTED: Feb. 2, 1972

Well: Arco et al Mountain River Lat. 65° 41' 23" Long. 129° 07' 50"

LABORATORY
NUMBER

E72-7574-1: Sampled from Mud tanks.

RESISTIVITY: 3.53 OHM-meters at 68°F.

Colorless water filtered from mud.

E72-7574-2: Sampled from Top.

RESISTIVITY: 3.67 OHM-meters at 68°F.

Colorless water filtered from mud.

E72-7574-3: Sampled from Middle.

RESISTIVITY: 3.57 OHM-meters at 68°F.

Colorless water filtered from mud.

E72-7574-4: Sampled from Bottom.

RESISTIVITY: 2.86 OHM-meters at 68°F.

Colorless water filtered from mud.

E72-7574-5:

BENZENE CONTENT: 0.02 P.P.M.

Sample was received in a 1 quart metal container with a foil insert present in the screw cap. Container was full, very muddy, and had to be filter pressed prior to analysis.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

CONFIDENTIAL

Lab No. E72-7718-5

Received: Feb. 8, 1972 Reported: Feb. 16, 1972

Well: Location: Arco et al Mountain R. H-47

Operator: ATLANTIC RICHFIELD CANADA LTD.

Lat. 64°46'23" Long. 129°07'50"

Elev.: K.B.

Grd.

Zone/Formation:

Field or Area: Mountain River

Sample Interval:

Method of Production: D.S.T. #3

Sampled from: Bottom

Sampled by:

Date: Jan. 11,
1972

OTHER PERTINENT DATA

Elevation: 295' est.

Recovered: 2880' fluid.

(Signed)

	Na & K	K	Ca	Mg					SO ₄	Cl			CO ₂	HCO ₃		
Mg./L	17343		1662	510					2273	29300				350		
Meq./L	754.43		82.93	41.92					47.28	826.26				5.74		
Meq. %	42.90		4.72	2.38					2.69	46.99				0.33		

Total Solids Mg/L:

By Evaporation

55,700

Fe Present

Specific Gravity

1.043

@60°F

Observed pH

7.8

@ 71 °F

Calculated 51,438

After Ignition

50,140

H₂S Present

Refractive Index

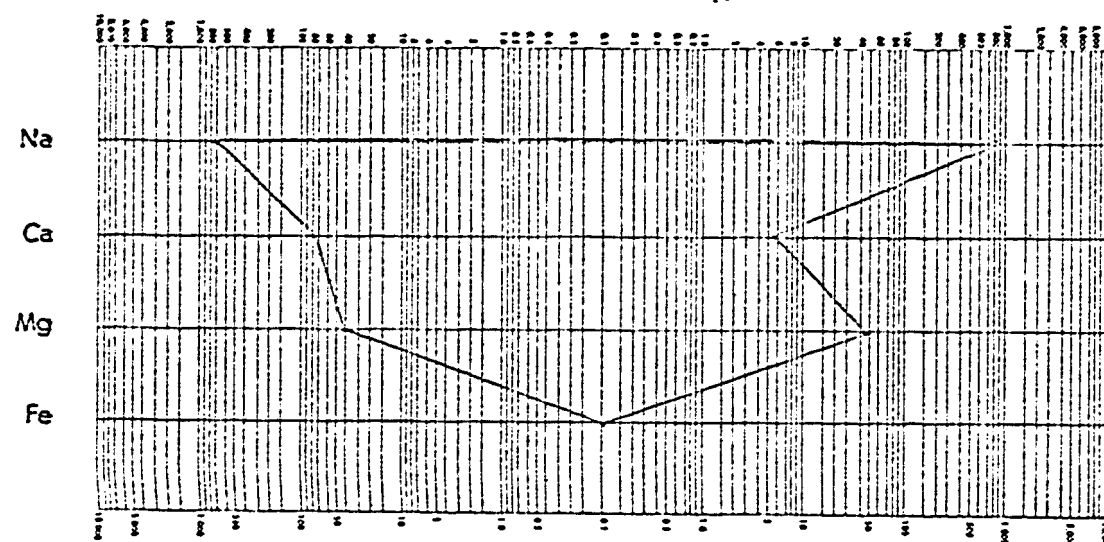
1.3422

@25°C

Resistivity

.169 ohm meters @ 63 °F

Pattern Unit Meq./L



Remarks and Conclusions

Sample consisted of colorless water with a thin sediment layer. Organic matter present in dissolved solids.

Continued.....

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

CONFIDENTIAL
Lab No. E72-7718-5

Received: Feb. 8, 1972 Reported: Feb. 16, 1972

Well: Location: Arco et al Mountain R. H-47

Operator: ATLANTIC RICHFIELD CANADA LTD.

Lat. 64°46'23" Long. 129°07'50"

Elev.: K.B.

Grd.

Zone/Formation:

Field or Area: Mountain River

Sample Interval:

Method of Production: D.S.T. #3

Sampled from: Bottom

Sampled by:

Date: Jan. 11,
1972

OTHER PERTINENT DATA

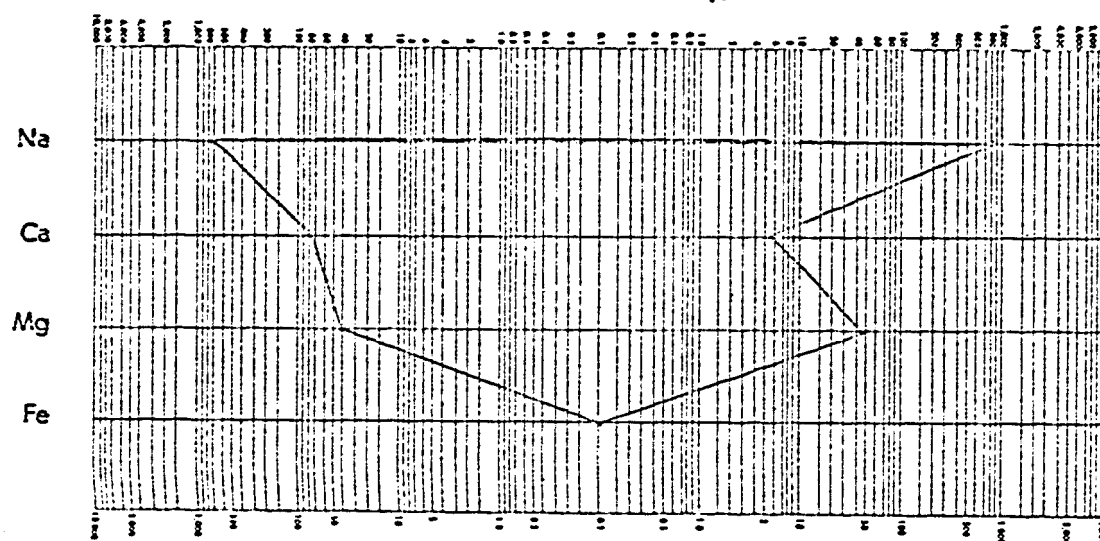
Elevation: 295' est.
Recovered: 2880' fluid.

(Signed)

	Na & K	K	Ca	Mg					SO ₄	Cl			CO ₂	HCO ₃		
Mg./L	17343		1662	510					2273	29300				350		
Meq./L	754.43		82.93	41.92					47.28	826.26				5.74		
Meq. %	42.90		4.72	2.38					2.69	46.99				0.33		

Total Solids Mg/L: By Evaporation 55,700 Fe Present Specific Gravity 1.043 @60°F Observed pH 7.8 @ 71 °F
 Calculated 51,438 After Ignition 50,140 H₂S Present Refractive Index 1.3422 @25°C Resistivity .169 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

Sample consisted of colorless water with a thin sediment layer. Organic matter present in dissolved solids.

Continued.....

ATLANTIC RICHFIELD CANADA LTD.

LABORATORY REPORT NUMBER: E72-7718-1/-5

LABORATORY NUMBER

E72-7718-1: Sampled from Top.

RESISTIVITY: 0.323 OHM-meters @ 68°F.

Sample consisted of colorless water with some sediment.

BENZENE CONTENT: No trace of benzene indicated.

Sample was received in a 1 quart metal container with a foil insert present in the screw cap. Container was full, water was clear, and appeared to be a good sample. No trace of toluene indicated.

E72-7718-2: Sampled 900' from Top.

RESISTIVITY: 0.239 OHM-meters @ 68°F.

Sample consisted of colorless water with some sediment.

BENZENE CONTENT: No trace of benzene indicated.

Sample was received in a 1 quart metal container with a foil insert present in the screw cap. Container was full, water was clear, and appeared to be a good sample. No trace of toluene indicated.

E72-7718-3: Sampled from Middle.

RESISTIVITY: 0.171 OHM-meters @ 68°F.

Colorless water with some sediment. H₂S present.

BENZENE CONTENT: No trace of benzene indicated.

Sample was received in a 1 quart metal container with a foil insert present in the screw cap. Container was full, water was clear, and appeared to be a good sample, and had to be filter pressed prior to analysis. No trace of toluene indicated.

E72-7718-4: Sampled 327' above Tool.

RESISTIVITY: 0.198 OHM-meters @ 68°F.

Colorless water with some sediment. H₂S Present.

BENZENE CONTENT: No trace of benzene indicated.

Sample was received in a 1 quart metal container with a foil insert present in the screw cap. Container was full, water was clear, and appeared to be a good sample. No trace of toluene indicated.

E72-7718-5: See complete water analysis.

BENZENE CONTENT: No trace of benzene indicated.

Sample was received in a 1 quart metal container with a foil insert present in the screw cap. Container was full, water was clear, and appeared to be a good sample. No trace of toluene indicated.

CONFIDENTIAL

FLUID ANALYSES
FOR
ATLANTIC RICHFIELD CANADA LTD.
ARCO CLARK ET AL MTN RIVER H-47
WILDCAT
NORTHWEST TERRITORIES

CORE LABORATORIES - CANADA LTD.

Petroleum Reservoir Engineering
CALGARY - EDMONTON - REGINA



GAS ANALYSIS

Company Atlantic Richfield Canada Ltd. Page 1 of 2
Well ARCO Clark et al Mtn River H-47 File 921-26
Field Wildcat, N.W.T. Analyst BGW
65° 46' 23.00 N.L.
Location 129° 07' 50.00 W.L. Elevation: K.B. _____ Grd. 295'
Formation _____ Depth 1920' - 2144'
Sampled from DST #1 (Flareline) by _____
Sampling pressure 40 psig Sampling temp. -5 °F Ambient temp. _____ °F
Date sampled Dec. 28/71 Date received Dec. 31/71 Date analysed Jan. 3/72
Container pressure 30 psig Mud _____ Water cushion _____
Recovery or flowrate: _____

<u>COMPONENT</u>	<u>MOLE %</u>	<u>IMP. GPM @ 14.65 psia and 60°F</u>	<u>SPECIFIC GRAVITY</u>
Hydrogen	<u>.05</u>		Calculated <u>.621</u> Measured _____
Helium	<u>.05</u>		
Nitrogen	<u>1.21</u>		<u>GROSS B.T.U. per SCF</u> <u>1085.9</u>
Carbon Dioxide	<u>.39</u>		Calculated @ 14.65 psia, 60°F, moisture and acid - gas free _____
Hydrogen Sulphide	<u>.00</u>		
Methane	<u>90.38</u>		<u>VAPOR PRESSURE of PENTANES PLUS</u>
Ethane	<u>5.13</u>		(calculated) <u>15.9 psia @ 100°F</u>
Propane	<u>1.67</u>	<u>.381</u>	
Iso Butane	<u>.32</u>	<u>.087</u>	Pseudo Critical Pressure <u>671.2</u> psia
Normal Butane	<u>.49</u>	<u>.128</u>	Pseudo Critical Temperature <u>364.1</u> °R
Iso Pentane	<u>.15</u>	<u>.045</u>	
Normal Pentane	<u>.11</u>	<u>.033</u>	Remarks <u>Cylinder No. C-149</u>
Hexanes	<u>.03</u>	<u>.010</u>	
Heptanes Plus	<u>.02</u>	<u>.008</u>	
Total	<u>100.00</u>	<u>.692</u>	
Pentanes Plus		<u>.096</u>	



CORE LABORATORIES — CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



Company Atlantic Richfield Canada Ltd. Page 2 of 2
Well ARCO Clark et al Mtn River H-47 File 921-26
Field Wildcat, N.W.T. Analyst LK
65° 46' 23.00 N.L.
Location 129° 07' 50.00 W.L. Elevation: K.B. _____ Grd. 295'
Formation _____ Depth _____
Sampled from DST #1 (Top of Tool) by _____
Sampling pressure _____ psig Sampling temp. _____ °F Ambient temp. _____ °F
Date sampled Dec. 28/71 Date received Dec. 31/71 Date analysed Jan 5/72
Container pressure _____ Mud _____ Water cushion _____
Recovery or flowrate: _____

Analysis

Chloride = 21,200 mg/liter
pH 7.9

REGENT DRILLING LIMITED

DAY WORK RECORD

PUMPS			MANUFACTURER		TYPE	STROKE LENGTH	LAST CASING SIZE		LAST CASING SET AT		DATE	WELL NAME		DATE	REPORT NO.	
NO. 1			FMSCO		D-300	14	9 5/8		6 1/8		Dec 22 1972	ARCO CLARK MTN RIVER H-47		Dec 22 1972	19	
NO. 2			FMSCO		D-175	12	9 5/8		6 1/8			ARCO CLARK MTN RIVER H-47				
EACH EMPLOYEE MUST SIGN THIS BOOK																
TOUR NO. 1 MIDNIGHT TO 8 A.M.			HOURS													
DRILLER			A. ELL													
DERRICK			G. NELSON													
FLOOR			G. SCHRAUFNAGEL													
FLOOR			C. JEFFERY													
FLOOR			K. PALECHEK													
FIREMAN																
MECHANIC																
INJURIES																
TOTAL			1646													
TOUR NO. 2 8 A.M. TO 4 P.M.			HOURS													
DRILLER			J. RAYKE													
DERRICK			R. LANE													
FLOOR			R. EFFORD													
FLOOR			K. DODGE													
FLOOR			R. MAPP													
FIREMAN																
MECHANIC																
INJURIES																
TOTAL			1667													
TOUR NO. 3 4 P.M. TO MIDNIGHT			HOURS													
DRILLER			A. ELL													
DERRICK			G. NELSON													
FLOOR			G. SCHRAUFNAGEL													
FLOOR			G. JEFFERY													
FLOOR			K. PALECHEK													
FIREMAN																
MECHANIC																
INJURIES																
TOTAL			1686													
DRILL PIPE SIZE			4 1/2													
TYPE			F.H.													
TOTAL NO. OF JOINTS			146													
DATE LAST SONOSCOPE			Aug 19/71													
FOOTAGE DRILLED SINCE LAST SONOSCOPE			1277													
TOTAL FOOTAGE DRILLED			2963													
LAST CALIPER DATE																
RESULTS																
CODE LETTER OF STRING																
TOOLPUSHER			Denny R. Gapp													
APPROVED BY			[Signature]													

REGENT DRILLING LIMITED

DAY WORK RECORD

PUMPS		MANUFACTURER		TYPE	STROKE LENGTH	LAST CASING SIZE		LAST CASING SET AT		DATE	WELL NAME	DATE	REPORT NO.									
NO. 1		Emsco		D-300	14	9 5/8		6 1/8		Dec 21 1971	ARCO CLARKE RIVER H. 47	Dec 21 1971	18									
NO. 2		Emsco		D-175	12																	
EACH EMPLOYEE MUST SIGN THIS BOOK TOUR NO. 1 MIDNIGHT TO 8 A.M. HOURS																						
DRILLER	A. ELL	8	FROM	FOOTAGE	TOTAL DEPTH	HOURS ON BOTTOM	DRILL PIPE WEIGHT	NO. AND SIZE OF D.C.S	D.C. WEIGHT	TRIPS	NO OF LINES	TOTAL TON MILES	LINE CUT FEET	AT MILES	FEET LEFT ON SPOOL	DATE OF LAST CUT	AT SURVEYS DEGREES	REMARKS	TIME			
DERRICK	G. NELSON	8	NO.	DRILLING STRING	BITS RUN NO.	SIZE	NOZZLE SIZE	SERIAL NO.	TYPE	WEIGHT	RPM	FOOTAGE FROM	FOOTAGE TO	FOOTAGE	HOURS	CORED FROM	CORED TO	REAMED FROM	REAMED TO	CONDIT-ION		
FLOOR	G. SCHRAUFNAGEL	8	1	SINGLES		31.41 FT.																
FLOOR	G. JEFFERY	8	12	D.C.S		354.15 FT.																
FLOOR	K. PALECHEK	8	2	SUB C.O		5.65 FT.	MUD	12 MID.	2 A.M.	4 A.M.	6 P.M.	WATER LOSS	FILTER CAKE	PH	GENERAL REMARKS							
FIREMAN			1	SUB CHRIS		6.85 FT.	WEIGHT	9.2	9.1	9.1	9.1	10.0	2 3/2	10.5	CLEANED SETTLING TANK							
MECHANIC				BIT OR C.B.		FT.	VISCOSITY	48	40	38	38	ADDITIVES	WATER									
INJURIES			2	STAB		8.94 FT.	PUMP PRESSURE	850	850	850	850											
				KELLY IN		28.85 FT.	R.P.M. PUMP NO. 1	59	59	59	59											
							R.P.M. PUMP NO. 2															
							PUMP NO. 1 LINER SIZE	5 1/2				PUMP NO. 2 LINER SIZE	5 1/2									
							TOTAL	1563	FT.													
TOUR NO. 2		8 A.M. TO 4 P.M.		HOURS		FROM	FOOTAGE	TOTAL DEPTH	HOURS ON BOTTOM	DRILL PIPE WEIGHT	NO. AND SIZE OF D.C.S	D.C. WEIGHT	TRIPS	NO OF LINES	TOTAL TON MILES	LINE CUT FEET	AT MILES	FEET LEFT ON SPOOL	DATE OF LAST CUT	AT SURVEYS DEGREES	REMARKS	TIME
DRILLER	J. BOYKO	13	1563	47	1610	7 1/2	54 M	4 6 3/4	26000	1	8	9516	34	9350	313	Dec 19 71	1570	4 1/2	1600	4 3/4	DRILL 8 3/4 HOLE (8-10 m)	8.00 9.45 1 3/4 1 3/4
DERRICK	R. LANE	13	NO.	DRILLING STRING	BITS RUN NO.	SIZE	NOZZLE SIZE	SERIAL NO.	TYPE	WEIGHT	RPM	FOOTAGE FROM	FOOTAGE TO	FOOTAGE	HOURS	CORED FROM	CORED TO	REAMED FROM	REAMED TO	CONDIT-ION		
FLOOR	R. EFFORD	12	13	STANDS		1216.26 FT.	4 1/2	8 3/4	2-11 1-12	30119	WDRT	8-10 m	80	1482	1610	118	17 1/2					
FLOOR	K. DOLDGE	12	12	SINGLES		FT.																
FLOOR	R. MAPP	12	12	D.C.S		358.23 FT.																
FLOOR			1	SUB CHRIS		6.85 FT.	MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	WATER LOSS	FILTER CAKE	PH	GENERAL REMARKS							
FIREMAN			2	SUB C.O		5.65 FT.	WEIGHT	9.0	9.1	8.9	9.1	10.6		10.5								
MECHANIC				BIT OR C.B.		FT.	VISCOSITY	36	37	36	38	ADDITIVES										
INJURIES			2	STAB		8.94 FT.	PUMP PRESSURE	850	900	900	900	2.0	1900 #									
				KELLY IN		140.7 FT.	R.P.M. PUMP NO. 1	59	60	61	61	CAUSTIC 25%										
							R.P.M. PUMP NO. 2					MUD ROLL										
							PUMP NO. 1 LINER SIZE	5 1/2				PUMP NO. 2 LINER SIZE	5 1/2	WATER								
							TOTAL	1610	FT.													
TOUR NO. 3		4 P.M. TO MIDNIGHT		HOURS		FROM	FOOTAGE	TOTAL DEPTH	HOURS ON BOTTOM	DRILL PIPE WEIGHT	NO. AND SIZE OF D.C.S	D.C. WEIGHT	TRIPS	NO OF LINES	TOTAL TON MILES	LINE CUT FEET	AT MILES	FEET LEFT ON SPOOL	DATE OF LAST CUT	AT SURVEYS DEGREES	REMARKS	TIME
DRILLER	A. ELL	4	1610	16	1626	4 1/2	56 M	4 6 3/4	26 M	1	8	9530	34	9350	313	12-19-71					DRILL (W-8-10 m)	4.00 5.45 1 3/4 3/4
DERRICK	G. NELSON	4	NO.	DRILLING STRING	BITS RUN NO.	SIZE	NOZZLE SIZE	SERIAL NO.	TYPE	WEIGHT	RPM	FOOTAGE FROM	FOOTAGE TO	FOOTAGE	HOURS	CORED FROM	CORED TO	REAMED FROM	REAMED TO	CONDIT-ION		
FLOOR	G. SCHRAUFNAGEL	4	13	STANDS		1216.26 FT.	4 1/2	8 3/4	2-11 1-12	30119	WDRT	8-10 m	80	1482	1614	130	19					
FLOOR	G. JEFFERY	4	12	SINGLES		FT.	5	8 3/4	2-11 1-12	52466	XTS	10-12	80	1614	1626	6	2 3/4					
FLOOR	K. PALECHEK	4	12	D.C.S		358.23 FT.																
FLOOR			1	SUB CHRIS		6.85 FT.	MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	WATER LOSS	FILTER CAKE	PH	GENERAL REMARKS							
FIREMAN			2	SUB C.O		5.65 FT.	WEIGHT	9.1			9.1	8.6	2 3/2	10.0	Pipe measured 1216.27							
MECHANIC				BIT OR C.B.		FT.	VISCOSITY	38			38	ADDITIVES	Pipe Jally 1216.26									
INJURIES			1	STAB		8.33 FT.	PUMP PRESSURE	900			900	Callous 5.11 1/2 No Con										
				KELLY IN		16.50 FT.	R.P.M. PUMP NO. 1	61			61	Measured 358.62										
							R.P.M. PUMP NO. 2					Jally 358.23										
							PUMP NO. 1 LINER SIZE	5 1/2				PUMP NO. 2 LINER SIZE	5 1/2	Diff. 390 No Con								
							TOTAL	1626	FT.													
DRILL PIPE SIZE	H 1/2	TYPE	F.H.	TOTAL NO. OF JOINTS	146	DATE LAST SONOSCOPIED	Aug 31	FOOTAGE DRILLED SINCE LAST SONOSCOPIED	1216	TOTAL FOOTAGE DRILLED	1216	LAST CALIBER DATE		RESULTS		CODE LETTER OF STRING						
B.O.P.S TESTED		ELAPSED TIME		PRESSURE		RESULTS		TOTCO RING ON BIT NO.	NO													

(Mark your pipe in 2 footage)

TOOLPUSHER: Jimmy Lane
APPROVED BY: [Signature]

REGENT DRILLING LIMITED

DAY WORK RECORD

[illegible]

REGENT DRILLING LIMITED

DAY WORK RECORD

PUMPS			MANUFACTURER		TYPE	STROKE LENGTH	LAST CASING SIZE		LAST CASING SET AT		DATE	WELL NAME	DATE	REPORT NO.
NO. 1			EMSCO		D 300	14	9 5/8		6 1/8		Dec 19 1971	Waco Creek River Mtn. H 47	Dec 19 1971	16
NO. 2			EMSCO		D 175	12								
TOUR NO. 1 MIDNIGHT TO 8 A.M.			HOURS											
DRILLER			A. ELL											
DERRICK			G. NELSON											
FLOOR			G. SCHRAUFNAGEL											
FLOOR			G. JEFFERY											
FLOOR			K. PALECHER											
FIREMAN														
MECHANIC														
INJURIES														
TOTAL			1454											
TOUR NO. 2 8 A.M. TO 4 P.M.			HOURS											
DRILLER			J. BOYKO											
DERRICK			R. LANE											
FLOOR			B. EFFORD											
FLOOR			K. DODGE											
FLOOR			B. MARR											
FIREMAN														
MECHANIC														
INJURIES														
TOTAL			1482											
TOUR NO. 3 4 P.M. TO MIDNIGHT			HOURS											
DRILLER			A. ELL											
DERRICK			G. NELSON											
FLOOR			G. SCHRAUFNAGEL											
FLOOR			G. JEFFERY											
FLOOR			K. PALECHER											
FIREMAN														
MECHANIC														
INJURIES														
TOTAL			1482											
DRILL PIPE SIZE			4 1/2											
TYPE			F.H.											
TOTAL NO. OF JOINTS			146											
DATE LAST SONOSCOPED														
FOOTAGE DRILLED SINCE LAST SONOSCOPED														
TOTAL FOOTAGE DRILLED														
LAST CALIPER DATE														
RESULTS														
CODE LETTER OF STRING														
TOOLPUSHER			Jenny Lapp											
APPROVED BY														

REGENT DRILLING LIMITED

DAY WORK RECORD

PUMPS			DATE <u>Dec 18 1971</u>		WELL NAME <u>One Clark Nitro River #47</u>		DATE <u>Dec 18 1971</u>		REPORT NO. <u>15</u>														
MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING SIZE		LAST CASING SET AT		RIG NO. <u>11</u>		LOCATION LSD. <u>24° 65' - 46' - 30" Long 129° - 07' - 50"</u>														
TOUR NO. 1 MIDNIGHT TO 8 A.M.			FROM	FOOTAGE	TOTAL DEPTH	HOURS ON BOTTOM	DRILL PIPE WEIGHT	NO. AND SIZE OF D.C.'S	D.C. WEIGHT	TRIPS	NO OF LINES	TOTAL TON MILES	LINE CUT FEET	AT MILES	FEET LEFT ON SPOOL	DATE OF LAST CUT	AT SURVEYS	DEGREES	REMARKS	TIME	START	STOP	INT VAL
TOUR NO. 1 MIDNIGHT TO 8 A.M.			1402	17	1419	12 1/4		9-4 1/2			8									DRILL 8 3/4 HOLE (Hold up on WT)	12:00	8:00	3
DRILLER	A. ELL	8																					
DERRICK	G. NELSON	8																					
FLOOR	G. SCHRAUFNAGEL	8																					
FLOOR	G. JEFFERY	8																					
FLOOR	K. PALECHKA	8																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 2 8 A.M. TO 4 P.M.			1419	16	1435	7 1/2	18m	4-6 3/4	22m		8								DRILL (WIT 8-10 m on B.A)	8:00	9:15	1 1/4	1 1/4
DRILLER	T. BOYKO	12																					
DERRICK	R. LANG	12																					
FLOOR	R. EFFORD	12																					
FLOOR	K. DODGE	12																					
FLOOR																							
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 3 4 P.M. TO MIDNIGHT			1435	16	1451	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 4 8 A.M. TO 4 P.M.			1451	16	1467	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	8:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 5 4 P.M. TO MIDNIGHT			1467	16	1483	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 6 8 A.M. TO 4 P.M.			1483	16	1500	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	8:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 7 4 P.M. TO MIDNIGHT			1500	16	1516	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 8 8 A.M. TO 4 P.M.			1516	16	1532	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	8:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 9 4 P.M. TO MIDNIGHT			1532	16	1548	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 10 8 A.M. TO 4 P.M.			1548	16	1564	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	8:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 11 4 P.M. TO MIDNIGHT			1564	16	1580	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 12 8 A.M. TO 4 P.M.			1580	16	1596	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	8:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 13 4 P.M. TO MIDNIGHT			1596	16	1612	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 14 8 A.M. TO 4 P.M.			1612	16	1628	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	8:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 15 4 P.M. TO MIDNIGHT			1628	16	1644	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 16 8 A.M. TO 4 P.M.			1644	16	1660	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	8:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 17 4 P.M. TO MIDNIGHT			1660	16	1676	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 18 8 A.M. TO 4 P.M.			1676	16	1692	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	8:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 19 4 P.M. TO MIDNIGHT			1692	16	1708	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 20 8 A.M. TO 4 P.M.			1708	16	1724	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	8:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 21 4 P.M. TO MIDNIGHT			1724	16	1740	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 22 8 A.M. TO 4 P.M.			1740	16	1756	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	8:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 23 4 P.M. TO MIDNIGHT			1756	16	1772	8	18m	4-6 3/4	22m		8								DRILL (with 8-10 m on bit)	4:00	12:00	8	
DRILLER	A. ELL	4																					
DERRICK	G. NELSON	4																					
FLOOR	G. SCHRAUFNAGEL	4																					
FLOOR	G. JEFFERY	4																					
FLOOR	K. PALECHKA	4																					
FIREMAN																							
MECHANIC																							
INJURIES																							
TOUR NO. 24 8 A.M. TO 4 P.M.			1772	16	1788	8	18m	4-6 3/4	22m		8												

REGENT DRILLING LIMITED

DAY WORK RECORD

PUMPS			DATE <u>Dec 17/71</u>		WELL NAME <u>Queo / Charles mtn River H-41</u>		DATE <u>Dec 17/71</u>		REPORT NO. <u>14</u>	
MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING SIZE	LAST CASING SET AT	RIG NO. <u>11</u>	LOCATION LSD. <u>LAT 65-46-20 Long 129 D-7-50</u>	SEC. <u></u>	TWP. <u></u>	RGE. <u></u>	PLEASE SHOW FOOTAGE MADE WHILE "CONTROL DRILLING" AS WELL AS HOURS AND ALSO RECORD CORE CUTTERS, CATCHERS, SWAB RUBBERS, ETC.
NO. 1 <u>EMSCO</u>	<u>D-300</u>	<u>14</u>	<u>9 7/8</u>	<u>618</u>						
NO. 2 <u>EMSCO</u>	<u>D-175</u>	<u>12</u>								
TOUR NO. 1 MIDNIGHT TO 8 A.M.			FROM <u>1200</u>	FOOTAGE <u>1300</u>	TOTAL DEPTH <u>1300</u>	HOURS ON BOTTOM <u>7 1/2</u>	DRILL PIPE WEIGHT <u>16</u>	NO. AND SIZE OF D.C.'S <u>4-6 3/4</u>	D.C. WEIGHT <u>40m</u>	TRIPS <u>8</u>
DRILLER <u>A. ELL</u>	<u>8</u>		NO.	DRILLING STRING	BITS RUN NO.	SIZE	NOZZLE SIZE	SERIAL NO.	TYPE	WEIGHT
DERRICK <u>G. NELSON</u>	<u>8</u>		7	STANDS	<u>653.20</u> FT.	<u>2</u>	<u>8 3/4</u>	<u>284041</u>	<u>H88</u>	<u>28</u>
FLOOR <u>G. SCHRAUFNAGEL</u>	<u>8</u>		2	SINGLES	<u>62.88</u> FT.					
FLOOR <u>G. JEFFERY</u>	<u>8</u>		18	D.C.'S	<u>535.83</u> FT.					
FLOOR <u>K. PALECHEK</u>	<u>8</u>		2	SUB C.O.	<u>5.65</u> FT.	<u>MUD</u>	<u>12 MID.</u>	<u>2 A.M.</u>	<u>4 A.M.</u>	<u>6 P.M.</u>
FIREMAN			1	SUB CHRS	<u>6.85</u> FT.	<u>WEIGHT</u>	<u>8.8</u>	<u>9.9</u>	<u>8.9</u>	<u>9.9</u>
MECHANIC				BIT OR C.B.	FT.	<u>VISCOSITY</u>	<u>35</u>	<u>36</u>	<u>37</u>	<u>37</u>
INJURIES			3	STAB	<u>13.64</u> FT.	<u>PUMP PRESSURE</u>	<u>900</u>	<u>900</u>	<u>900</u>	<u>GEL - 700 LBS.</u>
				KELLY IN	<u>21.95</u> FT.	<u>R.P.M. PUMP NO. 1</u>	<u>58</u>	<u>58</u>	<u>58</u>	<u>58</u>
						<u>R.P.M. PUMP NO. 2</u>				
						<u>PUMP NO. 1 LINER SIZE</u>	<u>5 1/2 x 14</u>	<u>PUMP NO. 2 LINER SIZE</u>	<u>5 1/2 x 12</u>	
			TOTAL	<u>1300</u>	FT.					
TOUR NO. 2 8 A.M. TO 4 P.M.			FROM <u>1300</u>	FOOTAGE <u>90</u>	TOTAL DEPTH <u>1390</u>	HOURS ON BOTTOM <u>6 3/4</u>	DRILL PIPE WEIGHT <u>17m</u>	NO. AND SIZE OF D.C.'S <u>14-6 3/4</u>	D.C. WEIGHT <u>40m</u>	TRIPS <u>8</u>
DRILLER <u>J. Boyko</u>	<u>13</u>		NO.	DRILLING STRING	BITS RUN NO.	SIZE	NOZZLE SIZE	SERIAL NO.	TYPE	WEIGHT
DERRICK <u>R. LANE</u>	<u>13</u>		8	STANDS	<u>747.58</u> FT.	<u>2</u>	<u>8 3/4</u>	<u>284041</u>	<u>H-88</u>	<u>28m</u>
FLOOR <u>R. EFFORD</u>	<u>13</u>		2	SINGLES	<u>62.98</u> FT.					
FLOOR <u>K. DOIDOLF</u>	<u>13</u>		18	D.C.'S	<u>535.83</u> FT.					
FLOOR			2	SUB C.O.	<u>5.65</u> FT.	<u>MUD</u>	<u>8 A.M.</u>	<u>10 A.M.</u>	<u>12 NOON</u>	<u>2 P.M.</u>
FIREMAN			1	SUB CHRS	<u>6.85</u> FT.	<u>WEIGHT</u>	<u>9.1</u>	<u>9.0</u>	<u>9.2</u>	<u>9.2</u>
MECHANIC				BIT OR C.B.	FT.	<u>VISCOSITY</u>	<u>33</u>	<u>35</u>	<u>36</u>	<u>33</u>
INJURIES			3	STAB	<u>13.64</u> FT.	<u>PUMP PRESSURE</u>	<u>900</u>	<u>900</u>	<u>900</u>	<u>GEL 500#</u>
				KELLY IN	<u>17.47</u> FT.	<u>R.P.M. PUMP NO. 1</u>	<u>58</u>	<u>58</u>	<u>58</u>	<u>58</u>
						<u>R.P.M. PUMP NO. 2</u>				
						<u>PUMP NO. 1 LINER SIZE</u>	<u>5 1/2</u>	<u>PUMP NO. 2 LINER SIZE</u>	<u>5 1/2</u>	
			TOTAL	<u>1390</u>	FT.					
TOUR NO. 3 4 P.M. TO MIDNIGHT			FROM <u>1390</u>	FOOTAGE <u>12</u>	TOTAL DEPTH <u>1402</u>	HOURS ON BOTTOM <u>4 1/2</u>	DRILL PIPE WEIGHT <u>24m</u>	NO. AND SIZE OF D.C.'S <u>5 1/2 x 14</u>	D.C. WEIGHT <u>22m</u>	TRIPS <u>8</u>
DRILLER <u>A. ELL</u>	<u>4</u>		NO.	DRILLING STRING	BITS RUN NO.	SIZE	NOZZLE SIZE	SERIAL NO.	TYPE	WEIGHT
DERRICK <u>G. NELSON</u>	<u>4</u>		11	STANDS	<u>1029.72</u> FT.	<u>3</u>	<u>8 3/4</u>	<u>28592</u>	<u>WDR-5</u>	<u>12m</u>
FLOOR <u>G. SCHRAUFNAGEL</u>	<u>4</u>		2	SINGLES	<u>61.15</u> FT.	<u>2</u>	<u>8 3/4</u>	<u>284041</u>	<u>H88</u>	<u>28</u>
FLOOR <u>G. JEFFERY</u>	<u>4</u>		9	D.C.'S	<u>264.24</u> FT.					
FLOOR <u>K. PALECHEK</u>	<u>4</u>		2	SUB C.O.	<u>5.65</u> FT.	<u>MUD</u>	<u>4 P.M.</u>	<u>6 P.M.</u>	<u>8 P.M.</u>	<u>10 P.M.</u>
FIREMAN			1	SUB CHRS	<u>6.85</u> FT.	<u>WEIGHT</u>	<u>9.1</u>	<u>9.1</u>	<u>9.2</u>	<u>9.2</u>
MECHANIC				BIT OR C.B.	FT.	<u>VISCOSITY</u>	<u>34</u>	<u>33</u>		
INJURIES			2	STAB	<u>8.94</u> FT.	<u>PUMP PRESSURE</u>	<u>900</u>	<u>900</u>	<u>GEL - 600#</u>	
				KELLY IN	<u>25.45</u> FT.	<u>R.P.M. PUMP NO. 1</u>	<u>59</u>	<u>59</u>	<u>59</u>	<u>59</u>
						<u>R.P.M. PUMP NO. 2</u>				
						<u>PUMP NO. 1 LINER SIZE</u>	<u>5 1/2 x 14</u>	<u>PUMP NO. 2 LINER SIZE</u>	<u>5 1/2 x 12</u>	
			TOTAL	<u>1402</u>	FT.					
DRILL PIPE SIZE <u>4 1/2</u>	TYPE	TOTAL NO. OF JOINTS <u>146</u>	DATE LAST SINCE SCOPE	FOOTAGE DRILLED SINCE LAST SINCE SCOPE	TOTAL FOOTAGE DRILLED	LAST CALIPER DATE	RESULTS	CODE LETTER OF STRING		
B.O.P.'S TESTED	ELAPSED TIME	PRESSURE	RESULTS	TOTCO RING ON BIT NO.						

TOOLPUSHER Jerry R. App
 APPROVED BY [Signature]

REGENT DRILLING LIMITED

DAY WORK RECORD

PUMPS										DAY WORK RECORD																											
MANUFACTURER		TYPE		STROKE LENGTH		LAST CASING SIZE		LAST CASING SET AT		DATE		WELL NAME		DATE		REPORT NO.																					
NO. 1 EMSCO		D-300		14"		9 3/4		1 1/8		16/71		ARCO CLARKE MTN RIVER H-47		16/71		13																					
NO. 2 EMSCO		D-175		12"		7 3/4		1 1/8		11		LAT 85-46-30 LONG 129-07-50																									
EACH EMPLOYEE MUST SIGN THIS BOOK										PLEASE SHOW FOOTAGE MADE WHILE "CONTROL DRILLING" AS WELL AS HOURS AND ALSO RECORD CORE CUTTERS, CATCHERS, SWAB RUBBERS, ETC.																											
TOUR NO. 1 MIDNIGHT TO 8 A.M.		HOURS		FROM		FOOTAGE		TOTAL DEPTH		HOURS ON BOTTOM		DRILL PIPE WEIGHT		NO. AND SIZE OF D.C.'S		D.C. WEIGHT		TRIPS		NO OF LINES		TOTAL TON MILES		LINE CUT FEET		AT MILES		FEET LEFT ON SPOOL		DATE OF LAST CUT		AT SURVEYS DEGREES		REMARKS		TIME	
DRILLER B. LYNCH		8 1/2		906		91		997		7 3/4		13 000		14-6 3/4		46 000																DRILL		12 00		12 30	
DERRICK W.B. LYNCH		8 1/2		4 STANDS		FT.		2		8 3/4		2-11 1-12		2840 41		H 88		28 28		46		695		997		302		23 3/4				SER RIG		12 30		12 45	
FLOOR R. MACGREGOR		8		1 SINGLES		702 71		FT.																								DRILL		12 45		8 00	
FLOOR G. SEIVEWRIGHT		8		18 D.C.'S		535.83		FT.																													
FLOOR E. LEMIEUX		8		2 SUB C.O.		5.65		FT.		MUD		12 MID.		2 A.M.		4 A.M.		6 P.M.		WATER LOSS		FILTER CAKE		PH		GENERAL REMARKS											
FIREMAN				1 SUB CHAIRS		6.85		FT.		WEIGHT		9.0		9.0		9.9		8.9		9.8		3/32		9.5		CLEANED SETTING TANK											
MECHANIC				BIT OR C.B.		FT.		VISCOSITY		35		35		33		35		ADDITIVES		WATER 1" STREAM																	
INJURIES				3 STAB		13.64		FT.		PUMP PRESSURE		850		850		850		850		GELL 5 Bags.																	
				KELLY IN		32.32		FT.		R.P.M. PUMP NO. 1		58		58		58		58		C.M.C. 25"																	
				TOTAL		997		FT.		PUMP NO. 1 LINER SIZE		5 1/2 x 14		PUMP NO. 2 LINER SIZE		5 1/2 x 12																					
TOUR NO. 2 8 A.M. TO 4 P.M.		HOURS		FROM		FOOTAGE		TOTAL DEPTH		HOURS ON BOTTOM		DRILL PIPE WEIGHT		NO. AND SIZE OF D.C.'S		D.C. WEIGHT		TRIPS		NO OF LINES		TOTAL TON MILES		LINE CUT FEET		AT MILES		FEET LEFT ON SPOOL		DATE OF LAST CUT		AT SURVEYS DEGREES		REMARKS		TIME	
DRILLER A. ELL		8		997		111		1108		7 1/2		13 m		4-6 3/4 14-6 3/4		40 m				8										1070		1 1/8		DRLG 8 3/4 HOLE		8 00	
DERRICK G. NELSON		8		5 STANDS		465.25		FT.		2		8 3/4		2-11 1-12		2840 41		H 88		28 m		46		695		1108		413		31 1/4				RIG SERV ✓ B.O.P.		8 30	
FLOOR G. SCHRAUFNAGEL		8		2 SINGLES		62.74		FT.																										DRLG 8 3/4 HOLE		8 45	
FLOOR G. JEFFERY		8		18 D.C.'S		535.83		FT.																										SURVEY @ 1070		3 15	
FLOOR K. PALECHEK		8		2 SUB C.O.		5.65		FT.		MUD		8 A.M.		10 A.M.		12 NOON		2 P.M.		WATER LOSS		FILTER CAKE		PH		GENERAL REMARKS								DRLG 8 3/4 HOLE		3 30	
FIREMAN				1 SUB CHAIRS		6.85		FT.		WEIGHT		8.9		8.9		8.9		8.9		10.0		2/32		9.0												4 00	
MECHANIC				BIT OR C.B.		FT.		VISCOSITY		35		34		34		35		ADDITIVES		WATER																	

DAY WORK RECORD

TOOLPUSHER Sony R. Izapp
APPROVED BY [Signature]

REGENT DRILLING LIMITED

DAY WORK RECORD

PUMPS			DATE <u>Dec 14 71</u>		WELL NAME <u>ARCO CLARKE MTH RIVER 47-H</u>		DATE <u>Dec 14 71</u>		REPORT NO. <u>11</u>														
MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING SIZE	LAST CASING SET AT	RIG NO. <u>11</u>	LOCATION <u>14765-46-23 LONG 129 02 50</u>	SEC. <u></u>	TWP. <u></u>	RGE. <u></u>	PLEASE SHOW FOOTAGE MADE WHILE "CONTROL DRILLING" AS WELL AS HOURS AND ALSO RECORD CORE CUTTERS, CATCHERS, SWAB RUBBERS, ETC.													
NO. 1 <u>EMSCO</u>	<u>D-3M</u>	<u>14"</u>																					
NO. 2 <u>EMSCO</u>	<u>D-175</u>	<u>12"</u>	<u>9 3/4</u>	<u>6 1/8</u>																			
TOUR NO. 1 MIDNIGHT TO 8 A.M.			HOURS																				
DRILLER <u>B. LYNCH</u>	<u>8</u>		FROM <u>687</u>	FOOTAGE <u>657</u>	TOTAL DEPTH <u>657</u>	HOURS ON BOTTOM	DRILL PIPE WEIGHT <u>6 1/2</u>	NO. AND SIZE OF D.C.'S <u>3 6 3/4 12 6 3/4</u>	D.C. WEIGHT <u>42 1/2</u>	TRIPS	NO OF LINES	TOTAL TON MILES	LINE CUT FEET	AT MILES	FEET LEFT ON SPOOL	DATE OF LAST CUT	AT SURVEYS	DEGREES	REMARKS	START	STOP	INT VAL	
DERRICK <u>W.B. LYNCH</u>	<u>8</u>		NO.	DRILLING STRING	BITS RUN NO.	SIZE	NOZZLE SIZE	SERIAL NO.	TYPE	WEIGHT	RPM	FOOTAGE FROM	FOOTAGE TO	FOOTAGE	HOURS	CORED FROM	CORED TO	REAMED FROM	REAMED TO	CONDIT-ION			
FLOOR <u>R. MCGREGOR</u>	<u>8</u>		1	STANDS		9084 FT.	1	8 3/4		52107108													
FLOOR <u>G. SEIDENWRIGHT</u>	<u>8</u>		2	SINGLES		6285 FT.																	
FLOOR <u>G. SEIDENWRIGHT</u>	<u>8</u>		15	D.C.'S		44406 FT.																	
FLOOR <u>E. LEMIEUX</u>	<u>5</u>		3	SUB		890 FT.	MUD	12 MID.	2 A.M.	4 A.M.	6 P.M.	WATER LOSS	FILTER CAKE	PH	GENERAL REMARKS								
FIREMAN				SUB			FT.	WEIGHT	8.5														
MECHANIC				BIT OR C.B.		65.75 FT.	VISCOSITY	54				ADDITIVES											
INJURIES							FT.	PUMP PRESSURE				GEL 700#											
				KELLY IN		45.7 FT.	R.P.M. PUMP NO. 1					GEL 100#											
							R.P.M. PUMP NO. 2																
							PUMP NO. 1 LINER SIZE					PUMP NO. 2 LINER SIZE											
				TOTAL		687 FT.																	
TOUR NO. 2 8 A.M. TO 4 P.M.			HOURS																				
DRILLER <u>A. ELL</u>	<u>12</u>		FROM <u>687</u>	FOOTAGE <u>4</u>	TOTAL DEPTH <u>691</u>	HOURS ON BOTTOM	DRILL PIPE WEIGHT <u>6 1/2</u>	NO. AND SIZE OF D.C.'S <u>3 6 3/4 12 6 3/4</u>	D.C. WEIGHT <u>42 M</u>	TRIPS	NO OF LINES	TOTAL TON MILES	LINE CUT FEET	AT MILES	FEET LEFT ON SPOOL	DATE OF LAST CUT	AT SURVEYS	DEGREES	REMARKS	START	STOP	INT VAL	
DERRICK <u>G. NELSON</u>	<u>12</u>		NO.	DRILLING STRING	BITS RUN NO.	SIZE	NOZZLE SIZE	SERIAL NO.	TYPE	WEIGHT	RPM	FOOTAGE FROM	FOOTAGE TO	FOOTAGE	HOURS	CORED FROM	CORED TO	REAMED FROM	REAMED TO	CONDIT-ION			
FLOOR <u>G. SCHRAUFNAGEL</u>	<u>12</u>		1	STANDS		9084 FT.	20	8 3/4		EC107108		14 M	85	687	691	4	1 1/2	687	691				
FLOOR <u>G. JEFFERY</u>	<u>12</u>			SINGLES		6288 FT.																	
FLOOR <u>G. JEFFERY</u>	<u>12</u>		15	D.C.'S		449.06 FT.																	
FLOOR <u>K. PALECHER</u>	<u>12</u>		15	SUB			FT.	MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	WATER LOSS	FILTER CAKE	PH	GENERAL REMARKS							
FIREMAN <u>R. EFFORD</u>	<u>10</u>			SUB		890 FT.	WEIGHT			4.6	4.6	2 1/2	10										
MECHANIC				BIT OR C.B.		65.75 FT.	VISCOSITY	55				ADDITIVES											
INJURIES							FT.	PUMP PRESSURE				1000 GEL 400#											
				KELLY IN		13.57 FT.	R.P.M. PUMP NO. 1					62 CAUSTIC 50#											
							R.P.M. PUMP NO. 2																
							PUMP NO. 1 LINER SIZE					PUMP NO. 2 LINER SIZE											
				TOTAL		691 FT.																	
TOUR NO. 3 4 P.M. TO MIDNIGHT			HOURS																				
DRILLER <u>B. LYNCH</u>	<u>4</u>		FROM <u>691</u>	FOOTAGE <u>4</u>	TOTAL DEPTH <u>695</u>	HOURS ON BOTTOM	DRILL PIPE WEIGHT <u>48 1/2</u>	NO. AND SIZE OF D.C.'S <u>3 6 3/4 12 6 3/4</u>	D.C. WEIGHT	TRIPS	NO OF LINES	TOTAL TON MILES	LINE CUT FEET	AT MILES	FEET LEFT ON SPOOL	DATE OF LAST CUT	AT SURVEYS	DEGREES	REMARKS	START	STOP	INT VAL	
DERRICK <u>W.B. LYNCH</u>	<u>4</u>		NO.	DRILLING STRING	BITS RUN NO.	SIZE	NOZZLE SIZE	SERIAL NO.	TYPE	WEIGHT	RPM	FOOTAGE FROM	FOOTAGE TO	FOOTAGE	HOURS	CORED FROM	CORED TO	REAMED FROM	REAMED TO	CONDIT-ION			
FLOOR <u>R. MCGREGOR</u>	<u>4</u>		1	STANDS		9084 FT.	20	8 3/4		EC107108		14 M	85	687	695	4	3 3/4	687	695				
FLOOR <u>G. SEIDENWRIGHT</u>	<u>4</u>			SINGLES		6288 FT.																	
FLOOR <u>G. SEIDENWRIGHT</u>	<u>4</u>		15	D.C.'S		449.06 FT.																	
FLOOR <u>E. LEMIEUX</u>	<u>4</u>			SUB			FT.	MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	WATER LOSS	FILTER CAKE	PH	GENERAL REMARKS							
FIREMAN				SUB		890 FT.	WEIGHT	8.6															
MECHANIC				BIT OR C.B.		65.75 FT.	VISCOSITY	55				ADDITIVES											
INJURIES							FT.	PUMP PRESSURE	1000														
				KELLY IN		17.57 FT.	R.P.M. PUMP NO. 1																
							R.P.M. PUMP NO. 2																
							PUMP NO. 1 LINER SIZE					PUMP NO. 2 LINER SIZE											
				TOTAL		695 FT.																	
DRILL PIPE SIZE	TYPE	TOTAL NO. OF JOINTS	DATE LAST SONOSCOPED	FOOTAGE DRILLED SINCE LAST SONOSCOPED	TOTAL FOOTAGE DRILLED	LAST CALIPER DATE	RESULTS	CODE LETTER OF STRING															
B.O.P.'S TESTED	ELAPSED TIME	PRESSURE	RESULTS	TOTCO RING ON BIT NO.																			
TOOLPUSHER <u>Denny R. Gapp</u>									APPROVED BY <u>W.B. Lynch</u>														

REGENT DRILLING LIMITED

DAY WORK RECORD

PUMPS		STROKE LENGTH		DATE		WELL NAME		DATE		REPORT NO.														
MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING SIZE	LAST CASING SET AT	DATE	WELL NAME	DATE	REPORT NO.																
NO. 1	EMSCO	17	48	618	Dec 13/71	241 65-76-33-2042-80	Dec 13/71	10																
NO. 2	EMSCO	12	48	618																				
EACH EMPLOYEE MUST SIGN THIS BOOK																								
TOUR NO. 1 MIDNIGHT TO 8 A.M.		HOURS	FROM	FOOTAGE	TOTAL DEPTH	HOURS ON BOTTOM	DRILL PIPE WEIGHT	NO. AND SIZE OF D.C.'S	D.C. WEIGHT	TRIPS	NO OF LINES	TOTAL TON MILES	LINE CUT FEET	AT MILES	FEET LEFT ON SPOOL	DATE OF LAST CUT	AT SURVEYS	DEGREES	REMARKS	TIME	START	STOP	INT VAL	
DRILLER	B. LYNCH	8	667	8	675	3	6000	3-6 3/4	42000															
DERRICK	W.B. LYNCH	8	2	STANDS	185.21 FT.	1	8 3/4	3/2	377444	MUD	24	65	624	675	51	4 1/2								
FLOOR	R. MACGREGOR	8		SINGLES	FT.																			
FLOOR	G. SEIVEWRIGHT	8	15	D.C.'S	449.06 FT.																			
FLOOR	E. LEMIEUX	8	2	SUB	FT.	MUD	12 MID.	2 A.M.	4 A.M.	6 P.M.	WATER LOSS	FILTER CAKE	PH	GENERAL REMARKS										
FIREMAN			1	SUB	3.25 FT.	WEIGHT		8.5	8.5	8.7	10.2	2 3/2	9.5											
MECHANIC				BIT OR C.B.	75 FT.	VISCOSITY		30	36	40	ADDITIVES													
INJURIES					FT.	PUMP PRESSURE		6.54	6.54	6.50	GELL 16 bags													
				KELLY IN	34.08 FT.	R.P.M. PUMP NO. 1		62	62	62	C.M.C. 75													
					FT.	R.P.M. PUMP NO. 2																		
				TOTAL	675 FT.	PUMP NO. 1 LINER SIZE 5 1/2 x 4		PUMP NO. 2 LINER SIZE 5 1/2 x 12																
TOUR NO. 2 8 A.M. TO 4 P.M.		HOURS	FROM	FOOTAGE	TOTAL DEPTH	HOURS ON BOTTOM	DRILL PIPE WEIGHT	NO. AND SIZE OF D.C.'S	D.C. WEIGHT	TRIPS	NO OF LINES	TOTAL TON MILES	LINE CUT FEET	AT MILES	FEET LEFT ON SPOOL	DATE OF LAST CUT	AT SURVEYS	DEGREES	REMARKS	TIME	START	STOP	INT VAL	
DRILLER	H. ELL	12					6 m.	3-6 3/4	42 m															
DERRICK	G. NELSON	12	1	STANDS	90.84 FT.	1	8 3/4		FC107108															
FLOOR	G. SCHRAUFNAGEL	12	1	SINGLES	31.51 FT.																			
FLOOR	G. JEFFERY	12	15	D.C.'S	449.06 FT.																			
FLOOR	K. PELECHER	12	2	SUBC.O	565 FT.	MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	WATER LOSS	FILTER CAKE	PH	GENERAL REMARKS										
FIREMAN	R. EFFORD	9	1	SUB	3.25 FT.	WEIGHT																		
MECHANIC				BIT OR C.B.	65.75 FT.	VISCOSITY					ADDITIVES													
INJURIES					FT.	PUMP PRESSURE																		
				KELLY IN	28.19 FT.	R.P.M. PUMP NO. 1																		
					FT.	R.P.M. PUMP NO. 2																		
				TOTAL	675 FT.	PUMP NO. 1 LINER SIZE 5 1/2 x 14		PUMP NO. 2 LINER SIZE 5 1/2 x 12																
TOUR NO. 3 4 P.M. TO MIDNIGHT		HOURS	FROM	FOOTAGE	TOTAL DEPTH	HOURS ON BOTTOM	DRILL PIPE WEIGHT	NO. AND SIZE OF D.C.'S	D.C. WEIGHT	TRIPS	NO OF LINES	TOTAL TON MILES	LINE CUT FEET	AT MILES	FEET LEFT ON SPOOL	DATE OF LAST CUT	AT SURVEYS	DEGREES	REMARKS	TIME	START	STOP	INT VAL	
DRILLER	B. LYNCH	4	675	12	687	3	6000	3-6 3/4	42000															
DERRICK	W.B. LYNCH	4	1	STANDS	90.54 FT.	1	8 3/4		FC107108			1622	8088	675	675	12	3							
FLOOR	R. MACGREGOR	4	2	SINGLES	62.88 FT.																			
FLOOR	G. SEIVEWRIGHT	4	15	D.C.'S	449.06 FT.																			
FLOOR	E. LEMIEUX	4		SUB	FT.	MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	WATER LOSS	FILTER CAKE	PH	GENERAL REMARKS										
FIREMAN				SUB	3.20 FT.	WEIGHT		8.6	8.5		8.6	2/32	11.5											
MECHANIC				BIT OR C.B.	65.75 FT.	VISCOSITY		36	33		ADDITIVES													
INJURIES					FT.	PUMP PRESSURE		1050			GELL 6 bags													
				KELLY IN	7.57 FT.	R.P.M. PUMP NO. 1		62			CAUSTIC 1 lb													
					FT.	R.P.M. PUMP NO. 2																		
				TOTAL	687 FT.	PUMP NO. 1 LINER SIZE 5 1/2 x 14		PUMP NO. 2 LINER SIZE 5 1/2 x 12																
DRILL PIPE SIZE	TYPE	TOTAL NO. OF JOINTS	DATE LAST UNSCOPED	FOOTAGE DRILLED SINCE LAST UNSCOPED	TOTAL FOOTAGE DRILLED	LAST CALIPER DATE	RESULTS	CODE LETTER OF STRING																
B.O.P.'S TESTED	OK	ELAPSED TIME	PRESSURE	RESULTS	TOTCO RING ON BIT NO.																			
TOOLPUSHER																								
APPROVED BY																								

[illegible]

DAILY DRILLING REPORT										REPORT NO. 40										DATE JAN 12/72																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
OPERATOR ATLANTIC RICHFIELD CANADA LTD.										LEASE AREA CLARKE WITH RIVER										FIELD OR DIST. EXPLORATION										COUNTY N.W.T.										STATE CAN.																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
CONTRACTOR REGENT DRILL LTD.										RIG NO. 11										DRILL PIPE STR. NO. 1										TOOL JOINT NO. 1										PUMPS										SIZE 7 7/8										MAKE SNC										WT. & GR. J55										NO. JOINTS										FEET										RKB. TO CSG. HD.										SET AT 618										REMARKS																																																																																																																																																																																																																																																																																																																																																																																											
SIGNATURE OF OPERATOR'S REPRESENTATIVE										SIGNATURE OF CONTRACTOR'S TOOL PUSHER										TYPE THD.										NO. 1										MANUFACTURER										TYPE										STROKE LENGTH										LAST CASING TUBING OR LINER										TIGHT HOLE										CONFIDENTIAL																																																																																																																																																																																																																																																																																																																																																																																																																									
TIME DISTRIBUTION-HOURS										MORNING										DAY										EVE										NO.										DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD										FOOTAGE										DR. D. R. M. R. CORE-C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO.										PUMP NO.										METHOD RUN																																																																																																																																																																																																																																																																																																																																									
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										BURNING CASING & CEMENTING										WAITING ON CEMENT										DRILL STEM TEST										OTHER										FISHING										COMPLETION WORK										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 M. OR TRIPS SINCE LAST CUT										CUMULATIVE TON M. OR TRIPS										NO. OF DAYS FROM SPUD										CUMULATIVE ROTATING HRS.										NO.										DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD										FOOTAGE										DR. D. R. M. R. CORE-C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO.										PUMP NO.										METHOD RUN									
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										BURNING CASING & CEMENTING										WAITING ON CEMENT										DRILL STEM TEST										OTHER										FISHING										COMPLETION WORK										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 M. OR TRIPS SINCE LAST CUT										CUMULATIVE TON M. OR TRIPS										NO. OF DAYS FROM SPUD										CUMULATIVE ROTATING HRS.										NO.										DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD										FOOTAGE										DR. D. R. M. R. CORE-C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO.										PUMP NO.										METHOD RUN									
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										BURNING CASING & CEMENTING										WAITING ON CEMENT										DRILL STEM TEST										OTHER										FISHING										COMPLETION WORK										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 M. OR TRIPS SINCE LAST CUT										CUMULATIVE TON M. OR TRIPS										NO. OF DAYS FROM SPUD										CUMULATIVE ROTATING HRS.										NO.										DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD										FOOTAGE										DR. D. R. M. R. CORE-C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO.										PUMP NO.										METHOD RUN									
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										BURNING CASING & CEMENTING										WAITING ON CEMENT										DRILL STEM TEST										OTHER										FISHING										COMPLETION WORK										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 M. OR TRIPS SINCE LAST CUT										CUMULATIVE TON M. OR TRIPS										NO. OF DAYS FROM SPUD										CUMULATIVE ROTATING HRS.										NO.										DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD										FOOTAGE										DR. D. R. M. R. CORE-C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO.										PUMP NO.										METHOD RUN									
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										BURNING CASING & CEMENTING										WAITING ON CEMENT										DRILL STEM TEST										OTHER										FISHING										COMPLETION WORK										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 M. OR TRIPS SINCE LAST CUT										CUMULATIVE TON M. OR TRIPS										NO. OF DAYS FROM SPUD										CUMULATIVE ROTATING HRS.										NO.										DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD																																																																																																													

[illegible]

DATE 4/14/10/72

[illegible]

[illegible]

DAILY DRILLING REPORT										REPORT NO. 36		DATE JAN 6 1972															
OPERATOR ATLANTIC RICHFIELD CANADA LTD.				LEASE ARCO. CLARKE MTH RIVER H-47				WELL NO. 47		FIELD OR DIST. NWT		COUNTY CHANDLER		STATE													
CONTRACTOR Regent Drilling Ltd				RIG NO. 11		DRILL PIPE NO. 412 SIZE 4 1/2 TYPE THD. F.H		TOOL JOINT O.D.		PUMPS		SIZE 9 3/4 MAKE ST-C WT. & GR. J-55		NO. JOINTS 618		REMARKS RIGHT HOLE											
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>				SIGNATURE OF CONTRACTOR'S TOOL PUMPER <i>[Signature]</i>		1. ENISCO D300 14		2. ENISCO D175 12		3.		L.C. CASING TUBING OR LINER		SET AT		CONFIDENTIAL											
TIME DISTRIBUTION—HOURS				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R. R. CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
MORN DAY EVE				24 STANDS D.P. 270256 FT.		BIT NO. 9		TIME 12.00 4.00 6.00		FROM 3308 TO 3363		D				44		34		1100		5 1/2		60		5 1/2	
RIG UP & TEAR DOWN				1 SINGLES D.P. 30.10 FT.		SIZE 8 3/4		WEIGHT 9.0 7.0 7.0																			
DRILLING ACTUAL				4 D.C. 6 3/4 117.78		MFG. HW		VISC.-SEC 40 39 38																			
REAMING				14 D.C. 6 1/4 419.73		TYPE XSSR		W.L.-C.C. 9.9 9.8																			
CONDITIONING MUD & CIRCULATING				2 STB. BODY O.D. 8.18		NO. 3		FLTR. CK. 2/32 4/32																			
TRIPS				1 STB. BODY O.D. 8.33		SIZE 11		PH 10.5 10.5																			
LUBRICATE RIG				2 STB. BODY O.D. 8.33		SER. NO. 21993		SD. CONT. %																			
DEVIATION SURVEY				2 RMR. BODY O.D. 5.65		DEPTH OUT		PRESSURE GRADIENT																			
TEST B.O.P.				1 SUBS O.D. 5.65		DEPTH IN		MUD & CHEMICALS ADDED																			
CUT OFF DRILLING LINE				1 BIT OR C.B. 6.85		TOTAL FTG. 448		TYPE AMT. TYPE AMT.																			
REPAIR RIG				1 KELLY DOWN 33.39		TOTAL HR. RUN 57 1/4		COND. OF BIT RUN																			
CORING				2 TOTAL 3363		REAMER NO.		CAUSTIC 50%																			
WIRE LINE LOGGING				WT. OF STRING 84 M LBS.		REAMER TYPE		DRILLER H. Bell																			
RUNNING CASING & CEMENTING				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R. R. CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
WAITING ON CEMENT				4 STANDS D.P. 117.78		BIT NO. 7		TIME 8.00 1.00 1.00		FROM 3430 TO		D															
DRILL STEM TEST				1 SINGLES D.P. 30.10		SIZE 8 3/4		WEIGHT 7.5 1.0 1.0																			
OTHER				4 D.C. 6 3/4 117.78		MFG. HW		VISC.-SEC 40 39 38																			
FISHING				14 D.C. 6 1/4 419.73		TYPE XSSR		W.L.-C.C. 9.9 9.8																			
COMPLETION WORK				2 STB. BODY O.D. 8.18		NO. 3		FLTR. CK. 2/32 4/32																			
A. PERFORATING				1 STB. BODY O.D. 8.33		SER. NO. 21993		SD. CONT. %																			
B. TUBING TRIPS				2 RMR. BODY O.D. 5.65		DEPTH OUT		PRESSURE GRADIENT																			
C. SWABBING				1 SUBS O.D. 5.65		DEPTH IN		MUD & CHEMICALS ADDED																			
D. TESTING				1 BIT OR C.B. 6.85		TOTAL FTG. 448		TYPE AMT. TYPE AMT.																			
E. ADDITIONAL				1 KELLY DOWN 33.39		TOTAL HR. RUN 57 1/4		COND. OF BIT RUN																			
TOTALS				2 TOTAL 3363		REAMER NO.		CAUSTIC 50%																			
TIME SUMMARY (OFFICE USE ONLY)				WT. OF STRING 84 M LBS.		REAMER TYPE		DRILLER H. Bell																			
DAY WORK				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R. R. CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
HRS. W/DP				30 STANDS D.P. 31.70		BIT NO. 8 3/4		TIME 9.1 9.1 9.1		FROM 3400 TO		D															
HRS. WO/DP				1 SINGLES D.P. 30.10		SIZE 8 3/4		WEIGHT 38 39 40																			
HRS. STANDBY				4 D.C. 6 3/4 117.78		MFG. HW		VISC.-SEC 40 39 38																			
TOTAL DAY WORK				14 D.C. 6 1/4 419.73		TYPE XSSR		W.L.-C.C. 9.9 9.8																			
WIRE LINE RECORD				2 STB. BODY O.D. 8.18		NO. 3		FLTR. CK. 2/32 4/32																			
REEL NO. 8 1"				1 STB. BODY O.D. 8.33		SER. NO. 21993		SD. CONT. %																			
NO. OF LINES 3 1/2				2 RMR. BODY O.D. 5.65		DEPTH OUT		PRESSURE GRADIENT																			
FEET SLIPPED 3				1 SUBS O.D. 5.65		DEPTH IN		MUD & CHEMICALS ADDED																			
FEET CUT OFF 379				1 BIT OR C.B. 6.85		TOTAL FTG. 448		TYPE AMT. TYPE AMT.																			
PRESENT LENGTH				1 KELLY DOWN 33.39		TOTAL HR. RUN 57 1/4		COND. OF BIT RUN																			
TON M. OR TRIPS SINCE LAST CUT				2 TOTAL 3363		REAMER NO.		CAUSTIC 50%																			
CUMULATIVE TON M. OR TRIPS 76				WT. OF STRING 84 M LBS.		REAMER TYPE		DRILLER																			
NO. OF DAYS FROM SPUD				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R. R. CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
CUMULATIVE ROTATING HRS.				30 STANDS D.P. 31.70		BIT NO. 8 3/4		TIME 9.1 9.1 9.1		FROM 3400 TO		D															
				1 SINGLES D.P. 30.10		SIZE 8 3/4		WEIGHT 38 39 40																			
				4 D.C. 6 3/4 117.78		MFG. HW		VISC.-SEC 40 39 38																			
				14 D.C. 6 1/4 419.73		TYPE XSSR		W.L.-C.C. 9.9 9.8																			
				2 STB. BODY O.D. 8.18		NO. 3		FLTR. CK. 2/32 4/32																			
				1 STB. BODY O.D. 8.33		SER. NO. 21993		SD. CONT. %																			
				2 RMR. BODY O.D. 5.65		DEPTH OUT		PRESSURE GRADIENT																			
				1 SUBS O.D. 5.65		DEPTH IN		MUD & CHEMICALS ADDED																			
				1 BIT OR C.B. 6.85		TOTAL FTG. 448		TYPE AMT. TYPE AMT.																			
				1 KELLY DOWN 33.39		TOTAL HR. RUN 57 1/4		COND. OF BIT RUN																			
				2 TOTAL 3363		REAMER NO.		CAUSTIC 50%																			
				WT. OF STRING 84 M LBS.		REAMER TYPE		DRILLER																			
				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R. R. CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
				30 STANDS D.P. 31.70		BIT NO. 8 3/4		TIME 9.1 9.1 9.1		FROM 3400 TO		D															
				1 SINGLES D.P. 30.10		SIZE 8 3/4		WEIGHT 38 39 40																			
				4 D.C. 6 3/4 117.78		MFG. HW		VISC.-SEC 40 39 38																			
				14 D.C. 6 1/4 419.73		TYPE XSSR		W.L.-C.C. 9.9 9.8																			
				2 STB. BODY O.D. 8.18		NO. 3		FLTR. CK. 2/32 4/32																			
				1 STB. BODY O.D. 8.33		SER. NO. 21993		SD. CONT. %																			
				2 RMR. BODY O.D. 5.65		DEPTH OUT		PRESSURE GRADIENT																			
				1 SUBS O.D. 5.65		DEPTH IN		MUD & CHEMICALS ADDED																			
				1 BIT OR C.B. 6.85		TOTAL FTG. 448		TYPE AMT. TYPE AMT.																			
				1 KELLY DOWN 33.39		TOTAL HR. RUN 57 1/4		COND. OF BIT RUN																			
				2 TOTAL 3363		REAMER NO.		CAUSTIC 50%																			
				WT. OF STRING 84 M LBS.		REAMER TYPE		DRILLER																			
				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R. R. CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
				30 STANDS D.P. 31.70		BIT NO. 8 3/4		TIME 9.1 9.1 9.1		FROM 3400 TO		D															
				1 SINGLES D.P. 30.10		SIZE 8 3/4		WEIGHT 38 39 40																			
				4 D.C. 6 3/4 117.78		MFG. HW		VISC.-SEC 40 39 38																			
				14 D.C. 6 1/4 419.73		TYPE XSSR		W.L.-C.C. 9.9 9.8																			
				2 STB. BODY O.D. 8.18		NO. 3		FLTR. CK. 2/32 4/32																			
				1 STB. BODY O.D. 8.33		SER. NO. 21993		SD. CONT. %																			
				2 RMR. BODY O.D. 5.65		DEPTH OUT		PRESSURE GRADIENT																			
				1 SUBS O.D. 5.65		DEPTH IN		MUD & CHEMICALS ADDED																			
				1 BIT OR C.B. 6.85		TOTAL FTG. 448		TYPE AMT. TYPE AMT.																			
				1 KELLY DOWN 33.39		TOTAL HR. RUN 57 1/4		COND. OF BIT RUN																			
				2 TOTAL 3363		REAMER NO.		CAUSTIC 50%																			
				WT. OF STRING 84 M LBS.		REAMER TYPE		DRILLER																			

DAILY DRILLING REPORT										REPORT NO. 35										DATE JAN 7/12																																																																																																																																											
OPERATOR ATLANTIC RICH FIELD CANADA LTD.										LEASE AKCO - CLARK MTD RIVER H. 47										WELL NO. N-47										FIELD OR DIST. EXPLORATION										COUNTY										STATE																																																																																																													
CONTRACTOR REGENT DRILL LTD										RIG NO. 11										DRILL PIPE STRING NO. 1 SIZE 4 1/2										TOOL JOINT O.D. F.H.										PUMPS NO. 1 MANUFACTURER Emsco TYPE D-300 STROKE LENGTH 14										LAST CASING TUBING OR LINER										SIZE 9 5/8										MAKE JSS										WT. & GR.										NO. JOINTS										FEET										RKB. TO CSG. HD.										SET AT 618										TIGHT HOLE										CONFIDENTIAL																			
SIGNATURE OF OPERATOR'S REPRESENTATIVE										SIGNATURE OF CONTRACTOR'S TOOL PUSHER										NO. 1										MANUFACTURER Emsco										TYPE D-300										STROKE LENGTH 14										LAST CASING TUBING OR LINER										SIZE 9 5/8										MAKE JSS										WT. & GR.										NO. JOINTS										FEET										RKB. TO CSG. HD.										SET AT 618										TIGHT HOLE										CONFIDENTIAL									
TIME DISTRIBUTION - HOURS										DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD										FOOTAGE										DR. D. R. M. R. CORE C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 1										METHOD RUN																													
RIG UP & TEAR DOWN										STANDS D.P. 62.58 FT.										BIT NO. 9										TIME 12:00										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
DRILLING ACTUAL										SINGLES D.P. 117.78 FT.										SIZE 8 3/4										WEIGHT 9.1										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
REAMING										D.C. 419.73 FT.										MFG. H.W.										VISC. SEC 40										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
CONDITIONING MUD & CIRCULATING										D.C. 419.73 FT.										TYPE X55R										W.L. C.C. 7.2										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
TRIPS										D.C. 419.73 FT.										NOZZLE NO. 3										FLTR. CK. 2.5										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
LUBRICATE RIG										D.C. 419.73 FT.										SER. NO. 21993										SD. CONT. % 10.0										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
DEVIATION SURVEY										D.C. 419.73 FT.										DEPTH OUT 21993										PRESSURE GRADIENT 10.0										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
TEST B.O.P.										D.C. 419.73 FT.										DEPTH IN 21993										MUD & CHEMICALS ADDED										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
CUT OFF DRILLING LINE										D.C. 419.73 FT.										TOTAL FTG. 344										TYPE AMT. TYPE AMT.										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
REPAIR RIG										D.C. 419.73 FT.										TOTAL HR. RUN 344										COND. OF BIT RUN										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
CORING										D.C. 419.73 FT.										REAMER NO. RUN										DRILLER D. BEL										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
WIRE LINE LOGGING										D.C. 419.73 FT.										REAMER TYPE RUN										DRILLER D. BEL										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
RUNNING CASING & CEMENTING										D.C. 419.73 FT.										REAMER TYPE RUN										DRILLER D. BEL										FROM 3110										TO 3164										DR. D. R. M. R. CORE C										CORE NO. 1										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM 44										WT. ON BIT 1000# 34										PUMP PRESS 1050										PUMP NO. 1										PUMP NO. 1										METHOD RUN																			
WAITING ON C																																																																																																																																																															

DATE Jan 6/72

OPERATOR ATLANTIC RICH FIELD CANADA LTD.										LEASE ARCO MTN RIVER										REPORT NO. 47-H										DATE JAN 6/72																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
CONTRACTOR REGENT DRILLING 11										RIG NO. 11										FIELD OR DIST. EXPLORATION										COUNTY N.W.T.										STATE CANADA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>										SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>										PUMPS										LAST CASING TUBING OR LINER										SIZE										MAKE										WT. & GR.										NO. JOINTS										FEET										RKB. TO CSG. NO.										SET AT										REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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DATE Jan 5/72

[illegible]

DAILY DRILLING REPORT

REPORT NO. 32 DATE JAN 4/72

OPERATOR ATLANTIC RICHFIELD CANADA LTD.

LEASE AKCO MTH RIVER

WELL NO. 7771 FIELD OR DIST. EXPLORATION COUNTY C.N.W.T. STATE CANADA

CONTRACTOR REGENT DRILLING RIG NO. 11

DRILL PIPE STRING NO. 11 SIZE 7 1/2 TYPE THD. 11

TOOL JOINT O.D. NO. 1 MANUFACTURER E.H.S. TYPE D-110 STROKE LENGTH 14

PUMPS NO. 2 MANUFACTURER E.H.S. TYPE D-110 STROKE LENGTH 12

LAST CASING TUBING OR LINER

SIZE 7 1/2 MAKE SMC WT. & GR. J55 NO. JOINTS FEET RKB. TO CSG. HD. SET AT 610 REMARKS CONFIDENTIAL TIGHT HOLE

SIGNATURE OF OPERATOR'S REPRESENTATIVE A. Corbett

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION-HOURS

MORNING TOUR

NO. DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

MUD RECORD

FOOTAGE

DR. D RM-R CORE-C

CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM

WT. ON BIT 1000#

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD RUN

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DAY TOUR

NO. DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

MUD RECORD

FOOTAGE

DR. D RM-R CORE-C

CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM

WT. ON BIT 1000#

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD RUN

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

EVENING TOUR

NO. DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

MUD RECORD

FOOTAGE

DR. D RM-R CORE-C

CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM

WT. ON BIT 1000#

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD RUN

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DAILY DRILLING REPORT										REPORT NO. 31	DATE 7/31/72	N.W.T.																	
OPERATOR ATLANTIC RICH FIELD CANADA LTD.										LEASE ARCO CLARKE MIN RIVER 47-M										WELL NO. FIELD OR DIST. COUNTY STATE									
CONTRACTOR RECENT DRILLING										RIG NO. 11										PUMPS									
SIGNATURE OF OPERATOR'S REPRESENTATIVE D. Corbett										SIGNATURE OF CONTRACTOR'S TOOL PUSHER D. Corbett										LAST CASING TUBING OR LINER									
TIME DISTRIBUTION - HOURS										DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD									
										STANDS D.P. FT.										MUD RECORD									
										SINGLES D.P. FT.										FOOTAGE									
										D.C.										DR. D. R.H. R. CORE NO.									
										I.D. O.D.										CORE NO.									
										STB. BODY O.D.										FORMATION (SHOW CORE RECOVERY)									
										STB. BODY O.D.										ROTARY RPM									
										RMR. BODY O.D.										WT. ON BIT 1000 H									
										SUBS										PUMP PRESS									
										BIT OR C.B.										PUMP NO. 1									
										TOTAL										PUMP NO. 2									
										REARER TYPE										METHOD RUN									
										DRILLER										SOL. S. PART. L. P. COMD. C.									
RIG UP & TEAR DOWN										1422.25										25.1									
DRILLING ACTUAL										6.3																			
REAMING										4																			
CONDITIONING MUD & CIRCULATING										4																			
TRIPS										2.5																			
LUBRICATE RIG										1																			
DEVIATION SURVEY										3.4																			
TEST S.O.P.										3.4																			
CUT OFF DRILLING LINE										3.4																			
REPAIR RIG																													
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																													
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																													
FEET SLIPPED																													
FEET CUT OFF																													
PRESENT LENGTH																													
TON M. OR TRIPS SINCE LAST CUT																													
CUMULATIVE TON M. OR TRIPS																													
NO. OF DAYS FROM SPUD																													
CUMULATIVE ROTATING HRS.																													

OPERATOR ATLANTIC RICHFIELD CANADA LTD. LEASE REPORT NO. 30 DATE June 2/72 WELL NO. EXP 12 27100 COUNTY NWT STATE CANADA

CONTRACTOR RIG NO. 121 DRILL PIPE STRING TOOL JOINT O.D. PUMPS NO. MANUFACTURER TYPE STROKE LENGTH LAST CASING TUBING OR LINER SIZE MAKE WT. & GR. NO. JOINTS FEET REB. TO CSG. NO. SET AT 618 REMARKS CONFIDENTIAL TIGHT HOLE

SIGNATURE OF OPERATOR'S REPRESENTATIVE SIGNATURE OF CONTRACTOR'S TOOL PUMPER

TIME DISTRIBUTION - HOURS MORN DAY EVE

DRILLING ASSEMBLY AT END OF TOUR BIT RECORD MUD RECORD FOOTAGE

STANDS D.P. 1990.14 FT. BIT NO. 2 TIME 1.2 2 AM 1.2 AM

SINGLES D.P. 6.7 D.C. 6.7 MFG. CHRS SIZE 8.5 WEIGHT 9.1 9.1 9.1

L.D. O.D. 57.94 FT. TYPE 0 VISC.-SEC 41 41 40

D.C. 6.7 L.D. O.D. 232.23 FT. NOZZLE NO. 10.0 FLTR. CK. 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 PH 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 SD. CONT. % 10.0

RMR. BODY O.D. 3.40 FT. SER. NO. 2435 PRESSURE GRADIENT

SUBS. 6.7 O.D. 3.40 FT. SER. NO. 2435

BIT OR C.B. 6.7 O.D. 3.40 FT. SER. NO. 2435

KELLY DOWN 37.40 FT. COND. OF BIT

TOTAL 243.8 FT. REAMER NO. DRILLER

WT. OF STRING 6000 LBS. REAMER TYPE

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/D P HRS. W/D P HRS. STANDBY

DRILLING ASSEMBLY AT END OF TOUR BIT RECORD MUD RECORD FOOTAGE

STANDS D.P. 1990.14 FT. BIT NO. 2 TIME 9.1 9.1 9.1

SINGLES D.P. 6.7 D.C. 6.7 MFG. CHRS SIZE 8.5 WEIGHT 37 40 43

L.D. O.D. 57.94 FT. TYPE 0 VISC.-SEC 9.5 9.4

D.C. 6.7 L.D. O.D. 232.23 FT. NOZZLE NO. 10.0 FLTR. CK. 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 PH 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 SD. CONT. % 10.0

RMR. BODY O.D. 3.40 FT. SER. NO. 2435 PRESSURE GRADIENT

SUBS. 6.7 O.D. 3.40 FT. SER. NO. 2435

BIT OR C.B. 6.7 O.D. 3.40 FT. SER. NO. 2435

KELLY DOWN 37.40 FT. COND. OF BIT

TOTAL 243.8 FT. REAMER NO. DRILLER

WT. OF STRING 6000 LBS. REAMER TYPE

DRILLING ASSEMBLY AT END OF TOUR BIT RECORD MUD RECORD FOOTAGE

STANDS D.P. 1990.14 FT. BIT NO. 2 TIME 9.1 9.1 9.1

SINGLES D.P. 6.7 D.C. 6.7 MFG. CHRS SIZE 8.5 WEIGHT 42 41 41

L.D. O.D. 57.94 FT. TYPE 0 VISC.-SEC 9.4 9.4

D.C. 6.7 L.D. O.D. 232.23 FT. NOZZLE NO. 10.0 FLTR. CK. 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 PH 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 SD. CONT. % 10.0

RMR. BODY O.D. 3.40 FT. SER. NO. 2435 PRESSURE GRADIENT

SUBS. 6.7 O.D. 3.40 FT. SER. NO. 2435

BIT OR C.B. 6.7 O.D. 3.40 FT. SER. NO. 2435

KELLY DOWN 37.40 FT. COND. OF BIT

TOTAL 243.8 FT. REAMER NO. DRILLER

WT. OF STRING 6000 LBS. REAMER TYPE

DRILLING ASSEMBLY AT END OF TOUR BIT RECORD MUD RECORD FOOTAGE

STANDS D.P. 1990.14 FT. BIT NO. 2 TIME 9.1 9.1 9.1

SINGLES D.P. 6.7 D.C. 6.7 MFG. CHRS SIZE 8.5 WEIGHT 42 41 41

L.D. O.D. 57.94 FT. TYPE 0 VISC.-SEC 9.4 9.4

D.C. 6.7 L.D. O.D. 232.23 FT. NOZZLE NO. 10.0 FLTR. CK. 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 PH 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 SD. CONT. % 10.0

RMR. BODY O.D. 3.40 FT. SER. NO. 2435 PRESSURE GRADIENT

SUBS. 6.7 O.D. 3.40 FT. SER. NO. 2435

BIT OR C.B. 6.7 O.D. 3.40 FT. SER. NO. 2435

KELLY DOWN 37.40 FT. COND. OF BIT

TOTAL 243.8 FT. REAMER NO. DRILLER

WT. OF STRING 6000 LBS. REAMER TYPE

DRILLING ASSEMBLY AT END OF TOUR BIT RECORD MUD RECORD FOOTAGE

STANDS D.P. 1990.14 FT. BIT NO. 2 TIME 9.1 9.1 9.1

SINGLES D.P. 6.7 D.C. 6.7 MFG. CHRS SIZE 8.5 WEIGHT 42 41 41

L.D. O.D. 57.94 FT. TYPE 0 VISC.-SEC 9.4 9.4

D.C. 6.7 L.D. O.D. 232.23 FT. NOZZLE NO. 10.0 FLTR. CK. 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 PH 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 SD. CONT. % 10.0

RMR. BODY O.D. 3.40 FT. SER. NO. 2435 PRESSURE GRADIENT

SUBS. 6.7 O.D. 3.40 FT. SER. NO. 2435

BIT OR C.B. 6.7 O.D. 3.40 FT. SER. NO. 2435

KELLY DOWN 37.40 FT. COND. OF BIT

TOTAL 243.8 FT. REAMER NO. DRILLER

WT. OF STRING 6000 LBS. REAMER TYPE

DRILLING ASSEMBLY AT END OF TOUR BIT RECORD MUD RECORD FOOTAGE

STANDS D.P. 1990.14 FT. BIT NO. 2 TIME 9.1 9.1 9.1

SINGLES D.P. 6.7 D.C. 6.7 MFG. CHRS SIZE 8.5 WEIGHT 42 41 41

L.D. O.D. 57.94 FT. TYPE 0 VISC.-SEC 9.4 9.4

D.C. 6.7 L.D. O.D. 232.23 FT. NOZZLE NO. 10.0 FLTR. CK. 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 PH 10.0

STB. BODY O.D. 3.40 FT. SER. NO. 2435 SD. CONT. % 10.0

RMR. BODY O.D. 3.40 FT. SER. NO. 2435 PRESSURE GRADIENT

SUBS. 6.7 O.D. 3.40 FT. SER. NO. 2435

BIT OR C.B. 6.7 O.D. 3.40 FT. SER. NO. 2435

KELLY DOWN 37.40 FT. COND. OF BIT

TOTAL 243.8 FT. REAMER NO. DRILLER

WT. OF STRING 6000 LBS. REAMER TYPE

[illegible]

DATE Dec 31/71

[illegible]

REPORT NO. 27 DATE 12-30-71

OPERATOR		LEASE		REPORT NO.		DATE		WELL NO.		FIELD OR DIST.		COUNTY		STATE													
ATLANTIC RICHFIELD CANADA LTD.		ARCO - CLARK MTN RIVER 47-H																									
CONTRACTOR		RIG NO.		DRILL PIPE STAIN		TOOL JOINT		O.D.		PUMPS		SIZE		MAKE		WT. & GR.		NO. JOINTS		FEET		RKB. TO C.G. HD.		SET AT		REMARKS	
11		11		1 1/2		4 1/2		TYPE THD. F.H.		NO.		MANUFACTURER		TYPE		STROKE LENGTH		LAST CASING TUBING OR LINER		9 5/8		STG		J-55		CONFIDENTIAL	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		1		1		1		1		1		1		1		1		1		1		1		TIGHT HOLE	
11		11		1 1/2		4 1/2		TYPE THD. F.H.		NO.		MANUFACTURER		TYPE		STROKE LENGTH		LAST CASING TUBING OR LINER		9 5/8		STG		J-55		CONFIDENTIAL	
TIME DISTRIBUTION - HOURS		MORN		DAY		EVE																					
RIG UP & TEAR DOWN		7 1/2		5 3/4		1 1/2																					
DRILLING ACTUAL		7 1/2		5 3/4		1 1/2																					
REAMING																											
CONDITIONING MUD & CIRCULATING																											
TRIPS		1 1/2																									
LUBRICATE RIG		1 1/2																									
DEVIATION SURVEY		1 1/2																									
TEST O.P.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/D																											
HRS. WO/D																											
HRS. STANDBY								</																			

REPORT NO. 26 DATE 12-9-71

OPERATOR ATLANTIC RICH FIELD CANADA LTD.		LEASE ARCOC CLARK MTH R 47-11		WELL NO. 11		FIELD OR DIST. CLARK MTH R		COUNTY N.W.		STATE ALABAMA																											
CONTRACTOR Regent Drilling		RIG NO. 11		DRILL PIPE STRING 11 1/2		TOOL JOINT 1. H		G.D. 1. H		PUMPS		LAST CASING TUBING OR LINER		SIZE 7 1/2 ST.		MAKE S-53		WT. & GR. 5-53		NO. JOINTS		FEET		RKB. TO CSG. NO.		SET AT 618		REMARKS CONFIDENTIAL									
SIGNATURE OF OPERATOR'S REPRESENTATIVE A. C. Smith		SIGNATURE OF CONTRACTOR'S TOOL PUSHER A. C. Smith		NO. 1		MANUFACTURER LAISCO		TYPE U-380		STROKE LENGTH 14		NO. 2		MANUFACTURER LAISCO		TYPE D-111		STROKE LENGTH 14		NO. 3		MANUFACTURER		TYPE		STROKE LENGTH		REMARKS TIGHT HOLE									
TIME DISTRIBUTION - HOURS		MORN		DAY		EVE		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R. M. R. CORE - C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN			
RIG UP & TEAR DOWN		6		15		8		1		STANDS D.P.		FT.		BIT NO.		TIME		FROM		TO																	
DRILLING ACTUAL		6		15		8		1		SINGLES D.P.		FT.		SIZE		WEIGHT		2141		2173																	
REAMING								1		L.D. O.D.		FT.		MFG.		VISC-SEC																					
CONDITIONING MUD & CIRCULATING		23						1		L.D. O.D.		FT.		TYPE		W.L.-CC.																					
TRIPS		23						1		L.D. O.D.		FT.		NOZZLE		FLTR. CK.		DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
LUBRICATE RIG		4						1		STB. BODY O.D.		FT.		SER. NO.		SD. CONT. %		TIME LOG		FROM		TO															
DEVIATION SURVEY		4						1		STB. BODY O.D.		FT.		DEPTH OUT		PRESSURE GRADIENT		ELAPSED TIME		FROM		TO															
TEST B.O.P.								1		STB. BODY O.D.		FT.		DEPTH IN				DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
CUT OFF DRILLING LINE								1		RMR. BODY O.D.		FT.		TOTAL FTG.		MUD & CHEMICALS ADDED		3:45		4:00																	
REPAIR RIG								1		SUBS O.D.		FT.		TOTAL HR. RUN		TYPE		4:00		5:30																	
CORING								1		BIT OR C.B.		FT.		COND. OF BIT				5:30		6:11																	
WIPE LINE LOGGING								1		KELLY DOWN		FT.		REAMER NO.		DRILLER		6:45		7:14																	
RUNNING CASING & CEMENTING								1		TOTAL		FT.		REAMER TYPE				7:45		8:00																	
WAITING ON CEMENT								1		WT. OF STRING		LBS.																									
DRILL STEM TEST								1		STANDS D.P.		FT.		BIT NO.		TIME		2145		2173																	
OTHER								1		SINGLES D.P.		FT.		SIZE		WEIGHT		2145		2173																	
FINISHING								1		L.D. O.D.		FT.		MFG.		VISC-SEC																					
COMPLETION WORK								1		D.C.		FT.		TYPE		W.L.-CC.		DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
A. PERFORATING								1		L.D. O.D.		FT.		NOZZLE		FLTR. CK.		TIME LOG		FROM		TO															
B. TUBING TRIPS								1		D.C.</																											

DATE 12-28-71

OPERATOR ATLANTIC RICH FIELD CANADA LTD.										LEASE ATLANTIC RICH FIELD CANADA LTD.										WELL NO. 11										FIELD OR DIST. ATLANTIC										COUNTY N.W.T.										STATE ALBERTA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
CONTRACTOR Pageant Drilling										RIG NO. 11										DRILL PIPE STRING 1 1/2" 11.5										TOOL JOINT 11.5										O.D. 11.5										PUMPS 1. L11500										TYPE 11.5										STROKE LENGTH 11.5										LAST CASING TUBING OR LINER 11.5										SIZE 11.5										MAKE 11.5										WT. & GR. 11.5										NO. JOINTS 11.5										FEET 11.5										RKR. TO CSG. NO. 11.5										SET AT 11.5										REMARKS CONFIDENTIAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
SIGNATURE OF OPERATOR'S REPRESENTATIVE A. Corbett										SIGNATURE OF CONTRACTOR'S TOOL PUSHER A. Corbett										1. L11500										2. L11500										3. L11500										4. L11500										5. L11500										6. L11500										7. L11500										8. L11500										9. L11500										10. L11500										11. L11500										12. L11500										13. L11500										14. L11500										15. L11500										16. L11500										17. L11500										18. L11500										19. L11500										20. L11500										21. L11500										22. L11500										23. L11500										24. L11500										25. L11500										26. L11500										27. L11500										28. L11500										29. L11500										30. L11500										31. L11500										32. L11500										33. L11500										34. L11500										35. L11500										36. L11500										37. L11500										38. L11500										39. L11500										40. L11500										41. L11500										42. L11500										43. L11500										44. L11500										45. L11500										46. L11500										47. L11500										48. L11500										49. L11500										50. L11500										51. L11500										52. L11500										53. L11500										54. L11500										55. L11500										56. L11500										57. L11500										58. L11500										59. L11500										60. L11500										61. L11500										62. L11500										63. L11500										64. L11500										65. L11500										66. L11500										67. L11500										68. L11500										69. L11500										70. L11500										71. L11500										72. L11500										73. L11500										74. L11500										75. L11500										76. L11500										77. L11500										78. L11500										79. L11500										80. L11500										81. L11500										82. L11500										83. L11500										84. L11500										85. L11500										86. L11500										87. L11500										88. L11500										89. L11500										90. L11500										91. L11500										92. L11500										93. L11500										94. L11500										95. L11500										96. L11500										97. L11500										98. L11500										99. L11500										100. L11500										101. L11500										102. L11500										103. L11500										104. L11500										105. L11500										106. L11500										107. L11500										108. L11500										109. L11500										110. L11500										111. L11500										112. L11500										113. L11500										114. L11500										115. L11500										116. L11500										117. L11500										118. L11500										119. L11500										120. L11500										121. L11500										122. L11500										123. L11500										124. L11500										125. L11500										126. L11500										127. L11500										128. L11500										129. L11500										130. L11500										131. L11500										132. L11500										133. L11500										134. L11500										135. L11500										136. L11500										137. L11500										138. L11500										139. L11500										140. L11500										141. L11500										142. L11500										143. L11500										144. L11500										145. L11500										146. L11500										147. L11500										148. L11500										149. L11500										150. L11500										151. L11500										152. L11500										153. L11500										154. L11500										155. L11500										156. L11500										157. L11500										158. L11500										159. L11500										160. L11500										161. L11500										162. L11500										163. L11500										164. L11500										165. L11500										166. L11500										167. L11500										168. L11500										169. L11500										170. L11500										171. L11500										172. L11500										173. L11500										174. L11500										175. L11500										176. L11500										177. L11500										178. L11500										179. L11500										180. L11500										181. L11500										182. L11500										183. L11500										184. L11500										185. L11500										186. L11500										187. L11500										188. L11500										189. L11500										190. L1150									

REPORT NO. 24 DATE 12-27-61

[illegible]

OPERATOR ATLANTIC RICHFIELD CANADA LTD.										LEASE 12-26-77										DATE 12-26-77																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
CONTRACTOR REGENT DRILLING										RIG NO. 100										DRILL PIPE STRING 100										TOOL JOINT 100										PUMPS 100										WELL NO. 100										FIELD OR DIST. 100										COUNTY 100										STATE 100																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
SIGNATURE OF OPERATOR'S REPRESENTATIVE Regent Drilling										SIGNATURE OF CONTRACTOR'S TOOL PUSHER 100										TYPE THD. 100										NO. 100										MANUFACTURER 100										TYPE 100										STROKE LENGTH 100										LAST CASING TUBING OR LINER 100										SIZE 100										MAKE 100										WT. & GR. 100										NO. JOINTS 100										FEET 100										RKB. TO CSG. HD. 100										SET AT 100										REMARKS CONFIDENTIAL TIGHT HOLE																																																																																																																																																																																																																																																																																																																																																																																																					
TIME DISTRIBUTION - HOURS 100										MORN 100										DAY 100										EVE 100										NO. 100										DRILLING ASSEMBLY AT END OF TOUR 100										BIT RECORD 100										MUD RECORD 100										FOOTAGE 100										DR. D R. M. R. CORE - C 100										CORE NO. 100										FORMATION (SHOW CORE RECOVERY) 100										ROTARY RPM 100										WT. ON BIT 1000# 100										PUMP PRESS 100										PUMP NO. LINER SIZE 100										PUMP NO. LINER SIZE 100										METHOD RUN SOL. S. PART. P. CON. D. C. 100																																																																																																																																																																																																																																																																																																																																																																																	
RIG UP & TEAR DOWN 100										DRILLING ACTUAL 100										REAMING 100										CONDITIONING MUD & CIRCULATING 100										TRIPS 100										LUBRICATE RIG 100										DEVIATION SURVEY 100										TEST B.O.P. 100										CUT OFF DRILLING LINE 100										REPAIR RIG 100										CORING 100										WIRE LINE LOGGING 100										RUNNING CASING & CEMENTING 100										WAITING ON CEMENT 100										DRILL STEM TEST 100										OTHER 100										FISHING 100										A. PERFORATING 100										B. TUBING TRIPS 100										C. SWABBING 100										D. TESTING 100										E. ADDITIONAL 100										TOTALS 100										TIME SUMMARY (OFFICE USE ONLY) 100										DAY WORK 100										HRS. W/D 100										HRS. WO/D 100										HRS. STANDBY 100										TOTAL DAY WORK 100										WIRE LINE RECORD 100										REEL NO. 100										NO. OF LINES 100										SIZE 100										FEET SLIPPED 100										FEET CUT OFF 100										PRESENT LENGTH 100										TON M. OR TRIPS SINCE LAST CUT 100										CUMULATIVE TON M. OR TRIPS 100										NO. OF DAYS FROM SPUD 100										CUMULATIVE ROTATING HRS. 100										NO. 100										DRILLING ASSEMBLY AT END OF TOUR 100										BIT RECORD 100										MUD RECORD 100										FOOTAGE 100										DR. D R. M. R. CORE - C 100										CORE NO. 100										FORMATION (SHOW CORE RECOVERY) 100										ROTARY RPM 100										WT. ON BIT 1000# 100										PUMP PRESS 100										PUMP NO. LINER SIZE 100										PUMP NO. LINER SIZE 100										METHOD RUN SOL. S. PART. P. CON. D. C. 100									
MORNING TOUR 100										DAY TOUR 100										EVENING TOUR 100										NO. 100										DRILLING ASSEMBLY AT END OF TOUR 100										BIT RECORD 100										MUD RECORD 100										FOOTAGE 100										DR. D R. M. R. CORE - C 100										CORE NO. 100										FORMATION (SHOW CORE RECOVERY) 100										ROTARY RPM 100										WT. ON BIT 1000# 100										PUMP PRESS 100										PUMP NO. LINER SIZE 100										PUMP NO. LINER SIZE 100										METHOD RUN SOL. S. PART. P. CON. D. C. 100																																																																																																																																																																																																																																																																																																																																																																																											
NO. 100										DRILLING ASSEMBLY AT END OF TOUR 100										BIT RECORD 100										MUD RECORD 100										FOOTAGE 100										DR. D R. M. R. CORE - C 100										CORE NO. 100										FORMATION (SHOW CORE RECOVERY) 100										ROTARY RPM 100										WT. ON BIT 1000# 100										PUMP PRESS 100										PUMP NO. LINER SIZE 100										PUMP NO. LINER SIZE 100										METHOD RUN SOL. S. PART. P. CON. D. C. 100																																																																																																																																																																																																																																																																																																																																																																																																																									
NO. 100										DRILLING ASSEMBLY AT END OF TOUR 100										BIT RECORD 100										MUD RECORD 100										FOOTAGE 100										DR. D R. M. R. CORE - C 100										CORE NO. 100										FORMATION (SHOW CORE RECOVERY) 100										ROTARY RPM 100										WT. ON BIT 1000# 100										PUMP PRESS 100										PUMP NO. LINER SIZE 100										PUMP NO. LINER SIZE 100										METHOD RUN SOL. S. PART. P. CON. D. C. 100																																																																																																																																																																																																																																																																																																																																																																																																																									
NO. 100										DRILLING ASSEMBLY AT END OF TOUR 100										BIT RECORD 100										MUD RECORD 100										FOOTAGE 100										DR. D R. M. R. CORE - C 100										CORE NO. 100										FORMATION (SHOW CORE RECOVERY) 100										ROTARY RPM 100										WT. ON BIT 1000# 100										PUMP PRESS 100										PUMP NO. LINER SIZE 100										PUMP NO. LINER SIZE 100										METHOD RUN SOL. S. PART. P. CON. D. C. 100																																																																																																																																																																																																																																																																																																																																																																																																																									
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DAILY DRILLING REPORT										REPORT NO.	DATE											
OPERATOR ATLANTIC RICHFIELD CANADA LTD.										LEASE 117-48	WELL NO. 117-48	FIELD OR DIST. 117-48	COUNTY ALBERTA	STATE ALBERTA								
CONTRACTOR 117-48										RIG NO. 117-48	DRILL PIPE STRING 117-48	TOOL JOINT 117-48	O.D. 117-48	PUMPS 117-48	SIZE 117-48	MAKE 117-48	WT. & GR. 117-48	NO. JOINTS 117-48	FEET 117-48	RGR. TO CSG. NO. 117-48	SET AT 117-48	REMARKS CONFIDENTIAL
SIGNATURE OF OPERATOR'S REPRESENTATIVE 117-48										SIGNATURE OF CONTRACTOR'S TOOL PUSHER 117-48												
TIME DISTRIBUTION—HOURS										MUD RECORD												
MORN DAY EVE										TIME 8:00 4:00 6:00												
RIG UP & TEAR DOWN										WEIGHT 9.2 9.2 9.3												
DRILLING ACTUAL										VISC.-SEC 38 38 38												
REAMING										W.L.-C.C. 10.0 10.0 10.0												
CONDITIONING MUD & CIRCULATING										FLTR. CK. 4.0 4.0 4.0												
TRIPS										PH 10												
LUBRICATE RIG										SD. CONT. %												
DEVIATION SURVEY										PRESSURE GRADIENT												
TEST S.O.P.										MUD & CHEMICALS ADDED												
CUT OFF DRILLING LINE										TYPE AMT. TYPE AMT.												
REPAIR RIG										TOTAL FTG. 177												
CORING										TOTAL HR. RUN 42												
WIRE LINE LOGGING										COND. OF BIT RUN												
RUNNING CASING & CEMENTING										REAMER NO.												
WAITING ON CEMENT										REAMER TYPE												
DRILL STEM TEST										DRILLER												
OTHER										117-48												
FISHING										117-48												
A. PERFORATING										117-48												
B. TUBING TRIPS										117-48												
C. SWABBING										117-48												
D. TESTING										117-48												
E. ADDITIONAL										117-48												
TOTALS										117-48												
TIME SUMMARY (OFFICE USE ONLY)										117-48												
DAY WORK										117-48												
HRS. W/DP										117-48												
HRS. WO/DP										117-48												
HRS. STANDBY										117-48												
TOTAL DAY WORK										117-48												
WIRE LINE RECORD										117-48												
REEL NO.										117-48												
NO. OF LINES										117-48												
FEET SLIPPED										117-48												
FEET CUT OFF										117-48												
PRESENT LENGTH										117-48												
TON M. OR TRIPS SINCE LAST CUT										117-48												
CUMULATIVE TON M. OR TRIPS										117-48												
NO. OF DAYS FROM SPUD										117-48												
CUMULATIVE ROTATING HRS.										117-48												
MORNING TOUR										117-48												
DAY TOUR										117-48												
EVENING TOUR										117-48												

DAILY DRILLING REPORT

REPORT NO. 20 DATE Dec 22/71

OPERATOR ATLANTIC RICHFIELD CANADA LTD.

LEASE HRCO CLARK-NTN RIVER H.47

WELL NO. H47 FIELD OR DIST. EXPLORATION COUNTY NWT STATE CAN.

CONTRACTOR REGENT DRUGS

RIG NO. 11

DRILL PIPE STRING NO. 973 SIZE 4 1/2 TYPE THD. F.H.

TOOL JOINT O.D.

PUMPS

MANUFACTURER TYPE STROKE LENGTH

1. EUSCO D-200 14

2. EUSCO D-175 12

LAST CASING TUBING OR LINER

SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT 618

REMARKS

CONFIDENTIAL TIGHT HOLE

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION-HOURS

MORN DAY EVE

RIG UP & TEAR DOWN

DRILLING ACTUAL 7 3/4

REAMING

CONDITIONING MUD & CIRCULATING

TRIPS

LUBRICATE RIG

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 1/2

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. W/O/DP

HRS. STANDBY

TOTAL DAY WORK

WIRE LINE RECORD

REEL NO.

NO. OF LINES 8 SIZE 1

FEET SLIPPED 34

FEET CUT OFF 24

PRESENT LENGTH 313

TON MI. OR TRIPS SINCE LAST CUT 217

CUMULATIVE TON MI. OR TRIPS 9567

NO. OF DAYS FROM SPUD 20

CUMULATIVE ROTATING HRS.

NO. DRILLING ASSEMBLY AT END OF TOUR

BIT NO. 5

TIME 1200 300 600

WEIGHT 9.2 9.1 9.2

VISC.-SEC 36 38 40

W.L.-C.C. 10.2 10.5

FLTR. CK. 252 242

PH 11 11.0

SD. CONT. %

PRESSURE GRADIENT

DEPTH OUT

DEPTH IN 1614

TOTAL FTG. 96

TOTAL HR. RUN 2714

COND. OF BIT

REAMER NO.

REAMER TYPE

DRILLER G. BLU

FOOTAGE

FROM TO

1686 1710

DEVIATION RECORD

DEPTH DEY. DIRECTION

1708 4 1/4

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

1200 630 6 1/2 DRUG 8 3/4 HOLE

630 645 3/4 SURVEY

645 800 1 1/4 DRUG 8 3/4 HOLE

NO. DRILLING ASSEMBLY AT END OF TOUR

BIT NO. 5

TIME 1200 1200

WEIGHT 7.00 12.00

VISC.-SEC 7.1 7.1

W.L.-C.C. 37 37

FLTR. CK. 7.4 7.4

PH 1.73 1.73

SD. CONT. % 10

PRESSURE GRADIENT

DEPTH OUT

DEPTH IN

TOTAL FTG. 11814

TOTAL HR. RUN 309

COND. OF BIT

REAMER NO.

REAMER TYPE

DRILLER

FOOTAGE

FROM TO

1110 1722 D

DEVIATION RECORD

DEPTH DEY. DIRECTION

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

8.30 8.45 1/2 DRUG 11

8.45 3.15 6 1/2 DRUG 11

3.15 4.00 1/2 DRUG 11

NO. DRILLING ASSEMBLY AT END OF TOUR

BIT NO. 6

TIME 1600 8 PM 10 PM

WEIGHT 9.1 9.1 9.1

VISC.-SEC 36 35 35

W.L.-C.C. 8.6

FLTR. CK. 32

PH 10.5

SD. CONT. %

PRESSURE GRADIENT

DEPTH OUT

DEPTH IN 1732

TOTAL FTG.

TOTAL HR. RUN

COND. OF BIT

REAMER NO.

REAMER TYPE

DRILLER

FOOTAGE

FROM TO

1732 1759 D

DEVIATION RECORD

DEPTH DEY. DIRECTION

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

4.00 4.15 1/2 RIG SET

4.15 6.00 RIG SET

6.00 8.00 RIG SET

8.00 8.15 1/2 RIG SET

8.15 12.00 RIG SET

DATE Dec 24 / 71

[illegible]

DAILY DRILLING REPORT										REPORT NO. 17										DATE 12/30/71																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
OPERATOR ATLANTIC RICHFIELD CANADA LTD.										LEASE HRCO (CLARK RIVER NTN H-47)										WELL NO. H-47										FIELD OR DIST. Exploration										COUNTY NWT										STATE CANADA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
CONTRACTOR Key-It Only										RIG NO. 11										DRILL PIPE STRING NO. 1										TOOL JOINT NO. 1										O.D. 4.5										PUMPS										LAST CASING TUBING OR LINER										SIZE 14										MAKE JSS										WT. & GR. 6.8										NO. JOINTS 1										FEET 1482										RKB. TO CSC. HD. 1482										SET AT 1482										REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
SIGNATURE OF OPERATOR'S REPRESENTATIVE										SIGNATURE OF CONTRACTOR'S TOOL PUSHER										NO. 1										MANUFACTURER ENISCO										TYPE D 300										STROKE LENGTH 14										NO. 2										MANUFACTURER ENISCO										TYPE D 175										STROKE LENGTH 15										NO. 3										MANUFACTURER										TYPE										STROKE LENGTH										NO. 4										MANUFACTURER										TYPE										STROKE LENGTH										NO. 5										MANUFACTURER										TYPE										STROKE LENGTH										NO. 6										MANUFACTURER										TYPE										STROKE LENGTH										NO. 7										MANUFACTURER										TYPE										STROKE LENGTH										NO. 8										MANUFACTURER										TYPE										STROKE LENGTH										NO. 9										MANUFACTURER										TYPE										STROKE LENGTH										NO. 10										MANUFACTURER										TYPE										STROKE LENGTH										NO. 11										MANUFACTURER										TYPE										STROKE LENGTH										NO. 12										MANUFACTURER										TYPE										STROKE LENGTH										NO. 13										MANUFACTURER										TYPE										STROKE LENGTH										NO. 14										MANUFACTURER										TYPE										STROKE LENGTH										NO. 15										MANUFACTURER										TYPE										STROKE LENGTH										NO. 16										MANUFACTURER										TYPE										STROKE LENGTH										NO. 17										MANUFACTURER										TYPE										STROKE LENGTH										NO. 18										MANUFACTURER										TYPE										STROKE LENGTH										NO. 19										MANUFACTURER										TYPE										STROKE LENGTH										NO. 20										MANUFACTURER										TYPE										STROKE LENGTH										NO. 21										MANUFACTURER										TYPE										STROKE LENGTH										NO. 22										MANUFACTURER										TYPE										STROKE LENGTH										NO. 23										MANUFACTURER										TYPE										STROKE LENGTH										NO. 24										MANUFACTURER										TYPE										STROKE LENGTH										NO. 25										MANUFACTURER										TYPE										STROKE LENGTH										NO. 26										MANUFACTURER										TYPE										STROKE LENGTH										NO. 27										MANUFACTURER										TYPE										STROKE LENGTH										NO. 28										MANUFACTURER										TYPE										STROKE LENGTH										NO. 29										MANUFACTURER										TYPE										STROKE LENGTH										NO. 30										MANUFACTURER										TYPE										STROKE LENGTH										NO. 31										MANUFACTURER										TYPE										STROKE LENGTH										NO. 32										MANUFACTURER										TYPE										STROKE LENGTH										NO. 33										MANUFACTURER										TYPE										STROKE LENGTH										NO. 34										MANUFACTURER										TYPE										STROKE LENGTH										NO. 35										MANUFACTURER										TYPE										STROKE LENGTH										NO. 36										MANUFACTURER										TYPE										STROKE LENGTH										NO. 37										MANUFACTURER										TYPE										STROKE LENGTH										NO. 38										MANUFACTURER										TYPE										STROKE LENGTH										NO. 39										MANUFACTURER										TYPE										STROKE LENGTH										NO. 40										MANUFACTURER										TYPE										STROKE LENGTH										NO. 41										MANUFACTURER										TYPE										STROKE LENGTH										NO. 42										MANUFACTURER										TYPE										STROKE LENGTH										NO. 43										MANUFACTURER										TYPE										STROKE LENGTH										NO. 44										MANUFACTURER										TYPE										STROKE LENGTH										NO. 45										MANUFACTURER										TYPE										STROKE LENGTH										NO. 46										MANUFACTURER										TYPE										STROKE LENGTH										NO. 47										MANUFACTURER										TYPE										STROKE LENGTH										NO. 48										MANUFACTURER										TYPE										STROKE LENGTH										NO. 49										MANUFACTURER										TYPE										STROKE LENGTH										NO. 50										MANUFACTURER										TYPE										STROKE LENGTH										NO. 51										MANUFACTURER										TYPE										STROKE LENGTH										NO. 52										MANUFACTURER										TYPE										STROKE LENGTH										NO. 53										MANUFACTURER										TYPE										STROKE LENGTH										NO. 54										MANUFACTURER										TYPE										STROKE LENGTH										NO. 55										MANUFACTURER										TYPE										STROKE LENGTH										NO. 56										MANUFACTURER										TYPE										STROKE LENGTH										NO. 57										MANUFACTURER										TYPE										STROKE LENGTH										NO. 58										MANUFACTURER										TYPE										STROKE LENGTH										NO. 59										MANUFACTURER										TYPE										STROKE LENGTH										NO. 60										MANUFACTURER										TYPE										STROKE LENGTH										NO. 61										MANUFACTURER										TYPE										STROKE LENGTH										NO. 62										MANUFACTURER										TYPE										STROKE LENGTH										NO. 63										MANUFACTURER										TYPE										STROKE LENGTH										NO. 64										MANUFACTURER										TYPE										STROKE LENGTH										NO. 65										MANUFACTURER										TYPE										STROKE LENGTH										NO. 66										MANUFACTURER										TYPE										STROKE LENGTH										NO. 67										MANUFACTURER										TYPE										STROKE LENGTH										NO. 68										MANUFACTURER										TYPE										STROKE LENGTH										NO. 69										MANUFACTURER										TYPE										STROKE LENGTH										NO. 70										MANUFACTURER										TYPE										STROKE LENGTH										NO. 71										MANUFACTURER										TYPE										STROKE LENGTH										NO. 72										MANUFACTURER										TYPE										STROKE LENGTH										NO. 73										MANUFACTURER										TYPE										STROKE LENGTH										NO. 74										MANUFACTURER										TYPE										STROKE LENGTH										NO. 75									

DATE Dec: 9/71

[illegible]

[illegible]

DAILY DRILLING REPORT										REPORT NO. 14										DATE Dec 17/71									
OPERATOR ATLANTIC RICH FIELD CANADA LTD.										LEASE <i>Deer Creek Mtn River H. 47</i>										WELL NO. FIELD OR DIST. EXPLORATION COUNTY NWT STATE CANADA									
CONTRACTOR REGENT DRILL										RIG NO. 11										DRILL PIPE STRING NO. 146 SIZE 4 1/2 TYPE THD. F.H.									
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>										SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>										PUMPS NO. MANUFACTURER TYPE STROKE LENGTH 1. EMISCO D-300 14 2. EMISCO D-175 12									
SIZE MAKE WT. & GR. NO. JOINTS FEET RKS. TO CSG. HD. SET AT REMARKS										TIGHT HOLE CONFIDENTIAL																			
TIME DISTRIBUTION - HOURS										MORNING TOUR										DAY TOUR									
RIG UP & TEAR DOWN										NO. DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD									
DRILLING ACTUAL										7 STANDS D.P. 653.20 FT.										TIME 12.00 2.00 4.00									
REAMING										2 SINGLES D.P. 61.88 FT.										WEIGHT 5.8 8.8 8.9									
CONDITIONING MUD & CIRCULATING										4 D.C. 6 3/4										VISC. SEC 35 35 37									
TRIPS										14 D.C. 6 1/4										W.L. C.C. 9.7									
LUBRICATE RIG										1 D.C. 418.05 FT.										FLTR. CK. 262									
DEVIATION SURVEY										1 STR. BODY O.D. 4.26 FT.										PH 10									
TEST B.O.P.										1 STR. BODY O.D. 4.70 FT.										SD. CONT. %									
CUT OFF DRILLING LINE										1 RMR. BODY O.D. 4.68 FT.										PRESSURE GRADIENT									
REPAIR RIG										2 SUBS. C. O.D. 5.65 FT.										MUD & CHEMICALS ADDED									
CORING										1 BIT OR C.B. 6.85 FT.										TYPE AMT. TYPE AMT.									
WIRE LINE LOGGING										1 KELLY DOWN 21.95 FT.										COND. OF BIT Run									
RUNNING CASING & CEMENTING										TOTAL 1300 FT.										REAMER NO.									
WAITING ON CEMENT										WT. OF STRING 5611 LBS.										REAMER TYPE									
DRILL STEM TEST										NO. DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD									
OTHER										8 STANDS D.P. 742.58 FT.										TIME 8.00 12.00									
FISHING										1 SINGLES D.P. 742.58 FT.										WEIGHT 9.1 7.2									
COMPLETION WORK										1 D.C. 117.78										VISC. SEC 35 35 37									
A. PERFORATING										1 D.C. 117.78										W.L. C.C. 11.6									
B. TUBING TRIPS										1 D.C. 117.78										FLTR. CK. 262									
C. SWABBING										1 D.C. 117.78										PH 10									
D. TESTING										1 STR. BODY O.D. 4.26 FT.										SD. CONT. %									
E. ADDITIONAL										1 STR. BODY O.D. 4.70 FT.										PRESSURE GRADIENT									
TOTALS										1 RMR. BODY O.D. 4.68 FT.										MUD & CHEMICALS ADDED									
TIME SUMMARY (OFFICE USE ONLY)										2 SUBS. C. O.D. 5.65 FT.										TYPE AMT. TYPE AMT.									
DAY WORK										1 BIT OR C.B. 6.85 FT.										COND. OF BIT Run									
HRS. W/D										TOTAL 1300 FT.										REAMER NO.									
HRS. WO/D										WT. OF STRING 5611 LBS.										REAMER TYPE									
HRS. STANDBY										NO. DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD									
TOTAL DAY WORK										11 STANDS D.P. 1029.72 FT.										TIME 8.00 12.00									
WIRE LINE RECORD										2 SINGLES D.P. 61.15 FT.										WEIGHT 9.1 9.1									
REEL NO.										1 D.C. 117.78										VISC. SEC 34 38									
NO. OF LINES										1 D.C. 117.78										W.L. C.C. 34 38									
SIZE										1 D.C. 117.78										FLTR. CK. 262									
FEET SLIPPED										1 STR. BODY O.D. 4.26 FT.										PH 10									
FEET CUT OFF										1 STR. BODY O.D. 4.70 FT.										SD. CONT. %									
PRESENT LENGTH										1 RMR. BODY O.D. 4.68 FT.										PRESSURE GRADIENT									
TON ML. OR TRIPS SINCE LAST CUT										2 SUBS. C. O.D. 5.65 FT.										MUD & CHEMICALS ADDED									
CUMULATIVE TON ML. OR TRIPS										1 BIT OR C.B. 6.85 FT.										TYPE AMT. TYPE AMT.									
NO. OF DAYS FROM SPUD										TOTAL 2545 FT.										COND. OF BIT Run									
CUMULATIVE ROTATING HRS.										WT. OF STRING 1402 LBS.										REAMER NO.									
																				REAMER TYPE									
																				DRILLER <i>[Signature]</i>									

DAILY DRILLING REPORT										REPORT NO. 13		DATE DEC 14/71																																																																																																																																																																							
OPERATOR ATLANTIC RICHFIELD CANADA LTD.										LEASE ALCO CLARK MTN RIVER H-47		WELL NO.		FIELD OR DIST. EXPLORATION		COUNTY NEW T.		STATE CANADA																																																																																																																																																																	
CONTRACTOR RECENT DRILLING										RIG NO. 11		DRILL PIPE STRING NO. SIZE 1 1/2 4 1/2		TOOL JOINT O.D. F.H.		PUMPS NO. MANUFACTURER TYPE STROKE LENGTH 1. SMC 10-700 14" 2. SMC 10-175 14" 3.		LAST CASING TUBING OR LINER 4 1/2		SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT 112		REMARKS CONFIDENTIAL TIGHT HOLE																																																																																																																																																													
SIGNATURE OF OPERATOR'S REPRESENTATIVE										SIGNATURE OF CONTRACTOR'S TOOL PUSHER																																																																																																																																																																									
TIME DISTRIBUTION-HOURS										MUD RECORD										FOOTAGE										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO.										PUMP NO.										METHOD RUN																																																																																									
RIG UP & TEAR DOWN										STANDS D.P. 402.71 FT.										SINGLES D.P. 402.71 FT.										D.C. 6 1/2										L.D. O.D. 117.78 FT.										D.C. 6 1/2										L.D. O.D. 418.05 FT.										STR. BODY 7 O.D. 426 FT.										STR. BODY 7 O.D. 470 FT.										RMR. BODY 7 O.D. 4.68 FT.										SUBS. 5.65 FT.										BIT OR C.B. 6 1/2 FT.										KELLY DOWN 32.32 FT.										TOTAL 997 FT.										WT. OF STRING 5200 LBS.										REAMER NO.										REAMER TYPE										DRILLER									
DRILLING ACTUAL 7 1/2										MFG. SEC										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
REAMING										NOZZLE NO. 2 1/1										SER. NO. 284071										DEPTH OUT 777										DEPTH IN 695										TOTAL FTG. 422 302										TOTAL HR. RUN 273										COND. OF BIT										REAMER NO.										REAMER TYPE										DRILLER																																																																															
CONDITIONING MUD & CIRCULATING										NO. 1										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
TRIPS										NO. 2										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
LUBRICATE RIG 4										NO. 3										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
DEVIATION SURVEY 1/4										NO. 4										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
TEST B.O.P.										NO. 5										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
CUT OFF DRILLING LINE										NO. 6										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
REPAIR RIG										NO. 7										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
CORING										NO. 8										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
WIRE LINE LOGGING										NO. 9										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
RUNNING CASING & CEMENTING										NO. 10										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
WAITING ON CEMENT										NO. 11										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
DRILL STEM TEST										NO. 12										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
OTHER										NO. 13										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
FISHING										NO. 14										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
A. PERFORATING										NO. 15										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
B. TUBING TRIPS										NO. 16										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
C. SWABBING										NO. 17										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
D. TESTING										NO. 18										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
E. ADDITIONAL										NO. 19										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
TOTALS 8										NO. 20										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
TIME SUMMARY (OFFICE USE ONLY)										NO. 21										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
DAY WORK										NO. 22										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
MRS. W/DP										NO. 23										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
MRS. WO/DP										NO. 24										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
MRS. STANDBY										NO. 25										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
TOTAL DAY WORK										NO. 26										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
WIRE LINE RECORD										NO. 27										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
REEL NO.										NO. 28										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
NO. OF LINES										NO. 29										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
FEET SLIPPED										NO. 30										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
FEET CUT OFF										NO. 31										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
PRESENT LENGTH										NO. 32										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
TON ML. OR TRIPS SINCE LAST CUT										NO. 33										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
CUMULATIVE TON ML. OR TRIPS										NO. 34										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
NO. OF DAYS FROM SPUD 13										NO. 35										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											
CUMULATIVE ROTATING HRS.										NO. 36										VISC.-SEC 3.5 25 75										W.L.-C.C. 4.5 12.2 10.3										FLTR. CK. 5 5 5										PH 7.5 7.5 7.5										SD. CONT. %										PRESSURE GRADIENT										MUD & CHEMICALS ADDED										TYPE AMT. TYPE AMT.										TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																																																											

DAILY DRILLING REPORT										REPORT NO. 12		DATE 11/15/11																																																																																																																															
OPERATOR ATLANTIC RICHFIELD CANADA LTD.										LEASE ARCUS CLARK WITH RIVER 42M.		WELL NO.		FIELD OR DIST. EXPLO-47100		COUNTY NWT		STATE CANADA																																																																																																																									
CONTRACTOR REGENT DRILLING										RIG NO. 11		DRILL PIPE STRING NO. 1 SIZE 4 1/2" TYPE THD. 1		TOOL JOINT O.D.		PUMPS NO. 1 MANUFACTURER EISCO TYPE D-300 STROKE LENGTH 14		LAST CASING TUBING OR LINER 9 5/8"		SIZE 9 5/8"		MAKE EISCO		WT. & GR. 11.5		NO. JOINTS 14		FEET 149		RKB. TO CSG. HD. 149		SET AT 149		REMARKS CONFIDENTIAL																																																																																																									
SIGNATURE OF OPERATOR'S REPRESENTATIVE										SIGNATURE OF CONTRACTOR'S TOOL PUSHER Jenny R. Izapp										TIGHT HOLE																																																																																																																							
TIME DISTRIBUTION - HOURS										DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD										FOOTAGE										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																													
RIG UP & TEAR DOWN										STANDS D.P. 9181 FT.										BIT NO. 2										TIME 6:00										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
DRILLING ACTUAL										SINGLES D.P. 3151 FT.										SIZE 8 3/4"										WEIGHT 8 3/4"										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
REAMING										D.C. 6 3/4"										MFG. SEC										VISC-SEC 37										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
CONDITIONING MUD & CIRCULATING										I.D. O.D. 117.78 FT.										TYPE H-88										W.L.-C.C. 4.4										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
TRIPS										D.C. 6 3/4"										NOZZLE NO. 2-11										FLTR. CK. 3/32										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
LUBRICATE RIG										STB. BODY 7 O.D. 4.26 FT.										SER. NO. 284041										SD. CONT. %										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
DEVIATION SURVEY										RMR. BODY 7 O.D. 4.70 FT.										DEPTH OUT										PRESSURE GRADIENT										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
TEST B.O.P.										SUBS. O.D. 5.65 FT.										TOTAL FTG. 678										MUD & CHEMICALS ADDED										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
CUT OFF DRILLING LINE										BIT OR C.B. FT.										TOTAL HR. RUN 2										COND. OF BIT NEW										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
REPAIR RIG										KELLY DOWN 1368 FT.										REAMER NO.										REAMER TYPE										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
CORING										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
WIRE LINE LOGGING										WT. OF STRING 7800 LBS.										REAMER NO.										REAMER TYPE										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN									
RUNNING CASING & CEMENTING										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
WAITING ON CEMENT										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
DRILL STEAM TEST										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
OTHER PIPE										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
FISHING										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
COMPLETION WORK										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
A. PERFORATING										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
B. TUBING TRIPS										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
C. SWABBING										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
D. TESTING										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
E. ADDITIONAL										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
TOTALS										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
TIME SUMMARY (OFFICE USE ONLY)										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
DAY WORK										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
HRS. W/DP										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
HRS. WO/DP										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
HRS. STANDBY										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
TOTAL DAY WORK										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
WIRE LINE RECORD										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
REEL NO.										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
NO. OF LINES										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
SIZE										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
FEET SLIPPED										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
FEET CUT OFF										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
PRESENT LENGTH										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
TON MI. OR TRIPS SINCE LAST CUT										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
CUMULATIVE TON MI. OR TRIPS										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
NO. OF DAYS FROM SPUD										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			
CUMULATIVE ROTATING HRS.										TOTAL 678 FT.										DRILLER S. Lynch										FROM 6:00										TO 6:00										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. 1										PUMP NO. 2										METHOD RUN																			

DAILY DRILLING REPORT										REPORT NO.		DATE																																																																																																																																									
OPERATOR ATLANTIC RICH FIELD CANADA LTD.										LEASE SPUD LAKE MUD RIVER. 47.11.		WELL NO.		FIELD OR DIST. EXPLOITATION		COUNTY		STATE																																																																																																																																			
CONTRACTOR REGENT DRILLING 11										RIG NO.		DRILL PIPE STRING NO. SIZE TYPE THD. #H		TOOL JOINT O.D.		PUMPS NO. MANUFACTURER TYPE STROKE LENGTH		LAST CASING TUBING OR LINER		SIZE MAKE WT. & CR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT		REMARKS CONFIDENTIAL TIGHT HOLE																																																																																																																															
SIGNATURE OF OPERATOR'S REPRESENTATIVE										SIGNATURE OF CONTRACTOR'S TOOL PUSHER																																																																																																																																											
TIME DISTRIBUTION-HOURS										DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD										FOOTAGE										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																																							
RIG UP & TEAR DOWN										1 STANDS D.P. 40.84 FT.										BIT NO. 10										TIME 1200										FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
DRILLING ACTUAL										2 SINGLES D.P. 62.88 FT.										SIZE 8 3/4										WEIGHT 8.5										FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
REAMING										3 D.C. 6 3/4										MFG. CHRIS										VISC.-SEC 34										FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
CONDITIONING MUD & CIRCULATING										12 D.C. 6 3/4										TYPE 9										W.L.-C.C.										FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
TRIPS										12 D.C. 6 3/4										NOZZLE										FLTR. CK.										FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
LUBRICATE RIG										3 STB. BODY O.D.										SER. NO. ECR7108										SD. CONT. %										FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
DEVIATION SURVEY										3 STB. BODY O.D.										DEPTH OUT 687										PRESSURE GRADIENT										FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
TEST S.O.P.										3 STB. BODY O.D.										DEPTH IN 675																				FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
CUT OFF DRILLING LINE										3 STB. BODY O.D.										TOTAL FTG. 12										MUD & CHEMICALS ADDED										FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
REPAIR RIG										3 STB. BODY O.D.										TOTAL HR. RUN 3										COND. OF BIT 1000										GEL 75% CMC 15%										FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.									
CORING										3 STB. BODY O.D.										REAMER NO.										DRILLER										FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
WIRE LINE LOGGING										3 STB. BODY O.D.										REAMER TYPE																				FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
RUNNING CASING & CEMENTING										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
WAITING ON CEMENT										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
DRILL STEM TEST										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
OTHER										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
FISHING										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
COMPLETION WORK										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
A. PERFORATING										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
B. TUBING TRIPS										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
C. SWABBING										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
D. TESTING										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
E. ADDITIONAL										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
TOTALS										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
TIME SUMMARY (OFFICE USE ONLY)										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
DAY WORK										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
HRS. W/DP										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
HRS. W/DP										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
HRS. STANDBY										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
TOTAL DAY WORK										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
WIRE LINE RECORD										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
REEL NO.										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
NO. OF LINES										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
FEET SLIPPED										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
FEET CUT OFF										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
PRESENT LENGTH										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
TON M. OR TRIPS SINCE LAST CUT										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
CUMULATIVE TON M. OR TRIPS										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
NO. OF DAYS FROM SPUD										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			
CUMULATIVE ROTATING HRS.										3 STB. BODY O.D.																														FROM TO										DR. D R.M. R CORE.C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO. LINER SIZE S.P.M.										PUMP NO. LINER SIZE S.P.M.										METHOD RUN SOLID PAPER-L.P. CON'D.C.																			

DAILY DRILLING REPORT										REPORT NO.										DATE																																																																																																																																																					
OPERATOR ATLANTICRICHFIELDCANADALTD.										LEASE ARCO CLARKE MTN RIVER 47-H										WELL NO. 47-100 FIELD OR DIST. ARCO COUNTY ALBERTA STATE CANADA																																																																																																																																																					
CONTRACTOR REGENT DRILLING										RIG NO. 11										PUMPS NO. 1 MANUFACTURER PHISCO TYPE D-300 STROKE LENGTH 14" NO. 2 MANUFACTURER PHISCO TYPE D-175 STROKE LENGTH 11"																																																																																																																																																					
SIGNATURE OF OPERATOR'S REPRESENTATIVE										SIGNATURE OF CONTRACTOR'S TOOL PUSHER										LAST CASING TUBING OR LINER 4"																																																																																																																																																					
TIME DISTRIBUTION-HOURS										NO. 2 DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD										FOOTAGE										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO.										PUMP NO.										METHOD RUN																																																											
MORN DAY EVE										STANDS D.P. 185.21 FT.										BIT NO. 1										TIME 2AM 4AM 6AM										FROM 667 TO 675										DR. D R.M. R. CORE-C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO.										PUMP NO.										METHOD RUN																																							
BIG UP & TEAR DOWN										SINGLES D.P. 8.5 FT.										SIZE 8.5										WEIGHT 8.5										VISC-SEC 30										W.L.-CC. 36										FLTR. CK. 40										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION									
DRILLING ACTUAL										D.C. 6.5										MFG. SEC										VISC-SEC 30										W.L.-CC. 36										FLTR. CK. 40										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																			
REAMING										I.D. O.D. 90.51 FT.										TYPE MANUS										VISC-SEC 30										W.L.-CC. 36										FLTR. CK. 40										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																			
CONDITIONING MUD & CIRCULATING										I.D. O.D. 358.55 FT.										NOZZLE NO. 3 SIZE 12										FLTR. CK. 40										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
TRIPS										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
LUBRICATE RIG										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
DEVIATION SURVEY										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
TEST S.O.P.										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
CUT OFF DRILLING LINE										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
REPAIR RIG										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
CORDING										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
WIRE LINE LOGGING										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
RUNNING CASING & CEMENTING										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
WAITING ON CEMENT										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
DRILL STEM TEST										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
OTHER										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
FISHING										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
A. PERFORATING										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
B. TUBING TRIPS										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
C. SWABBING										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
D. TESTING										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
E. ADDITIONAL										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
TOTALS										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
TIME SUMMARY (OFFICE USE ONLY)										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
DAY WORK										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
HRS. W/DP										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
HRS. WO/DP										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
HRS. STANDBY										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
TOTAL DAY WORK										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
WIRE LINE RECORD										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
REEL NO.										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
NO. OF LINES										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
FEET SLIPPED										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
FEET CUT OFF										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
PRESENT LENGTH										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
TON MI. OR TRIPS SINCE LAST CUT										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
CUMULATIVE TON MI. OR TRIPS										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
NO. OF DAYS FROM SPUD										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
CUMULATIVE ROTATING HRS.										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
TOTAL										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
WT. OF STRING										STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
NO. 1 DRILLING ASSEMBLY AT END OF TOUR										BIT NO. 1										TIME 430										FROM 675 TO 687										DR. D R.M. R. CORE-C										CORE NO.										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM										WT. ON BIT 1000#										PUMP PRESS										PUMP NO.										PUMP NO.										METHOD RUN																																																	
SINGLES D.P. 70.84 FT.										SIZE 10										WEIGHT 430										VISC-SEC 26										W.L.-CC. 36										FLTR. CK. 40										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																			
D.C. 6.5										MFG. SEC										VISC-SEC 26										W.L.-CC. 36										FLTR. CK. 40										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
I.D. O.D. 90.51 FT.										TYPE MANUS										VISC-SEC 26										W.L.-CC. 36										FLTR. CK. 40										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																													
STB. BODY O.D. 358.55 FT.										NOZZLE NO. 3 SIZE 12										FLTR. CK. 40										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																																	
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION										DEPTH										DEV.										DIRECTION																																							
STB. BODY O.D. 358.55 FT.										SER. NO. 371494										SD. CONT. %										PRESSURE GRADIENT										DEVIATION RECORD										DEPTH																																																																																																																							

[illegible]

DAILY DRILLING REPORT										REPORT NO.		DATE DEC 11/91																											
OPERATOR ATLANTIC RICH FIELD CANADA LTD.										LEASE ARCO CLARK MTR RIVER 47H		WELL NO. EXPLORATORY		COUNTY NUWT		STATE CANADA																							
CONTRACTOR REGENT DRILLING										RIG NO. 11		DRILL PIPE NO. SIZE		TOOL JOINT O.D.		PUMPS		LAST CASING TUBING OR LINER		SIZE MAKE		WT. & GR. NO. JOINTS		FEET RKB. TO CSG. HD.		SET AT REMARKS													
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>										SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>		NO. MANUFACTURER		TYPE STROKE LENGTH		1. EMSCO D-300 14		2. EMSCO D-175 12		13 3/4		9 5/8		TIGHT HOLE															
TIME DISTRIBUTION-HOURS										NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN					
RIG UP & TEAR DOWN										STANDS D.P.		BIT NO.		TIME		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
DRILLING ACTUAL										SINGLES D.P.		SIZE		WEIGHT		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
REAMING										D.C.		MFG.		VISC-SEC		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
CONDITIONING MUD & CIRCULATING										L.D. O.D.		FT.		W.L.-C.C.		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
TRIPS										D.C.		NO.		FLTR. CK.		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
LUBRICATE RIG										L.D. O.D.		FT.		PH		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
DEVIATION SURVEY										STB. BODY O.D.		FT.		SD. CONT. %		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
TEST B.O.P.										STB. BODY O.D.		FT.		PRESSURE GRADIENT		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
CUT OFF DRILLING LINE										RMR. BODY O.D.		FT.		DEPTH OUT		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
REPAIR RIG										SUBS O.D.		FT.		DEPTH IN		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
CORING										BIT OR C.B.		FT.		TOTAL FTG.		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
WIRE LINE LOGGING										KELLY DOWN		FT.		COND. OF BIT		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
RUNNING CASING & CEMENTING										TOTAL		FT.		REAMER NO.		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
WAITING ON CEMENT										WT. OF STRING		LBS.		REAMER TYPE		DRILLER		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
DRILL STEM TEST										NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
OTHER WORK										STANDS D.P.		BIT NO.		TIME		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
FISHING										SINGLES D.P.		SIZE		WEIGHT		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
COMPLETION WORK										D.C.		MFG.		VISC-SEC		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
A. PERFORATING										L.D. O.D.		FT.		W.L.-C.C.		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
B. TUBING TRIPS										D.C.		NO.		FLTR. CK.		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
C. SWABBING										L.D. O.D.		FT.		PH		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
D. TESTING										STB. BODY O.D.		FT.		SD. CONT. %		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
E. ADDITIONAL										STB. BODY O.D.		FT.		PRESSURE GRADIENT		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
TOTALS										RMR. BODY O.D.		FT.		DEPTH OUT		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
TIME SUMMARY (OFFICE USE ONLY)										SUBS O.D.		FT.		DEPTH IN		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
DAY WORK										BIT OR C.B.		FT.		TOTAL FTG.		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
MRS. W/DP										KELLY DOWN		FT.		COND. OF BIT		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
MRS. WO/DP										TOTAL		FT.		REAMER NO.		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
MRS. STANDBY										WT. OF STRING		LBS.		REAMER TYPE		DRILLER		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
WIRE LINE RECORD										NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
REEL NO.										STANDS D.P.		BIT NO.		TIME		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
NO. OF LINES										SINGLES D.P.		SIZE		WEIGHT		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
FEET SLIPPED										D.C.		MFG.		VISC-SEC		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
FEET CUT OFF										L.D. O.D.		FT.		W.L.-C.C.		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
PRESENT LENGTH										D.C.		NO.		FLTR. CK.		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
TON M. OR TRIPS SINCE LAST CUT										L.D. O.D.		FT.		PH		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
CUMULATIVE TON M. OR TRIPS										STB. BODY O.D.		FT.		SD. CONT. %		FROM		TO		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
NO. OF DAYS FROM SPUD										STB. BODY O.D.		FT.		PRESSURE GRADIENT																									

DAILY DRILLING REPORT										REPORT NO.		DATE DEC 10/71																																					
OPERATOR ATLANTIC RICHFIELD CANADA LTD.										LEASE ARCO LARRE WITH RIVER 4TH		WELL NO. EXPLORATORY		FIELD OR DIST. N.W.T.		COUNTY N.W.T.		STATE CANADA																															
CONTRACTOR REGENT DRILLING										RIG NO. 11		DRILL PIPE NO. 1 SIZE 4" TYPE THD. FH		TOOL JOINT O.D.		PUMPS NO. 1 MANUFACTURER EMSCO TYPE D-300 STROKE LENGTH 14 NO. 2 MANUFACTURER EMSCO TYPE D-175 STROKE LENGTH 12		LAST CASING TUBING OR LINER SIZE 12" MAKE 94		WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT		REMARKS CONFIDENTIAL TIGHT HOLE																											
SIGNATURE OF OPERATOR'S REPRESENTATIVE J.R. Bell										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 S.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. STABBING 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 LIFT SIZE FEET SLIPPED FEET CUT OFF PRESENT LENGTH TON M.L. OR TRIPS SINCE LAST CUT CUMULATIVE TON M.L. OR TRIPS NO. OF DAYS FROM SPUD CUMULATIVE ROTATING HRS.										MORNING TOUR NO. DRILLING ASSEMBLY AT END OF TOUR STANDS D.P. FT. BIT NO. TIME WEIGHT SINGLES D.P. FT. SIZE D.C. MFG. VISC.-SEC I.D. O.D. FT. TYPE W.L.-C.C. D.C. NOZZLE NO. FLTR. CK. I.D. O.D. FT. 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. TYPE AMT. TYPE AMT. TOTAL HR. RUN KELLY DOWN FT. COND. OF BIT TOTAL FT. REAMER NO. WT. OF STRING LBS. REAMER TYPE DRILLER										DAY TOUR NO. DRILLING ASSEMBLY AT END OF TOUR STANDS D.P. FT. BIT NO. TIME WEIGHT SINGLES D.P. FT. SIZE D.C. MFG. VISC.-SEC I.D. O.D. FT. TYPE W.L.-C.C. D.C. NOZZLE NO. FLTR. CK. I.D. O.D. FT. 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. TYPE AMT. TYPE AMT. TOTAL HR. RUN KELLY DOWN FT. COND. OF BIT TOTAL FT. REAMER NO. WT. OF STRING LBS. REAMER TYPE DRILLER										EVENING TOUR NO. DRILLING ASSEMBLY AT END OF TOUR STANDS D.P. FT. BIT NO. TIME WEIGHT SINGLES D.P. FT. SIZE D.C. MFG. VISC.-SEC I.D. O.D. FT. TYPE W.L.-C.C. D.C. NOZZLE NO. FLTR. CK. I.D. O.D. FT. 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. TYPE AMT. TYPE AMT. TOTAL HR. RUN KELLY DOWN FT. COND. OF BIT TOTAL FT. REAMER NO. WT. OF STRING LBS. REAMER TYPE DRILLER										FOOTAGE FROM TO DR-D RMR-R CORE-C CORE NO. FORMATION (SHOW CORE RECOVERY) ROTARY RPM WT. ON BIT 1000# PUMP PRESS PUMP NO. LINER SIZE S.P.M. PUMP NO. LINER SIZE S.P.M. METHOD RUN SOL-S PART-P COM-C DEVIATION RECORD DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION TIME LOG FROM TO ELAPSED TIME DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS 12 200 8 12.00 8 100 8 RIG TO 4 HEND UP 12 18 12 THRU OUT PUMPS & CLEAN CELLAR CUT OFF 13" CONDUCTOR Casing INSTALL CASING POUL. DOWN 154' 1 2 1/2" FLANGE STUCK 2" DOWN CHAMBER BOYS									

DAILY DRILLING REPORT										REPORT NO.										DATE									
OPERATOR ATLANTIC RICHFIELD CANADA LTD.										LEASE AREO CLARKE DTH AREA 47-H										DATE Dec 9-71									
CONTRACTOR RECENT DRILLING										WELL NO. 11										FIELD OR DIST. FAIRBANKS, ALY									
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>										SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>										COUNTY NWT									
STATE CANADA										TIGHT HOLE CONFIDENTIAL																			
TIME DISTRIBUTION - HOURS										DRILLING ASSEMBLY										BIT RECORD									
NO. DRILLING ASSEMBLY										NO. DRILLING ASSEMBLY										NO. DRILLING ASSEMBLY									
STANDS D.P.										STANDS D.P.										STANDS D.P.									
SINGLES D.P.										SINGLES D.P.										SINGLES D.P.									
D.C.										D.C.										D.C.									
L.D. Q.D.										L.D. Q.D.										L.D. Q.D.									
NOZZLE										NOZZLE										NOZZLE									
SER. NO.										SER. NO.										SER. NO.									
DEPTH OUT										DEPTH OUT										DEPTH OUT									
DEPTH IN										DEPTH IN										DEPTH IN									
TOTAL FTG.										TOTAL FTG.										TOTAL FTG.									
TOTAL NR. RUN										TOTAL NR. RUN										TOTAL NR. RUN									
CONDO. OF BIT										CONDO. OF BIT										CONDO. OF BIT									
REARER NO.										REARER NO.										REARER NO.									
REARER TYPE										REARER TYPE										REARER TYPE									
DRILLER										DRILLER										DRILLER									
FOOTAGE										FOOTAGE										FOOTAGE									
FROM										FROM										FROM									
TO										TO										TO									
D.B.D.										D.B.D.										D.B.D.									
CORE NO.										CORE NO.										CORE NO.									
FORMATION (SHOW CORE RECOVERY)										FORMATION (SHOW CORE RECOVERY)										FORMATION (SHOW CORE RECOVERY)									
ROTARY										ROTARY										ROTARY									
WT. ON BIT										WT. ON BIT										WT. ON BIT									
PUMP PRESS.										PUMP PRESS.										PUMP PRESS.									
PUMP NO.										PUMP NO.										PUMP NO.									
PUMP NO.										PUMP NO.										PUMP NO.									
METHOD										METHOD										METHOD									
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
12:00 12:15 4										12:00 12:15 4										12:00 12:15 4									
12:15 12:45 4										12:15 12:45 4										12:15 12:45 4									
6:45 9:00 17										6:45 9:00 17										6:45 9:00 17									
STABAR OUT OFF HOLE										STABAR OUT OFF HOLE										STABAR OUT OFF HOLE									
PUMP IN HOLE										PUMP IN HOLE										PUMP IN HOLE									
SURGEY + BLOW KELLY										SURGEY + BLOW KELLY										SURGEY + BLOW KELLY									
PULL OUT TO RUN CASING										PULL OUT TO RUN CASING										PULL OUT TO RUN CASING									
RIG TO RUN CASING										RIG TO RUN CASING										RIG TO RUN CASING									
W/CN 2000										W/CN 2000										W/CN 2000									
RIG - RUN CASING										RIG - RUN CASING										RIG - RUN CASING									
PUMPING 9 1/2" Casing - 20000 LBS (20000)										PUMPING 9 1/2" Casing - 20000 LBS (20000)										PUMPING 9 1/2" Casing - 20000 LBS (20000)									
RIG UP, REPAIR CASING & GRINDING WATER IN TANK										RIG UP, REPAIR CASING & GRINDING WATER IN TANK										RIG UP, REPAIR CASING & GRINDING WATER IN TANK									
+ CIRCULATING HOLE										+ CIRCULATING HOLE										+ CIRCULATING HOLE									
PUMPED 10 PPS. WATER, RIGGED UP & RUN RIG & PUMPED										PUMPED 10 PPS. WATER, RIGGED UP & RUN RIG & PUMPED										PUMPED 10 PPS. WATER, RIGGED UP & RUN RIG & PUMPED									
324 5/8" Casing - 20000 LBS (20000)										324 5/8" Casing - 20000 LBS (20000)										324 5/8" Casing - 20000 LBS (20000)									
TOP DRILL AND REPAIR TO RUN 1/2" 17 1/2" WATER (17 1/2")										TOP DRILL AND REPAIR TO RUN 1/2" 17 1/2" WATER (17 1/2")										TOP DRILL AND REPAIR TO RUN 1/2" 17 1/2" WATER (17 1/2")									
FIRST Casing (17 1/2" 17 1/2" 17 1/2")										FIRST Casing (17 1/2" 17 1/2" 17 1/2")										FIRST Casing (17 1/2" 17 1/2" 17 1/2")									
PUMPED BACK - FIRST Casing OK. GOOD SURFACE CEMENTS										PUMPED BACK - FIRST Casing OK. GOOD SURFACE CEMENTS										PUMPED BACK - FIRST Casing OK. GOOD SURFACE CEMENTS									
11:15 12:00 17										11:15 12:00 17										11:15 12:00 17									
W/CN 2000										W/CN 2000										W/CN 2000									
WIRE LINE RECORD										WIRE LINE RECORD										WIRE LINE RECORD									
REEL NO.										REEL NO.										REEL NO.									
NO. OF LINES										NO. OF LINES										NO. OF LINES									
FEET CLIPPED										FEET CLIPPED										FEET CLIPPED									
FEET CUT OFF										FEET CUT OFF										FEET CUT OFF									
PRESENT LENGTH										PRESENT LENGTH										PRESENT LENGTH									
TOWED OR TRIPS										TOWED OR TRIPS										TOWED OR TRIPS									
SINCE LAST CUT										SINCE LAST CUT										SINCE LAST CUT									
CUMULATIVE										CUMULATIVE										CUMULATIVE									
TOWED OR TRIPS										TOWED OR TRIPS										TOWED OR TRIPS									
NO. OF DAYS										NO. OF DAYS										NO. OF DAYS									
FROM SPUD										FROM SPUD										FROM SPUD									
CUMULATIVE										CUMULATIVE										CUMULATIVE									
ROTATING HBL										ROTATING HBL										ROTATING HBL									

DATE _____

8-1971

[illegible]

12-8-71

DAILY DRILLING REPORT				REPORT NO.	DATE																																																						
OPERATOR ATLANTIC RICHFIELD CANADA LTD.				LEASE HARPO CLARKE MTH RD-47-11	WELL NO.	FIELD OR DIST.	COUNTY	STATE																																																			
CONTRACTOR W. S. D. Drilling		RIG NO. 11	DRILL PIPE STRING NO. SIZE	TOOL JOINT O.D.	PUMPS NO. MANUFACTURER TYPE D STROKE LENGTH		LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKS. TO CSG. NO.	SET AT	REMARKS																																												
SIGNATURE OF OPERATOR'S REPRESENTATIVE L. R. Bell		SIGNATURE OF CONTRACTOR'S TOOL PUSHER E. C. V. V. H.		1. Emasco D-175											CONFIDENTIAL																																												
SIGNATURE OF OPERATOR'S REPRESENTATIVE L. R. Bell		SIGNATURE OF CONTRACTOR'S TOOL PUSHER E. C. V. V. H.		2.		3.									TIGHT HOLE																																												
TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR				BIT RECORD				MUD RECORD				FOOTAGE				FORMATION (SHOW CORE RECOVERY)				ROTARY RPM				WT. ON BIT 1000#				PUMP PRESS				PUMP NO.				PUMP NO.				METHOD RUN															
RIG UP & TEAR DOWN				STANDS D.P. FT.				BIT NO.				TIME				FROM				TO				CORE NO.				FORMATION				ROTARY RPM				WT. ON BIT 1000#				PUMP PRESS				PUMP NO.				PUMP NO.				METHOD RUN							
DRILLING ACTUAL				SINGLES D.P. FT.				SIZE				WEIGHT				VISC-SEC				W.L.-C.C.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.			
REAMING				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
CONDITIONING MUD & CIRCULATING				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
TRIPS				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
LUBRICATE RIG				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
DEVIATION SURVEY				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
TEST B.O.P.				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
CUT OFF DRILLING LINE				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
REPAIR RIG				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
CORING				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
WIRE LINE LOGGING				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
RUNNING CASING & CEMENTING				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
WAITING ON CEMENT				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
DRILL STEM TEST				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
OTHER				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
FISHING				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
A. PERFORATING				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
B. TUBING TRIPS				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
C. SWABBING				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
D. TESTING				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
E. ADDITIONAL				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
TOTALS				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
TIME SUMMARY (OFFICE USE ONLY)				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
DAY WORK				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
HRS. W/DP				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
HRS. WO/DP				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
HRS. STANDBY				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
TOTAL DAY WORK				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
WIRE LINE RECORD				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
REEL NO.				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
NO. OF LINES				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
FEET SLIPPED				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
FEET CUT OFF				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
PRESENT LENGTH				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
TON MI. OR TRIPS SINCE LAST CUT				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
CUMULATIVE TON MI. OR TRIPS				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
NO. OF DAYS FROM SPUD				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											
CUMULATIVE ROTATING HRS.				D.C.				NOZZLE				NO.				FLTR. CK.				PH				SD. CONT. %				PRESSURE GRADIENT				MUD & CHEMICALS ADDED				TYPE				AMT.				TYPE				AMT.											

12-7-71

DAILY DRILLING REPORT										REPORT NO.		DATE																							
OPERATOR ATLANTIC RICH FIELD CANADA LTD.										LEASE MACO CLARKE		DATE 12-7-71																							
CONTRACTOR ATLANTIC RICH FIELD CANADA LTD.										WELL NO. MTN RIVER 47-H		FIELD OR DIST. Exploratory		COUNTY NWT		STATE CANADA																			
SIGNATURE OF OPERATOR'S REPRESENTATIVE J. R. Bell										SIGNATURE OF CONTRACTOR'S TOOL PUSHER A. C. Bell		PUMPS NO. 1 MANUFACTURER 0308PE TYPE 12		LAST CASING TUBING OR LINER		REMARKS CONFIDENTIAL TIGHT HOLE																			
TIME DISTRIBUTION - HOURS										NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN					
RIG UP & TEAR DOWN										STANDS D.P.		BIT NO.		TIME		FROM		TO		CORE NO.		DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
DRILLING ACTUAL										SINGLES D.P.		SIZE		WEIGHT		328		430		1		280		10		10		10		10		10			
REAMING										D.C.		MFG.		VISC.-SEC		330		530		2		34		10		10		10		10		10			
CONDITIONING MUD & CIRCULATING										I.D. O.D.		TYPE		W.L.-C.C.		330		530		2		34		10		10		10		10		10			
TRIPS										D.C.		NOZZLE		FLTR. CK.		330		530		2		34		10		10		10		10		10			
LUBRICATE RIG										STB. BODY O.D.		SER. NO.		SD. CONT. %		330		530		2		34		10		10		10		10		10			
DEVIATION SURVEY										STB. BODY O.D.		DEPTH OUT		PRESSURE GRADIENT		330		530		2		34		10		10		10		10		10			
TEST B.O.P.										STB. BODY O.D.		DEPTH IN		MUD & CHEMICALS ADDED		330		530		2		34		10		10		10		10		10			
CUT OFF DRILLING LINE										SUBS		TOTAL FTG.		TYPE		330		530		2		34		10		10		10		10		10			
REPAIR RIG										BIT OR C.B.		TOTAL HR. RUN		COND. OF BIT		330		530		2		34		10		10		10		10		10			
CORDING										KELLY DOWN		REAMER NO.		DRILLER		330		530		2		34		10		10		10		10					
WIRE LINE LOGGING										TOTAL		REAMER TYPE		DRILLER		330		530		2		34		10		10		10		10					
RUNNING CASING & CEMENTING										WT. OF STRING		LBS.		DRILLER		330		530		2		34		10		10		10		10					
WAITING ON CEMENT										NO.		DRILLING ASSEMBLY AT END OF TOUR		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN					
DRILL STEM TEST										STANDS D.P.		BIT NO.		TIME		FROM		TO		CORE NO.		DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
OTHER										SINGLES D.P.		SIZE		WEIGHT		328		430		1		280		10		10		10		10		10			
FISHING										D.C.		MFG.		VISC.-SEC		330		530		2		34		10		10		10		10		10			
A. PERFORATING										I.D. O.D.		TYPE		W.L.-C.C.		330		530		2		34		10		10		10		10		10			
B. TUBING TRIPS										D.C.		NOZZLE		FLTR. CK.		330		530		2		34		10		10		10		10		10			
C. SWABBING										STB. BODY O.D.		SER. NO.		SD. CONT. %		330		530		2		34		10		10		10		10		10			
D. TESTING										STB. BODY O.D.		DEPTH OUT		PRESSURE GRADIENT		330		530		2		34		10		10		10		10		10			
E. ADDITIONAL										SUBS		TOTAL FTG.		MUD & CHEMICALS ADDED		330		530		2		34		10		10		10		10					
TOTALS										BIT OR C.B.		TOTAL HR. RUN		COND. OF BIT		330		530		2		34		10		10		10		10		10			
TIME SUMMARY (OFFICE USE ONLY)										KELLY DOWN		REAMER NO.		DRILLER		330		530		2		34		10		10		10		10		10			
DAY WORK										TOTAL		REAMER TYPE		DRILLER		330		530		2		34		10		10		10		10		10			
HRS. W/DP										WT. OF STRING		LBS.		DRILLER		330		530		2		34		10		10		10		10		10			
HRS. WO/DP										NO.		DRILLING ASSEMBLY AT END OF TOUR		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN					
HRS. STANDBY										STANDS D.P.		BIT NO.		TIME		FROM		TO		CORE NO.		DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
TOTAL DAY WORK										SINGLES D.P.		SIZE		WEIGHT		328		430		1		280		10		10		10		10		10		10	
WIRE LINE RECORD										D.C.		MFG.		VISC.-SEC		330		530		2		34		10		10		10		10		10			
REEL NO.										I.D. O.D.		TYPE		W.L.-C.C.		330		530		2		34		10		10		10		10		10			
NO. OF LINES										D.C.		NOZZLE		FLTR. CK.		330		530		2		34		10		10		10		10		10			
FEET SLIPPED										STB. BODY O.D.		SER. NO.		SD. CONT. %		330		530		2		34		10		10		10		10		10			
FEET CUT OFF										STB. BODY O.D.		DEPTH OUT		PRESSURE GRADIENT		330		530		2		34		10		10		10		10		10			
PRESENT LENGTH										STB. BODY O.D.		DEPTH IN		MUD & CHEMICALS ADDED		330		530		2		34		10		10		10		10		10			
TON M. OR TRIPS SINCE LAST CUT										SUBS		TOTAL FTG.		TYPE		330		530		2		34		10		10		10		10		10			
CUMULATIVE TON M. OR TRIPS										BIT OR C.B.		TOTAL HR. RUN		COND. OF BIT		330		530		2		34		10		10		10		10		10			
NO. OF DAYS FROM SPUD										KELLY DOWN		REAMER NO.		DRILLER		330		530		2		34		10		10		10		10		10			
CUMULATIVE ROTATING HRS.										TOTAL		REAMER TYPE		DRILLER		330		530		2		34		10		10		10		10		10			
TOTAL										WT. OF STRING		LBS.		DRILLER		330		530		2		34		10		10		10		10		10			

DAILY DRILLING REPORT										REPORT NO.		DATE																											
OPERATOR ATLANTIC RICHFIELD CANADA LTD.										LEASE ARC0 CLARK Mtn Area 4-1-11		DATE 2-6-71																											
CONTRACTOR REGENT DRILLING										RIG NO. 11		WELL NO.		FIELD OR DIST.		COUNTY		STATE																					
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>										SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>		PUMPS		LAST CASING TUBING OR LINER		SIZE		MAKE		WT. & GR.		NO. JOINTS		FEET		RKB. TO CSG. NO.		SET AT		REMARKS									
TIME DISTRIBUTION—HOURS										NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D R.M.-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
RIG UP & TEAR DOWN										STANDS D.P.		FT.		BIT NO.		TIME		WEIGHT		FROM		TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
DRILLING ACTUAL										SINGLES D.P.		FT.		SIZE		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
REAMING										D.C.		FT.		MFG.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
CONDITIONING MUD & CIRCULATING										I.D. O.D.		FT.		TYPE		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
TRIPS										I.D. O.D.		FT.		NOZZLE		NO.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
LUBRICATE RIG										STR. BODY O.D.		FT.		SER. NO.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
DEVIATION SURVEY										STR. BODY O.D.		FT.		DEPTH OUT		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
TEST B.O.P.										RMR. BODY O.D.		FT.		DEPTH IN		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
CUT OFF DRILLING LINE										SUBS O.D.		FT.		TOTAL FTG.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
REPAIR RIG										BIT OR C.B.		FT.		TOTAL HR. RUN		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
CORING										KELLY DOWN		FT.		COND. OF BIT		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
WIRE LINE LOGGING										TOTAL		FT.		REAMER NO.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
RUNNING CASING & CEMENTING										WT. OF STRING		LBS.		REAMER TYPE		DRILLER		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
WAITING ON CEMENT										NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D R.M.-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
DRILL STEM TEST										STANDS D.P.		FT.		BIT NO.		TIME		WEIGHT		FROM		TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
OTHER										SINGLES D.P.		FT.		SIZE		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
FISHING										D.C.		FT.		MFG.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
A. PERFORATING										I.D. O.D.		FT.		TYPE		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
B. TUBING TRIPS										I.D. O.D.		FT.		NOZZLE		NO.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
C. SWABBING										STR. BODY O.D.		FT.		SER. NO.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
D. TESTING										STR. BODY O.D.		FT.		DEPTH OUT		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
E. ADDITIONAL										RMR. BODY O.D.		FT.		DEPTH IN		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
TOTALS										SUBS O.D.		FT.		TOTAL FTG.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
TIME SUMMARY (OFFICE USE ONLY)										BIT OR C.B.		FT.		TOTAL HR. RUN		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
DAY WORK										KELLY DOWN		FT.		COND. OF BIT		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
HRS. W/DP										TOTAL		FT.		REAMER NO.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
HRS. WO/DP										WT. OF STRING		LBS.		REAMER TYPE		DRILLER		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
HRS. STANDBY										NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D R.M.-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
TOTAL DAY WORK										STANDS D.P.		FT.		BIT NO.		TIME		WEIGHT		FROM		TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
WIRE LINE RECORD										SINGLES D.P.		FT.		SIZE		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
REEL NO.										D.C.		FT.		MFG.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
NO. OF LINES										I.D. O.D.		FT.		TYPE		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
SIZE										I.D. O.D.		FT.		NOZZLE		NO.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
FEET SLIPPED										STR. BODY O.D.		FT.		SER. NO.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
FEET CUT OFF										STR. BODY O.D.		FT.		DEPTH OUT		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
PRESENT LENGTH										RMR. BODY O.D.		FT.		DEPTH IN		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
TON MI. OR TRIPS SINCE LAST CUT										SUBS O.D.		FT.		TOTAL FTG.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
CUMULATIVE TON MI. OR TRIPS										BIT OR C.B.		FT.		TOTAL HR. RUN		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
NO. OF DAYS FROM SPUD										KELLY DOWN		FT.		COND. OF BIT		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
CUMULATIVE ROTATING HRS.										TOTAL		FT.		REAMER NO.		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION			
TOTAL										WT. OF STRING		LBS.		REAMER TYPE		DRILLER		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	

[illegible]

REPORT NO.

LOCATION								WIRE LINE RECORD			REEL NO.
LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	SIZE	NO. LINES	FT. SLIPPED	
									FT. CUT OFF	PRESENT LENGTH	
									TON MI. OR TRIPS SINCE LAST CUT		
									CUMULATIVE TON MI. OR TRIPS		

FOOTAGE		DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 +	PUMP PRESS	PUMP NO.		PUMP NO.		METHOD RUN
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	
17	139	R										
CONFIDENTIAL TIGHT HOLE												
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION		
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
12.00				START MOTORS ON D-175 PUMP Hook UP SAM								
				TO MUD LINES - WARM + PRIME D-175 PUM								
				FINISH RIGGING UP COLLAR SET								
2.30	4.30	2		REAM 12 1/2 HOLE TO 17"								
4.30	4.45	1/2		CLEAN + TIGHTEN UNION IN MUD LINE								
4.45	5.15	1/2		REAMING								
5.15	5.45	1/2		REPAIR SET MAIN MUD								
5.45	7.00	2 1/2		REAMING								
				DRILLER <i>LeB...</i>								

FOOTAGE		DR.-D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	RATORY RPM	WT. ON BIT 1000±	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN
FROM	TO											
DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION			
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
8 ⁰⁰	8:30	½		BLOW LINES & KELLY & TRIP OUT TO RUN CASING								
8 ³⁰				CUT BARREL OFF REAMER & RIG TO RUN CASING CUT OFF								
	12 ⁰⁰	12		CON BARREL & THAW OUT PUMP & WELD UP CCELLAR TET .								
12 ⁰⁰	2 ⁴⁵	2		RUN CASING & RIG UP CEMENTER & HEAD UP CASING								
2 ⁴⁵	3:15	½		RUN CEMENT & PUMP PLUG								
3:15	6:30	3 ¼		W.O.C.								
6:30				FEEL FOR CEMENT w/ 2" PIPE & FOUND CEMENT @ 6'								
	8 ⁰⁰	1 ½		& RIG TO RUN CEMENT.								
											DRILLER	J. J. Jones

[illegible]

APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE ARCO MTN RIVER	WELL NO.	API WELL NUMBER	DATE 12-2-71
OPERATOR ATLANTIC RICHFIELD	CONTRACTOR REGENT DRILLING		
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>L. R. Kelly</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>D. Colwell</i>	
D.P. SIZE	WT./FT.	GRADE	TOOL JT. O.D.
			TYPE THREAD
			STRING NO.
			PUMP NO.
			PUMP MANUFACTURER
			TYPE
			STROKE LENGTH

LOCATION LAT 65 46 MIN 23 SEC LONG 129 07.50	WIRE LINE RECORD	REEL NO.
SIZE	MAKE	WT. & GR.
		NO. JOINTS
		FEET
		RKB. TO CSO. HD.
		SET AT
FT. CUT OFF	PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT		
CUMULATIVE TON MI. OR TRIPS		

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	
1.	RIG UP AND TEAR DOWN				STB RMR	OD	FT.	MFG.		PRESSURE GRADIENT	
2.	DRILL ACTUAL				D.C. ID	OD	FT.	TYPE		VISC.-SEC.	
3.	REAMING				STB RMR	OD	FT.	JETS 1 3/4"		PV/YP	
4.	CORING				D.C. ID	OD	FT.	SER. NO.		GELS.	
5.	CONDITION MUD & CIRCULATE				STB RMR	OD	FT.	DEPTH OUT		WL.-CC'S	
6.	TRIPS							DEPTH IN		pH	
7.	LUBRICATE RIG							TOTAL FTG.		SOLIDS %	
8.	REPAIR RIG							TOTAL HRS. RUN			
9.	CUT OFF DRILLING LINE				STANDS DP	FT.		COND. 1/8" T/B GAGE		MUD & CHEMICALS ADDED	
10.	DEVIATION SURVEY				SINGLES DP	FT.		GPM/ PD-PSI		TYPE	AMT.
11.	WIRE LINE LOGS				KELLY DOWN	FT.					
12.	RUN CASING & CEMENT				TOTAL	FT.					
13.	WAIT ON CEMENT				WT. OF STRING	LBS.					
14.	NIPPLE UP B.O.P.										
15.	TEST B.O.P.										
16.	DRILL STEM TEST										
17.	PLUG BACK										
18.	SQUEEZE CEMENT										
19.	FISHING										
20.	DIR. WORK										
21.											
22.											
23.											
COMPLETION											
A. PERF'RTN											
B. TBG TRIPS											
C. TREATING											
D. SWABBING											
E. TESTING											
F. ADITN'L											
G.											
TOTALS											
DAY WORK TIME SUMMARY (OFFICE USE ONLY)											
HRS. W/CONTR. D.P.											
HRS. W/OPR. D.P.											
HRS. WO'D.P.											
HRS. STANDBY											
TOTAL DAY WORK											
NO. OF DAYS FROM SPUD											
CUMULATIVE ROTATING HRS.											
TOTAL MUD COST											

MORNING TOUR

DAY TOUR

EVENING TOUR

FOOTAGE		DR. D. RM. R. CORE. C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
DEVIATION RECORD											
TIME LOG		ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
FROM	TO										
12.00	8.00	8		DRILL CONDUCTOR HOLE WORK ON WATER LINES							
CONFIDENTIAL											
TIGHT HOLE											
DRILLER <i>J. Bayler</i>											
FOOTAGE											
FROM	TO	DR. D. RM. R. CORE. C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
								LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
DEVIATION RECORD											
TIME LOG		ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
FROM	TO										
				DRILL CONDUCTOR HOLE SET CONDUCTOR PIPE CEMENT W/ 35 SKS PERMAFROST CEMENT BUILD FUEL LINES TO PUMPS + REPAIR HEATER IN TOOL HOUSE. WORK ON WATER LINES + LINE FROM STAND PIPE TO MUD ROLL FOR GUNNING TANKS							
DRILLER <i>B. Lynch</i>											
FOOTAGE											
FROM	TO	DR. D. RM. R. CORE. C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
								LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
DEVIATION RECORD											
TIME LOG		ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
FROM	TO										
8.00	12.00	4		DRILL RAT HOLE START PUMP MOTOR WORK ON WATER LINES CHANGE OIL LINES ON PUMP MOTOR							
DRILLER <i>J. Bayler</i>											



DAILY DRILLING REPORT REPORT NO.

LEASE		WELL NO.	API WELL NUMBER	DATE					
ARCO MTN RIVER				12/1/71					
OPERATOR		CONTRACTOR							
ATLANTIC RICHFIELD		REGENT DRILLING							
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER							
L. R. Bell		D. Corbett							
D.P. SIZE	WT./FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
TIME DISTRIBUTION - HOURS									
CODE NO.	OPERATION	MORN.	DAY	EVE.					
1.	RIG UP AND TEAR DOWN								
2.	DRILL ACTUAL								
3.	REAMING								
4.	CORING								
5.	CONDITION MUD & CIRCULATE								
6.	TRIPS								
7.	LUBRICATE RIG								
8.	REPAIR RIG								
9.	CUT OFF DRILLING LINE								
10.	DEVIATION SURVEY								
11.	WIRE LINE LOGS								
12.	RUN CASING & CEMENT								
13.	WAIT ON CEMENT								
14.	NIPPLE UP B.O.P.								
15.	TEST B.O.P.								
16.	DRILL STEM TEST								
17.	PLUG BACK								
18.	SQUEEZE CEMENT								
19.	FISHING								
20.	DIR. WORK								
21.									
22.									
23.									
COMPLETION									
A. PERF'RT'N									
B. TBG TRIPS									
C. TREATING									
D. SWABBING									
E. TESTING									
F. ADDIT'N'L									
G.									
TOTALS									
DAY WORK TIME SUMMARY (OFFICE USE ONLY)									
HRS. W/CONTR. D.P.									
HRS. W/OPR. D.P.									
HRS. WO/D.P.									
HRS. STANDBY									
TOTAL DAY WORK									
NO. OF DAYS FROM SPUD									
CUMULATIVE ROTATING HRS.									
TOTAL MUD COST									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
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D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
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STANDS DP					WT. OF STRING LBS.				
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KELLY DOWN									
TOTAL									
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BIT					BIT NO.				
SIZE					TIME				
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D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
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KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
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FT. TYPE					VISC.-SEC.				
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D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
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TOTAL HRS. RUN					TOTAL HRS. RUN				
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TOTAL									
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FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
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KELLY DOWN									
TOTAL									
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SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
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STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
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SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
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D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
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KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
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KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
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SIZE					TIME				
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D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
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TOTAL									
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FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
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KELLY DOWN									
TOTAL									
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BIT					BIT NO.				
SIZE					TIME				
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FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
STB RMR OD					PV/YP				
D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
FT. DEPTH OUT					TOTAL FTG.				
TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.					DRILLING ASSEMBLY (At end of tour)				
BIT					BIT NO.				
SIZE					TIME				
STB RMR OD					WEIGHT				
D.C. ID OD					PRESSURE GRADIENT				
FT. TYPE					VISC.-SEC.				
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D.C. ID OD					GELS				
FT. SER. NO.					WL.-CC'S.				
STB RMR OD					PH				
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TOTAL HRS. RUN					TOTAL HRS. RUN				
COND. 1/8" 7/8" GAGE					MUD & CHEMICALS ADDED				
GPM/ PD-PSI					TYPE AMT. TYPE AMT.				
STANDS DP					WT. OF STRING LBS.				
SINGLES DP									
KELLY DOWN									
TOTAL									
NO.									

LEASE		WELL NO.	API WELL NUMBER		DATE
ARCO MTN RIVER					11/30/71
OPERATOR		CONTRACTOR			
ATLANTIC RICHFIELD		REGENT DRILLING			
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER			
<i>L. K. Bell</i>		<i>A. Corbett</i>			
D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
PUMP NO.	PUMP MANUFACTURER		TYPE		STROKE LENGTH
LOCATION					
LAT 65 46 MIN 23 SEC LONG 129 07 30					
WIRE LINE RECORD					
REEL NO.					
SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT					
FT. CUT OFF PRESENT LENGTH					
TON MI. OR TRIPS SINCE LAST CUT					
CUMULATIVE TON MI. OR TRIPS					
LAST CASING TUBING OR LINER					
SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT					
FT. CUT OFF PRESENT LENGTH					
TON MI. OR TRIPS SINCE LAST CUT					
CUMULATIVE TON MI. OR TRIPS					

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
1.	RIG UP AND TEAR DOWN				STB RMR	OD	FT. MFG.		PRESSURE GRADIENT
2.	DRILL ACTUAL				D.C. ID	OD	FT. TYPE		VISC.-SEC.
3.	REAMING				STB RMR	OD	FT. JETS 1/32"		PV/YP
4.	CORING				D.C. ID	OD	FT. SER. NO.		GELS.
5.	CONDITION MUD & CIRCULATE				STB RMR	OD	FT. DEPTH OUT		WL.-CC'S.
6.	TRIPS						DEPTH IN		pH
7.	LUBRICATE RIG						TOTAL FTG.		SOLIDS %
8.	REPAIR RIG						TOTAL HRS. RUN		
9.	CUT OFF DRILLING LINE				STANDS DP	FT.	COND. 1/8" T/B GAGE		MUD & CHEMICALS ADDED
10.	DEVIATION SURVEY				SINGLES DP	FT.	GPM/ PD-PSI		TYPE AMT. TYPE AMT.
11.	WIRE LINE LOGS				KELLY DOWN	FT.			
12.	RUN CASING & CEMENT				TOTAL	FT.			
13.	WAIT ON CEMENT				WT. OF STRING	LBS.			
14.	NIPPLE UP & O.P.								
15.	TEST B.O.P.								
16.	DRILL STEM TEST								
17.	PLUG BACK								
18.	SQUEEZE CEMENT								
19.	FISHING								
20.	DIR. WORK								
21.									
22.									
23.									
COMPLETION									
A. PERF'RTN									
B. TBG TRIPS									
C. TREATING									
D. SWABBING									
E. TESTING									
F. ADDIT'NL									
G.									
TOTALS									
DAY WORK TIME SUMMARY (OFFICE USE ONLY)									
HRS. W/CONTR. D.P.									
HRS. W/OPR. D.P.									
HRS. WD.D.P.									
HRS. STANDBY									
TOTAL DAY WORK									
NO. OF DAYS FROM SPUD									
CUMULATIVE ROTATING HRS.									
TOTAL MUD COST									

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000 +	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO										
DEVIATION RECORD											
TIME LOG		ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
FROM	TO										
8 00	6 00	10 00				FINISH SPOTTING BUILDINGS + WALKS HOOK UP SUCTIONS TO PUMPS. PUT UP PREFABS SHORTEN FALSE FLOOR ON SUB + REMODEL PREFAB FRAMES. FRAMES.					

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000 +	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO										
DEVIATION RECORD											
TIME LOG		ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
FROM	TO										

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000 +	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO										
DEVIATION RECORD											
TIME LOG		ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
FROM	TO										

