



Well Name Nom du puits Aquit Highland L I-23		Drilling Authority No. Autorisation de forage n° 648	
Field/Area Gisement/Région Highland Lake		Date Issued Date d'émission Jan. 8, 1973	
Location Emplacement	Unit Unité I-23-62-40-122-15	Section	Permit or Lease 4413
Latitude 62°32'44.66"		Longitude 122°19'08"	
U.W.L.R. N.R.U.E.P. 62.54574 -- 122.31889			
U.W.I. No. N.I.P. No. 300I236240122150			
File Microfilmed		Rig. Release Date Date de transfert de la tour de forage March 17, 1973	
Tour Sheets, Microfilmed		Status Statut Plugged for Thermal Recovery Obsrvn Well	
		Information Release Date Date de publication autorisée des informations March 17, 1975	

CHANGE OF NAME:
CHANGEMENT DE NOM:Change of Location
Changement de emplacement

INDEX	DATE RECEIVED RECU LE	INDEX
Application for a Drilling Authority	15-01-73 K	Demande d'autorisation de forage
Well Completion Data		Renseignements sur le forage d'un puits
Well History Report		Données chronologiques sur le puits
Application to Amend a Drilling Authority		Demande de modification d'une autorisation de forage
Application to Change a Well Name		Demande de changement du nom d'un puits
Application to Abandon a Well or Suspend Drilling		Demande d'abandon d'un puits ou de suspension du forage
Application to Alter Condition of a Well		Demande d'autorisation de modifier l'état d'un puits
Well History Supplement		Supplément aux données chronologiques sur le puits
Well Completion Data		Renseignements sur le forage d'un puits
Work-Over Report No.		Rapport de reconditionnement n°
Application to Commingle Production before Measurement		Demande d'autorisation de mélanger la production avant jaugeage
Data for Back Pressure Test on Natural Gas Wells		Données de calcul de la capacité de production d'un puits de gaz naturel — Méthode graphique n° 7
Data for Back Pressure Test on Natural Gas Wells		Données de calcul de la capacité de production d'un puits de gaz naturel — Méthode de Vitter
M.P.R. — Oil — Calculations		Calcul du T.M.P. (Taux maximal de production) de pétrole
New Oil Well Report		Rapport sur un nouveau puits de pétrole
New Gas Well Report		Rapport sur un nouveau puits de gaz naturel
Well Inspection Report		Rapport d'inspection de l'emplacement d'un puits
Rig Inspection Report		Rapport d'inspection d'une tour de forage
Battery Inspection Report		Rapport d'inspection d'une batterie de puits
Equipment Report		Rapport d'inspection des compteurs
Well Card		Fiche de puits
New Service Well Report		Rapport sur un nouveau puits de service
Strat Service Logs		Rapport mensuel des injections d'eau
Logs — Large scale		Diagrammes: Grande échelle
Logs — Small scale		Diagrammes: Petite échelle

Drilling Authority No. 648
Nº de l'autorisation de forage
Date issued Jan. 8/73
Date de délivrance

To be submitted in duplicate within thirty days after the completion, rework, abandonment, recompletion or suspension of every well.
 À présenter en double dans les trente jours suivant l'achèvement, le remaniement, l'abandon et le reconditionnement de chaque puits, ou après suspension.

Well Name & No. - Nom et n° du puits Aquit Highland L I-23		Permit No. - N° de permis 4413		Lease No. - N° de concession	
(Permitter, Licensee, Lessee) - (Défendeur de permis ou de licence, du concessionnaire) Aquitaine Company of Canada Ltd.		Exploratory Licence No. - N° de licence de sondage 1974			
(Operator) - (Exploitant) Aquitaine Company of Canada Ltd.		Exploratory Licence No. - N° de licence de sondage 1974			
LOCATION - EMPLACEMENT					
Unit - Unité I	Section 23	Grid - Étendue quadrillée 62-40, 122-15	Latitude 62°32'44.66"	Longitude 122°19'08"	
Unique Well Identifier - Code d'orateur			Universal Well Location Reference - Références universelles d'emplacement du puits		
3001236240122150			62.54574° N Lat and 122.31889° W Long		

	Date	Depth - Profondeur	Pool(s) Gisement(s)
Spudded Début des travaux	Mar 4/73		
Suspended Suspension des travaux			Interval(s) Open to Production Intervalle(s) de production
Resumed Operations Reprise des travaux			
Finished Drilling Forage terminé	Mar 13/73	2,735'	
Deepened Approfondissement			
Complete (Gas/Oil) Achèvement (Gaz/Pétrole)			
Abandoned Abandon			
Rig Released Fin des travaux	Mar 17/73	2,735'	

MINISTRY OF INDUSTRY AND COMMERCE
DEVELOPMENT
CONVENTION ENGINEER
SEP 4 1973
YELLOWKNIFE, N.W.T.

Elevation: Gr. 1507'
Altitude du sol

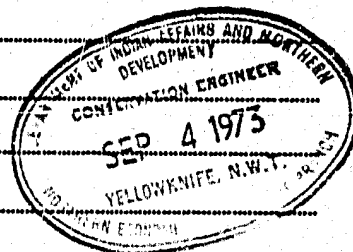
K.B. 1520'
du carré d'entraînement

Rig No. 4
N° de la tour de brage

Guthrie McLaren
Drilling Contractor
Entrepreneur en forage

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

10895



Casing Record - Tubing					
Casing Size (Inches) Diamètre (en pouces)	Grade Qualité	Weight Poids	Amount Longueur	Set or - Fixation à	Sacks of Cement and Additives Sacs de ciment et d'additifs
1. Casing 8-5/8"	K-55	24#	493'	506' K.B.	375 sx Oilwell + 2% CaCl ₂ + 102 sx Oilwell
2.					C + 3% CaCl ₂ in annulus
3.					to surface. approx. $\frac{1}{4}$
4.					bbl returns
5. Tubing 2-3/8"	-	4.7#	1519.81'	1533' K.B.	350 sx Oilwell + 8% Gel
6.					+ 55 sx neat cmt. Good returns.

Note: The well has been completed for temperature surveys for the Earth Physics Branch of the Department of Energy Mines and Resources, Ottawa.						LEADERS
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Geological Tops Sommet des formations	Elevation - Profondeur		Core Record - Carottes					
	Depths Sous le niveau du sol	Sub-Sea Sous le niveau de la mer	From - de	To - à	Rec. Récupérées	From - de	To - à	Rec. Recup.
Horn River	1,740'	- 220'	2342'	2372'	30'			
Nahanni	1,850'	- 330'						
Headless Shale	2,246'	- 726'						
Landry	2,273'	- 753'						
Manetoe	2,293'	- 773'						
Bear Rock Anhydrite	2,445'	- 925'						

[illegible]

CEMENTING RECORD (Plug, Squeeze, etc.) CIMENTATION (bouchon, 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
March 17	2735	2300	Bear Rock Formation 165 sacks oilwell C								
March 17	2300	1730	Nahanni Formation 210 sacks oilwell C								

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 la première obturation	F.S.I.B.H.P. Pression de fond à l'obturation définitive	I.F.B.H.P. Pression de fond au jaillissement	F.F.B.H.P. Pression de fond à l'écoulement définitif	L.H.P. Pression hydrostatique de début	F.H.P. Pression hydrostatique définitive	Remarks - Remarques
1	Mar. 15	Manetoe	2280	2340	90	60	90	--	478	37	220	1138	1138	Recovery: 200' salt water cut mud + 234' salt water

ANALYSIS — ANALYSE

Lab. No. No de laboratoire	Sample Echantillon	From - de	To - à	Source	Remarks - Remarques	PRESENT STATUS OF WELL ETAT ACTUEL DU PUIT			
E73-3492-1	Water	2280	2340	Manetoe	Recovery 200' salt water cut mud + 234' salt water	Oil Pétrole		Interval/Intervalle	
						Gas Gaz		Interval/Intervalle	
						Dry Sec	X	heat flow observation	
						Susp. Travaux sus.		well	

Company
Société

Aquitaine Company of Canada Ltd.

Signed by
Signé par

Mr. G. Kuhn de Chizelle, Drilling Superintendent
M. G. Kuhn de Chizelle, Drilling Superintendent

Date
Date

August 30, 1973

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

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



Drilling Authority No. 648

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

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

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

Name and number of well Aquit Highland L I-23
Location: Unit I Section 23 Grid 62-40-122-15
Latitude 62°32'44.66" N Longitude 122°19'08" W
From Established Reference Marker Unique Well Identifier 3001236240122150
Universal Well Location Reference 62.54574°N Lat. and 122.31889°W Long.
Permit No. 4413 Lease No.

Aquitaine Company of Canada Ltd.
(Permittee, Licensee, Lessee)

Date of commencement of proposed program March 16, 1973

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at N/A
Gas at N/A
Water at 2,280' - 2,340'
Total Depth 2,735' Date of last operations Rig Released @ 8:00 p.m., March 17/73.
Present condition of well completed for temperature surveys for the Earth Physics Branch of the Department of Energy Mines and Resources, Ottawa.

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. Csg 8-5/8"	24# K-55	493'	506' KB	375 sx Oilwell + 3% CaCl ₂ + 102 sx in the annulus.	None
2.					
3. Tbg 2-3/8"	4.7#	1519.81'	1533' KB	550 sx Oilwell + 8% Gel + 35 sx Neat	None
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
1	2735' - 2300'	Bear Rock	165 sacks	Plug down 0230 March 16, no feel.
2	2300' - 1730'	Nahanni	210 sacks	Plug down 0345 March 16

The following logs have been run DIL, FDC, SNP, BHCS

Other operations proposed

Operations to be carried out by Guthrie McLaren Drlg Contractor Licence No. 10895

Address 14630 119 Ave., EDMONTON, Alberta Address

Responsible Agent in field L. Mulholland

Dated at CALGARY, Alberta this 20th Day of March 1973

Signed by G. Kuhn de Chazelle Company Aquitaine Company of Canada Ltd.

Title Drilling Superintendent Operator's Exploratory Licence No. 1974

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

(For OIL AND MINERAL DIVISION use only)

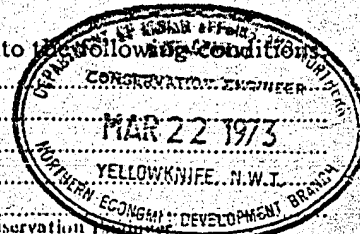
APPROVAL

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

Dated 28-MAR-73, 19

R. L. Price

District Conservation Engineer





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 ... Aquit Highland L I-23

Location: Unit I Section 23 Grid 62-40-122-15
Latitude 62°32'44.66" N Longitude 122°19'08" W
Unique Well Identifier 300I236240122150
Universal Well Location Reference 62.54574° N, Lat. & 122.31889° W, Long.

Elevation: Ground 1,505' K.B. 1,515' (est.) feet above sea-level.
Well is expected to produce from Exploratory formation at a depth
of about feet. Expected total final depth 3,450'
Area assigned to well Exploratory
(for District Conservation Engineer's use only)

Permit No. 4413 Lease No. Acreage 58980
Permittee, licensee, or lessee Aquitaine Co. of Canada Ltd.
Explanatory Licence No. 1974
Surface owned by Crown or Crown
(If alienated submit name and address of owner and occupant.)

Petroleum and natural gas rights owned by Crown
We propose to use the following strings of casing, either cementing or landing them as indicated below:—

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1. 8-5/8"	24#	K-55	New	500	275 (to surface)
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment. Manetoe 2,280' Ronning 3,150'.
To be controlled by drilling fluid and blow out prevention equipment consisting
of an annular preventer and a double gate preventer.

Well will be drilled with Rotary Rig No. 4 by Guthrie McLaren Drilling Ltd.
(Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Business Licence No. Will advise
At well D. Moore At registered office W. M. Bogert
Address 540 - 5 Ave S.W., CALGARY Address 540 - 5 Ave S.W., CALGARY, Alta.
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at CALGARY, Alberta this 18th day of December 19 72
Signed by W. M. Bogert Company Aquitaine Company of Canada Ltd.
Title Drilling Superintendent Operator's Licence No. 1974

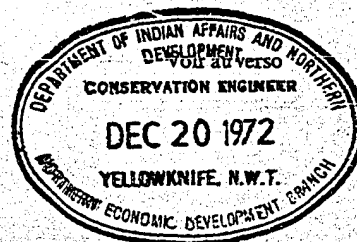
(For Oil and Mineral Division use only)

APPROVED

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

See attached list of Conditions of Approval
Dated 8-JAN-73 19 R. L. Price
District Conservation Engineer

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



D.I.A.N.D. - CONDITIONS OF APPROVAL FOR DRILLING AUTHORITY No. 648

WELL

Aquit. Highland L I-23

1. Copies of this Drilling Authority Form and Daily Drilling Report Preparation Requirements Card, shall be posted, in full view at the drilling rig, in both the doghouse and drilling foreman's office between spud and rig release dates.
2. The company will submit to this office, on Tuesday morning of each week, a day-by-day progress report summary, on the well, for the past week. (See daily drilling report preparation requirements card for pertinent details.) Phoned-in report format shall be in this order - well name, location, present depth, present activity in progress and past day's pertinent details.
3. All shows (small or large) of oil & gas are to be reported immediately.
4. When a fatal accident occurs the District Conservation Engineer is to be notified immediately and drilling ahead must cease. Permission to resume operations must be granted by the District Conservation Engineer after a fatality.
5. All waste materials on and around the wellsite area, shall be disposed of in a manner that will prevent pollution to adjacent areas. Burnables shall be burned and non-burnables shall be buried with adequate cover or hauled away.
6. Prior to moving to drilling site, a Land Use Permit, for access and a Water Use Permit must be obtained from the Water, Forests and Land Division, Yellowknife. We further draw your attention to Sections 95 and 96 of the Canada Oil & Gas Land Regulations.
7. Forward to this office two (2) field prints of all well logs (except Velocity logs) including copies of core analysis and fluid analysis as soon as they are available.
8. Any changes to, or additions to the approved Drilling Authority must have prior approval of the District Conservation Engineer. For example: total depth, casing depths/specs., location coordinates, well name, datum elevations, operator, contractor.
9. Surface casing to be set 50 feet (min.) into a consolidated formation at the approved depth.
10. 3000# W.P. (Ser. 900) B.O.P.'s are required to 12,000 ft. (max.)
5000# W.P. (Ser. 1500) B.O.P.'s are required below 12,000 ft.
11. You are required to notify the Yellowknife Office twenty-four (24) hours before spudding.

PROGRAM & PROGNOSIS
HIGHLAND LAKE PROJECT
December 8, 1972

Well Name	Aquit Highland Lk K-42	Aquit Highland Lk I-23	Aquit Highland Lk O-61
Location: Lat.	62°31'59.87"	62°32'44.66"	62°30'53.55"
Long.	122°23'36.18"	122°19'08"	122°26'48.89"
Elevations: Ground	1173'	1505'	1170'
K.B.	1183'	1515'	1180'
AFE Number:	6302	6312	6312

Geological Prognosis

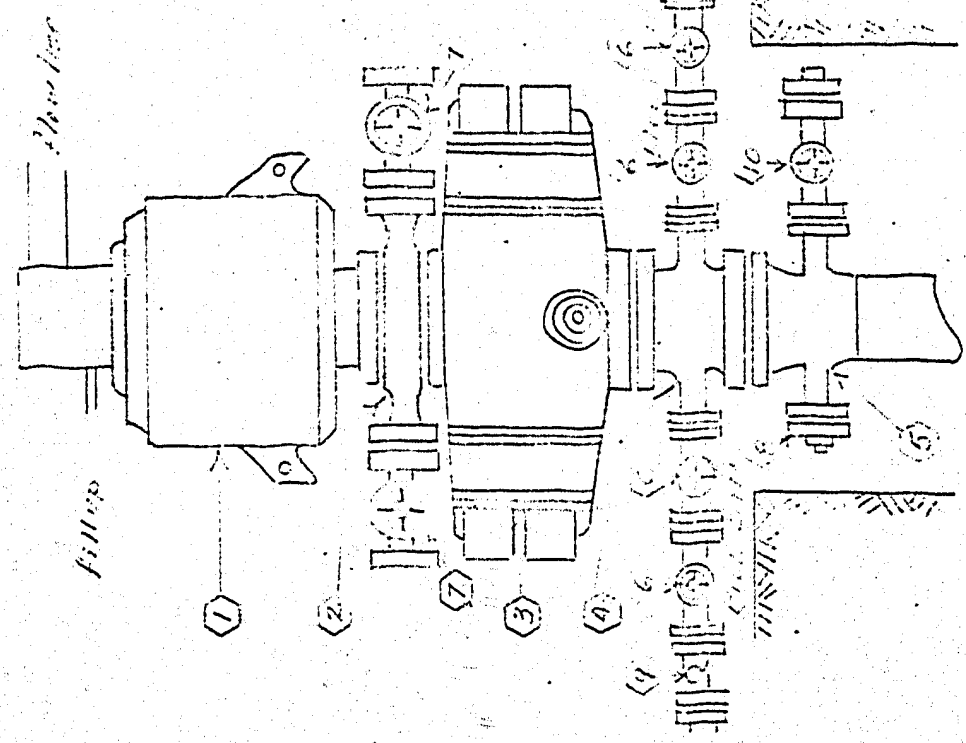
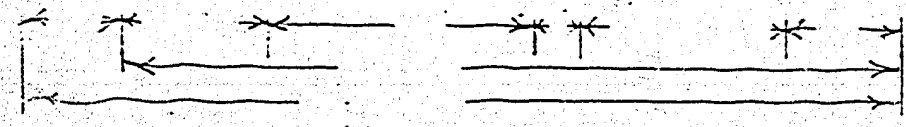
Formation	Depth	Subsea	Depth	Subsea	Depth	Subsea
Upper Devonian						
Ft. Simpson (sh)	100'		100'		100'	
Middle Devonian						
Horn River (sh)	1,405'		1,700'		1,500'	
Nahanni (ls)	1,485'		1,780'		1,580'	
Headless (sh ls)	1,950'		2,250'		2,070'	
Manetoe (dol)	1,980'		2,280'		2,100'	
Landry (ls)					2,210'	
Bear Rock (dol)	2,090'		2,340'		2,270'	
(anhyd)	2,220'		2,430'		2,380'	
Silur/Ordovician						
Ronning (dol)	2,980'		3,150'		3,100'	
Cambrian (sh & sd)						
Basal Clastics	3,400'					
Projected Total Depth	3,500'		3,450'		3,400'	

Hole Size:

Surface: 12-1/4"
Main: 7-7/8"

Zones of Interest:

Manetoe Dolomite, Ronning and Basal Clastics.



① *Pressure Preventer*

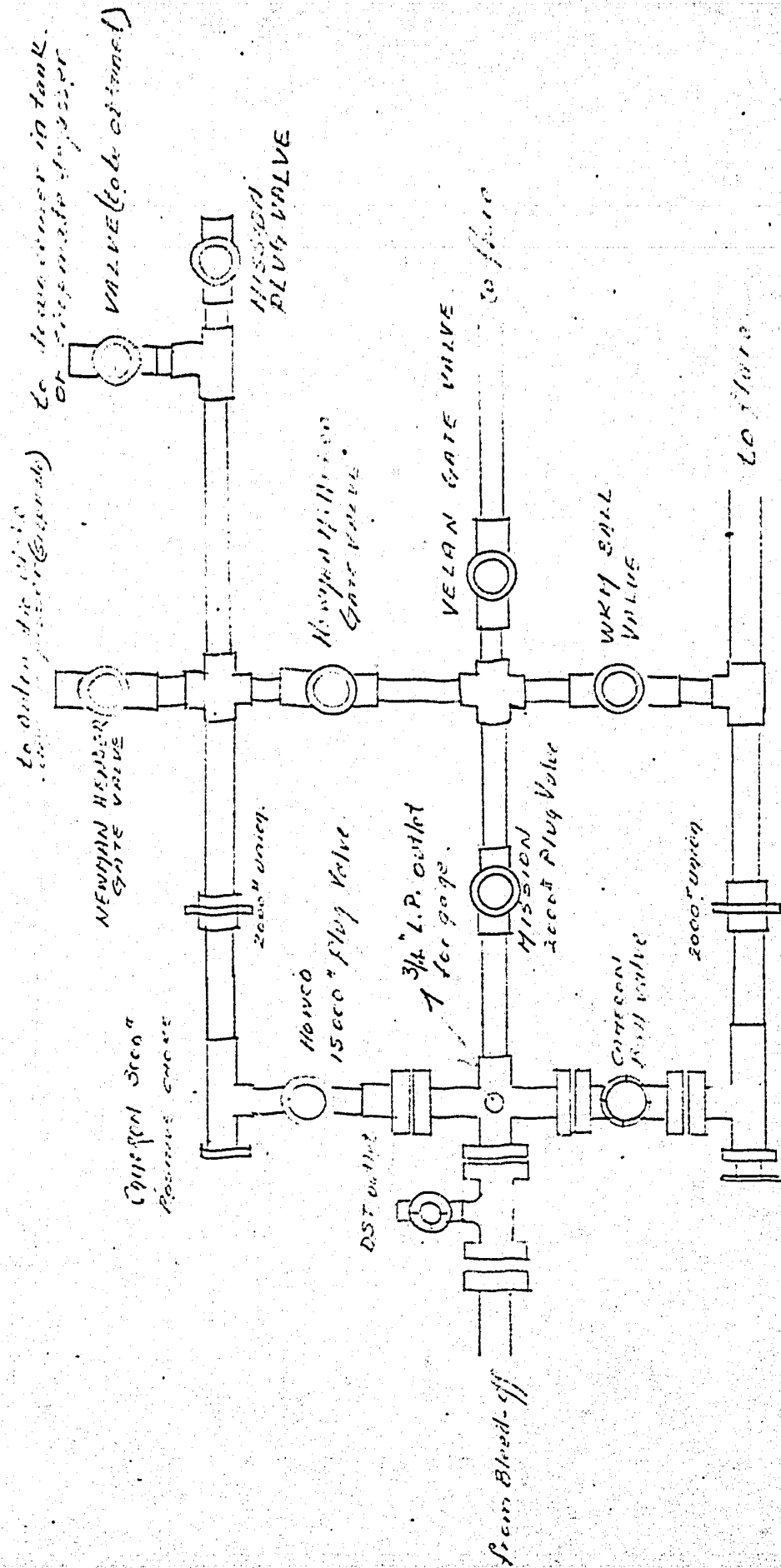
② *Stem and Nut*

③ *Double Gate Preventer*

10" - 3000 psi D.G.P. Stack.
 AGGUTWINE
 NOV. 1972



NOTE: Parasitic eggs - HPS 2" Female L.R. inlet and 3" female L.R. outlet.



673-11-04-070

WELLSITE HISTORY REPORT

Aquit Highland Lake I-23

June 1973

Well History Report
Aquit Highland Lake I-23
Table of Contents



SECTION I	Summary of Well Data
SECTION II	Geological Summary
SECTION III	Engineering Summary
SECTION IV	Logs
SECTION V	Analysis
SECTION VI	Completion Summary



Aquit Highland Lake I-23

SECTION I - Summary of Well Data

- (a) Well Name and Number: Aquit Highland L I-23
- (b) Permittee: Aquitaine Company of Canada Ltd. - 100%
- (c) Operator: Aquitaine Company of Canada Ltd.
540 - 5th Avenue S.W.
CALGARY, Alberta
T2P OM4
- (d) Location: Unit I, Section 23, Grid 62-40-122-15
Unique Well Identifier: 3001236240122150
Universal Location Reference: Lat. 62.54574°N
Long. 122.31889°W
- (e) Co-ordinates: Latitude: 62°32'44.66"
Longitude: 122°19'.08"
- (f) Permit No.: 4413
- (g) Drilling Contractor: Guthrie McLaren Drilling
14630 - 119 Ave.
EDMONTON, Alberta

Rig No. 4
- (h) Drilling Authority: No. 648
Date issued January 8th, 1973
- (i) Classification: Exploratory Wildcat
- (j) Elevations: Ground 1507'
K.B. 1520'
- (k) Spudded: March 4, 1973
- (l) Completed Drilling: March 13, 1973
- (m) Total Depth: 2735'
- (n) Well Status: Plugged for Thermal Recovery Observation Well
- (o) Rig Released: March 17, 1973
- (p) Hole Sizes: 12½" to 228; 7 7/8" to 2735'
- (q) Casing: 8 5/8" to 506; 2 3/8" to 1533'

SECTION II - Geological Summary

- (a) Formation Tops: See "Geological Marker Report" attached.
- (b) Cored Intervals: See "Core Report" attached.
- (c) Core Descriptions: See "Geological Sample Descriptions" attached.
- (d) Sample Descriptions: See "Geological Sample Descriptions" attached.
- (e) Paleontological Determinations: Not Applicable.

AQUIT HIGHLAND LAKE I-23

FORMATION TOPS

Horn River	1740
Nahanni	1850
Headless	2246
Landry	2273
Manetoe/Bear Rock Dol	2293
Bear Rock Anh.	2446

From	To	Core C Ditch	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	GEOLOGICAL SAMPLE DESCRIPTION	Sheet No. 1
						Aquit. Highland Lk. I-23	GR - 1506.5 KB - 1519.87
30	40	D		10		Sh. (100%) med/dk grey, fissile w trace sh, red.	
40	50	D		10		Sh. (100%) med/dk grey, mic-mica, fissile tr. pyrite	
50	60	D		10		Sh. (100%) as above w trace Ss, tan, very fine grain, tight	
60	90	D		30		Sh. (100%) med/dk grey, fissile, mic-mica	
90	130	D		40		Sh. (100%) as above platy	
130	150	D		20		Sh. (100%) med grey, fissile, in part mic-mica	
150	190	D		40		Sh. (100%) as above w trace mudstone, brown	
190	200	D		10		Sh. (100%) as above w trace siltstone, med brown, hard	
200	300	D		100		Sh. (100%) med grey, fissile, in part mic-mica	
300	320	D		20		Sh. (100%) as above w trace siltstone, dk brown, hard, tight	
320	330	D		10		Sh. (100%) med/dk grey, fissile, in part mic-mica	
330	350	D		20		Sh. (100%) as above w trace siltstone, dark brown	
350	450	D		100		Sh. (100%) med/dk grey, fissile, in part mic-mica	
450	480	D		30		Sh. (100%) as above w trace mudstone, dk brown	
480	500	D		20		Sh. (100%) as above w trace pyrite	
500	510	D		10		Sh. (70%) med/dk grey, in part mic-mica w cement (30%)	
510	530	D		20		Sh. (90%) as above w cement (10%)	
530	550	D		20		Sh. (100%) med/dr grey black, fissile, in part mic-mica	
550	590	D		40		Sh. (100%) med grey w trace dk grey, fissile, in part mic-mica, trace pyrite	
590	600	D		10		Sh. (100%) as above w trace pyrite	
600	610	D		10		Sh. (100%) as above w trace pyrite plant stems	
610	640	D		30		Sh. (100%) med grey w trace dk grey, fissile, in part mic-mica	
640	650	D		10		Sh. (100%) as above w trace pyrite plant stems	
650	660	D		10		Sh. (100%) as above	
660	670	D		10		Sh. (100%) as above w in part silty, glauc.	
670	680	D		10		Sh. (100%) as above w trace pyrite	
680	690	D	1	10		Sh. (100%) as above w trace shell frags	
690	700	D		10		Sh. (100%) as above w trace pyrite	
700	730	D		30		Sh. (100%) med grey w trace black, in part mic-mica, glauc., trace pyrite	
730	740	D		10		Sh. (100%) as above	

SAMPLES NOT LAGGED

SAMPLES LAGGED AT 100... FT. PER MIN.

(Delete as Appropriate)

GEOLOGICAL SAMPLE DESCRIPTION						Sheet No. 2
From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
Aquit. Highland Lk. I-23						
740	750	D		10		Sh. (100%) as above, in part silty, pyrc
750	770	D		20		Sh. (100%) as above, in part silty, glauconitic, tr. pyrite
770	810	D		40		Sh. (100%) as above, abundant pyrite
810	820	D		10		Sh. (100%) med grey w trace Ss, dk grey, very fine grain, glauc.
820	830	D		10		Sh. (100%) med grey, fissile, in part mic-mica, trace pyrite
830	860	D		30		Sh. (50%) as above w Sh. (50%) light grey, fissile
860	870	D		10		Sh. (100%) light grey, fissile, in part silty, mic-mica
870	980	D		110		Sh. (100%) light grey, fissile, in part mic-mica
980	1020	D		40		Sh. (100%) as above, in part silty
1020	1030	D		10		Sh. (100%) light grey, ifssile, in part mic-mica
1030	1040	D		10		Sh. (100%) as above w trace Ss, light grey, very fine grain, tight
1040	1090	D		50		Sh. (100%) as above
1090	1130	D		40		Sh. (100%) light grey, fissile, in part mic-mica, in part silty
1130	1140	D		10		Sh. (50%) as above w sh. (50%) dk grey black, bit.
1140	1150	D		10		Sh. (80%) as above w Sh. (20%) dk grey blk, bit.
1150	1190	D		40		Sh. (20%) light grey, fissile, in part mic-mica w Sh (80%) dk grey blk, bit.
1190	1210	D		20		Sh. (50%) as above w Sh. (50%) dk grey blk, bit.
1210	1250	D		40		Sh. (100%) light grey fissile, in part mic-mica w trace shale, dk grey blk, bit.
1250	1260	D		10		Sh. (100%) light grey, fissile, in part mic-mica
1260	1270	D		10		Sh. (100%) as above w trace pyrite
1270	1290	D		10		Sh. (100%) as above
1290	1300	D		10		Sh. (100%) as above w trace sh., blk, bit.
1300	1410	D		110		Sh. (100%) light grey, fissile in part mic-mica
1410	1420	D		10		Sh. (100%) as above w tr. pyrite
1420	1450	D		30		Sh. (100%) as above w tr. sh., blk, bit.
1450	1640	D		190		Sh. (100%) light grey fissile, in part mic-mica
1640	1650	D		10		Sh. (60%) as above w Sh. (40%) med grey/dk grey blk, in part bit.
1650	1660	D		10		Sh. (60%) dk grey blk, bit. w Sh. (40%) light grey, fissile

SAMPLES NOT LAGGED

SAMPLES LAGGED AT 100 FT. PER MIN.

(Delete as Appropriate)

GEOLOGICAL SAMPLE DESCRIPTION						Sheet No. 3
From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
Aquit. Highland Lk. T-23						
						in part mic-mica
1660	1670	D	10			Sh. (70%) dk grey blk, bit. w Sh. (30%) light grey as above
1670	1680	D	10			Sh. (50%) as above w Sh. (50%) light grey as above
1680	1700	D	20			Sh. (20%) dk grey blk, as above w sh. (80%) light grey as above
1700	1730	D	30			Sh. (50%) light grey, fissile, in part mic-mica w Sh. (50%) med/dk grey trace pyrite
1730	1740	D	10			Sh, as above w trace siltstone, light grey trace pyrite
1740	1750	D	10			Sh. (50%) light/ med grey w Sh. (50%) blk, bit, in part mic-mica, trace pyrite
HORN RIVER SHALE 1749 (-229)						
1750	1770	D	20			Sh. (30%) light/med grey w Sh. (70%) blk., bit, in part mic-mica, trace pyrite
1770	1790	D	20			Sh. (90%) blk, bit as above w Sh. (10%) light/med grey
1790	1820	D	30			Sh. (100%) blk, bit, mic-mica, trace pyrite
1820	1850	D	30			Sh. (100%) as above w trace secondary calc. frac. infill
1850	1860	D	10			Sh. (70%) as above w Ls. (30%) buff brown blk, mottley, crpxl, argill, tight, trace secondary calc. as above
NAHANNI Ls 1856 (-336)						
1860	1870	D	10			Ls. (80%) bf/argill. to brown blk crpxl, hard, tight, trace hairline fracs filled w secondary calc. w Sh. (20%) blk, bit.
1870	1890	D	20			Ls. (100%) buff, argill to dk brn blk, crpxl, hard tight
1890	1900	D	10			Ls. (100%) bf, argill to light/dk brn, mottley, crpxl/ mcxl, tight
1900	1920	D	20			Ls. (100%) buff, argill to med/dk brown, crpxl/mcxl tight
1920	1930	D	10			Ls. (100%) as above, in part bit.
1930	1940	D	10			Ls. (100%) as above w trace dk brn cherty ls.
1940	1960	D	20			Ls. (100%) bf, argill to med/dk brn, crpxl/mcxl, tight
1960	1970	D	10			Ls. (100%) bf, argill to med/dk brn, crpxl/ very fine grain, tight trace bit. fill, tr. secondary calc.
1970	1980	D	10			Ls. (100%) as above w trace chert, light smokey grey trace pyrite
1980	1990	D	10			Ls. (100%) as above

SAMPLES NOT LAGGED

SAMPLES LAGGED AT 100 FT. PER MIN.

(Delete as Appropriate)

GEOLOGICAL SAMPLE DESCRIPTION						Sheet No. 4
From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
Aquit. Highland Lk. I-23						
1990	2030	D	tr	40		Ls. (100%) as above w tr. poor intxl. por. bit. filled trace pyrite, trace secondary calc. frac. infill
2030	2190	D	tr	160		Ls. (100%) as above crpxl/ fgr.
2190	2200	D	1	10		Ls. (100%) med brn/med grey brn, crpxl, hard, tight, trace argill, sl. pyrc
2200	2230	D		30		Ls. (100%) as above w trace brn blk ls
2230	2240	D		10		Dol. (100%) med brn/med grey brn, crpxl/mcxl, hard, tight, sl. pyrc, trace secondary calc.
2240	2250	D		10		Dol. (100%) as above w trace sh, light blue grey, sl. dolc. ab. diss pyrite
HEADLESS SH. 2249 (-729)						
2250	2260	D		10		Dol. (90%) as above w sh. (10%) as above
2260	2270	D		10		Dol. (80%) as above w sh (20%) as above
2270	2280	D		10		Dol. (60%) as above w sh (40%) as above
LANDRY LS 2284 (-764)						
2280	2290	D		10		Ls. (90%) med grey brn, crpxl, in part chalky, pyrc w sh (10%) as above
2290	2300	D		10		Ls. (80%) as above w dol. (20%) light tan, crpxl/mcxl, hard tight, ab. secondary calc.
MANETOE 2301 (-791)						
2300	2310	D		10		Dol. (90%) light/med brn, crpxl/mcxl, hard, tight w trace pyrite intxl por ab. secondary calc.
2310	2330	D		20		Dol. (10%) light/med brn, trace brn blk, crpxl/ very fine grain, tight w trace pyrite intxl por ab. secondary calc.
2330	2342	D	tr	12		Dol. (100%) as above w trace fair intxl por
CORE # 12342 - 2372 Rec. 30'						
2342	2372	C	18'	12		Dol. light brn/dk brn, crpxl/very fine grain, in part hard tight in part bit,, trace micro faults, abund. secondary calc. in fill, no vugs, faint H ₂ S on fresh break, poor intxl por in approx 18' of core. Core covered w salt crystals upon drying. abund. sucrosic dolomite
2342	2380	D		8		Dol. (100%) as above
2380	2390	D		10		Dol. (100%) buff/light grey brn, cpxl/mcxl, hard, tight, ab. hairline fracs w bit. infill, trace secondary calc.
BEAR ROCK DOL 2383?						
2390	2400	D		10		Dol. (100%) as above w trace dol, med brn, f/ med grain, ti.

SAMPLES NOT LAGGED

SAMPLES LAGGED AT 100 FT. PER MIN.

(Delete as Appropriate)

GEOLOGICAL SAMPLE DESCRIPTION						Sheet No. 5
From	To	Core C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Showings O.G.W.	
Aquit. Highland Lk. I-23						
2400	2410	D		10		Dol. (100%) buff/dk brn, mottley, cpxl/mcxl, hard, tight, ab. spar calc, tr. bit., tr. poor por
2410	2420	D		10		Dol. (100%) buff/light brn/ trace dk brn blk, cpxl/mcxl, tight, tr. poor intxl por ab. bit, tr. spar calc
2420	2430	D		10		Dol. (100%) as above w tr. dol. buff, fine grain.
2430	2440	D		10		Dol. (100%) as above w tr. pyrite
2440	2450	D		10		Dol. (100%) as above w tr. anhy, white
2450	2460	D		10		Dol. (100%) as above w tr anhy, light tan
2460	2470	D		10		Sh (90%) cavings after trip w dol. (10%) as above w anhy (tr) white/light tan
2470	2480	D		10		Anhy (40%) white light brn w Sh. (40%) cavings w dol. (20%) light/dk brn, cpxl, hard, tight
2480	2490	D		10		Anhy (50%) as above w dol. (30%) as above w Sh (20%) cavings as above
2490	2500	D		10		Dol. (70%) buff/light brn/dk brn blk, cpxl/very fine grain, hard, tight w Anhy (20%) light tan/white w Sh. (10%) cavings
2500	2510	D		10		Dol. (80%) buff/med brn grey/dk brnsh grey, cpxl/fine grain, in part sucrosic, hard, tight, w tr. secondary calc. w Anhy (20%) as above
2510	2520	D		10		Dol. (50%) as above w Anhy (50%) as above
2520	2530	D		10		Dol. (60%) as above, in part, brn blk, bit, w anhy (40%) as above
2530	2540	D		10		dol. (70%) as above w anhy (30%) as above
2540	2550	D		10		Dol. (80%) as above w Anhy (20%) as above
2550	2560	D		10		Dol. (90%) light grey/dk grey brn/brn blk, cpxl/mcxl, in part sucrosic, hard tight tr. secondary calc. w Anhy (10%) as above
2560	2570	D		10		Dol. (40%) as above w Anhy (60%) as above
2570	2580	D		10		Dol. (90%) as above, w Anhy (10%) as above
2580	2600	D		10		Dol. (100%) as above w Anhy (tr) as above
2600	2610	D		10		Anhy (80%) buff/light, tan/grey/brn, w dol. (20%) light brn/dk grey brn/ grey, cpxl/mcxl, hard ti, in pt very anhy
2610	2620	D		10		Anhy (20%) as above w dol. (80%) as above
2620	2640	D		20		Anhy (80%) as above w dol. (20%) as above
2640	2650	D		10		Anhy (90%) as above w dol (10%) as above

SAMPLES NOT LAGGED

SAMPLES LAGGED AT 100 FT. PER MIN.

(Delete as Appropriate)

GEOLOGICAL SAMPLE DESCRIPTION						Sheet No. 6
From	To	Cora C Ditch D	No. of Ft. Porous	No. of Ft. Non-Porous	Stations O.G.W.	
Aquit. Highland Lk. I-23						
2650	2660	D		10		Anhy (100%) as above, in pt very dolc w dol (tr) as above, grey/dk brn cpxl, hard, tight, in part very anhyc
2660	2680	D		20		Anhy (100%) as above w dol (tr) as above
2680	2690	D		10		Anhy (100%) as above w dol (tr) as above
2690	2700	D		10		Anhy (60%) as above w dol. (40%) light brn/dk grey brn/grey, cpxl/mcxl hard, tight, very anhyc
2700	2735	D		35		Anhy (100%) buff/light tan/dk brn, dk grey, w dol (tr) as above
TOTAL DEPTH DRILLED 2735						

SAMPLES NOT LAGGED

SAMPLES LAGGED AT ...100... FT. PER MIN.

(Delete as Appropriate)

SECTION III - Engineering Summary

- (a) Report of Drill Stem Tests: See "Drill Stem Test Data Sheet" and "Lynes Technical Service Report" attached.
- (b) Casing Record: See "Casing Information" and Engineering Pipe Tally".
- (c) Bit Record: See "Bit Record" and "Bit Hydraulics" attached.
- (d) Mud Record: See "Mud and Additions Summary" attached.
- (e) Deviation Record: Se "Deviation Survey Report" attached.
- (f) Abandonment Plugs: See "Plug Back and Abandonment Report" attached.
- (g) Lost Circulation Zones: not applicable
- (h) Report of Blowouts: not applicable

DRILLSTEM TEST DATA SHEET

AQUITAINE
COMPANY OF CANADA LTD.

TEST NO. 1

DATE March 15/16, 1973

WELL NAME Aquit Highland Lake I-23 LOCATION N. 62°32'44.66"
W. 122°19'8"

TEST DATA:

INTERVAL 2280 - 2340 SUB-SEA 760 - 820 FORMATION Bear Rock Dol.

BLOW (Describe) Weak initial airpuff continuing weak
Airblow during preflow

Gas to Surface Nil Mins. Max. Rate (Measure) (Est.) Mcf/day

Describe Gas: Sweet Sour Was Flare Lit

Describe Build-up, etc. Weak airblow when valve was opened
Slightly increasing then dying after 60 mins.

FLUID TO SURFACE (Record Times & Describe Fluid) Nil

RECOVERY (Record amount & whether Gassy, Salty, Fresh, Sulphurous, Etc.)

Mud: 200' salt water cut mud

Water: 234' salt water - 35,400 ppm by refractometer

Oil: -

Remarks: (Special Samples, Sampling Points, Samples Retained, Etc.) 3 samples taken
of recovery - 1 top, 1 centre and 1 bottom.

RECORD OF FIELD PRESSURES AND TIMES:

Started in Hole	15:00	Out of Hole	05:00
Initial Hydrostatic		Pressure	1136 psi.
Valve Open (Initial)	5	Mins. Pressure	779 psi.
Initial Shut-in	60	Mins. Pressure	No press recorded psi.
Valve Open	90	Mins. Pressure (initial)	47 (final) 214 psi.
Final Shut-in	90	Mins. Pressure	474 psi.
Final Hydrostatic		Pressure	1099 psi.
Temperature	68°	Recorders No.	Depth No. Depth.
Remarks			

HOLE DATA:

Hole Size & Depth 7-7/8" - 2735 Mud: Wt. 9.4 Visc. 76 W.L. 8.6

TESTING EQUIPMENT:

Testing Co.	Lynes United	Ticket No.	6391
Packer(s): No.	4	Size	7"
		Choke (B.H.)	1"
Drill Pipe Size:	4 1/2"	Drill Collars: Amt	533.71' I.D. 2-7/8"
Recorders: (No. & Type)	AKI # 2561 C2275', #2234 C2270'		
Special Equipment: (Underline)	MFE Tool, Jars, Safety Joint, Pump Out, Sub, Straddle By-Pass, Etc.		

REMARKS ON TEST: (Misrun, Disposition of Samples - Charts, Hole Problems, etc.)

BH Sampler & Recovery Samples to I&G Labs/Edmonton
By Lynes United.

COMPANY REPRESENTATIVE L.G. Mulholland

CASING INFORMATION

AQUITAINE
COMPANY OF CANADA LTD.

SURFACE CASING

INTERMEDIATE CASING O.D. 2 3/8"

REDUCTION CASING

INNER

N. 62°32'44.66"

WELL Aquit Highland Lake I-23LOCATION W. 122°19'8"DATE March 17, 1973

JTS. ON LOC.	FT. ON LOC.	CSG. WT.	GR.	RGE.	THD.	T & C	MAKE	JTS. RUN	DEPTH LANDED	FT. RUN IN WELL
51	1614.90	4.7	J55	2	8RD	EUE		48		1519.81
	Collar on Bottom									
	Omega latch Down Baffle on Top of 1st Joint									nil

ACCESSORIES

CENTRALIZERS MAKE _____ No. 2
POSITIONS on 1st & 5th JointSCRATCHERS MAKE nil No. _____
POSITIONS _____No. OF COLLARS WELDED nil

SHOE: MAKE	TYPE	nil
COLLAR: MAKE	TYPE	nil
LANDING JOINT LENGTH (WHEN USED)		-
OVERALL LENGTH OF STRING		1519.81
FEET UP FROM K.B. (SUBTRACT)	K.B.	13.50
DEPTH SET - DRILLER	TALLY	1533.31
SHOE JOINT OVERALL (SUBTRACT)		
COLLAR DEPTH - DRILLER	TALLY	

REMARKS _____

RUNNING AND CEMENTING

RUNNING

POWER TONGS Tubing Hand Tongs TORQUE: MAX _____ NOM _____ MIN _____TIMES: STARTED IN: 10:30 am ON BOTTOM _____ CIRCULATED MIN _____FILL UP POINTS open ended

CEMENTING

CEMENT COMPANY HalliburtonTYPES AND QUANTITY OF CEMENT 350 sacks oilwell cementplus 8% Gel & 35 sacks neat oilwell cementSLURRY WT. 14.5 & 16 WATER AHEAD 5 BBLSTIMES: START MIX 3:15 pm FINISH 4:10 pm START DISP. 4:20 pm FINISH 4:25 pmCALC. DISP. 6 BBLS PRESSURES: MAX. PUMP 800 psi BUMP 1600 psiCEMENT RETURNS YES/NO No. OF BBLS 8

LANDING

TIME String landed in tubing hanger before cementing. DATE _____ WT. OF STRING (LESS BLOCKS) 7000Bowl. 7000 LANDING BOWL (SIZE x SERIES x TYPE) Newman McEvoy 2000 # TypesREMARKS Cemented Full Length.

CASING INFORMATION

AQUITAINE
COMPANY OF CANADA LTD.

SURFACE CASING

INTERMEDIATE CASING O.D. 8 5/8"

REDUCTION CASING

LINER

WELL Aquit Highland Lake I-23N. 62°32'44.66"LOCATION W 122°19'8"DATE March 6, 1973

JTS. ON LOC.	FT. ON LOC.	CSG. WT.	GR.	RGE.	THD.	T & C	MAKE	JTS. RUN	DEPTH LANDED	FT. RUN IN WELL
14	591.15	24#	K.55	3	8RD	S	NKK	12	506'	506.30

ACCESSORIES

CENTRALIZERS MAKE Wotco No. 2POSITIONS 5' above shoe & over
collar on top of 2nd jointSCRATCHERS MAKE nil No. POSITIONS SHOE: MAKE Wotco TYPE Reg/Float 1.90COLLAR: MAKE Wotco TYPE Reg/Float 1.52

LANDING JOINT LENGTH (WHEN USED)

OVERALL LENGTH OF STRING 509.72

FEET UP FROM K.B. (SUBTRACT) 3.7

DEPTH SET - DRILLER TALLY 506'

SHOE JOINT OVERALL (SUBTRACT) 46'

COLLAR DEPTH - DRILLER TALLY 460

No. OF COLLARS WELDED 2 (Floatshoe & Collar)REMARKS 100% circulation during entire cement job.

RUNNING AND CEMENTING

RUNNING

POWER TONGS Rig Tongs TORQUE: MAX NOM MIN TIMES: STARTED IN: 6:00 am ON BOTTOM 8:30 am CIRCULATED MIN 75FILL UP POINTS 80', 160', 240', 320', 400', 500'.

CEMENTING

CEMENT COMPANY HalliburtonTYPES AND QUANTITY OF CEMENT Oilwell Cement375 Sacks + 2% CaCl₂ SLURRY WT. 15.2 WATER AHEAD 5 BBLSTIMES: START MIX 10:25 am FINISH 10:45 am START DISP. 10:50 am FINISH 11:00 amCALC. DISP. 29.3 BBLS PRESSURES: MAX. PUMP 100 BUMP 1000CEMENT RETURNS YES/NO No. OF BBLS Nil*

LANDING

TIME 10:30 pm DATE March 6, 1973 WT. OF STRING (LESS BLOCKS) 13,000 lbs.WT. LANDED IN SLIPS N.A. LANDING BOWL (SIZE x SERIES x TYPE) 8"-2000 psi - weld on* REMARKS Felt top of cement with 1" pipe at 75'. Recemented from surface through 1" pipe at 75' with 102 sacks oilwell cement + 3% CaCl₂ before cement returned. Job completed at 2:45 pm.

PIPE TALLY

AQUITA
COMPANY OF CANADA, LTD.

SHEET No. 1 OF 1

SIZE 8 5/8" O.D. WT. 24 PPF. GRADE K-55 THREAD 8RD MAKE NKK

ON LOCATION 14 JOINTS 591.15 FT. LEFT OUT 2 JOINTS 84.85 FT. IN HOLE 12 JOINTS 50630 FT.

REMARKS Threads off measurement

A		C		E		G		I		K		M		O		Q		TOTALS	
1	42 80	21		41		51		81		101		121		141		161		A	424 20
2	42 80	22		42		52		82		102		122		142		162		B	166 95
3	41 15	23		43		53		83		103		123		143		163		C	
4	42 80	24		44		54		84		104		124		144		164		D	
5	42 80	25		45		55		85		105		125		145		165		E	
6	42 80	26		46		56		86		106		126		146		166		F	
7	42 80	27		47		57		87		107		127		147		167		G	
8	42 50	28		48		58		88		108		128		148		168		H	
9	42 40	29		49		59		89		109		129		149		169		I	
10	41 35	30		50		70		90		110		130		150		170		J	
11	424 20	31		51		71		91		111		131		151		171		K	
12	41 62	32		52		72		92		112		132		152		172		L	
13	42 80	33 out		53		73		93		113		133		153		173		M	
14	42 05	34 out		54		74		94		114		134		154		174		N	
15		35		55		75		95		115		135		155		175		O	
16		36		56		76		96		116		136		156		176		P	
17		37		57		77		97		117		137		157		177		Q	
18		38		58		78		98		118		138		158		178		R	
19		39		59		79		99		119		139		159		179			
20		40		60		80		100		120		140		160		180			
21	166 95	41		61		81		101		121		141		161		181		TOTALS	591 15

PIPE TALLY

SHEET No. 1 OF 1
 SIZE 2 3/8 " O.D. WT. 4.7 PPF. GRADE J55 THREAD 8RD-EUE MAKE _____
 ON LOCATION 51 JOINTS 1614.90 FT. LEFT OUT 3 JOINTS 95.09 FT. IN HOLE 48 JOINTS 1519.81 FT.
REMARKS _____
Treads off Tally

A		C		E		G		I		K		M		O		Q		TOTALS	
1	31 86	21	30 83	41	31 78	61		81		101		121		141		161		A	317 48
2	31 88	22	31 88	42	31 74	62		82		102		122		142		162		B	316 40
3	31 80	23	31 82	43	31 84	63		83		103		123		143		163		C	316 45
4	31 48	24	31 75	44	31 73	64		84		104		124		144		164		D	316 01
5	31 54	25	31 85	45	31 82	65		85		105		125		145		165		E	31 75
6	31 76	26	31 75	46	31 81	66		86		106		126		146		166		F	
7	31 79	27	31 85	47	31 54	67		87		107		127		147		167		G	
8	31 79	28	31 79	48	31 21	68		88		108		128		148		168		H	
9	31 80	29	31 21	49	31 59	69		89		109		129		149		169		I	
10	31 78	30	31 72	50	31 75	70		90		110		130		150		170		J	
11	317 48	31	316 45	51	316 81	71		91		111		131		151		171		K	
12	31 84	32	31 10	52	31 75	72		92		112		132		152		172		L	
13	31 56	33	31 71	53		73		93		113		133		153		173		M	
14	31 79	34	30 80	54		74		94		114		134		154		174		N	
15	31 80	35	31 85	55		75		95		115		135		155		175		O	
16	31 81	36	31 76	56		76		96		116		136		156		176		P	
17	31 80	37	31 81	57		77		97		117		137		157		177		Q	
18	31 82	38	31 76	58		78		98		118		138		158		178		R	
19	30 45	39	31 85	59		79		99		119		139		159		179		TOTALS	1614 90
20	31 72	40	31 64	60		80		100		120		140		160		180			
21	316 40	41	316 01	61	31 75	81		101		121		141		161		181			

DRILL PIPE :	SIZE O.D.	WT.	16.6#	TYPE T.J.
	4 1/2			4 1/2" FH
DRILL COLLARS :	SIZE O.D.	WT.		TYPE T.J.
	No.	O.D.	I.D.	4 1/2" H90
	No.	O.D.	I.D.	" "
	No.	O.D.	I.D.	TYPE T.J.
	No.	O.D.	I.D.	TYPE T.J.
	No.	O.D.	I.D.	TYPE T.J.

[illegible]

DATE SPOOLED March 17, 1973
DATE RIG RELEASED March 17, 1973

MAKE:

[illegible]

Mud & Additive Report
Aquit Highland Lake I-23

<u>DATE</u>	<u>DEPTH</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>ADDITIVES</u>
Mar. 4, 1973	76'	8.3	37	1700 lbs Gel. 50 lbs lime
Mar. 5, 1973	278'	8.5	70	2500 lbs Gel 125 lbs lime 4000 lbs salt gel 150 lbs caustic
Mar. 6, 1973	506'	8.8	95	2000 lbs gel 100 lbs caustic
Mar. 8, 1973	866'	8.7	37	5000 lbs gel 100 lbs bicarb
Mar. 9, 1973	1700'	9.5	50	1500 lbs gel 500 lbs salt gel 50 lbs caustic
Mar. 10, 1973	1963'	9.3	46	1500 lbs gel 1500 lbs salt gel 50 lbs CMC
Mar. 11, 1973	2330'	9.4	52	1700 lbs gel 1700 lbs salt gel 100 lbs caustic
Mar. 12, 1973	2372'	9.5	65	200 lbs gel 100 lbs salt gel
Mar. 13, 1973	2607'	9.4	65	2400 lbs gel 2000 lbs salt gel 400 lbs caustic 100 lbs CMC 1150 lbs peltex 200 lbs soda ash
Mar. 14, 1973	2735'	9.4	78	3800 lbs gel 700 lbs salt gel 250 lbs caustic 100 lbs CMC 750 lbs peltex 500 lbs plastex

PLUG-BACK AND ABANDONMENT REPORT

AQUITAINE
COMPANY OF CANADA LTD.Well Aquit Highland Lake I-23Location N.62°32'44.66" W.122°19'8"

Hole Size	7-7/8"			
Depth	2735			

K.B. Elev. 1520'F.T.D. 2735'

Casing in Hole	Size	Set at	Top of Cement
Surface Casing	8-5/8"	506"	surface
Production String			

Fluid in Hole MudPlug Back String 4 1/2" drillpipeService Company HalliburtonCons. Bd. Officer Not present

	Plug #1	Plug #2	Plug #3	Plug #4	Plug #5	Plug #6
Date	3/17/73	3/17/73				
Interval — Top Bottom	2300 2735	1730 2300				
Formation — Name Depth						
Calipered Hole Size (Average)	7-7/8"	7-7/8"				
Type of Cement	Oilwell	Oilwell				
Number of Sacks	165	210				
Additives	nil	nil				
Bbls. of Water Ahead	10	10				
Displacement — Bbls. Water Bbls. Mud	2 28	2 22				
Slurry Weight	15.6	15.4				
Mixing Times — Start Finish	2:05 am 2:15 am	3:40 am 3:15 am				
Displacing Times — Start Finish	2:20 am 2:30 am	3:25 am 3:45 am				
Felt Plug Time	Not Req'd	Not Req'd				
Felt Plug Depth	-	-				

Surface Casing Cut Not cut Ft. Below Grd. Surface Plugs - Sacks. Plate Welded Yes/No.CASING SALVAGE: Shot off at - No. of Jts. Recovered -Remarks -Agent of Operator L.G. Mulholland

SECTION IV - Logs

<u>DATE RUN</u>	<u>RUN NUMBER</u>	<u>INTERVAL</u>	<u>TYPE</u>
March 14, 1973	1	2728 - 450	Dual Induction - Laterolog
March 14, 1973	1	2721 - 460	Borehole Compensated Sonic Log
March 14, 1973	1	2727 - 1400	Formation Density plus caliper.
March 14, 1973	1	2727 - 1400	Sidewall Neutron Porosity Log.

SECTION V - ANALYSIS

(a) Water: Sec "Water Analysis" by Chem. & Geo. Laboratories
Lab. no. E73 - 3492 - 1 attached.

SECTION VI - Completion Summary

Not Applicable

SUBMITTED BY AQUITAINE COMPANY OF CANADA LTD.

DATE:

June 10/73

BY:

G. Kuhn de Chizelle

Received: Mar. 19, 1973 Reported: Apr. 10, 1973

Well: Location: Aquit Highland Lk I-23

Operation: AQUITAINE COMPANY OF CANADA LTD.

Field or Area: Wildcat

Elev.: K.B. 1520' Grd. 1506.5' Zone/Formation: Manetoe

Sample Interval: 2280' - 2340'

Method of Production: D.S.T. #1

Sampled from: 2280'

Sampled by: Lynes United Services Ltd.

Date: Mar. 15, 1973

OTHER PERTINENT DATA

(Signed)

Na & K	K	Ca	Mg	SO ₄	Cl	CO ₂	HCO ₃	OH
Mg. 19,039		1,714	532	4,919	30,150	NH1	300	NH1
Meq. 828.21		85.53	43.73	102.32	850.23	---	4.92	---
Meq. 43.25		4.47	2.28	5.34	44.40	---	0.26	---

Total Solids Mg/L: By Evaporation 61,660 Fe Present Specific Gravity 1.048 @60°F Observed pH 7.9 @70 °F

Calculated 56,654 After Ignition 55,860 H₂S NH1 Refractive Index 1.3438 @25°C Resistivity 0.153 ohm meters @68 °F

Pattern Unit Meq./L

ORGANIC MATTER: Much

Remarks and Conclusions

Sample consisted of muddy water with a brown coloured filtrate.

E73-3492-2: 2046'

RESISTIVITY: 0.186 Ohm-Meters @ 68°F.
Muddy water with a brown coloured filtrate.

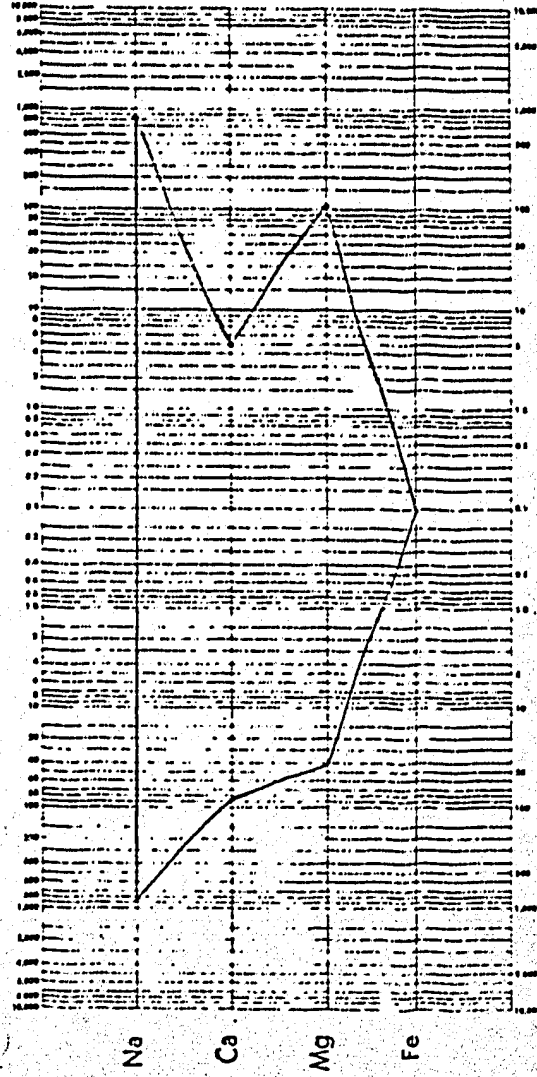
E73-3492-3: 1846'

RESISTIVITY: 0.236 Ohm-Meters @ 68°F.
Muddy water with a brown coloured filtrate.

NO TRACE OF BENZENE INDICATED

NO TRACE OF TOLUENE INDICATED.

Sample was received in a 1 quart plastic container without a foil insert present in the screw cap. Container was full, water was muddy, and appeared to be a good sample.



CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. E73-3492-1

Received: Mar. 19, 1973 Reported: Apr. 10, 1973

Well: Location: Aquit Highland Lk I-23

Operator: AQUITAINE COMPANY OF CANADA LTD.

Field or Area: Wildcat

Elev.: K.B. 1520' Grd. 1506.5' Zone/Formation: Manetoe

Method of Production:

D.S.T. #1

Sampled from:

2280'

Sampled by: Lynes United Services Ltd.

Sample Interval: 2280' - 2340'

Date: Mar. 15, 1973

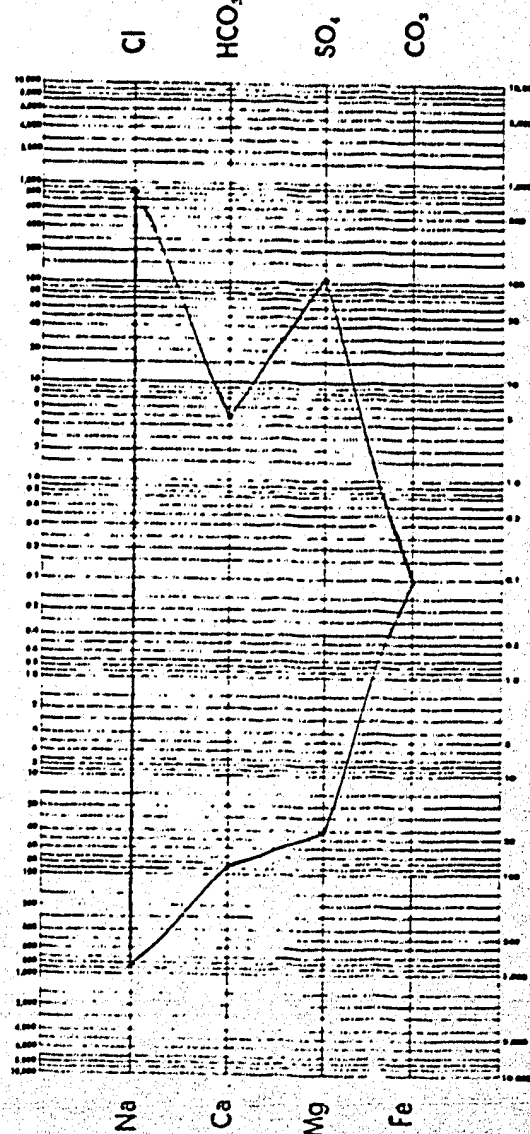
OTHER PERTINENT DATA

(Signed)

Na & K	K	Ca	Mg	SO ₄	Cl	CO ₃	HCO ₃	OH
Mg. /L								
19,039		1,714	532	4,919	30,150	Nil	300	Nil
Meq. /L								
828.21		85.53	43.73	102.32	850.23	---	4.92	---
Meq. %								
43.25		4.47	2.28	5.34	44.40	---	0.26	---

Total Solids Mg/L: By Evaporation 61,660 Fe Present Specific Gravity 1.048 @60°F Observed pH 7.9 @70 °F
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Operator: AQUITAINE COMPANY OF CANADA LTD.

Field or Area: Wildcat

Elev.: K.B. 1520' Grd. 1506.5'

Zone/Formation: Manetoe

Sample Interval: 2280' - 2340'

Method of Production: D.S.T. #1

Sampled from: 2280'

Sampled by: Lynes United Services Ltd.

Date: Mar. 15, 1973

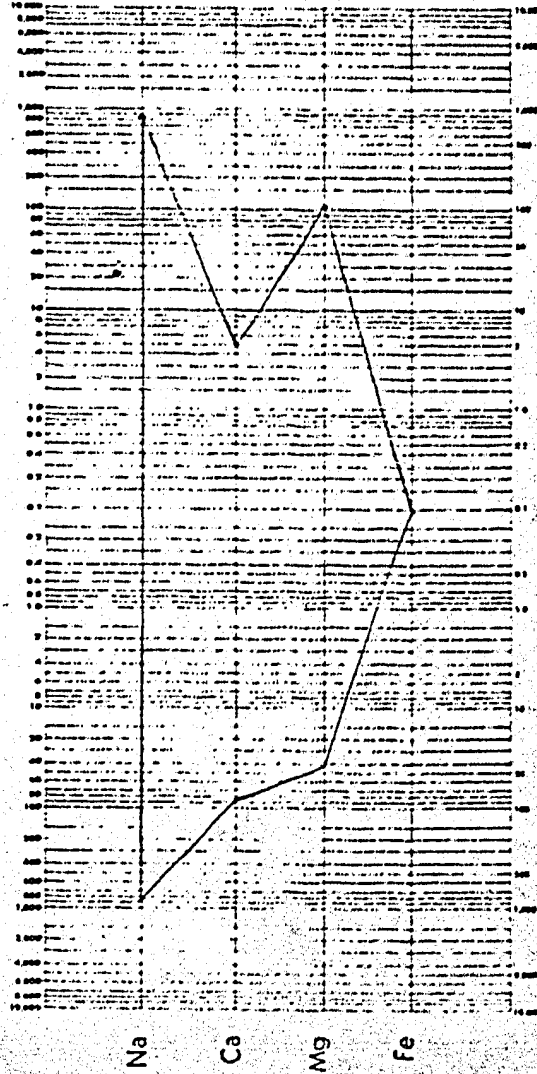
OTHER PERTINENT DATA

(Signed)

Na & K	K	Ca	Mg	SO ₄	Cl	CO ₃	HCO ₃	OH
Mg. /L								
19,039		1,714	532	4,919	30,150	Nil	300	Nil
Meq. /L								
828.2		85.53	43.73	102.32	850.23	---	4.92	---
Meq. %								
43.25		4.47	2.28	5.34	44.40	---	0.26	---

Total Solids Mg/L: By Evaporation 61,660 Fe Present Specific Gravity 1.048 @60°F Observed pH 7.9 @70 °F
 Calculated 56,654 After Ignition 55,860 H₂S Nil Refractive Index 1.3438 @25°C Resistivity 0.153 ohm meters @68 °F

Pattern Unit Meq./L



ORGANIC MATTER: Much

Remarks and Conclusions

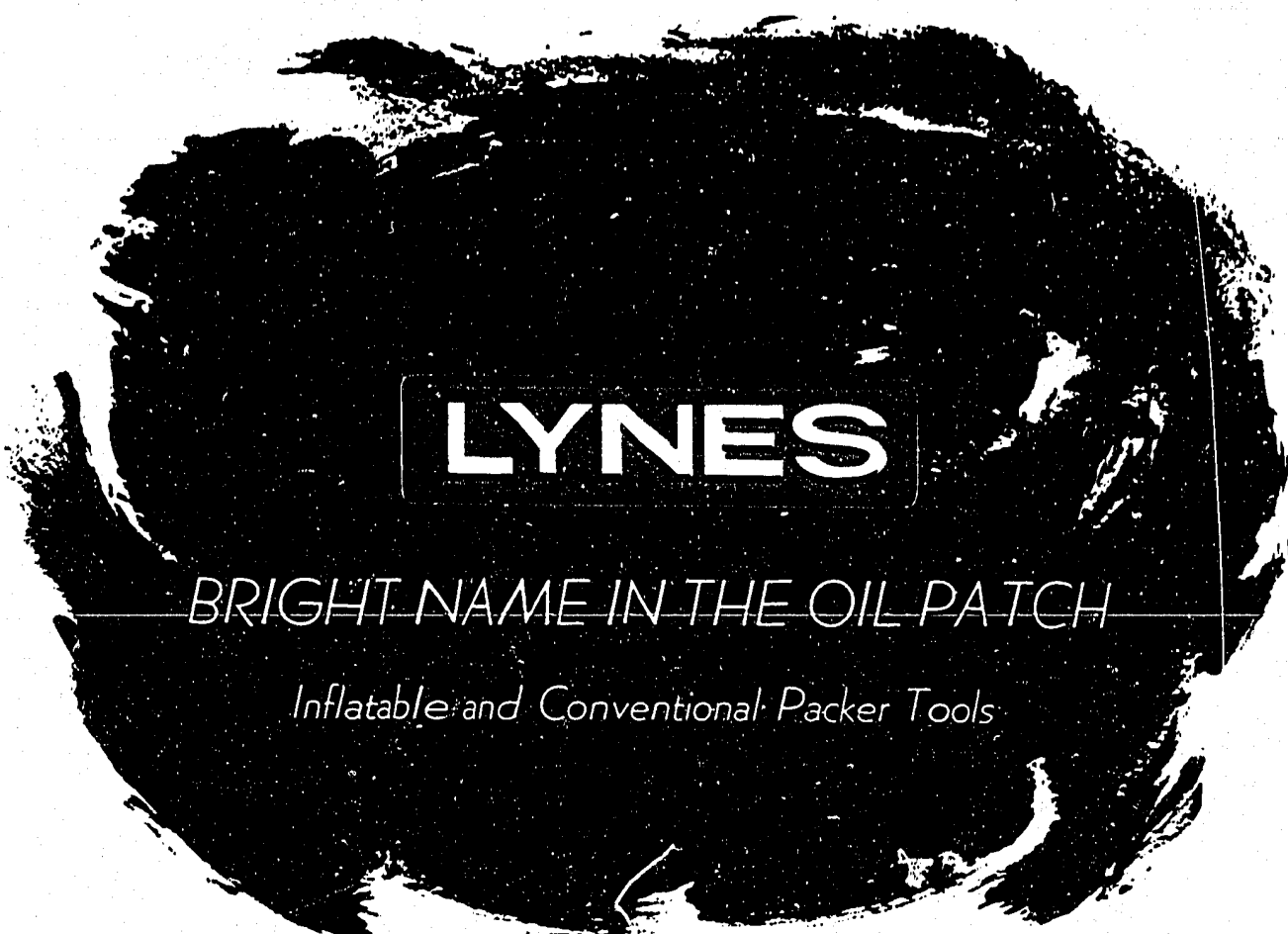
Sample consisted of muddy water with a brown coloured filtrate.
 E73-3492-2: 2046'

RESISTIVITY: 0.186 Ohm-Meters @ 68°F.
 Muddy water with a brown coloured filtrate.
 E73-3492-3: 1846'

RESISTIVITY: 0.236 Ohm-Meters @ 68°F.
 Muddy water with a brown coloured filtrate.
 NO TRACE OF BENZENE INDICATED

NO TRACE OF TOLUENE INDICATED.

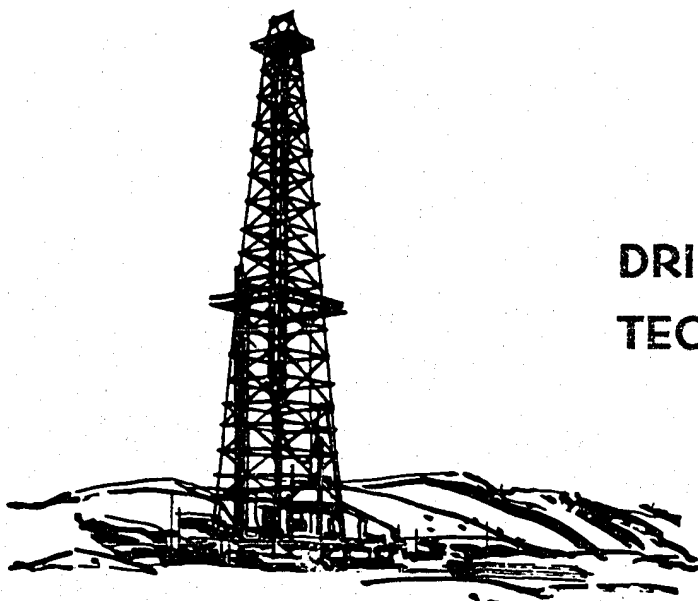
Sample was received in a 1 quart plastic container without a foil insert present in the screw cap. Container was full, water was muddy, and appeared to be a good sample.



LYNES

BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools



**DRILL STEM TEST
TECHNICAL SERVICE REPORT**

LYNES UNITED SERVICES LTD.

WELL NAME - ADULT HIGHLAND

LOCATION - 1-23

DST NUMBER - 1

INTERVAL TESTED - 2200 TO 2300

RECORDED TO - 2500

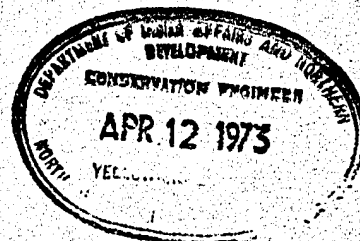
DEPTH - 2207

FINAL SHUT IN PRESSURE

TIME(MIN) Φ	$\frac{T + \Phi}{\Phi}$	PSIG
0	0.0000	220
9	11.0000	350
10	0.2778	400
27	4.5185	427
30	3.0385	433
45	3.1111	436
54	2.7593	450
63	2.5070	462
72	2.3125	468
81	2.1722	474
90	2.0556	478

EQU. FITTED LINE IS $\log((T_0 + \Phi)/\Phi) = -0.00047 \text{ PSIG} + 3.40445$

EXTRAPOLATION OF FINAL SHUT-IN = 520.36 H = 154.62



LYNES UNITED SERVICES LTD.

WELL NAME - AQUIT HIGHLAND

LOCATION - I-23

DST NUMBER - 1

INTERVAL TESTED - 2200 TO 2300

RECORDED TO - 2500

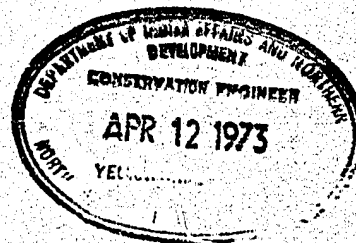
DEPTH - 2247

FINAL SHUT IN PRESSURE

TIME(MIN)	$\frac{T + Q}{Q}$	PSIG
Q	Q	
0	0.0000	220
9	11.5556	350
18	6.2778	400
27	4.5105	427
36	3.6389	433
45	3.1111	450
54	2.7593	450
63	2.5079	462
72	2.3128	468
81	2.1728	478
90	2.0556	478

EQU. FITTED LINE IS $\log((T+Q)/Q) = -0.00647 \text{ PSIG} + 3.40445$

EXTRAPOLATION OF FINAL SHUT-IN = 526.36 H= 154.62



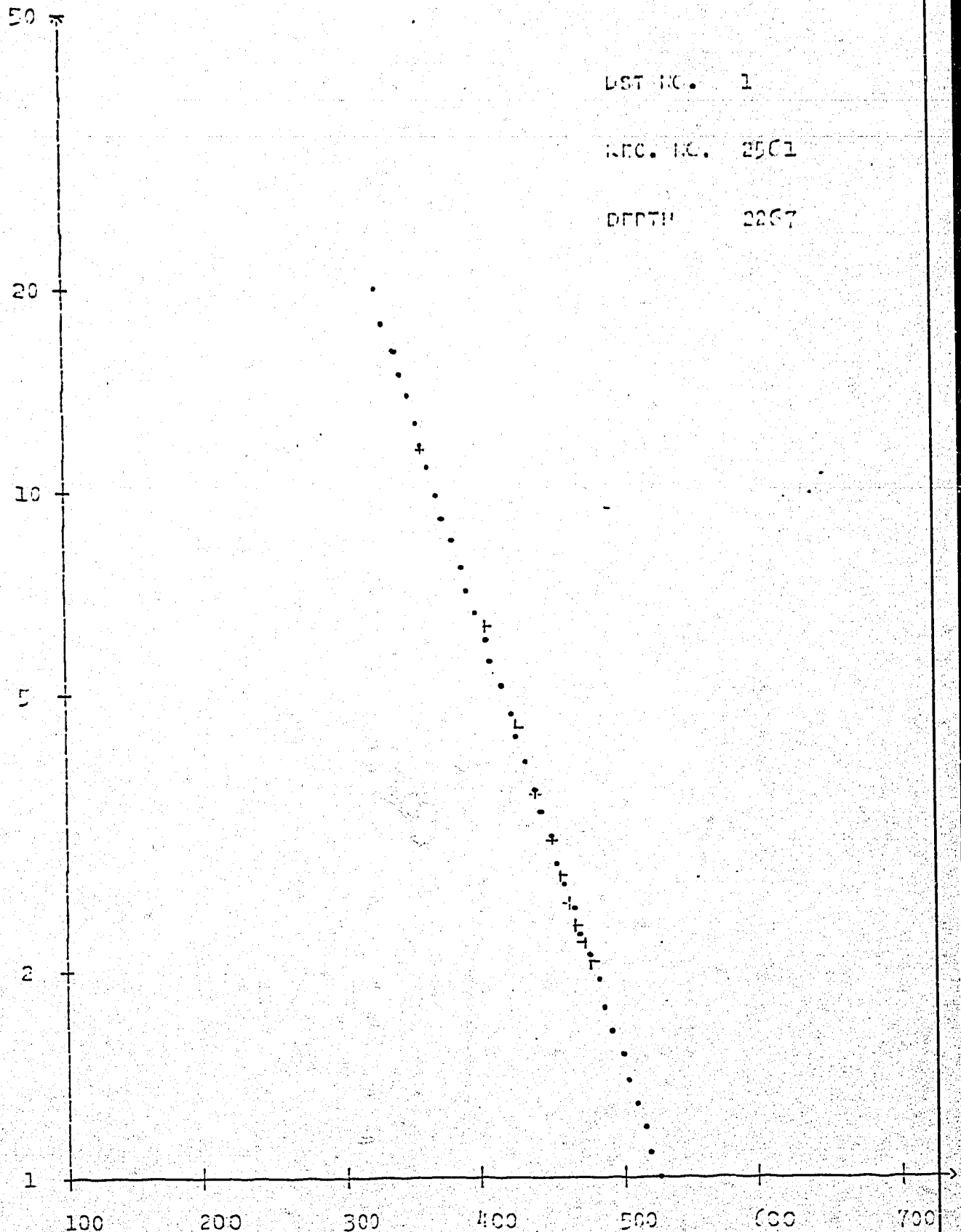
LYNES UNITED SERVICES LTD.

DST NO. 1

REC. NO. 2501

DEPTH 2267

$\frac{T_0 + q}{q}$



PSIG (OIL OR WATER)

PRESSURE EXTRAPOLATION PLOT

LYNES UNITED SERVICES LTD.

TEST DATA				GENERAL INFORMATION	
Test No. L		Lynes Test 1		Company Aquitaine Co. of Canada Ltd.	
Formation		T.D. 2731 Ft.		Address	
Interval Tested 2280 Ft. to 2340		Interval Tested 60 Ft.		Net Pay Tested	
Type of Test Straddle By-pass Conv		Cushion Amount		Well Name Aquit Highland	
Started in Hole at 1500 Hrs.		Tool Open at 910 Hrs.		Well Number I-23	
Pre-Flow 5 Mins.		Initial Shut-in 60 Mins.		K.B. Elevation Sub-Sea Elevation	
2nd Flow Mins.		Second Shut-in Mins.		Area Highland Lake Province N.W.T.	
Final Flow 90 Mins.		Final Shut-in 90 Mins.		Company Rep. L. Mulholland	
Remarks:		Tester L. Rausch		Contractor Guthrie McLaren Rig No. 4	
Blow: Weak initial puff (air). Medium blow building on final flow to strong and remaining constant then dying after 60 minutes.		Ticket No. 6391 Date March 15/73		Service Reports To: 12 - above address	
GAS BLOW MEASUREMENTS				MUD AND HOLE DATA	
Measured with no gas to surface.				Mud Type Gel	
Time	Surface Choke	Reading Inches	Cubic Feet/Day	Weight 9.4	Viscosity 78 Water Loss 8.6
				Filter Cake 2/32"	Bottom Hole Temperature
				Drill Pipe Size 4 1/2	Weight
				Drill Collars 6 1/2	I.D. 2 7/8 Feet Run 533
				Main Hole or Casing Size 7 7/8"	
				Rathole or Liner Size	No. of Feet
				Bottom Hole Choke Size 1"	
				Surface Choke Size 1"	
				Packer Rubber Size 7"	
RECOVERY				REMARKS	
TOTAL FLUID RECOVERED 434 Ft. Consisting of:				Pipe pulled very tight for 60 feet or past top of interval	
200 Ft. of drilling mud				Shut-in pressures suggest	
234 Ft. of salt water				relatively low permeability within the interval tested. Recorder	
				909 stepping.	
Test was/was not Reverse Circulated					
Oil Recovery A.P.I. Water Specific Gravity					
Salinity 55,400 PPM					
PRESSURE READINGS					
Inside _____ Outside X		Inside _____ Outside X		Inside _____ Outside X	
Recorder No. 2561		Recorder No. 2234		Recorder No. 909	
Capacity 3750		Capacity 3350		Capacity 4000	
Depth 2267		Depth 2265		Depth 2727	
NUMBER KEY:					
1 - INITIAL HYDROSTATIC		1138		1150	
2 - PRE-FLOW		300 (false)		342 (false)	
3 - INITIAL SHUT-IN				below	
4a - 2nd INITIAL FLOW				straddle	
4b - 2nd FINAL FLOW					
4c - 2nd SHUT-IN					
5 - 3rd INITIAL FLOW		37		50	
6 - FINAL FLOW		220		230	
7 - FINAL SHUT-IN		478		480	
8 - FINAL HYDROSTATIC		1138		1150	
				883	
				1221	

Aquitaine Co. of Canada Ltd.

Company

Aquit Highland I-23

Well Name and Description

#1

March 15/73

Test No.

Date of Test

7565
GUTHRIE McLAREN
Drinking Club

From *Journal of the American Medical Association*, 1991; 265: 1031-1034

Date MAR 17 1973

Weather Condition	Road Conditions	Nearest Town	Water Source	Camp Distance from River
Cold	ROUGH	Simons	Lake	200 yds
			Miles Hauled	Reason for Extra L. Dist.
			12	2

Rig No. 4 OWKS	Drill Pipe String		Tool Joint
	No.	Size	Type Thd.

PLUMES

LAST
CASING
TUBING
OR LINER

<u>Date</u>	<u>Made</u>	<u>Wt. & Gr.</u>	<u>No Joints</u>	<u>Feet</u>	<u>RKB. to CSC. HD.</u>	<u>Sat wt</u>	<u>Remarks</u>
8 th	NEN	ZHJSS	12	605		605	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUMPER

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT	C-250	15"
2.			
3.			

TIME DISTRIBUTION-HOURS

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

MOONING TOUR

DAY TOUR

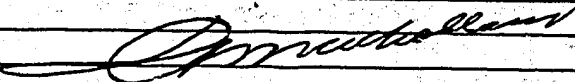
EVENING TOUR

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

DRILLING ASSEMBLY AT END OF TOUR				BIT RECORD		
	Stands D.P.		Ft.	Bit No.		
	Singles D.P.		Ft.	Size		
	D.C.			Mfg.		
	I.D. O.D.		Ft.	Type		
	D.C.			No.		
	I.D. O.D.		Ft.	Nozzle	Size	
	5th Body O.D.		Ft.	Ser. No.		
	9th Body O.D.		Ft.	Depth Out		
	Rmr. Body O.D.		Ft.	Depth In		
	Subs O.D.		Ft.	Total Ftg.		
	Bit or C.B.		Ft.	Total Hrs. Run		
	Kelly Down		Ft.	Cond. of Bit		
	Total		Ft.	Reamer No.		
Wt. of String			Lbs.	Reamer Type		
Pipe in Hole			Jts.	Water Charges Reg. Hrs. O.T. Hrs.		
Pipe on Racks			Jts.	Trucker.....		
Total Pipe on Lease			Jts.	Trucker.....		

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

[illegible][illegible][illegible][illegible][illegible]

FOOTAGE			DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)		Rotary RPM	Wt. on Bit 1000 Lbs	Pump Press	Pump No. 1	Pump No. 2	Method Run		
From	To	Fig.								Liner Size	S.P.M.	Liner Size	S.P.M.	SC-3 Part 4- Com d-
OIL WELL CEMENT + 8% GEL. STARTED MIXING CEMENT AT 3:15 PM. MIXING COMPLETE AT 4:10 PM WITH GOOD CEMENT RETURNS AT SURFACE.														
Deviation Record		Depth	Dev.	Direction		Depth	Dev.	Direction		Depth	Dev.	Direction		
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
								INSERTED OMESA LATCH DOWN PLUG AND PUMPED PLUG DOWN WITH 6 BBL'S OF DIESEL OIL. FINAL PRESSURE 1600 PSI. PID OFF PRESSURE PLUG HELD. PLUG DOWN @ 4:25 PM MAR 17/73.						
								PLUG RELEASED 8:00 PM MAR 17/73						
4:00	4:15	1/4						CEMENT TUBING						
4:15	12:00	7 3/4						LEAK OUT RECD.						
														

TIME SUMMARY

Day Work		
----------	--	--

Hrs. W/DP	
-----------	--

ATTN: WCO/BI	

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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Reg. No.

No. of Lines	Size
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Feet S.ipped

Report of

**Ton Mi. or Trips
Since Last Cut**

Ton **Mi.** or Trips

Cumulative

10

11

1. *Journal of the American Medical Association*, 1997; 278: 1039-1044.

1. *Chlorophyll a* (Chl *a*)

N^o 7563GUTHRIE McLAREN
Drilling Co.

DAILY DRILLING REPORT

Form 6

Lessee Apuit Highland L I-23 Date MAR 15 1973
Well Name 23-62-40-122-15
Location - Loc. 23-62-40-122-15 Sec. 15 Twp. 23 Rge. 62 W. 40Weather Condition Cool Road Conditions Rough Nearest Town FT Simpson Water Source Lake Camp Distance from Rig 200 YD
Reason for Extra L. Plant C Pump

OPERATOR <u>Apuit</u>	Rig No. <u>4</u> DWKS <u>11-34</u>	Drill Pipe String <u>534</u> O.D.	Tool Joint <u>534</u> O.D.	Type Tbd. <u>F.H.</u>	No.	MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER	Size	Make	Wt. & Gr.	No Joints	Feet	RKB. CSG. HD.	Set at	Remarks
SIGNATURE OF OPERATOR'S REPRESENTATIVE <u>[Signature]</u>	SIGNATURE OF CONTRACTOR'S TOOL PUSHER <u>[Signature]</u>				1.	<u>NET</u>	<u>C-250</u>	<u>15"</u>		<u>5 7/8</u>	<u>NEW</u>	<u>24 K 55</u>	<u>12</u>	<u>506</u>		<u>506</u>	
					2.												
					3.												

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 Lbs.		Pump Press		Pump No. 1		Pump No. 2		Method Run	
Rig Up & Tear Down	Morn	Day	Eve	35	Stands D.P.	2186.56 Ft.	Bit No.		Time		From	To	Feet																
Drilling Actual				18	Singles D.P.		Size		Weight																				
Running					D.C.	64	Mfg.		Visc.-Sec.																				
Conditioning Mud & Circulating					I.D. O.D.	533.71 Ft.	Type		W.L.-C.C.																				
Trips					D.C.		No.		FL TR. CK.																				
Lubricate Rig					I.D. O.D.		Size		PH																				
Deviation Survey					Sib. Body O.D.		Ser. No.		SD. Cont. %																				
Test B.O.P.					Sib. Body O.D.		Depth Out		Pressure Gradient																				
Cut Off Drilling Line					Rm. Body O.D.		Depth In																						
Repair Rig					Subs	2.00 Ft.	Total Ftg.		Mud & Chemicals Added																				
Coring					Bit or C.B.		Total Hr. Run		Type	Amt.	Type	Amt.																	
Wire Line Logging					Kelly Down	9.13 Ft.	Cond. of Bit																						
Running Casing & Cementing					Total	2735 Ft.	Reamer No.																						
Waiting on Cement					Wt. of String	68.000 Lbs.	Reamer Type																						
Drill Stem Test					Pipe in Hole	70 Jts.	Water Charges	Reg. Hrs. O.T. Hrs.																					
Make UDST					Pipe on Racks	51 Jts.	Trucker																						
Other					Total Pipe on Lease	121 Jts.	Trucker																						
				Driller <u>Paul Collins</u>																									

COMPLETION WORK				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 Lbs.		Pump Press		Pump No. 1		Pump No. 2		Method Run	
A. Performing				35	Stands D.P.	2186.56 Ft.	Bit No.		Time		From	To	Feet																
B. Tubing Trips					Singles D.P.		Size		Weight																				
C. Swabbing					D.C.	64	Mfg.		Visc.-Sec.																				
D. Testing					I.D. O.D.	533.71 Ft.	Type		W.L.-C.C.																				
E. Additional					D.C.		No.		FL TR. CK.																				
Totals					I.D. O.D.		Size		PH																				
				DAY TOUR																									
				TIME SUMMARY (Office Use Only)																									
				Day Work																									
				Hrs. W/DP																									
				Hrs. WO/DP																									
				Hrs. Standby																									
				Total Day Work																									
				WIRE LINE RECORD																									
				Reel No. <u>E 716</u>																									
				No. of Lines <u>8</u> Size <u>1 1/8</u>																									
				Feet Slipped <u>380</u>																									
				Feet Cut Off <u>380</u>																									
				Present Length																									
				Ton M. of Trips Since Last Cue <u>183.98</u>																									
				Cumulative Ton M. of Trips																									
				No. of Days From Spud <u>11</u>																									
				Cumulative Rotating Hrs.																									

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 Lbs.		Pump Press		Pump No. 1		Pump No. 2		Method Run	
				34	Stands D.P.	2123.66 Ft.	Bit No.		Time		From	To	Feet																
					Singles D.P.		Size		Weight																				
					D.C.	64	Mfg.		Visc.-Sec.																				
					I.D. O.D.	533.71 Ft.	Type		W.L.-C.C.																				
					D.C.		No.		FL TR. CK.																				
					I.D. O.D.		Size		PH																				
					Sib. Body O.D.		Ser. No.		SD. Cont. %																				
					Sib. Body O.D.		Depth Out		Pressure Gradient																				
					Rm. Body O.D.		Depth In																						
					Subs	2.00 Ft.	Total Ftg.		Mud & Chemicals Added																				
					Bit or C.B.		Total Hr. Run		Type	Amt.	Type	Amt.																	
					Kelly Down	9.13 Ft.	Cond. of Bit																						
					Total	2769.34 Ft.	Reamer No.																						
					Wt. of String	64.000 Lbs.	Reamer Type																						
					Pipe in Hole	70 Jts.	Water Charges	Reg. Hrs. O.T. Hrs.																					
					Pipe on Racks	53 Jts.	Trucker																						
					Total Pipe on Lease	121 Jts.	Trucker																						
				Driller <u>Allen Pinger</u>																									

DST #1 - LYNEE UNITED - INTERVAL 2280 - 2340
W. 4" - 7" STRADDLE BURESS PACKERS V.D. INITIAL 5 MINS.
131' 60 MINS. V.D. 90 MINS. FSI 90 MINS.
WALK INITIAL PUFF ON PREFLOW, WALK AIRBLOW WHEN VALVE
WAS OPENED, SLIGHTLY INCREASING THEN DYING AFTER 6 MINS.
RECOVERED 200' SALT WATER LIT 1400, 234' SALT WATER 135.400 LPM
1HP 1136 PSI FHP 1099 PSI NO. 15IP, FEIP 474 IFP 47 FFP 214 PSI

7562
GUTHRIE McLAREN
Drilling Co.

Form 6

Handwritten form for drilling log, including sections for OPERATOR, TIME DISTRIBUTION, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, and various logs (Morning, Day, Evening).

7561
GUTHRIE McLAREN
Drilling Co.

DAILY DRILLING REPORT

Form 6

[illegible]

429

N^o 7559CUTRIE McLAREN
Drilling Co.

DAILY DRILLING REPORT

Form 6

Lease No. Ag with Highland 1-23

Date

Location - Loc. 1 Sec. 35 Twp. 40 R. 22 W. 4 M. March 11, 1913

Weather Condition

Cold

Road Conditions

Door

Nearest Town

St. Simpson

Water - Source

4K

Miles Hauled

12

Pumped

Camp Distance from Rig

200 yd

Reason for Extra L. Plant

Camp

OPERATOR

Aquitain

Rig No.

4

Drill Pipe

5 3/4 O.D.

Tool Joint

5 3/4 O.D.

PUMPS

Size

Make

Wt. & Gr.

No. Joints

Feet

RKB. to

CSG. HD.

Set at

Remarks

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	7 1/2	8	
Reaming			
Conditioning Mud & Circulating			
Trips	3 3/4	7 1/4	
Lubricate Rig	1/4	3/4	1/4
Deviation Survey	1/4	1/4	
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring		1	7
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			
TOTAL	8 9/8	8 9/8	

MORNING TOUR

DAY TOUR

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 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
28	Stand D.P.	1749.81 Ft.	Bit No. 2	Time 12:00 3:00 6:00	From To Ftg.								
	Singles D.P.		Size 7 3/8	Weight 9.3 9.4 9.4	2224 2330 106	D							
	D.C.		Mfg. Smith	Visc.-Sec. 46 48 52									
	I.D. O.D.		Type 355-G	W.L.-C.C. 8.4 8.6									
18	2 3/4 D.C.	536.76 Ft.	No. 2 1	FL TR. CK. 3/32 3/32									
	Sub. Body O.D.		Size 10 11	PH 9.5 9.0 11.5									
	Rmr. Body O.D.		Ser. No. MC889	SD Cont. %									
1	Rmr. Body O.D.	2.00 Ft.	Depth Out 1707	Pressure Gradient									
1	Sub. Body O.D.	3.00 Ft.	Depth In 1707										
	Bit or C.B.		Total Ftg. 623										
	Kelly Down	38.43 Ft.	Total Hr. Run 35 1/2										
	Total	3330.00 Ft.	Reamer No.										
	Wt. of String	58.000 Lbs.	Reamer Type										
	Pipe in Hole	56	Water Charges Reg. Hrs. O.T. Hrs.										
	Pipe on Racks	65	Trucker										
	Total Pipe on Lease	121	Trucker										
			Driller										

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 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
28	Stand D.P.	1781.44 Ft.	Bit No. 2 3	Time 9:00 3:00	From To Ftg.								
1	Singles D.P.	1781.44 Ft.	Size 7 3/8 6 3/8 3 3/8	Weight 9.5 9.4	2230 2342 12	D							
	D.C.		Mfg. Smith	Visc.-Sec. 54 53									
18	2 3/4 D.C.	536.76 Ft.	Type 355-G WESORIL	W.L.-C.C. 9.4 9.4									
	I.D. O.D.		No. 2 1	FL TR. CK. 3/32 3/32									
	Sub. Body O.D.		Size 10 11	PH 12.5 10.5									
	Rmr. Body O.D.		Ser. No. MC889	SD Cont. %									
1	Rmr. Body O.D.	2.00 Ft.	Depth Out 2342	Pressure Gradient									
1	Sub. Body O.D.	3.00 Ft.	Depth In 1707 2342										
	Bit or C.B.		Total Ftg. 635 3										
	Kelly Down	18.50 Ft.	Total Hr. Run 36 1										
	Total	2342.90 Ft.	Reamer No.										
	Wt. of String	58.000 Lbs.	Reamer Type										
	Pipe in Hole	57	Water Charges Reg. Hrs. O.T. Hrs.										
	Pipe on Racks	64	Trucker										
	Total Pipe on Lease	121	Trucker										
			Driller										

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 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
28	Stand D.P.	1749.44 Ft.	Bit No. 3	Time 6:00 8:00	From To Ftg.								
	Singles D.P.		Size 6 3/8 3 3/8	Weight 9.5 9.4	2345 2372 30	C	1 Recovered 30'						
	D.C.		Mfg. WESORIL	Visc.-Sec. 53 53									
18	2 3/4 D.C.	536.76 Ft.	Type WESORIL	W.L.-C.C. 9									
	I.D. O.D.		No. 2 1	FL TR. CK. 3/32									
	Sub. Body O.D.		Size 10 11	PH 10.5 10									
	Rmr. Body O.D.		Ser. No.	SD Cont. %									
1	Rmr. Body O.D.	2.00 Ft.	Depth Out 2372	Pressure Gradient									
1	Sub. Body O.D.	3.00 Ft.	Depth In 2342										
	Bit or C.B.		Total Ftg. 30										
	Kelly Down	12.78 Ft.	Total Hr. Run										
	Total		Reamer No.										
	Wt. of String	56.000 Lbs.	Reamer Type										
	Pipe in Hole		Water Charges Reg. Hrs. O.T. Hrs.										
	Pipe on Racks		Trucker										
	Total Pipe on Lease	121	Trucker										
			Driller										

WIRE LINE RECORD

Reel No.	176
No. of Lines	8 Size 1 1/8
Feet Slipped	380
Feet Cut Off	380
Present Length	
Ton Mi. or Trips Since Last Cut	9209
Cumulative Ton Mi. or Trips	381.60
No. of Days From Spud	8
Cumulative Rotating Hrs.	

Core # 2342 - 2372
Cut 30'
Recovered 30'

Less
Well Name *Agait High Land L3 T-23*
Location — Lat. *1 23* (62-40-122-15) Long. *123* (15-40-122-15) Elev. *123* (15-40-122-15) W. *123* (15-40-122-15) M. *123* (15-40-122-15)

Date March 10 1964

Weather Condition		Road Conditions		Nearest Town	Water - Source	Miles Hauled	Pumped	Camp Distance from R/W	Reason for Extra L. Plant	
Cold		Poor		St. Simpson	CR	12		200 yd	CR	
TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER	Size	Make	Wt. & Gr.	No Joints	Feet	RKD. to CSO. HD.	Set at	Remarks
C-250	15		9 5/8		24" H-55	12	506		506	

OPERATOR

Rig No. 4 DWK8 2-34	Drill Pipe String		Tool Joint 5 3/4 O.D.
	No. 1	Size 2 3/4	Type Thd. FH.

No.		MANUFACTURER
-----	--	--------------

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION—HOURS

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

NO.	DRILLING ASSEMBLY AT END OF HOPE
-----	-------------------------------------

BIT RECORD

MUD RECORD

100

[illegible]

100

[illegible]

AT END OF TOOK		
22	Stand D.P.	1374 72 Fr
	Singles D.P.	36 32 Fr
	D.C.	
	I.D. O.D.	Fr
	D.C.	
18	I.D. 64	534.76 Fr
	Sub. Body O.D.	Fr
	Sub. Body O.D.	Fr
1	Sub. O.D.	2.00 Fr
1	Sub. O.D.	3.00 Fr
	Bit or C.B.	Fr
	Kelly Down	15.20 Fr
	Total	1963.00 Fr
Wt. of String	52.000	Lbs
Pipe in Hole	45	Jts
Pipe on Racks	76	Jts
Total Pipe on Lease	121	Jts

Bit No.	2	
Size	7 3/8	
Mfg.	Smith	
Type	355-G	
No.	2	1
Size	10	11
Scr. No.	MC889	
Depth Out		
Depth In	1707	
Total Ftg.	256	
Total Mr. Run	13 1/2	
Cond. of Bit	10	
Reamer No.		
Reamer Type		
Water Charge Reg. Hrs. O.T. Hrs.		
Trucker		
Trucker		
Trucker		

MUD RECORD			
Time	2:00	4:00	6:00
Weights	9.1	9.3	9.3
Visc.-Sec.	38	40	46
W.L.-C.C.	9.8	10.2	8.6
PL TH. CK.	2/32	2/32	2/32
PH	10	9.5	9.5
SD Cont. %			
Pressure Gradient			
Mud & Chemicals Added			
Type	Amt.	Type	Amt.
Water	10.00 ^{gal}		
Water 40%	10.00 ^{gal}		
C.M.C.	50 ^{lb}		
Driller	Wm. L. ...		

FOOTAGE			
From	To	Figs.	
1890	1963	73	
Deviation Record		Dr,th	
		1893	
Hour Started	Hour Stopped	Elapsed Time	A
12:00	12:45	44	
12:45	12:30	14	
12:30	1:15	34	
1:15	7:00	534	
7:00	7:15	14	
7:15	9:00	34	

[illegible]

ROTATION & RECOVERY)		Rotary RPM	Wt. on Ble 1000 Lbs.
		48	20/20
with	Dev.	Direction	
6	2°		

S OF OPERATIONS IN SEQUENCE A

service + B. C.

-vey

on / Stake. Tank

11

vey

11

Pump Pressure	Pump No. 1		Pump No. 2		Meters Run SOL Per'ch. Com'd.
	Liner Size.	S.P.M.	Liner Size	S.P.M.	
2800	5	57			
400		43			
300		27			
Depth		Dev.		Direction	
REMARKS					
2.2 P ✓					
k					
Fuel 1'-4"					

Fishing				
COMPLETION WORK	A. Perforating			
	B. Tubing Trips			
	C. Swabbing			
	D. Testing			
	E. Additional:			
Totals		8	8	8

NO.	DRILLING ASSEMBLY AT END OF TOUR		
24	Stands D.P.		Fr
1	Singles D.P.	15316	Fr
	D.C.		
	I.D. O.D.		Fr
10	D.C. 22 18	64 26	53176 v.

BIT RECORD		
Bit No.	2	
Size	7 3/8	
Mfg.	Smith	
Type	315-G	
No.	2	1
Nozzle	Size	1 1/2

MUD RECORD			
Time	9:00	12:00	3:00
Weight	9.3	9.3 -	9.3
Visc. - Sec.	43	50	47
W.L. - C.C.	9.0	8.8	8.8
FL TR. CK.	3.2	3.2	3.2
PH	6.5	10.5	10.5

FOOTAGE		
From	To	Figs.
1963	2103	140

Deviation Record	Depth
	3250

DR-D RM-R Core-C	Core No.	FORM (SHOW COR)
D		
Dev.	Direction	Dep
2°		

[illegible][illegible][illegible]

	Stb. Body	O.D.		
	Stb. Body	O.D.		
1	Km. Boer	X 00	2.00	
1	Subs	B. 1/2	3.00	
	Dit or C. 1/2			
	Kelly Down		29.59	
	Total		21.03	
Wt. of String			54.000	Lbs
Pipe in Hole			49	Ju
Pipe on Racks			72	Ju
Total Pipe on Lease			121	Ju

Ser. No.	MC 889
Depth Out	
Depth In	1707
Total Ftg.	396
Total Hr. Run	21
Cond. of Bit	
Reamer No.	
Reamer Type	

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

Trucker	
Trucker	
Trucker	

PH	4.3	10.3	10.3
SD.			
Cont. %			
Pressure			
Gradient			
Mud & Chemicals Added			
Type	Am.	Type	Am.
Cell	1000 ⁺⁺		
Salt Cell	1000 ⁺⁺		
Caustic	50		
Driller	Boss Collins		

[illegible][illegible]

SEER + BapK + 1
ILL
PUK
ILL

[illegible]

Total Day Work					
WIRE LINE RECORD					
Reel No.	E 176				
No. of Lines	8	Sic	1 1/8		
Feet Slipped	380				
Feet Cut Off	380				
Present Length					
Ton Mi. or Trips	38				
Since Last Cut					
Cumulative	38.60				
Ton Mi. or Trips					
No. of Days	7				
From Spud					
Cumulative					

NO.	DRILLING ASSEMBLY AT END OF TOUR	
26	Stands D.P.	1625.57 F
1	Singles D.P.	31.42 F
	D.C.	
	I.D. O.D.	F
	D.C.	
18	2 3/8 6 1/4 I.D. O.D.	536.76 F
	Sub. Body O.D.	F
	Sub. Body O.D.	F
1	Run. Body O.D.	200 F
1	Sub. B.T.O.D.	3.00 F
	Run. C.P.	

BIT RECORD		
Bit No.	2	
Size	7 3/8	
Mfg.	Smith	
Type	3TS-G	
Nozzle	No.	2 1
	Size	10 11
Ser. No.	MC-889	
Depth Out		
Depth In	1707	
Total Ftg.	517	
Total Hr.	2.8	

MUD RECORD			
Time	6:00	8:00	10:00
Weight	9.3	9.3	9.3
Visc.-Sec.	48	43	46
W.L.-C.C.	8.8	8.6	8.4
FL TR. CK.	7/32	2/32	3/32
PH	10.5	10.0	9.5
SD. Cont. %			
Pressure Gradient			
Mod & Chemicals Added			
Type	Amt.	Type	Amt.
W A	7.0.8		

FOOTAGE			
From	To	Ftge.	
2193	2224	121	

Deviation Record		Depth	A
		2145	

Hour Started	Hour Stopped	Elapsed Time	A
4:00	4:15	15	
4:15	4:25	10	
4:25	6:30	2:05	
6:30	7:00	30	

DR-D RM-R Core-C	Core No.	FORM (SHOW COR)			
17					
Dev.	Direction			De	
14					
B	C	D	Acc. D.T.	DETAIL	
				Rig	
				DR	
				S/L	
				CL	

ROTATION (E RECOVERY)		Rotary RPM	Wt. o Bic 1000 Lbs
		50	30
Depth	Dev.	Direction	

LS OF OPERATIONS IN SEQUENCE A

SER & Baps ✓

will

EVERY

AN SHAKER T

Pump Pres	Pump No. 1 Liner Site	S.P.M.	Pump No. 2 Liner Site	S.P.M.	Method Run SCL Par'el Com'
900	5	62			
750		46			
250		39			
Depth		Dev.		Direction	

AND REMARKS

ANK

7557
GUTHRIE McLAREN
Duckburg, Ark.

DAILY DRILLING REPORT

Form 6

Handwritten form for drilling operations. Includes sections for Lease Well Name, Location, Date, Operator, Signature of Operator's Representative, Time Distribution - Hours, Completion Work, Wire Line Record, and various tables for Drilling Assembly, Bit Record, Mud Record, Footage, and Details of Operations in Sequence and Remarks. The form is filled with handwritten data for three different drilling runs.

Lease
 Well Name Alquit Highland 2k. ~~100~~
 620 22° 45' LONG 122° 19' 08"
 Location Loc. Sec. Twp. Res. W. M. MAR. 4 1923

Weather Condition **FAIR**

Road Conditions *Good*

Nearest
Town: St. Louis

Water - Source **LAKES**
Miles Hauled **12**

Camp Distance from Rig 3 miles

OPERATOR

Rig No. 4	Drill Pipe String		Tool Joint
DWKS 4-34	No.	Size	Type Thd.
	3	5 7/8	FH.

ER	TYPE	STROKE LENGTH
----	------	---------------

LAST
CASINO

TUBING

OR. LINE

AQUITAINE

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION—HOURS

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

MORNING TOUR

DAY TOUR

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR				BIT RECORD			
	Stands D.P.		Pt.	Bit No.	1-5		
	Singles D.P.		Pt.	Size	7 7/8		
	D.C.			Mfg.	SEC		
1	I.D. O.D.	31.37	Pt.	Type	S44		
	D.C.			No.	3		
	I.D. O.D.		Pt.	Notale			
				Size	9/16		
	Sub. Body O.D.		Pt.	Ser. No.	913649		
	Sub. Body O.D.		Pt.	Depth Out	IN		
	Rmr. Body O.D.		Pt.	Depth In	0		
2	Subs	4.90	Pt.	Total Ftg.	76.		
	Bit or C.B.		Pt.	Total Htr. Run	3/4		
	Kelly Down	39.73.	Pt.	Cond. of Bit			
	Total	76.	Pt.	Reamer No.			
	Wt. of String	18,000	Lbs.	Reamer Type			
	Pipe in Hole	0	Ju.	Water Charges	Reg. Hrs. O.T. Hrs.		
	Pipe on Racks	121	Ju.	Trucker			
	Total Pipe on Lease	121	Ju.	Trucker			

DRILLING ASSEMBLY AT END OF TOUR				BIT RECORD			
Standards D.P.			Ft.	Bit No.	1-5		
Singles D.P.			Ft.	Size	7 7/8		
D.C.				Mfg.	Sec		
2	I.D. O.D.	61.37	Ft.	Type	S44		
	D.C.			No.	3		
	I.D. O.D.		Ft.	Nozzle	9/16		
	Sub. Body O.D.		Ft.	Scr. No.	913249		
	Sub. Body O.D.		Ft.	Depth Out	21 7/8		
	Rmr. Body O.D.		Ft.	Depth In	106		
2	Subs O.D.	4.90	Ft.	Total Ftg.	30		
	Bit or C.D.		Ft.	Total Hr. Run	2		
	Kelly Down	3973	Ft.	Cond. of Bit			
	Total	106.00	Ft.	Reamer No.			
Wt. of String		18.000	Lbs.	Reamer Type			
Pipe in Hole				Water Charges Reg. Hrs. O.T. Hrs.			
Pipe on Racks				Trucker			
Total Pipe on Lease				Trucker			
				Trucker			

DRILLING ASSEMBLY AT END OF TOUR				BIT RECORD			
NO.	Standards D.P.		Ft.	Bit No.	2-5		
	Singles D.P.		Ft.	Size	12 1/4		
	D.C.			Mfg.	SMITH		
2	I.D. O.D.	61 37.	in.	Type	DGH-J		
	D.C.			No.	OPEN		
	I.D. O.D.		Ft.	Nozzle			
	Sub-Body O.D.		Ft.	Ser. No.	LN084		
	Sub-Body O.D.		Ft.	Depth Out	IN		
	Rmr. Body O.D.		Ft.	Depth In	0		
3	Subs	6.02	Ft.	Total Ftg.	106		
	Bit CG	1.00	Ft.	Total Hr. Run	2		
	Kelly Down	97.61	Ft.	Cond. of Bit			
	Total	106.00	Ft.	Reamer No.			
	Wt. of String	18,000	Lbs.	Reamer Type			
	Pipe in Hole		Ju.	Water Charges		Reg. Hrs.	O.T. Hrs.
	Pipe on Racks		Ju.	Trucker			
	Total Pipe on Lease	121	Ju.	Trucker			
			Ju.	Trucker			

[illegible]

MUD RECORD			
Time	9:00	11:00	
Weight	8.4	8.4	
Visc.-Sec.	40	60	
W.L.-C.C.			
FL TR. CK.			
PH			
SD.			
Cont. %			
Pressure			
Gradient			
Mud & Chemicals Added			
Type	Amt.	Type	Amt.
Gel	2500	W	
Sa/Gel	500	W	
Caustic	100	W	
Line	100	W	
Driller	Abraham		

[illegible]

FOOTAGE			DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVER..)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run																					
From	To	Feet.							Liner Size	S.P.M.	Liner Size	S.P.M.	SGL-S Par'el-P Com'd-C																			
0	76	76	D			150	5	425	7/4	65																						
<table border="1"> <thead> <tr> <th>Deviation Record</th> <th>Depth</th> <th>Dev.</th> <th>Direction</th> <th>Depth</th> <th>Dev.</th> <th>Direction</th> <th>Depth</th> <th>Dev.</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td></td> <td>76</td> <td>10</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>													Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction		76	10							
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction																							
	76	10																														
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																								
12:00	12:30	1/2						REPAIR VALVE ON CANTY Pump																								
12:30	1:15	3/4						MIX MUD																								
1:15	2:00	3/4						SPUD & DRILL 7 3/8 HOLE LOSING GARC FROM 50'																								
2:00	2:15	1/4						SURVEY																								
2:15	6:15	4						RAN OUT OF FUEL WAIT Portruck. to LIFT FUEL Ta																								
6:15	7:00	3/4						WORK ON PUMP. WORK UNDER VALVES																								
7:00	8:00	1						WORK OUT MUD RING.																								
								G.L. ELEVATION 1532. "																								
								KB TO G.L. 12.8 "																								
								KB ELEVATION 1545 "																								

FOOTAGE			DR-D Ind-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run		
From	To	Figs.							Liner Size	S.P.M.	Liner Size	S.P.M.	SGL-S Per'ct-P Com'd-C
76	106	30				150	5	400	7 1/4	40			
Deviation Record			Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction		
			106	10									
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
8:00	8:15	1/4						Rig Service					
8:15	10:15	2						Work Mud Ring + Condition Mud					
10:15	11:00	3/4						Drill					
11:00	1:30	2 1/2						Work Mud Ring + Condition Mud					
1:30	2:00	1/2						Drill					
2:00	4:00	2						Condition Mud + Work Sluffing shale					

[illegible]**WIRE LINE RECORD**

Real No. £716

No. of Lines 8 Size 1³/₈

Feet Slipped 45

Feet Cut Off 75

Present Length

Ton Mi. or Trips
Since Last Cure 272.51

Cumulative
Ton Mi. or Trips

No. of Days
From Spud 1

Cumulative
Rotating Hrs.

755 O

DAILY DRILLING REPORT

Form 6

MARCH 2 1973

Weather Condition	Road Conditions	Nearest Town	Water - Source	Camp Distance from Rig
Cool	Rough	FT. Simpson	Water Hauled	Reason for Extra L. Plant
			Pumped	Camp

[illegible][illegible][illegible][illegible]