



Well Name Nom du puits		DECALTA DOME LRI ET AL KEELE N-62		Drilling Authority No. Autorisation de forage n° 709	
Field/Area Gisement/Région				Date Issued Date d'émission September 17, 1973	
Location Emplacement		Unit Unité N-62-64-30-124-45		Permit or Lease 5423	
Latitude 64°21'48" N		Longitude 124°57'12" W			
U.W.L.R. N.R.U.E.P. Lat. 64.36333° N		Long. 124.95333° W.			
U.W.I. No. N.I.P. No. 300N626430124450					
File Microfilmed		Rig. Release Date Date de transfert de la tour de forage 21-10-73			
Tour Sheets, Microfilmed		Status Statut O + A			
		Information Release Date Date de publication autorisée des informations 21-10-75			

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

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Application for a Drilling Authority	Sept. 25, 1973 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

DATE RECEIVED
RECU LE

LOGS: DIAGRAMMES

NAME
Nom

Type

Run No.
Nº du
sondage

Interval
Intervalle

ANALYSES:

Sample
Échantillon

Lab. No.
Lab. nº

Formation

Interval
Intervalle

A.O.F. Potential
Débit maximal
absolu d'un puits

Formation

Interval
Intervalle

MC.F/D.
M.P.C./jour

Test Date
Date du test

DRILL STEM TESTS: – ESSAIS AUX TIGES

No.
Nº

Formation

Interval
Intervalle

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 DECALTA DOME LRI ET AL KEELE N-62		Permit No. - N° de permis 5423	Lease No. - N° de concession -
(Permittee, Licensee, Lessee) - (Défendeur de permis ou de licence, du concessionnaire) Total Petroleum (North American) Ltd.		Exploratory Licence No. - N° de licence de sondage 2035	
(Operator) - (Exécutant) Western Decalta Petroleum Limited		Exploratory Licence No. - N° de licence de sondage 2255	

LOCATION - EMPLACEMENT				
Unit - Unité N	Section 62	Grid - Étendue quadrillée 64-30-124-45	Latitude 64°21'48"N	Longitude 124°57'12"W
Unique Well Identifier - Code d'ordinateur 300N626430124450			Universal Well Location Reference - Références universelles d'emplacement du puits Lat. 64.36333°N. Long. 124.95333°W.	

	Date	Depth - Profondeur	Pool(s) Gisement(s)
Spudded Début des travaux	Sept. 20/73		
Suspended Suspension des travaux			Interval(s) Open to Production Intervalle(s) de production NIL
Resumed Operations Reprise des travaux			
Finished Drilling Forage terminé			
Deepened Approfondissement			
Complete (Gas/Oil) Achèvement (Gaz/Pétrole)			Elevation: Gr. 729' K.B. 740' Altitude du sol du carré d'entraînement
Abandoned Abandon	Oct. 21/73	4199'	Rig No. 7H Drilling Contractor Guthrie McLaren N° de la rig de forage Entrepreneur en forage
Rig Released Fin des travaux	Oct. 21/73		Contractor's Business Licence No. 10920 N° du permis de l'entrepreneur

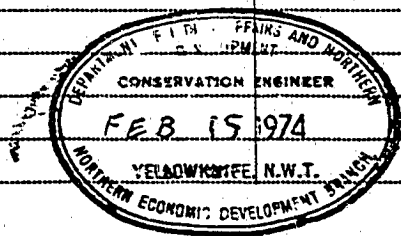
CASING RECORD - TUBAGE

Casing Size (Inches) Diamètre (en pouces)	Grade Qualité	Weight Poids	Amount Longueur	Set at - Fixation à	Sacks of Cement and Additives Sacs de ciment et d'additifs
1. 10-3/4 Conductor Pipe		36.5#	62'	62'	30 sax permafrost cement + 2% CaCl ₂
2. 7	KS	20	16 its	523.7'	135 sax construction cement + 2% CaCl ₂
3.					
4.					
5.					
6.					

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. Recupérées	From - de	To - à	Rec. Recup.
Top of Little Bear	1131	-391		NIL				
Top of Basal Little Bear San Unit	1830	-1090						
Slater River	2128	-1388						
San Sault	2783	-2043						
Ronning	2840	-2100						
Saline River	3530	-2790						

Log Record - Diagrammes

Run Série	Type of Log Genre de diagramme	From - De	To - À
	Schlumberger		
1	Dual Induction-Laterolog	4191	520
1	Formation Density Log	4196	520
1	Borehole Compensated Sonic Log	4196	520



CEMENTING RECORD (Plug, Squeeze, etc.) CIMENTATION (écoulement, sous pression, etc.)				PERFORATING RECORD (Bullet, Jet) PERFORATION (à balles, à jet)				SERVICING RECORD (Acidizing, Fracing, etc.) ENTRETEN (acidification, fracturation, etc.)			
Date	From - de	To - à	Remarks - Remarques	Date	From - de	To - à	Remarks - Remarques	Date	From - de	To - à	Remarks - Remarques
1973											
Oct. 19	4199	4100	66 sax + 2% CaCl ₂								
Oct. 20	2890	2790	35 sax + 3% CaCl ₂ Felt @ 2785'								
Oct. 20	570	470	41 sax + 3% CaCl ₂ Felt @ 475'								
Oct. 20	Surface		5 sax								

DRILL STEM TESTS - ESSAIS AUX TIGES

No. - No	Date	Formation	From - de	To - à	V.O. Mins. Vapeur ouverte (minutes)	I.S.I. Mins. Première opération (minutes)	F.S.I. Mins. Opération définitive (minutes)	I.S.I.B.H.P. Pression de fond à l'observation définitive	I.F.B.H.P. Pression de fond au forage définitif	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	Sept. 25 1973	Top of Little Bear	1121	1155	60	30	90	315	304	95	525	515	Rec. 600' Fresh Water
2	Sept. 28	Basal Little Bear	1877	1910	60	30	90	671	650	50	879	889	Rec. 775' Fresh Water
3	Oct. 2	Ronning	2853	2895	90	30	90	1172	1161	34	1349	1338	Rec. 30' Mud, 471' Salt Water
4	Oct. 19	Ronning	3350	3430	60	60	90	1396	1394	154	1841	1810	Rec. 180' Mud, 960' Salt Water

ANALYSIS - ANALYSE				PRESENT STATUS OF WELL ETAT ACTUEL DU PUIS			
Lab. No. No de laboratoire	Sample Échantillon	From - de	To - à	Source	Remarks - Remarques	Oil Pétrole	Interval (intervalle)
7021-31523	1	1155	1121	DST #1			
7021-31523	2	1910	1877	DST #2			
7021-21523	3	2895	2853	DST #3			
E73-2964	1	3350	3430	DST #4			
						Gas Gaz	Interval (intervalle)
						Oil Huile	
						Susp. Travaux sus.	

WESTERN DECALTA PETROLEUM LIMITED

Company
Société

Signed by
Signé par

Title
Titre

VICE PRESIDENT EXPLORATION

Date

February 11, 1974

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

Préparer les formulaires en conservation du district



File No. 709
Drilling Authority No.

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 DECALTA DOME LRI ET AL KEELE N-62
Location: Unit N Section 62 Grid 64-30-124-45
Latitude 64°21'48"N Longitude 124°57'12"W
Unique Well Identifier 300N626430124450
Universal Well Location Reference Lat. 64.36333°N. Long. 124.95333°W
Permit No. 5423 Lease No. —

Total Petroleum (North America) Lt
(Permitter, Licensee, Lessee)

Date of commencement of proposed program October 19, 1973.

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at NIL
Gas at NIL
Water at 1111 - 1155, 1877 - 1910, 2853 - 2895, 3350 - 3430
Total Depth 4199' Date of last operations October 21, 1973 (Rig Release)
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. 10-3/4" Conductor Pipe	36.5#	52'	52'	—	Nil
2. 7"	20#	16 jts	523.7'	135 sax construction + 2% CaCl ₂	Plug in place @ 5:15 a.m.
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
1	4199 - 4100	Saline River	66 sax + 2%	
2	2890 - 2790	Ronning	35 sax + 3%	Felt @ 2785'
3	470 - 570	Bottom of Surface Casing	41 sax + 3%	Felt @ 475'
				Welded on same plate.

The following logs have been run BHCS, DIL, FD

Other operations proposed Nil

Operations to be carried out by Guthrie McLaren Contractor Licence No. 0989
Address 14630 - 119 Avenue Address Edmonton, Alberta
Responsible Agent in field J. Ontko
Dated at Calgary this 22 Day of October 19 73
Signed by *[Signature]* Company Western Decalta Petroleum Limited
Title Vice President Exploration Operator's Exploratory Licence No. 2255

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Confirming oral approval given October 19, 1973.

Dated November 9, 19 73

[Signature]
Oil Conservation Engineer

IAND 52-96 (5) (2-69)

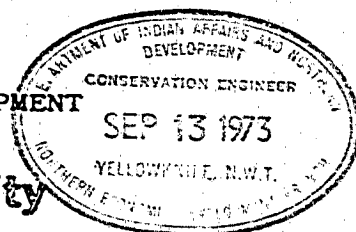
Forms to be submitted in triplicate to Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.



CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application for a Drilling Authority



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

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

Name and number of well DECALTA DOME LRI ET AL KEELE N-62

Location: Unit N Section 62 Grid 64-30-124-45

Latitude 64° 21' 48" N Longitude 124° 57' 12" W

Unique Well Identifier 300N626430124450

Universal Well Location Reference Lat. 64.36333° N. Long. 124.95333° W.

Elevation: Ground 732 K.B. 742 feet above sea-level.

Well is expected to produce from Ronning formation at a depth

of about 4200' feet. Expected total final depth 4200'

Area assigned to well Exploratory

(for Oil Conservation Engineer's use only)

Permit No. 5423 Lease No. - Acreage 55,344

Permittee, licensee, or lessee Total Petroleum (North American) Ltd.

Exploratory Licence No. 2035

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	Feet of Cement
1. <u>10-3/4"</u>	<u>32.75</u>	<u>H-40</u>	<u>New</u>	<u>100</u>	<u>100</u>
2. <u>7"</u>	<u>20</u>	<u>J-55</u>	<u>New</u>	<u>500</u>	<u>200</u>
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment

Hydril and Double-gate Shaffer 6" - 900 series

Well will be drilled with Rotary Rig No. 7H by Guthrie McLaren Drilling Limited

(Drilling Contractor or company)

14630-119th Ave., Edmonton, Alberta T5L 2P2

Responsible agent of applicant:—

Contractor's Business Licence No. 10920

At well Guthrie Toolpusher At registered office W.G. Tyler

Address - Address 630-6th Ave., S.W., Calgary, Alberta T2P 0T2

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

Dated at Calgary, Alberta this 29 day of August 19 73

Signed by [Signature] Company Western Decalta Petroleum Limited

Title Chief Engineer Operator's Licence No. 2255

(For Oil and Mineral Division use only)

APPROVED

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

The Conditions of Approval that are attached will affect your operations. Please read and post these Conditions at the drilling site.

Dated September 17, 19 73

[Signature]
Oil Conservation Engineer

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

TO BE ATTACHED TO AND MADE A PART OF DRILLING AUTHORITY NO. 709

FOR Decalta Dome LRI et al Keele N-62 APPROVED Sept. 17, 1973.

CONDITIONS OF APPROVAL:

1. Copies of this Drilling Authority or Amendments to a 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 shall submit to this office, on Tuesday of each week/daily, the latest reports received 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 contamination of adjacent areas, or sub-surface waters.
4. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
5. Approval must be obtained from the District Conservation Engineer to run any casing or liners not approved on the Drilling Authority.
6. All shows of oil and/or gas, and water flows, or any unusual events shall be reported to the District Conservation Engineer immediately.
7. Should a fatal accident occur, drilling operations are to be suspended and the District Conservation Engineer notified immediately. Permission to resume drilling must be obtained from the District Conservation Engineer.
8. Two field print copies of all well logs and three copies of the core analyses and fluid analyses must be forwarded to the District Conservation Engineer as soon as they are available.
9. Formation tops (samples or logs) of the section penetrated each week are to be reported with the weekly drilling reports.
10. The District Conservation Engineer must be notified at least 24 hours before spudding the well.
11. Permission to drill beyond the approved final total depth must be obtained from the District Conservation Engineer.

B. Wood
F. G. E. Blue

GEOLOGICAL PROGNOSIS

DECALTA DOME LRI ET AL KEELE 0-62

64° 21' 48" N 124° 57' 12" W

Unit 0 Sec. 62 Grid 64 30 - 124 45

N.W.T. PERMIT 5423

S.P. 46 Line K

Ground Elevation 732' K.B. 745'±

Spud in Cretaceous	Depth	Elevation
Sans Sault	2900'	-2155'
Ronning	2980'	-2235'
Total Depth	4200'	-3355'

Samples

Ten foot samples will be caught from grass roots to T.D.

One set of washed samples will be put in vials at the wellsite.

The remainder of the sample will be forwarded to the Geological Survey of Canada.

Testing

All significant porosity will be evaluated. Water samples will be put in metal containers for subsequent benzene analysis.

Coring

If significant hydrocarbons are recovered on a test, a program of coring and testing will be commenced.

Logging

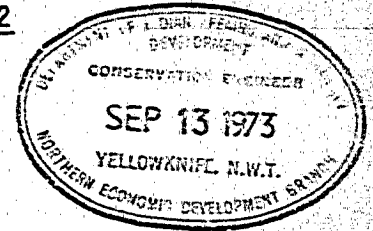
The logging program will be decided at the appropriate time, but will consist of at least IES AND BHCS logs.

Reports

All reports will be sent to Decalta's Calgary office for distribution. This is a 'TIGHT HOLE', all reports in code.

DRILLING PROGRAM ON DECALTA DOME LRI ET AL KEELE 0-62

Elevations: G.L. 732'
K.B. 742'



1. Drill sufficient 13-3/8" hole with dry auger to set 10-3/4", 32.75# conductor casing into a consolidated formation below perma-frost. Cement with sufficient perma-frost cement to obtain returns to the surface.
2. After waiting on cement, drill out below 10-3/4" casing with 9" bit, test cement job on conductor and continue drilling 9" hole.
3. After drilling 500 feet of 9" hole, run sufficient 7", 20# casing to land on bottom. Cement with sufficient cement (3% CaCl₂) to obtain surface returns.
4. In 8 hours, slack off casing and install casing bowl and blowout preventers. Prior to drilling out in 12 hours, test casing and blowout preventers to 1000 psi and log results.
5. After drilling out shoe with 6 1/4" bit, test surface casing cement job to 150 psi for 15 mins. If test satisfactory continue drilling 6 1/4" hole with water until mud-up required by hole conditions.
6. Ten foot samples will be caught and any zones of interest will be tested as they are penetrated.
7. After penetrating all zones down to 4200' (-3355), the hole will be logged and all additional zones of interest tested.
8. After evaluating the hole, further completion details will be approved out of the Calgary office of Western Decalta Petroleum Limited.

SURVEYS AND TALLIES

1. Take Totco surveys every 100' on surface hole. Maximum deviation will be one degree.
2. Surveys to be taken every 500' below the shoe in accordance with Government regulations. Maximum deviation is 3 degrees. Deviation in excess of 3 degrees will be reported to a Western Decalta representative.
3. Double tallies to be taken prior to logging and recorded in tour book.

LOGGING PROGRAM

A. IES

(2" - 100') from total depth to surface casing.

(5" - 100') from total depth to surface casing.

B. BHCS/Gamma Ray/Caliper

(2" - 100') from total depth to surface casing.

(5" - 100') from total depth to surface casing.

C. Additional logs may be run at this time if required by geological department, i.e., dipmeter.

DRILLING MUD

Hole will be drilled with water until hole conditions require mud-up. A Gel/Chemical mud system will be used. Anhydrite will be treated out with soda ash.

W.G. Tyler
Chief Engineer

11 September 1973

GUTHRIE McLAREN DRILLING LTD.

RIG 7H BLOWOUT PREVENTION EQUIPMENT

Blowout Preventer Stack

Flow Nipple

Fill Up
Line

Equipped with 40 gallon accumulator
and two nitrogen bottles.
Baker hand pump 75 feet from rig.

6" 900 Series
Hydril

6" 900 Series

Blind Rams

Double Gate Shaffer

Pipe Rams

6" 900/600
Series Flanged

Blowout Preventer Manifold

Adj. Choke

2000 psi
Mud Gauge

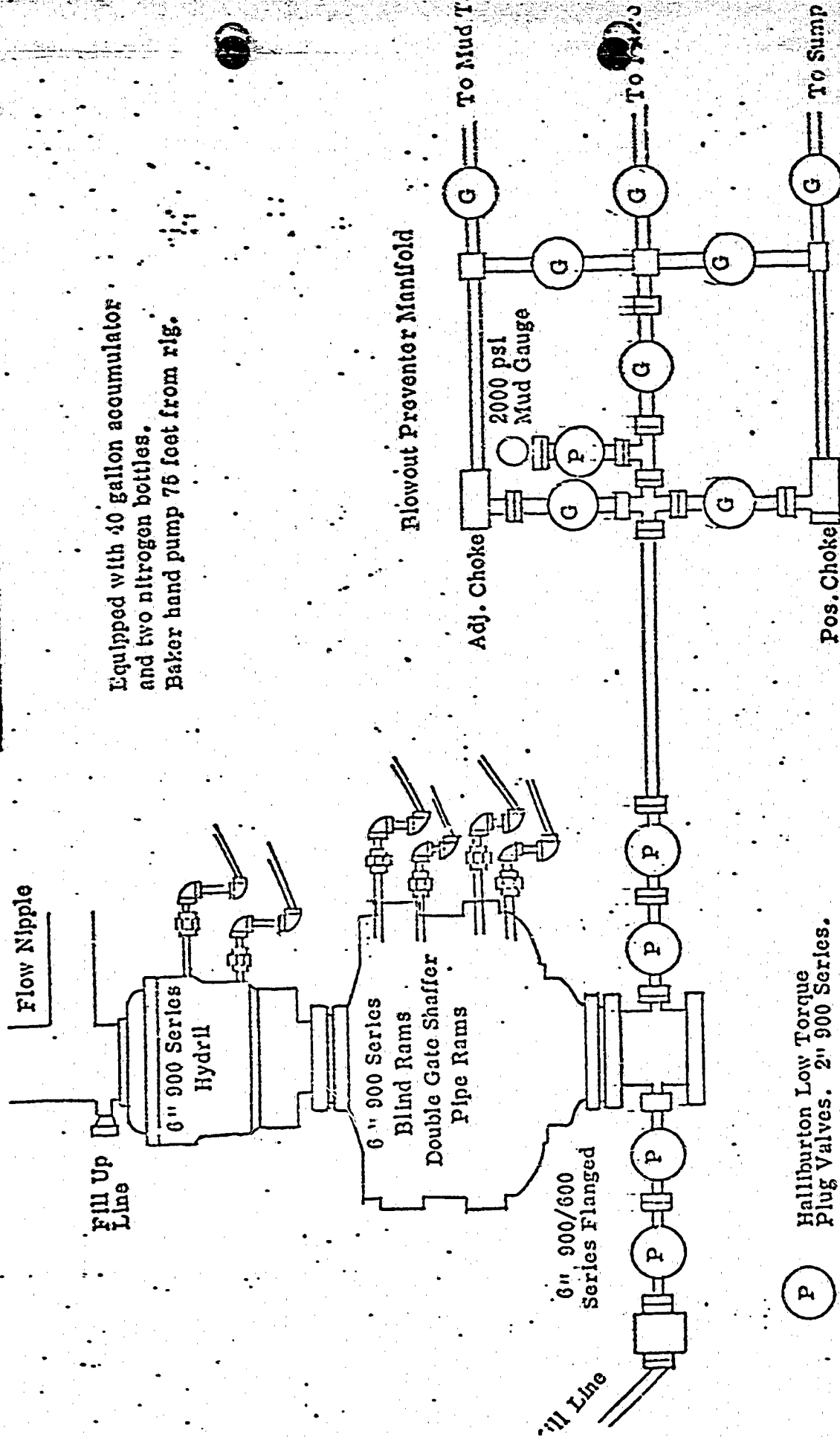
Pos. Choke

To Mud T.

To Mud T.

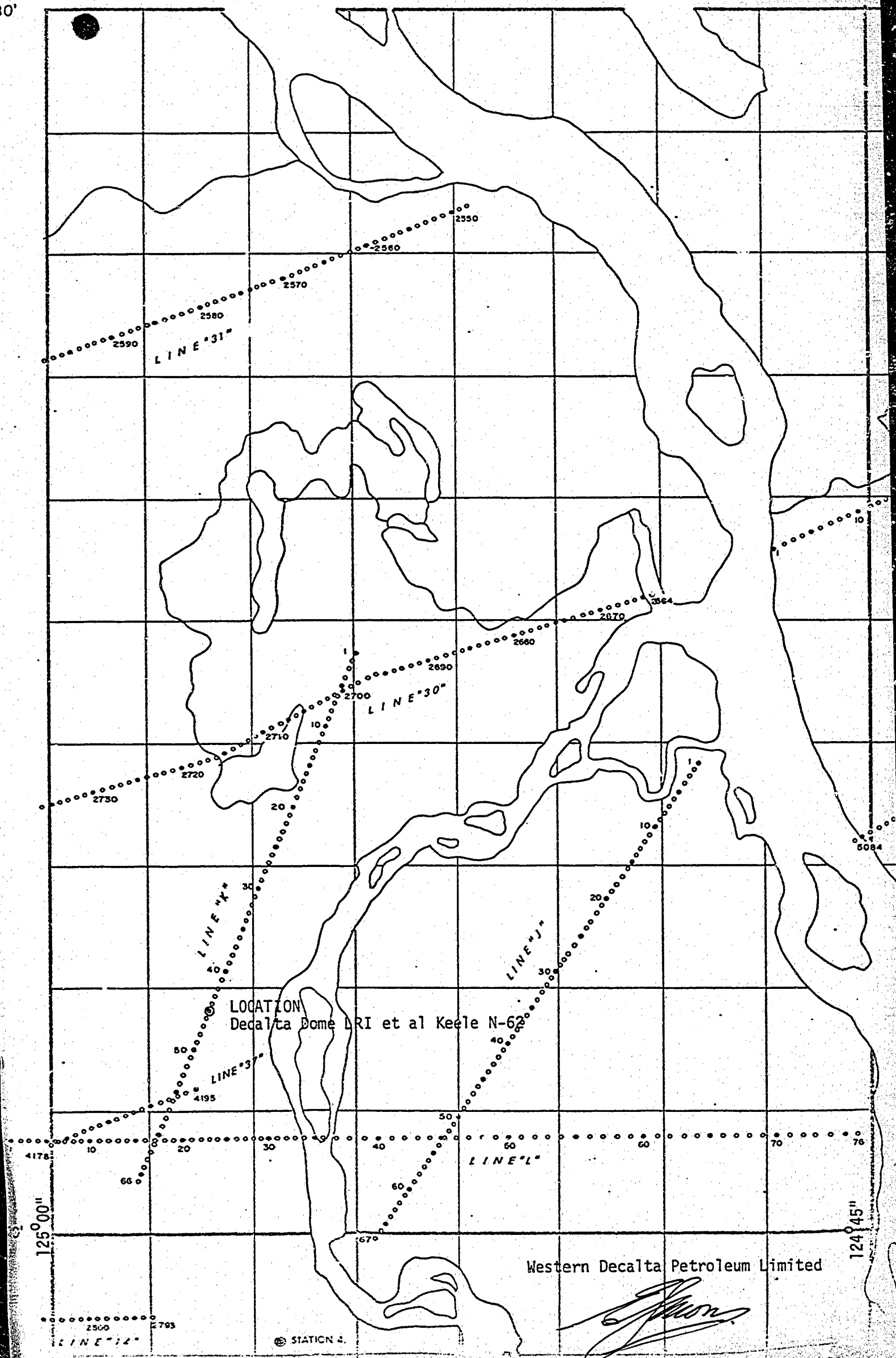
Halliburton Low Torque
Plug Valves. 2" 900 Series.

WKM 2" 900 Series Flanged
Gate Valves.



30'

124° 45'



019-11-04-049

DECALTA DOME LRI ET AL KEELE N-62

64°21'48"N. 124°57'12"W

NORTHWEST TERRITORIES

N-7940-1-790

019-11-04-049

WELL HISTORY REPORT

on

DECAITA DOME LRI et al KEELE N-62 ✓

64 deg.21'48"N ✓ 124 deg.57'12"W ✓

NORTHWEST TERRITORIES

CANADA



John K. Ontko
Submitted by:
John K. Ontko
Professional Geologist

TABLE OF CONTENTS

SUMMARY OF PERTINENT DATA

SUMMARY OF SUB SURFACE DATA

SAMPLE DESCRIPTION

ENGINEERING SUMMARY

- (a) Bit Record
- (b) Mud Record
- (c) Daily Progress Report
- (d) Deviation Record
- (f) Drill Stem Tests
- (e) Abandonment Record

SUMMARY OF PERTINENT WELL DATA

NAME OF WELL: Decalta Dome LRI et al Keele-N-52 ✓
PERMITTEE: Total Petroleum (North America) Ltd. ✓
OPERATOR: Western Decalta Petroleum Limited
630 - 6th Avenue S.W.,
Calgary, Alberta.
LOCATION: Lat. 64 deg., 21' 48"N. ✓
Long. 124 deg., 57' 12"W. ✓
Unit N Sec. 62 Grid 64-30; 124-45 ✓
Shot Point 46 of Line K.
PERMIT: 5423 ✓
DRILLING CONTRACTOR: Guthrie McLaren Drilling Ltd. ✓ Rig#7 Helicopter
DRILLING AUTHORITY: 709 Issued Sept. 17th, 1973. ✓
CLASSIFICATION: New Field Wildcat ✓
ELEVATION: 729' ground, 740' K.B. ✓
SPUDED: 8:00 AM, Sept. 20th, 1973 ✓
COMPLETED DRILLING: 8:00 AM, Oct. 14th, 1973 ✓
TOTAL DEPTH: 4199 - driller ✓ 4196 - logger ✓
WELL STATUS: D & A ✓
RIG RELEASE: 12:01 AM, Oct. 21st, 1973 ✓
HOLE SIZES: 13-3/8" 0 - 50' ✓
9" 50 - 521' ✓
6 1/4" 521' - T.D. ✓
CASING: Conductor - 62' - 10-3/4" 32.75#
w/30 sax permafrost + 2% CaCl₂ ✓
Surface - 523.7' - 7" 20# w/135 sax
construction + 2% CaCl₂ ✓
RIG MOVE & SUPPLY: Okanagan Helicopters Ltd.
NO. OF DST's: 4 ✓
NO. OF CORES: 0 ✓
LOGS: Schlumberger ✓
TOOLPUSHERS: R. Rutherford; A. Field ✓
WELLSITE SUPERVISION: J. Ontko
HEADQUARTER SUPERVISORS: A. Patterson & K. Bassaraba (geology).
T. Tyler (engineering)
DISTRIBUTION OF DATA: Well cuttings (1 set bags) - Institute
of Petroleum & Sedimentary Geology-Calgary
Well cuttings (3 set bottles + 1 envelope)
Decalta.

SURFACE CASING TALLY

Ran 16 joints 7" 20# Simotimo KS casing, measured 523.70'
K.B. with float shoe, collar, 3 scratchers, 2 centralizers.
Cemented with 135 sax construction + 2% CaCl₂.

Plug in place 5:15 AM, with 800# and good returns. Held
pressure on same as float did not hold.

Joint

1	30.43'
2	32.00
3	33.21
4	32.75
5	33.70
6	30.75
7	33.40
8	33.70
9	33.32
10	33.70
11	33.62
12	32.53
13	32.70
14	31.34
15	33.70
16	30.72
	521.57'
	.95 shoe
	1.18 float
TOTAL	523.70'

SUMMARY OF PERTINENT WELL DATA CONT'D.

DISTRIBUTION OF DATA: Schlumberger Logs (Field and original)
Decalta
Geolograph - 1 Decalta & 1 Guthrie
McLaren
Well Reports - Decalta (all) for
distribution

SUMMARY OF SUB-SURFACE DATA

K.B. 740'

<u>FORMATION</u>	<u>LOG DEPTH</u>	<u>ELEVATION</u>
Perma Frost		
CRETACEOUS		
Top of Little Bear	1131	- 391
Top of Basal Little Bear		
Sand Unit	1830	-1090
Slater River	2128	-1388
Sans Sault	2783	-2043
Ronning	2840	-2100
Saline River	3530	-2790
Total Depth	- 4199 - driller	
	4196 - logger	

SAMPLE DESCRIPTION

SAMPLE DESCRIPTIONS

10' interval (lagged) Start at 60' K.B.

- 60 - 70 Shale - dark grey, soft, blocky to fissile in part. Occasionally micro-micaceous.
- 80 Shale - as above, with a chitinous fish tooth observed.
- 90 - 100 Shale as above. Poor samples.
- 110 - 210 Shale as above. Improvement in sample quality. Cuttings difficult to wash, because when wet it becomes a goo.
- 220 Shale - as above with occasional chip of light brown mudstone.
- 230 Shale as above.
- 240 Shale - as above, one chip of a black, rounded chert pebble (cavings?)
- 250 - 320 Shale as above.
- 330 Shale - as above, with a chip of a rounded, black, chert pebble present.
- 340 - 50 Shale - as above with a trace amount of dark grey to black chert fragments.
- 360 - 70 Shale - as above with considerable very fine to fine grained, loose, angular, sand grains.
- 380 - 400 Shale - as before with very occasional pyrite fragment.
- 410 - 20 Shale - as above, with pyrite more easily noticeable. Occasional black, rounded, chert pebble or fragment there of.
- 430 - 40 as above with occasional chip of ironstone.
- 450 - 70 with considerable, very fine sized, loose quartz sand grains.
- 480 - 520 Shale as above with occasional trace of pyrite and black chert.
- Surface casing run at 521'.
- 530 Shale - as above with trace of light purple siderite with coarse, angular, quartz grain inclusions.

- 540 - 550 Shale as above with trace of light grey, slightly salt and peppered, very fine grained, sub-angular, sandstone, with occasional solitary, angular, coarse quartz grains and pyrite fragment.
- 570 - 80 as above with shale becoming light brown and silty in part.
- 590 as above, becoming more arenaceous.
- 600 as above with trace of solitary, coarse, sub-rounded, coarse vari-colored chert and quartz grains (appear cemented in a light purple siderite.)
- 610 Shale - grey to brown grey, blocky, silty, slightly carbonaceous in part, with occasional pyrite and solitary quartz and/or chert grains. Trace to minor amount of grey, argillaceous, very fine grained sandstone.
- 640 - 60 as above with argillaceous sandstone varying from common (more obvious) to a trace.
- 670 - 700 as above with shale becoming more brownish in part. Argillaceous sandstone of above is common to abundant (10% - 40%.) Occasional fragment of pyrite remains present, however, the chert and quartz grains have all but disappeared.
- 710 - 30 as above with occasional chip of brown mudstone. The argillaceous sandstone has become minor to trace in amount.
- 740 - 50 with a few chips of greyish-green shale. Decrease in argillaceous sandstone to nil.
- 760 - 820 Shale - predominantly grey, blocky, silty, with minor grey, argillaceous, very fine grained sandstone. Occasional pyrite fragment present.
- 830 decrease in pyrite and chert to trace.

- 850 Shale - grey to dark grey, blocky, silty, grading to sandy in part, with minor to trace of grey, argillaceous, very fine grained sandstone. Occasional pyrite and few chips of green marl.
- 360 - 910 as above with shale becoming less arenaceous to only slightly. Pyrite and green shale (marl) remain as occasional.
- 920 as above with abundant dark grey to black, blocky shale, increase in pyrite. Trace of rusty iron (stone?)
- 930 - 50 Shale - dark grey in part silty, brownish grey, blocky, with minor to trace amount of pale green shale. Trace of grey, argillaceous, in part kaolinitic sandstone. Occasional pyrite and chert pebble (grain) present.
(Note: shale is soft when wet, but not bentonitic.)
- 960 as above with decrease of brown grey shale to minor with trace of darker green shale.
- 970 - 1020 as above, dark grey and brownish grey shale. with occasional chip of green shale and pyrite fragment.
- 1030 - 40 as above with slightly brownish grey shale predominant.
- 1050 - 70 dark grey shale as above predominant.
- 1080 as above with occasional coarse, rounded, black chert grain. A foram noticed.
- 1090 - 1110 Shale as above (occasional green shale chip remains present.)
- 1120 as above with few angular chips of dark grey to black chert, trace of grey, argillaceous, very fine grained, slightly salt and peppered sandstone. Pyrite obvious.

- 1130 Grit - vari-colored chert, angular to sub-roundness of chips exhibited. Probably a pebble conglomerate in a shale matrix as no sandstone present.
- 1140 Grit - loose, coarse, vari-colored chert grains as above, in a light grey, fine grained, poorly sorted, sub-rounded to sub-angular, slightly salt and peppered sandstone. Poor to fair porosity. No oil stain or fluorescence.
- 1150 Sandstone - as above with minor amount of vari-colored chert. Poor to good porosity. Occasional chip appears stained (iron?) No fluorescence or cut.
- 1155 circu- Sandstone as above, very slightly glauconitic.
lated Porosity mostly poor, but grading to good. No stain or fluorescence.
- 1160 becoming argillaceous with minor kaolinite matrix, vari-colored, sub-rounded chert pebbles common. Porosity poor, occasionally fair.
- 1170 - 1200 with minor amount to trace of grey shale. Decrease in chert to minor. Occasional pyrite.
- 1210 - 20 decrease in sandstone becoming more argillaceous and finer textured. Abundant sub-rounded, vari-colored chert (grit) with black predominant. Much grey, silty shale present.
- 1230 Sandstone - grey, very argillaceous, silty to very fine grained, occasionally fine grained, contains trace of black flecks and glauconite, occasional pyrite. Porosity poor and spotty. Chert decreasing to minor.
- 1240 as above with minor amount of grey shale.
- 1250 increase in medium and dark grey shale to abundant. Trace of pale green shale and light grey marl with quartz grain inclusions.

- 1260 becoming fine grained in part with poor to fair porosity. Chert abundant. Decrease in above shales.
- 1270 - 80 Sandstone - grey, friable, salt and peppered, sub-angular, fair to poorly sorted, decrease in grit sized chert to minor, shale minor in amount.
- 1290 - 1300 Sandstone - grey, fine grained, fair to good sorting, sub-angular, salt and peppered, less friable than above, kaolinitic matrix, loose angular quartz and vari-colored chert grains common. Good porosity, no stain.
- 1310 grading to finer texture and becoming argillaceous. Grey shale common. Trace of coarse, chert and quartz grains.
- 1320 predominantly argillaceous sandstone and shale as above.
- 1330 - 50 Shale - grey, silty to sandy in part, with grey argillaceous sandstone of above common.
- 1360 with light grey, very fine grained, slightly black flecked, argillaceous sandstone abundant. Occasional rusty shale chip present.
- 1370 Sandstone - as above with above shale common. Trace of light brown (iron stained) sandstone and shale.
- 1380 - 90 argillaceous, silty to very fine grained sandstone as above.
- 1400 - 10 as above, with minor amount of grey shale.
- 1420 as above, shale becoming common, light brown mudstone obvious.
- 1430 as above, grading to predominantly shale.
- 1440 Shale - grey, blocky with lighter grey, silty to sandy shale abundant.
- 1450 as above, decrease in silty, sandy shale (very argillaceous sandstone) to common. Less than 25%.

1460 predominantly argillaceous sandstone of above.
1470 - 80 Sandstone - very fine grained to silty, argillaceous (as above) with minor amount of above shale.
1490 as above with shale decreasing to a trace.
1500 - 10 grading to primarily an argillaceous siltstone.
1520 - 30 interbedded with dark grey, blocky shale which is abundant.
1540 - 50 Shale - grey, blocky, silty in part.
1560 increase in grey, argillaceous siltstone (very fine grained sandstone common - app.35%).
1570 decrease in siltstone to minor.
1580 as above with trace of light brown mudstone with occasional rusty ironstone chip.
1590 - 1600 with increase in grey, argillaceous siltstone (very fine grained sandstone) to common - 30%.
1610 - 50 Shale as above with very minor siltstone content. Less than 15%. Occasional chip of brown mudstone present.
1660 Sandstone - grey, argillaceous, very fine grained. (Same as above.)
1670 grading to a very argillaceous siltstone.
1680 Shale - grey, blocky, with varying minor amounts of grey, argillaceous siltstone and very fine grained sandstone.
1690 - 1700 Sandstone and siltstone of above predominant.
1710 - 50 predominantly shaly with siltstone (very fine grained sandstone) as above.
1760 as above with light grey, silty shale common.
1770 - 90 Shale - dark grey, blocky, silty in part. Same as above.
1800 with minor amount of lighter grey, argillaceous siltstone (very fine grained sandstone.)
1810 Sandstone - as above, very argillaceous, very fine grained, grading to siltstone in part. Shale minor in amount. Trace brown ironstone.

- 1820 grading to a silty shale.
- 1830 - 40 Shale - grey, blocky, silty to sandy.
- 1850 with few coarse, sub-rounded, vari-colored chert pebbles.
- 1860 as above, with minor amount of light grey, slightly salt and peppered and micaceous, slightly kaolinitic, fine grained, sub-angular sandstone with vari-colored, coarse sub-rounded chert grains (grit) obvious. Few chips of cement are also present, suggesting this is a poor sample, as some of the cuttings may have been in a mud tank for awhile.
- 1870 as above with only a trace of above sandstone, chert and cement.
- 1880 with grey, salt and peppered, fine to medium grained, poorly sorted sandstone. Poor to good porosity. No stain or fluorescence.
- 1890 Sandstone - as above with a spotty kaolinite matrix, and occasional mica flake. Porosity is poor to good. No stain etc.
- 1900 becoming argillaceous in part with grey, blocky shale common.
- 1910 grading to an argillaceous, very fine grained, tight sandstone.
- 1920 - 70 Shale and Sandstone - grey, blocky, silty with varying amounts of grey, argillaceous, very fine to fine grained sandstone (from minor to abundant.)
- 1980 - 90 as above. Occasional chip of aragonite columns.
- 2000 with minor amount of grey, slightly argillaceous, salt and peppered, very fine to fine sized, angular to sub-angular, slightly porous sandstone.

- 2010 - 20 Sandstone - grey, fine to medium sized, angular to sub-angular, poorly sorted, slightly salt and peppered, in part ferruginous stained, good to excellent porosity. The quartz is clear, opaque to translucent types. Occasional loose, coarse, sub-angular to sub-rounded opaque quartz grain. Much grey, blocky shale of above present.
- 2030 Sandstone - as above with good to excellent porosity. Some iron stain.
- 2040 - 60 as above with some kaolinite matrix. Porosity varies from poor to excellent. Some disseminated pyrite.
- 2070 - 90 Sandstone - as above becoming fine grained, angular to sub-angular, fair to good sorting. Good to excellent porosity.
- 2100 - 30 as above, decrease in porosity to poor to fair. Occasional chip of brown mudstone present.
- 2140 grading to very fine grained, argillaceous, tight. Minor amount of grey shale.
- 2150 Shale - grey, blocky, silty in part with minor amount of grey, argillaceous, very fine grained sandstone of above.
- 2160 Sandstone, Siltstone and Shale - as above with grey, argillaceous, very fine grained sandstone and siltstone abundant (prevalent.)
- 2170 - 80 Shale - as above predominates with abundant siltstone and sandstone of above.
- 2190 Shale - as above with minor dark grey, blocky to fissile in part shale.
- 2200 - 90 Shale - as above, dark grey, blocky to slightly fissile.
- 2300 - 20 as above with a very minor amount of grey siltstone, grading in part to sandstone.
- 2300 - 2430 Shale - as above, with occasional trace of argillaceous siltstone and/or sandstone.

- 2440 - 60 as above with minor amount of dark grey shale with a slight metallic lustre.
- 2470 - 80 Shale - as above, dark grey, blocky, fissile in part. Occasional trace of siltstone and/or sandstone.
- 2490 Shale - as above with minor grey, argillaceous very fine grained sandstone grading to siltstone.
- 2500 - 10 as above with decrease in amount of arenaceous content. Few pale green, and brown shale chips.
- 2520 as above, shale looks darker as it was burned when being dried.
- 2530 with a few chips of light brown, and greenish brown chert.
- 2540 Shale - as above, dark grey, blocky to fissile in part.
- 2550 as above, with minor grey, argillaceous, very fine grained sandstone and siltstone. Occasional chip of yellow, grey, and black chert (angular) present. Few pyrite grains are also occasionally present.
- 2560 as above. No chert.
- 2570 - 90 as above with decrease in arenaceous content. Occasional chip of pale green shale remains present.
- 2600 - 20 as above with occasional chip of chert as before.
- 2630 Shale - as above with minor amount of darker grey shale.
- 2640 - 50 Shale - as before, grey to dark grey, blocky to slightly fissile, with trace of siltstone grading to argillaceous, very fine grained sandstone. Occasional chip of chert continues to be present.
- 2660 as above with minor amount of brown, blocky shale.

- 2670 - 90 Shale - as above, grey, blocky, and dark grey, blocky to fissile in part.
- 2700 - 20 Shale - as above with hard, brown, blocky shale minor to a trace.
- 2730 becoming hard, dark brown to black when wet (brittle.)
- 2740 - 30 predominantly dark brown to black, brittle as above. Fish remains occasionally obvious.
- 2750 as above with trace of pale grey green shale.
- 2760 with minor black (dull steel grey lustre) shale. Trace of argillaceous quartzite sandstone. Occasional chert (quartzite) chip and pyrite fragment.
- 2770 as above with minor grey, argillaceous, quartzitic sandstone.
- 2780 as above with few chips of light grey, fine grained, poorly sorted, angular to sub-angular, slightly salt and peppered, glauconitic sandstone with kaolinite cement. Tight.
- 2790 sandstone of above more common, with slight trace of patchy, poor to fair inter-granular porosity. No stain or fluorescence. (Possibly 1 to 2 feet of porosity.)
- 2800 Siltstone - grey, quartzitic with abundant grey, blocky shale.
- 2810 as above with minor amount of light grey, fine grained, glauconitic, and in part micaceous sandstone (as before.) Porosity poor and patchy.
- 2820 Siltstone - as above, decrease in sandstone to a few chips only.
- 2830 Sandstone - as above, light grey to white, very fine grained, fair sorting, micaceous giving rock a salt and peppered appearance, glauconitic, angular to sub-angular, quartzose. Usually well packed, quartzite looking, on occasion has lighter color with kaolinite cement. (This type may have spotty, poor porosity.)

- 2840 Limestone - white, chalky and light grey, dense, micro-crystalline.
- 2850 as above with abundant light grey brown, dense, micro-crystalline dolomite.
- 2860 Dolomite - light brown, micro to very finely crystalline in part, fossiliferous with considerable calcite infilled vugs. Occasional trace of poor pin-point and inter-crystalline porosity. No stain or cut.
- 2870 as above with poor pin-point porosity.
- 2880 - 90 Dolomite - light brown, crypto to micro to occasionally very finely crystalline, dense, tight, slightly argillaceous with minor amount of light grey to brownish grey, crypto and white, soft, chalky limestone.
- 2900 - 10 as above with dolomite becoming predominantly crypto-crystalline, and slightly limy. Chalky limestone present in minor amount.
- 2920 - 40 as above with limestone common. Partly fossiliferous. Occasional clear calcite chip present.
- 2980 - 3000 Dolomite - as above, occasionally very fine crystalline with trace of inter-crystalline porosity (appears to be fracture or fossil cavity lining), ibumen is occasionally present along in these contacts. Some fluorescence which is limited to calcite, no cut.
(Note: considerable shale with some sandstone present caused by high R.P.M. of drill pipe to correct deviation.)
- 3010 - 20 Dolomite - light brown, crypto to micro-crystalline, dense, slightly limy with minor chalky limestone.
- 3030 - 40 with minor amount of sandy dolomite, containing sub-rounded, clear quartz grain inclusions and occasional glauconite.

- 3050 - 60 sandy dolomite of above is abundant with trace of greenish shale and greenish grey, very fine to fine grained quartz sandstone. (Samples have considerable shale cavings caused by high R.P.M. of drill pipe.)
- 3070 as above with much dark to black, fissile, white speckled shale, considerable other recognized lithology from up-hole present.
- 3080 as above, light brown, sandy dolomite with minor light grey, dolitic sandstone. Trace of light grey marl, which is occasionally micaceous (muscovite), pyrite is obvious.
- 3090 Limestone and sandstone - Limestone is light grey, occasionally stained reddish, chalky to very finely crystalline in part silty to very sandy. Tight (40%.) Sandstone - predominantly reddish brown or rust stained, in part light grey to greenish, calcareous to feldspathic, silty to fine grained, sub-rounded, predominantly clear quartz, poorly sorted. (40%.) Light brown, light grey, dense, micro-crystalline dolomite common. (A pot pourri.)
- 3100 a mixture as above, with sandstone prevalent 50+%.
- 3110 as above with decrease in reddish stain, above carbonates are abundant to prevalent.
- 3120 Limestone - light grey brown, to light brown, dense, micro-crystalline, dolomitic, grading to dolomite. White to light grey, soft, chalky limestone is common.
- 3130 - 40 Red beds - reddish brown, slightly calcareous shale and siltstones interbedded with light brown to light grey limestone as above, and trace of light grey and greenish siltstone to very fine grained sandstone; and marlstone.
- 3150 as above with light brownish grey, dense, micro-crystalline dolomite abundant.

- 3160 as above with dolomite predominant.
- 3170 - 30 decrease in dolomite to minor, light grey to greenish grey, calcareous siltstone to very fine grained sandstone is becoming more obvious to minor in amount. Reddish sandstone and siltstone and shale prevalent.
- 3190 predominantly light grey, crypto to micro-crystalline dolomite.
- 3200 Dolomite - as above, white to light grey, soft to dense, crypto to micro-crystalline, very limy in part with abundant reddish (rusty to pinkish), sandy, silty, argillaceous, dolomite grading to dolomitic, silty shale - app. 35%.
- 3210 Dolomite - becoming predominantly light grey brown, hard, crypto to micro-crystalline; with decrease in sandy, silty, reddish rust colored portion to less than 20%. Trace of yellow, soft limestone and dull greenish grey, crypto-crystalline, limy dolomite.
- 3220 as above, becoming medium brown, hard, dense, micro-crystalline dolomite, abundantly stained pinkish, rusty and maroon color. Occasional chip of translucent calcite present.
- 3240 Dolomite - as above, predominantly medium brown, silty, abundant red stained dolomitic siltstone and silty dolomite.
- 30 increase in reddish brown, grey, and yellowish dolomitic siltstone and very silty dolomite to abundant (40%). Minor amount grading to very fine grained quartzose dolomitic sandstone.
- 3260 as above with abundant light brown to grey to red and yellow stained, dolomitic to very dolomitic siltstone grading to very fine grained sandstone in part. Silty dolomite common, as well as reddish stained, silty shale.

3270 - 30

Dolomite - as above, vari-colored, light grey to light brown, abundant reddish and minor yellowish, silty and/or sandy and/or argillaceous dolomite. Floating, rounded to sub-rounded, clear quartz is often present. Trace of grey marl and occasional pyrite fragment. Dolomititic siltstone and sandstone often present in minor amount. Reddish shale common.

3290 - 3350

Shale - predominantly blocky, reddish brown to maroon, with minor to trace amount of brown, slightly dolomititic with minor dolomite. Occasional chip of green shale present.

3360

Increase in dolomite to predominant. Most prevalent color of the crypto to micro-crystalline dolomite is light brown to slightly yellowish brown. Decrease in reddish shale content is obvious.

Color change from reddish to grey.

3370

Dolomite - light grey brown, dense, crypto-crystalline with minor greenish grey to greyish green, waxy, blocky shale.

3380

as above with minor amount of yellowish brown to reddish brown shale similar to before. Trace amount of soft, chalky, variably stained limestone remains present.

3390

Dolomite - light grey to brownish grey, dense, micro to finely crystalline. Trace of pin-point porosity. No stain or fluorescence or cut.

3400

Shale - blocky, grey to grey green, dolomititic with considerable grey, dense, dolomite and blocky, yellow to reddish brown dolomititic shale.

3410

Dolomite - slightly limy, grey, micro-crystalline to finely crystalline with occasional pin-point vug. Occasional ostracod observed. Perhaps occasional large vug present as indicated by some coarser sized crystals at chip edge.

- 3420 - 30 slightly limy dolomite as above, micro to finely crystalline.
- 3440 as above with trace of reddish, at times yellowish dolomite and shale as before (cavings?)
- 3450 the reddish to pinkish, slightly silty dolomite is common.
- 3460 dolomite as above, grey, micro to very finely crystalline, stained in part yellow, red to pink. Tight.
- 3470 as above with minor amount of reddish brown, slightly dolomitic, and sandy shale. A few pieces of orange stained dolomite.
- 3480 as above with considerable yellow stain.
(Note: sample burned while drying.)
- 3490 as above, yellow and reddish stain abundant, when dried becomes a bright reddish orange (a light brick red color.)
- 3500 - 10 as above yellow stain abundant. Trace of red dolomitic shale.
- 3520 - 30 with reddish brown, slightly dolomitic shale becoming abundant.
- 3540 - 50 as above, reddish shale abundant. Trace of medium grey shale and a few chips of greenish grey to green, waxy shale.
- 3560 Shale - reddish brown to maroon interbedded with green, waxy shale (minor amount), grey to grey brown (often yellow stained), micro-crystalline, slightly silty dolomite is common. Trace of siltstone and sandstone.
- 3570 as above, greyish green and green shale type very abundant. Dolomite present as trace only.
- 3580 as above, decrease in green shale to minor. Increase in grey shale, light grey brown dolomite and light grey to buff marl to common.
- 3590 Shale - decrease in reddish brown shale to minor. The grey shale is most prevalent, green shale minor and grey argillaceous, earthy dolomite and light grey marl is common.

- 3600 Shale - predominantly grey, blocky, slightly dolomitic with grey green and dark grey shale (cavings) common. Minor light grey, micro-crystalline dolomite and reddish shale is present. Trace of anhydrite.
- 3610 Shale - predominantly grey as above with minor grey green shale and light grey marl. Trace dolomite. Occasional anhydrite.
- 3620 - 40 increase in light grey and green shale as well as dolomite. Numerous loose, angular, coarse, clear quartz grains present. Minor light grey marl. Minor anhydrite present, as indicated by mud reaction.
- 3650 as above with green shale becoming common to abundant.
- 3660 - 80 as above, the occasional solitary, clear quartz appear to be crystals as well as grains. (Very little to no transport.) Apparently quartz is imbedded in light grey marl.
- 3690 as above with minor light grey, micro-crystalline dolomite.
- 3700 - 10 as above, predominantly shale, dark grey and green, fissile to blocky, waxy appearing in part.
- 3720 - 40 becoming predominantly grey to dark grey shale with green minor to common; with minor amount of light grey, slightly dolomitic shale with considerable angular, vari-sized (silt to coarse), clear quartz grain and crystal inclusions. Trace of hard, black, silicified shale.
- 3750 - 60 Shale - grey and dark grey, blocky, fissile in part with decrease in amount of green shale to very minor. Trace of hard, dark brown dolomite. (Probably nodules.)
- 3770 - 80 as above, dark brown, micro-crystalline dolomite increased to minor in amount.

- 3790 - 3800 as above with considerable white calcite.
(A fractured zone?) Shale is very dark.
- 3810 - 20 Shale - as above, very dark grey to shiny
black with abundant medium grey. Minor green
shale. Trace of dolomite, occasional calcite
fragment.
- 3830 - 60 decrease in dark grey to black shale to
common (20%) with corresponding increase in
medium grey colored shale to predominant.
Green shale remains obvious. Trace dolomite
and occasional chip of light grey marl.
- 3870 - 80 with less dark grey shale, greyish green,
slightly fissile to blocky shale common.
- 3890 - 4000 Shale - as above with greyish green shale
(in part waxy appearing) becoming abundant
to prevalent. Habit is blocky becoming more
fissile than above and slightly splintery
in part. Light brown dolomite present as
trace amount only.
- 4010 Shale - as above, greyish green, waxy in part,
blocky, fissile to splintery, with minor dark
grey and grey shale.
- 4020 - 4200 as above, predominantly fissile to splintery
habit.
- 4200 T.D.

ENGINEERING

BIT RECORD

<u>Bit No.</u>	<u>Size</u>	<u>Type</u>	<u>Serial</u>	<u>Depth In</u>	<u>Total Feet</u>	<u>Total Hours</u>	<u>Remarks</u>
1-S	9	YT1	E22	60	265	10½	1-1-1
2-S	6½	S4	4699346	325			
1	6½	S3	432960	520	409	13-3/4	4-2-1
2	6½	M4N	442960	930	225	9½	3-3-1
3	6½	M4N	433513	1155	278	12½	5-4-1
4	6½	M4L	911937	1433	190	9½	5-2-1
5	6½	S4	429701	1623	230	12-3/4	4-5-1
6	6½	J33	VN265	1853	632	39-3/4	1-2-1
7	6½	M4N	442895	2485	159	22	4-2-1
8	6½	J33	VR823	2644	330	26½	1-1-1
9	6½	M4N	436437	2974	67	23½	4-6-1
10	6½	M4N	433511	3043	43	13	3-3-1
11	6½	J33	VR824	3086	556	62-3/4	1-1-1
12	6½	J33	VR514	3642	553	50½	Lost one cone.
13	6½	M4N	442889		Reaming		

DAILY MUD RECORD

<u>Date</u>	<u>Depth</u>	<u>Weight #/Gal.</u>	<u>Vis. Sec.</u>	<u>W.L.</u>	<u>PH</u>	<u>Gel</u>	<u>Caustic</u>	<u>Peltex</u>	<u>Sawdust</u>	<u>Soda Ash</u>	<u>CMC</u>	<u>Wt. Mat.</u>
Sept. 20	60											
21	420	8.8	39			25	100	100				
22	521	9	47									
23	W.O.C.											
24	777	8.5	28									
25	1155	8.8	51			20	50					
26	1380	8.8	33			17			24			
27	1673	8.7	38		10.5	32	200					
28	1910	8.7	48		9.0	64	200		25			
29	2158	8.8	40		9.5	40	100					
30	2458	8.8	36		9.0	45	50					
Oct. 1	2626	8.8	37		9.0	72	150		14			
2	2851	8.9	37		9.5	54	150					
3	2944	9.0	38		10	20	50			100		
4	3023	9.2	37			20				100		
5	3043	9.1	35		10.5	10						
6	Work on Sump - Shut down											
7	3065	9.1	38		10	26	50					
8	3086	9.3	35		10	12	50					
9	3186	9.1	36		9.5	20	100					
10	3589	9.2	35		10.0	10	50					

DAILY MUD RECORD CONT'D.

<u>Date</u>	<u>Depth</u>	<u>Weight #/Gal.</u>	<u>Vis. Sec.</u>	<u>W.L.</u>	<u>PH</u>	<u>Gel</u>	<u>Caustic</u>	<u>Peltex</u>	<u>Sawdust</u>	<u>Soda Ash</u>	<u>CMC</u>	<u>Wt.Mat.</u>
Oot. 11	3580	9.2	43		10	20	50	50				
12	3758	9.4	62		12		50	25		2500		
13	4018	9.3	49		12			400		400		
14	4195	9.4	63	12	12				50		100	
15	4195	9.3	106	8.0	12	22	100	200			150	
16		9.5	95	8.8	10							
17		10.2	142	8.8	12	25	100		250		100	110
18		10.8	255	5.4	10.5	8	100	100				25

DAILY PROGRESS REPORT

Date	Depth	Footage	Hrs. on Bottom	8:00 AM Temp. & Weather		Remarks
				Bit Nos.		
Sept. 21	420	360	10½	1S, 2S	30 degs. clear	mud rings
22	521	101	3-3/4	3S, 2S	30 degs. cloudy	Ran casing
23	521					Cut casing, welded on bowl w/difficulty
24	777	257	7¼	1	25 degs. cloudy	Pressured BOP's - OK, Drill out
25	1155	378	15½	1, 2	20 degs. clear	Drill
26	1380	225	9-3/4	2, 3	30 degs. clear	Ran DST #1, drill.
27	1673	293	15-3/4	3, 4, 5	32 degs. clear	Drill.
28	1910	234	13½	5, 6	25 degs. clear.	Prepare to run DST #2.
29	2153	248	12	6	25 degs. cloudy	Ran DST #2, drill.
30	2485	327	19	6	30 degs. clear	Drill.
Oct. 1	2626	141	19½	7	20 degs. clear	Drill.
2	2851	225	19	7, 8	25 degs. clear	Drill.
3	2944	93	7¼	8	15 degs. clear	Run DST #3.
4	3023	79	18-3/4	8, 9	20 degs. clear	Try to correct deviation.
5	3043	20	8-3/4	9	25 degs. clear	Shut Down by Board, 5:00PM, Oct. 4/73.
6		Work on new sump				
7	3065	22	5½	10	20 degs. clear	Finish sump, Drill.
8	3086	21	7½	10, 11	26 degs. cloudy	Drill. Waiting on pump clutch.
9	3186	100	12½	11	15 degs. clear	Waiting on clutch, drill.
10	3389	203	22-3/4	11	25 degs. cloudy	Drill.
11	3580	191	10½	11	25 degs. clear	Drill - circulate sample.
12	3758	178	16½	11, 12	20 degs. snow	Drill.

DAILY PROGRESS REPORT CONT'D.

<u>Date</u>	<u>Depth</u>	<u>Footage</u>	<u>Hrs. on Bottom</u>	<u>Bit Nos.</u>	<u>8:00 AM Temp. & Weather</u>	<u>Remarks</u>
Oct. 13	4018	260	23	12	25 deg. cloudy	Drill.
14	4199	177	18	12	10 deg. clear	Reached TD. Lost one cone.
15					5 deg. cloudy	Schlumberger reached 3350 - condition hole
16					10 deg. clear	Schlumberger reached 3151 - condition hole
17						Clean fill 3150 - TD.
18						Condition hole - start logging at 8:00 AM, Oct. 18/73.
19						Ran Schlumberger logs. Run DST #4.
20						Ran abandonment plugs.

DEVIATION RECORD

<u>Depth</u>	<u>Deviation (degrees)</u>	<u>Depth</u>	<u>Deviation (degrees)</u>
100	$\frac{1}{4}$	1897	2
186	$\frac{3}{4}$	1988	2
271	1	2080	$1-\frac{3}{4}$
298	1	2170	2
325	$1-\frac{1}{8}$	2266	2
350	$\frac{3}{4}$	2358	$2-\frac{3}{4}$
378	$\frac{3}{4}$	2422	$2\frac{1}{4}$
521	1	2484	3
596	1	2502	$2-\frac{3}{4}$
656	1	2532	$2-\frac{2}{3}$
717	$1\frac{1}{2}$	2563	$2\frac{1}{2}$
777	$1\frac{1}{2}$	2593	3
838	$1\frac{1}{2}$	2623	$2-\frac{1}{8}$
899	$1-\frac{3}{4}$	2698	$2\frac{1}{4}$
972	$1\frac{1}{2}$	2788	$2-\frac{3}{4}$
1070	$1-\frac{3}{4}$	2881	$3\frac{1}{2}$
1160	2	2972	$4-\frac{3}{4}$
1190	$1-\frac{3}{4}$	2992	$4-\frac{3}{4}$
1283	$1\frac{1}{2}$	3023	$4\frac{1}{2}$
1375	$1\frac{1}{2}$	3043	$4\frac{1}{4}$
1405	$1\frac{1}{2}$	3085	4
1496	$1-\frac{3}{4}$	3126	4
1557	$1\frac{1}{4}$	3186	4
1680	$1\frac{1}{4}$	3309	4
1773	$1\frac{1}{2}$	3642	$2\frac{1}{2}$
1835	$1-\frac{3}{4}$	3772	$2\frac{1}{4}$

SURFACE CASING TALLY

Ran 16 joints 7" 20# Simotimo KS casing, measured 523.70'
K.B. with float shoe, collar, 3 scratchers, 2 centralizers.
Cemented with 135 sax construction + 2% CaCl₂.

Plug in place 5:15 AM, with 800# and good returns. Held
pressure on same as float did not hold.

<u>Joint</u>	
1	30.43'
2	32.00
3	33.21
4	32.75
5	33.70
6	30.75
7	33.40
8	33.70
9	33.32
10	33.70
11	33.62
12	32.53
13	32.70
14	31.34
15	33.70
16	<u>30.72</u>
	521.57'
	.95 shoe
	<u>1.18 float</u>
TOTAL	523.70'

DRILL STEM TESTS

Company - Lynes United Services Limited

DST #1 (Top of Little Bear) 1121 - 1155. Sept. 25/73

Preflow 5 mins. ISI 30 mins. VO 60 mins. FSI 90 mins.
Very weak air blow on preflow. Strong air blow growing
weak in 45 mins. when valve opened. Recovered 600'
fresh water.

Preflow 136	IHP	525	ISI	315	IFP	95
	FHP	515	FSI	304	FFP	304

DST #2 (Basal Little Bear) 1877 - 1910. Sept. 28/73

Preflow 5 mins. ISI 30 mins. VO 60 mins. FSI 90 mins.
Weak air blow on preflow. Strong air blow when valve
opened decreasing to fair at end of period. Recovered
775' fresh water.

Preflow 42#	IHP	879	ISI	671	IFP	50
	FHP	889	FSI	650	FFP	346

DST #3 (Ronning) 2853 - 2895. Oct. 2/73

Preflow 5 mins. ISI 30 mins. VO 90 mins. FSI 90 mins.
Good initial blow. Fair air blow decreasing to weak at
end of test. Recovered 30' mud and 471' salt water.

Preflow 63#	IHP	1349	IFP	34	ISIP	1172
	FHP	1338	FFP	228	FSIP	1161

Temp. 140 degrees F.

DST #4 (Ronning) 3350 - 3430. Oct. 19/73

Preflow 5 mins. ISI 60 mins. VO 60 mins. FSI 90 mins.
Weak air blow on preflow. Good air blow on valve opening
increasing to strong during test. Recovered 180' mud
and 960' salt water - salinity 9200 ppm.

Preflow. 401#	IHP	1841 #	IFP	154 #	ISP	1396 #
	FHP	1810 #	FFP	621 #	FSIP	1394 #

4300# Recorder No. 8820

ABANDONMENT PROGRAM

Plug #1 4199 - 4100 (Bottom Plug)
66 sax cement, down @ 5:15 PM, Oct. 19th, 1973

Plug #2 2890 - 2790 (Top of Lime)
35 sax construction cement + 3% CaCl_2 ,
down @ 6:45 PM, Oct. 19th, 1973.
Felt @ 2785', 2:15 AM, Oct. 20th, 1973.

Plug #3 570 - 470 (Over surface casing shoe)
41 sax cement + 3% CaCl_2 , down @ 3:30 AM,
Oct. 20th, 1973.
Felt @ 475', 11:30 AM, Oct. 20th, 1973.

Plug #4 (Top)
Cemented with 5 sax. Cut off casing
3' below surface and welded on plate
and well location marker.

Rig Released - 4:00 AM, October 21st, 1973



CORE LABORATORIES - CANADA LTD.
Petroleum Reservoir Engineering
CALGARY ALBERTA



Plastic

7021-31523

CONTAINER IDENTITY

LABORATORY NUMBER

Western Decalta Petroleum Limited

1 of 3

64° 21' 48.00 N.L.

OPERATOR

PAGE

LSO 124° 57' 12.00 W.L.

Decalta Dome LRI et al Keele N-62

740'

732'

LOCATION

WELL OR SAMPLE LOCATION NAME

KB ELEV.

GRD. ELEV.

Keele River Area, Northwest Territories

Little Bear

Lynes United Services

FIELD OR AREA

POOL OR ZONE

SAMPLER

DST

1

600' Fresh Water

TEST TYPE & NO.

TEST RECOVERY

Top of Tool

POINT OF SAMPLE

AMT. & TYPE CUSHION

MUD RESISTIVITY

PUMPING

FLOWING

GAS LIFT

SWAB

1155' - 1121'

WATER

BBLS/D.

OIL

BBLS/D.

GAS

MFC/D.

TEST INTERVALS OR PERFS.

SEPARATOR RESERVOIR

CONTAINER
WHEN SAMPLED

CONTAINER
WHEN RECEIVED

SEPARATOR

PRESSURES, PSIG

TEMPERATURES, °F

Sept. 25/73

Oct. 16/73

Oct. 22/73

M.A.

DATE SAMPLED (D/M/Y)

DATE RECEIVED (D/M/Y)

DATE ANALYSED (D/M/Y)

ANALYST

REMARKS

MUD FILTRATE ANALYSIS

Resistivity = 6.65 Ohm-meters @ 77°F.

Chloride = 84 mg/liters.



CORE LABORATORIES - CANADA LTD.
Petroleum Reservoir Engineering
CALGARY ALBERTA



Plastic

WATER ANALYSIS

7021-31523

CONTAINER IDENTITY

LABORATORY NUMBER

Western Decalta Petroleum Limited

2 of 3

PAGE

64° 21' 48.00 N.L.

OPERATOR

LSD 124° 57' 12.00 W.L.

Decalta Dome LRI et al Keele N-62

740'

732'

LOCATION

WELL OR SAMPLE LOCATION NAME

MS ELEV.

GRD. ELEV.

Keele River Area, Northwest Territories

Little Bear

Lynes United Services

FIELD OR AREA

POOL OR ZONE

SAMPLER

DST 2

775' Fresh Water

TEST TYPE & NO.

TEST RECOVERY

Top of Tool

POINT OF SAMPLE

AMT. & TYPE CUSHION

MUD RESISTIVITY @ OF

PUMPING

FLOWING

GAS LIFT

SWAB

1910' - 1877'

WATER

BBLS/D.

OIL

BBLS/D.

GAS

MFC/D.

TEST INTERVALS OR PERFS.

SEPARATOR RESERVOIR

CONTAINER
WHEN SAMPLED

CONTAINER
WHEN RECEIVED

SEPARATOR

PRESSURES, PSIG

TEMPERATURES, °F

Sept. 28/73

Oct. 16/73

Oct. 22/73

M.A.

DATE SAMPLED (D/M/Y)

DATE RECEIVED (D/M/Y)

DATE ANALYSED (D/M/Y)

ANALYST

REMARKS

ION	MG/L	MG%	MEQ/L
Na+K	860	31.1	37.4
K			
Ca	5	0.2	0.2
Mg	5	0.2	0.4
Ba			
Sr			
Fe		TRACE	

ION	MG/L	MG%	MEQ/L
Cl	409	14.8	11.5
Br			
I			
HCO ₃	1352	49.0	22.2
SO ₄	5	0.2	0.1
CO ₃	125	4.5	4.2
OH	0	0.0	0.0
H ₂ S		ABSENT	

TOTAL SOLIDS MG/L

BY EVAPORATION @ 110°C

BY EVAPORATION @ 110°C

2,761

AT IGNITION

CALCULATED

1.0019 @ 60°F
SPECIFIC GRAVITY

1.3320 @ 23°C
REFRACTIVE INDEX

8.9

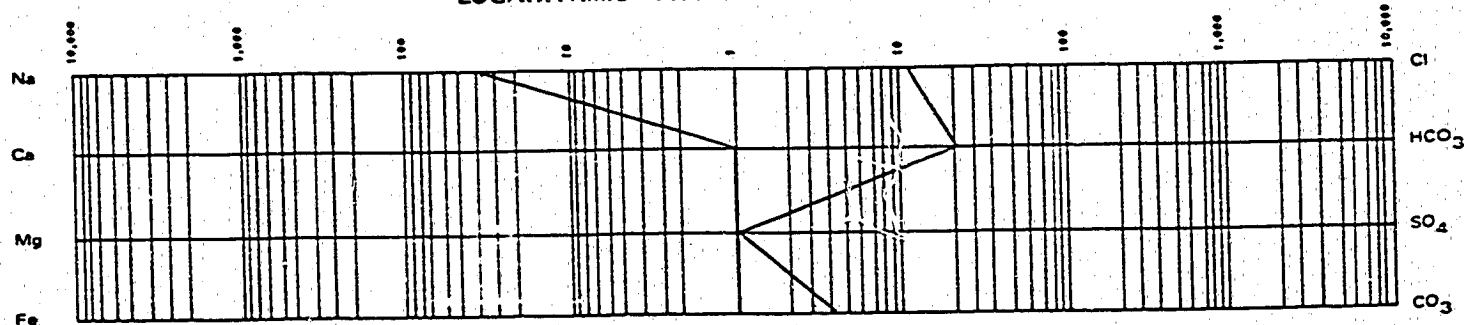
pH

2.91

@ 25°C

RESISTIVITY (OHM/MEYERS)

LOGARITHMIC PATTERN MEQ PER LITER



REMARKS



CORE LABORATORIES - CANADA LTD.
Petroleum Reservoir Engineering
CALGARY ALBERTA



Plastic

CONTAINER IDENTITY

WATER ANALYSIS

7021-31523

LABORATORY NUMBER

Western Decalta Petroleum Limited

3 of 3

PAGE

64° 21' 48.00 N.L.

OPERATOR

LSD 124° 57' 12.00 W.L.

Decalta Dome LRI et al Keele N-62

740

732'

LOCATION

WELL OR SAMPLE LOCATION NAME

KB ELEV.

GRD. ELEV.

Keele River Area, Northwest Territories

Bear Rock

Lynes United Services

FIELD OR AREA

POOL OR ZONE

SAMPLER

DST 3

501' Salt Water

TEST TYPE & NO.

TEST RECOVERY

Top of Tool

@

OF

POINT OF SAMPLE

AMT. & TYPE CUSHION

MUD RESISTIVITY

PUMPING

FLOWING

GAS LIFT

SWAB

2895' - 2853'

WATER

BBLS/D.

OIL

BBLS/D.

GAS

MFC/D.

TEST INTERVALS OR PERFS.

SEPARATOR RESERVOIR

CONTAINER
WHEN SAMPLED

CONTAINER
WHEN RECEIVED

SEPARATOR

PRESSURES, PSIG

TEMPERATURES, °F

Oct. 2/73

Oct. 16/73

Oct. 22/73

M.A.

DATE SAMPLED (D/M/Y)

DATE RECEIVED (D/M/Y)

DATE ANALYSED (D/M/Y)

ANALYST

REMARKS

ION	MG/L	MG%	MEQ/L
Na+K	10863	35.5	472.3
K			
Ca	644	2.1	32.1
Mg	243	0.8	20.0
Ba			
Sr			
Fe		TRACE	

ION	MG/L	MG%	MEQ/L
Cl	17902	58.5	504.8
Br			
I			
HCO ₃	151	0.5	2.5
SO ₄	820	2.7	17.1
CO ₃	0	0.0	0.0
OH	0	0.0	0.0
H ₂ S		ABSENT	

TOTAL SOLIDS MG/L

BY EVAPORATION @ 110°C

BY EVAPORATION @ 180°C

30,623

AT IGNITION

CALCULATED

1.0218 @ 60°F
SPECIFIC GRAVITY

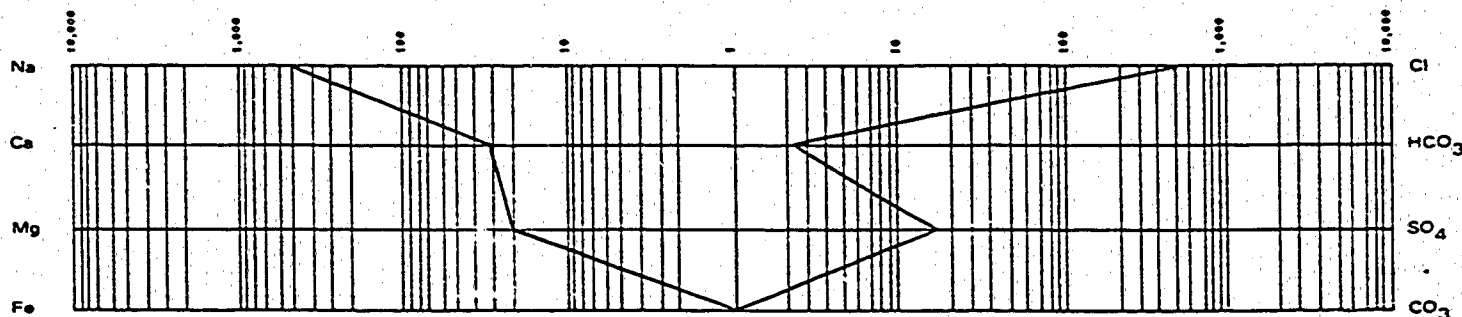
1.3371 @ 23°C
REFRACTIVE INDEX

7.7

pH

0.225 @ 25°C
RESISTIVITY (OHM/METERS)

LOGARITHMIC PATTERN MEQ PER LITER



REMARKS



CONTAINER IDENTITY
Quart Can

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —



LABORATORY NUMBER
E73-2964

SAMPLE LOCATION
300N 6264 301 24450
FIELD OR AREA

OPERATOR NAME AND ADDRESS
WESTERN DECALTA PETROLEUM LIMITED

WELL OR SAMPLE LOCATION NAME
Decalta Dome LRI et al Keele N-62

ELEVATIONS
732'

POOL OR ZONE
Ronning

NAME OF SAMPLER
W. Goodwin

COMPANY

TEST TYPE & NO
D.S.T. 4
TEST INTERVAL OR PERFS
3350' - 3430'

1140'

TEST RECOVERY

POINT OF SAMPLE

AMT & TYPE OF CUSHION

MUD RESISTIVITY

TYPE OF PRODUCTION

PUMPING

FLOWING

GAS LIFT

SWAB

PRODUCTION RATES

WATER

BBLS/D OIL

BBLS/D GAS

MCF/D

PRESSURES - PSIG

TEMPERATURES (°F)

SEPARATOR TREATER

RESERVOIR

CONTAINER
WHEN SAMPLED WHEN RECEIVED

SEPARATOR TREATER

CONTAINER
WHEN SAMPLED WHEN RECEIVED

DATE SAMPLED (D/M/Y) DATE RECEIVED (D/M/Y) DATE ANALYZED (D/M/Y)
19/10/73 02/11/73 04/12/73

ANALYST
R.J. Maloney

REMARKS

ION	MG/L	MG%	MEQ/L	ION	MG/L	MG%	MEQ/L
Na	14048	34.36	611.07	Cl	23200	56.74	654.24
K				Br			
Ca	625	1.53	31.19	I			
Mg	719	1.76	59.10	HCO ₃	280	0.68	4.59
So				SO ₄	1971	4.82	41.00
Sr				CO ₃	46	0.11	1.53
Fe	MUCH			OH	NIL		

H₂S NIL

TOTAL SOLIDS Mg/L

BY EVAPORATION 42510 @ 100°C
AT IGNITION 39310
CALCULATED 40889

ORGANIC MATTER: Present

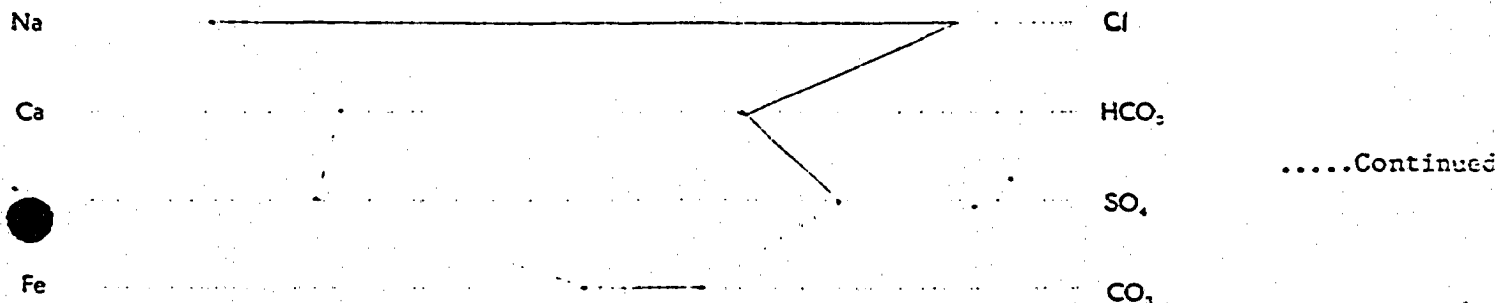
SPECIFIC GRAVITY 1.030 @ 60°C
REFRACTIVE INDEX 1.3401 @ 20°C

OBSERVED PH 8.5 @ 70°C
RESISTIVITY (OHM/cmeters) 0.184 @ 25°C

LOGARITHMIC PATTERN MEQ PER LITER

Remarks and Conclusions

The sample consisted of muddy water with a dark yellow filtrate.



WESTERN DECALTA PETROLEUM LIMITED

LABORATORY REPORT NUMBER: E73-2964

E73-2964-1: TOP

RESISTIVITY: 0.307 OHM-Meters @ 25°C.

Mud with a light brown filtrate.

E73-2964-3: BOTTOM

RESISTIVITY: 0.186 OHM-Meters @ 25°C.

Mud with a greenish filtrate.

BENZENE

E73-2964-1:

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 very muddy.

E73-2964-2:

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 muddy.

E73-2964-3:

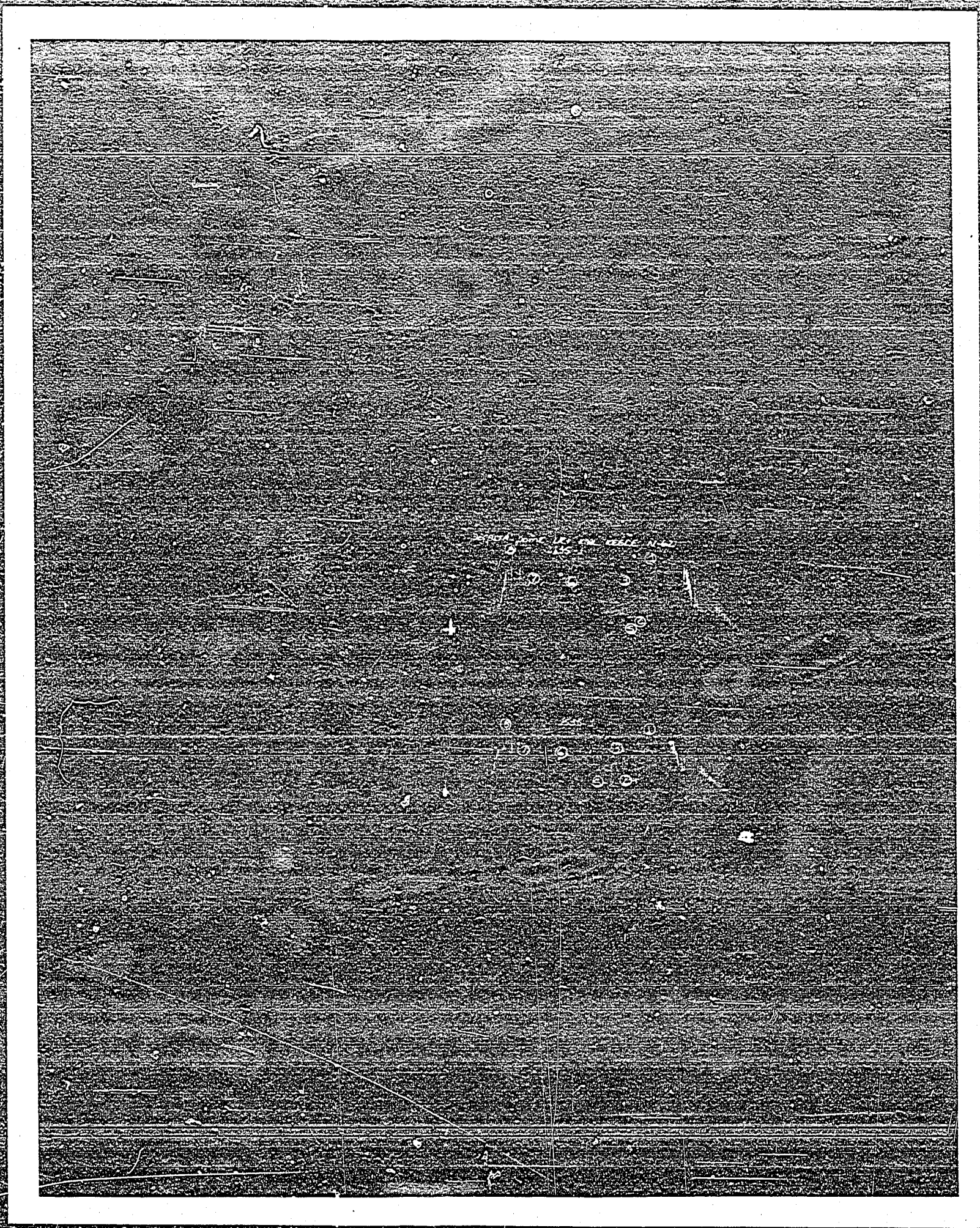
No trace of benzene indicated.

Sample was received in a 1-quart metal container with a foil insert present in the screw cap. Container was full, very muddy but had settled out.

LYNES UNITED SERVICES LTD.

TEST DATA				GENERAL INFORMATION			
Test No.	1			Lynes Test	1		
Formation	Little Bear			T.D.	1151		
Interval Tested	1121			Ft. to	1155		
Interval Tested	34			Ft. Net Pay Tested			
Type of Test	Conventional Bottom Hole						
Cushion	Amount			Ft.	Well Name		
Started in Hole at	11:25 A.M.			Hrs.	Tool Open at 1:55		
Pre-Flow	5	Mins.	Initial Shut-in	30	Mins.	K.B. Elevation	740
2nd Flow		Mins.	Second Shut-in		Mins.	Area	Keele River
Final Flow	60	Mins.	Final Shut-in	90	Mins.	Company Rep.	John Ontko
Remarks:							
Blow: Very weak air blow on preflow. Strong air blow on final flow dying throughout valve open.				Tester Gary Hughes			
				Contractor Guthrie McLaren			
				Ticket No. 7778			
				Date September 25, 1973			
				Service Reports To:			
				15 - above address			
GAS BLOW MEASUREMENTS							
Measured with							
No Gas to surface.							
Time	Surface Choke	Reading Inches	Cubic Feet/Day	MUD AND HOLE DATA			
				Mud Type Gel			
				Weight 9.0 Viscosity 58 Water Loss			
				Filter Cake 2/32 Bottom Hole Temperature			
				Drill Pipe Size 3 1/2 IF			
				Drill Collars 3 1/2 IF I.D. Feet Run 501.72			
				Main Hole or Casing Size 6 1/2			
				Rathole or Liner Size No. of Feet			
				Bottom Hole Choke Size 1/2"			
				Surface Choke Size 1"			
				Packer Rubber Size 5 1/2			
				REMARKS			
				Shut-in pressures suggest high permeability within the interval tested.			
RECOVERY							
TOTAL FLUID RECOVERED 600 Ft. Consisting of:							
600 Ft. of Fresh water							
Ft. of							
Ft. of							
Ft. of							
Test was/was not Reverse Circulated							
Oil Recovery A.P.I. Water Specific Gravity							
Salinity							
PRESSURE READINGS							
Inside X Outside		Inside Outside X		Inside Outside		Inside Outside	
Recorder No. 2235		Recorder No. 1535		Recorder No.		Recorder No.	
Capacity 3350		Capacity 4200		Capacity		Capacity	
Depth 1124		Depth 1128		Depth		Depth	
NUMBER KEY:							
1 - INITIAL HYDROSTATIC	544	533					
2 - PRE-FLOW	150	147					
3 - INITIAL SHUT-IN	322	319					
4a - 2nd INITIAL FLOW							
4b - 2nd FINAL FLOW							
4c - 2nd SHUT-IN							
5 - 3rd INITIAL FLOW	92	93					
6 - FINAL FLOW	316	316					
7 - FINAL SHUT-IN	316	316					
8 - FINAL HYDROSTATIC	536	533					

Western Decalta Petroleum Ltd. Decalta Dome LRI Et Al Keele N-62 1 September 25, 1973



LYNES UNITED SERVICES LTD.

TEST DATA		Test No. 2		Lynes Test 2		GENERAL INFORMATION		+	
Formation		Little Bear		I.D. 1910		Ft.		Company Western Decalta Petroleums Ltd.	
Interval Tested		1877		Ft. to 1910		Ft.		Address 2nd Floor, 620 - 6th Avenue S.W.	
Interval Tested		33		Ft. Net Pay Tested		Ft.		Calgary, Alberta	
Type of Test		Conventional Bottom Hole							
Cushion		Amount		Ft.		Well Name Decalta Dome LRI Et Al Keele			
Started in Hole at		9:45		Hrs.		Tool Open at		11:40 Hrs.	
Pre-Flow		5		Mins.		Initial Shut-in		30 Mins.	
2nd Flow				Mins.		Second Shut-in			
Final Flow		60		Mins.		Final Shut-in		90 Mins.	
Remarks:									
Blow:		Very weak air blow on preflow. Dead in 2 mins. Strong air blow on final flow, decreasing throughout flow.							
		15 - above address							

GAS BLOW MEASUREMENTS

Measured with

MUD AND HOLE DATA

Mud Type Gel

Weight 8.7 Viscosity 48 Water Loss
Filter Cake 2/32 Bottom Hole Temperature 145
Drill Pipe Size 3 1/2 IF Weight
Drill Collars 3 1/2 IF I.D. Feet Run
Main Hole or Casing Size 6 1/2
Rathole or Liner Size No. of Feet
Bottom Hole Choke Size 3"
Surface Choke Size 1"
Packer Rubber Size 5 1/2

REMARKS

Shut-in pressures suggest average permeability within the interval tested.

RECOVERY

TOTAL FLUID RECOVERED 775 Ft. Consisting of:

775 Ft. of Fresh water
Ft. of
Ft. of
Ft. of

Test was/was not Reverse Circulated

Oil Recovery A.P.I. Water Specific Gravity

Salinity

PRESSURE READINGS

Inside X Outside
Recorder No. 2235
Capacity 3350
Depth 1892

Inside _____ Outside X
Recorder No. 1535
Capacity 4200
Depth 1887

Inside _____ Outside _____
Recorder No. _____
Capacity _____
Depth _____

Inside _____ Outside _____
Recorder No. _____
Capacity _____
Depth _____

NUMBER KEY:

- 1 - INITIAL HYDROSTATIC
- 2 - PRE-FLOW
- 3 - INITIAL SHUT-IN
- 4a - 2nd INITIAL FLOW
- 4b - 2nd FINAL FLOW
- 4c - 2nd SHUT-IN
- 5 - 3rd INITIAL FLOW
- 6 - FINAL FLOW
- 7 - FINAL SHUT-IN
- 8 - FINAL HYDROSTATIC

865
64
679

53
361
664
864

865
54
681

56
360
666
859

Western Decalta Petroleums Ltd.

Company

Decalta Dome LRI Et Al Keele N-62

Well Name and Description

Test No. 2

September 28, 1973

Date of Test

LYNES UNITED SERVICES LTD.

WELL NAME - DECALTA DOME LPI ET AL KEFLF

LOCATION - N-62

DST NUMBER - 2

INTERVAL TESTED - 1877 TO 1910

RECORDER NO. - 1535

DEPTH - 1887

INITIAL SHUT IN PPRESSURE

TIME(MIN) ϕ	$\frac{T + \phi}{\phi}$	PSIG
0	0.0000	54
3	2.6667	674
6	1.8333	680
9	1.5556	680
12	1.4167	681
15	1.3333	681
18	1.2778	681
21	1.2381	681
24	1.2083	681
27	1.1852	681
30	1.1667	681

EXTRAPOLATION OF INITIAL SHUT-IN = 681.66

LYNES UNITED SERVICES LTD.

WELL NAME - DECALTA DOME LPT ET AL KEELE

LOCATION - N-62

DST NUMBER - 2

INTERVAL TESTED - 1877 TO 1910

RECORDER NO. - 1535

DEPTH - 1887

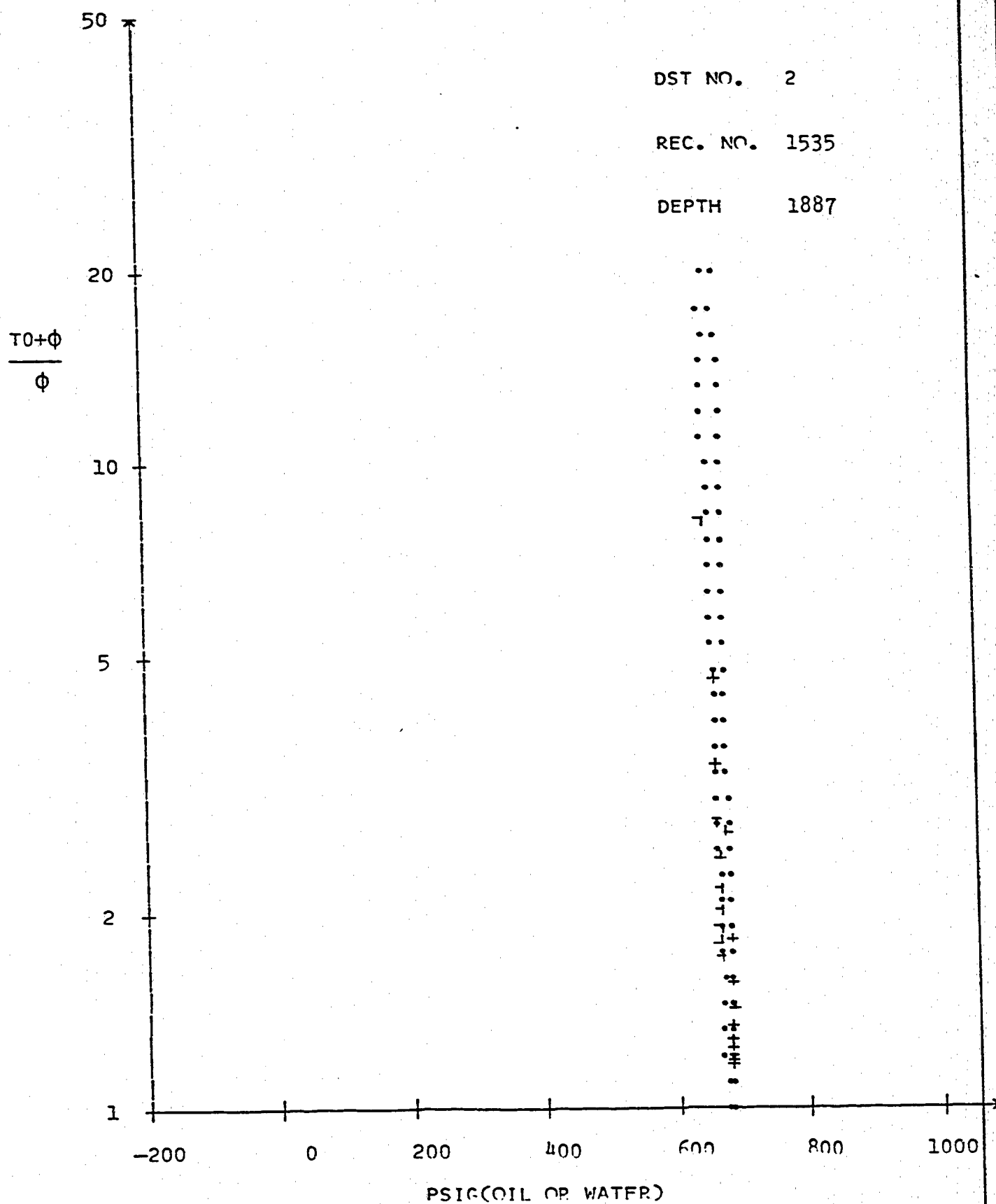
SECOND SHUT IN PRESSURE

TIME(MIN) ϕ	$\frac{T + \phi}{\phi}$	PSIG
0	0.0000	360
9	8.2222	648
18	4.6111	659
27	3.4074	660
36	2.8056	662
45	2.4444	663
54	2.2037	664
63	2.0317	665
72	1.9028	666
81	1.8025	666
90	1.7222	666

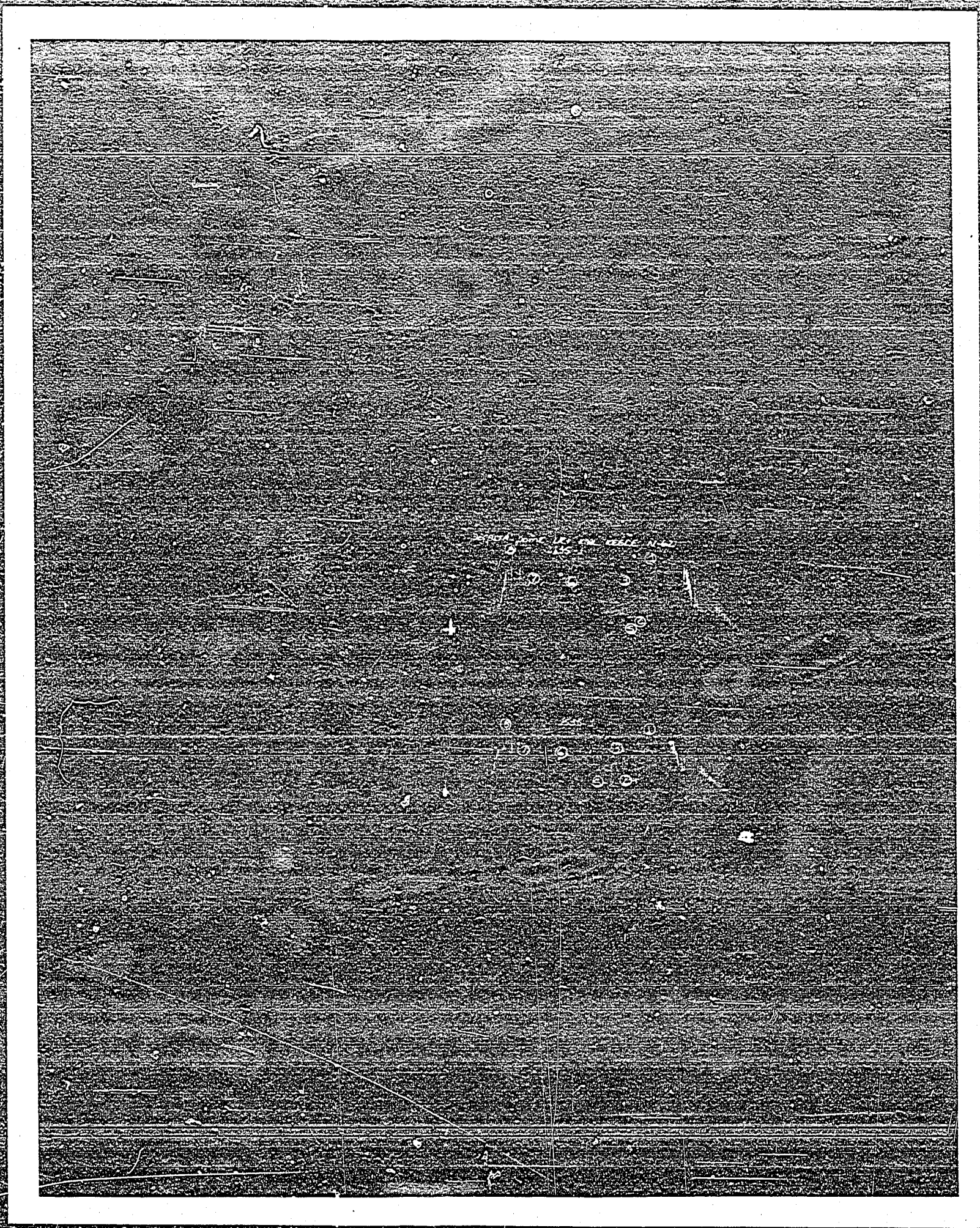
EOU. FITTED LINE IS $\log((T_0 + \phi)/\phi) = -0.04900 \text{ PSIG} + 32.86819$

EXTRAPOLATION OF SECOND SHUT-IN = 670.82 M = 20.41

LYNES UNITED SERVICES LTD.



PRESSURE EXTRAPOLATION PLOT



LYNES UNITED SERVICES LTD.

TEST DATA				GENERAL INFORMATION			
Test No. 3		Lynes Test 3		+ Company Western Decalta Petroleum Ltd			
Formation Bear Rock		T.D. 2895 Ft.		Address 2nd Floor, 630 - 6th Avenue S.W.			
Interval Tested 2853		Ft. to 2895		Calgary, Alberta			
Interval Tested 42		Ft. Net Pay Tested					
Type of Test Conventional Bottom Hole							
Cushion		Amount		Ft. Well Name Decalta Dome LRI Et Al Keele			
Started in Hole at 4:00A.M. Hrs.		Tool Open at 5:25 Hrs.		Well Number N-62			
Pre-Flow 5 Mins.		Initial Shut-in 30 Mins.		K.B. Elevation 740 Sub-Sea Elevation			
2nd Flow Mins.		Second Shut-in Mins.		Area Keele River Province N.W.T.			
Final Flow 90 Mins.		Final Shut-in 90 Mins.		Company Rep. John Ontko			
Remarks:				Tester Gary Hughes			
				Contractor Guthrie McLaren Ria No. 7H			
Blow: Very weak air blow on preflow. Very weak air blow on final flow, decreasing through-out valve open.				Ticket No. 7780 Date October 2, 1973			
				Service Reports To: 15 - above address			
GAS BLOW MEASUREMENTS							
Measured with				MUD AND HOLE DATA			
				Mud Type Gel			
				Weight 9.0 Viscosity 70 Water Loss 16			
				Filter Cake 2/32 Bottom Hole Temperature			
				Drill Pipe Size 3 1/2 IF Weight			
				Drill Collars 3 1/2 IF I.D. Feet Run 501.72			
				Main Hole or Casing Size 6 1/2			
				Rothole or Liner Size No. of Feet			
				Bottom Hole Choke Size 1 1/2"			
				Surface Choke Size 1"			
				Packer Rubber Size 5 1/2"			
				REMARKS			
				Shut-in pressures suggest high permeability within the interval tested.			
RECOVERY							
TOTAL FLUID RECOVERED 501 Ft. Consisting of:							
30 Ft. of Drilling Mud							
471 Ft. of Salt Water							
Ft. of							
Ft. of							
Test was/was not Reverse Circulated							
Oil Recovery A.P.I. Water Specific Gravity							
Salinity							
PRESSURE READINGS							
Inside X Outside		Inside Outside X		Inside Outside		Inside Outside	
Recorder No. 8870		Recorder No. 1535		Recorder No.		Recorder No.	
Capacity 4300		Capacity 4200		Capacity		Capacity	
Depth 2869		Depth 2864		Depth		Depth	
NUMBER KEY:							
1 - INITIAL HYDROSTATIC		1328		1333			
2 - PRE-FLOW		59		54			
3 - INITIAL SHUT-IN		1181		1176			
4a - 2nd INITIAL FLOW							
4b - 2nd FINAL FLOW							
4c - 2nd SHUT-IN							
5 - 3rd INITIAL FLOW		40		47			
6 - FINAL FLOW		239		238			
7 - FINAL SHUT-IN		1177		1177			
8 - FINAL HYDROSTATIC		1325		1328			

Western Decalta Petroleum Ltd. Decalta Dome LRI Et Al Keele N-62 3 October 2, 1973

Company

Well Name and Description

Test No.

Date of Test

LYNES UNITED SERVICES LTD.

WELL NAME - DECALTA DOME LRI ET AL KEELE

LOCATION - N-62

DST NUMBER - 3

INTERVAL TESTED - 2853 TO 2895

RECORDER NO. - 1535

DEPTH - 2864

INITIAL SHUT IN PRESSURE

TIME(MIN) ϕ	$\frac{T + \phi}{\phi}$	PSIG
0	0.0000	54
3	2.6667	1164
6	1.8333	1172
9	1.5556	1174
12	1.4167	1176
15	1.3333	1176
18	1.2778	1176
21	1.2381	1176
24	1.2083	1176
27	1.1852	1176
30	1.1667	1176

EXTRAPOLATION OF INITIAL SHUT-IN = 1177.32

LYNES UNITED SERVICES LTD.

WELL NAME - DECALTA DOME LRI ET AL KEELE

LOCATION - N-62

DST NUMPEP - 3

INTERVAL TESTED - 2853 TO 2895

RECORDER NO. - 1535

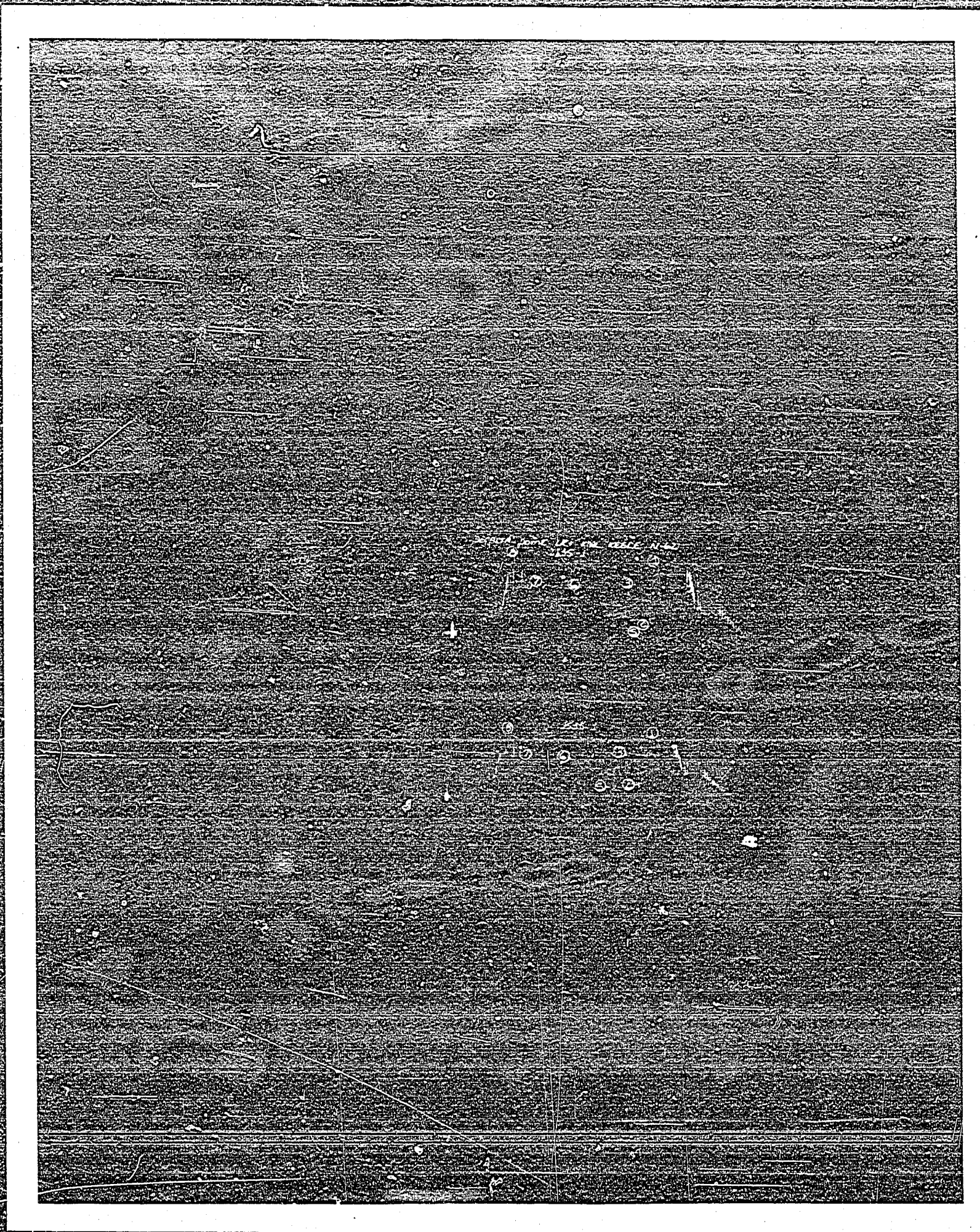
DEPTH - 2864

SECOND SHUT IN PRESSURE

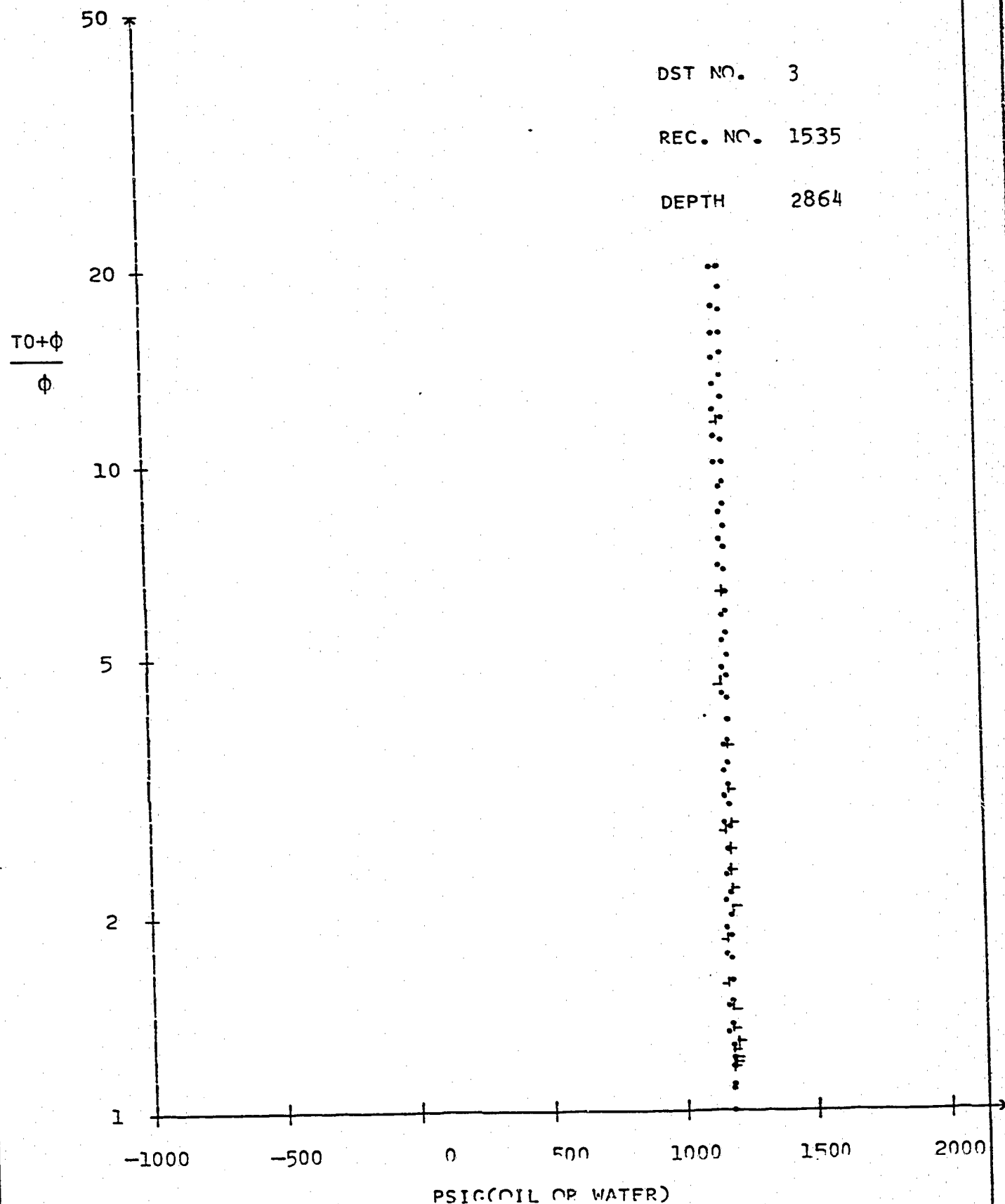
TIME(MIN) ϕ	$\frac{T + \phi}{\phi}$	PSIG
0	0.0000	238
9	11.5556	1167
18	6.2778	1172
27	4.5185	1174
36	3.6389	1176
45	3.1111	1176
54	2.7593	1177
63	2.5079	1177
72	2.3194	1177
81	2.1729	1177
90	2.0556	1177

EOU. FITTED LINE IS $\log((T+\phi)/\phi) = -0.11478 \text{ PSIG} + 135.41020$

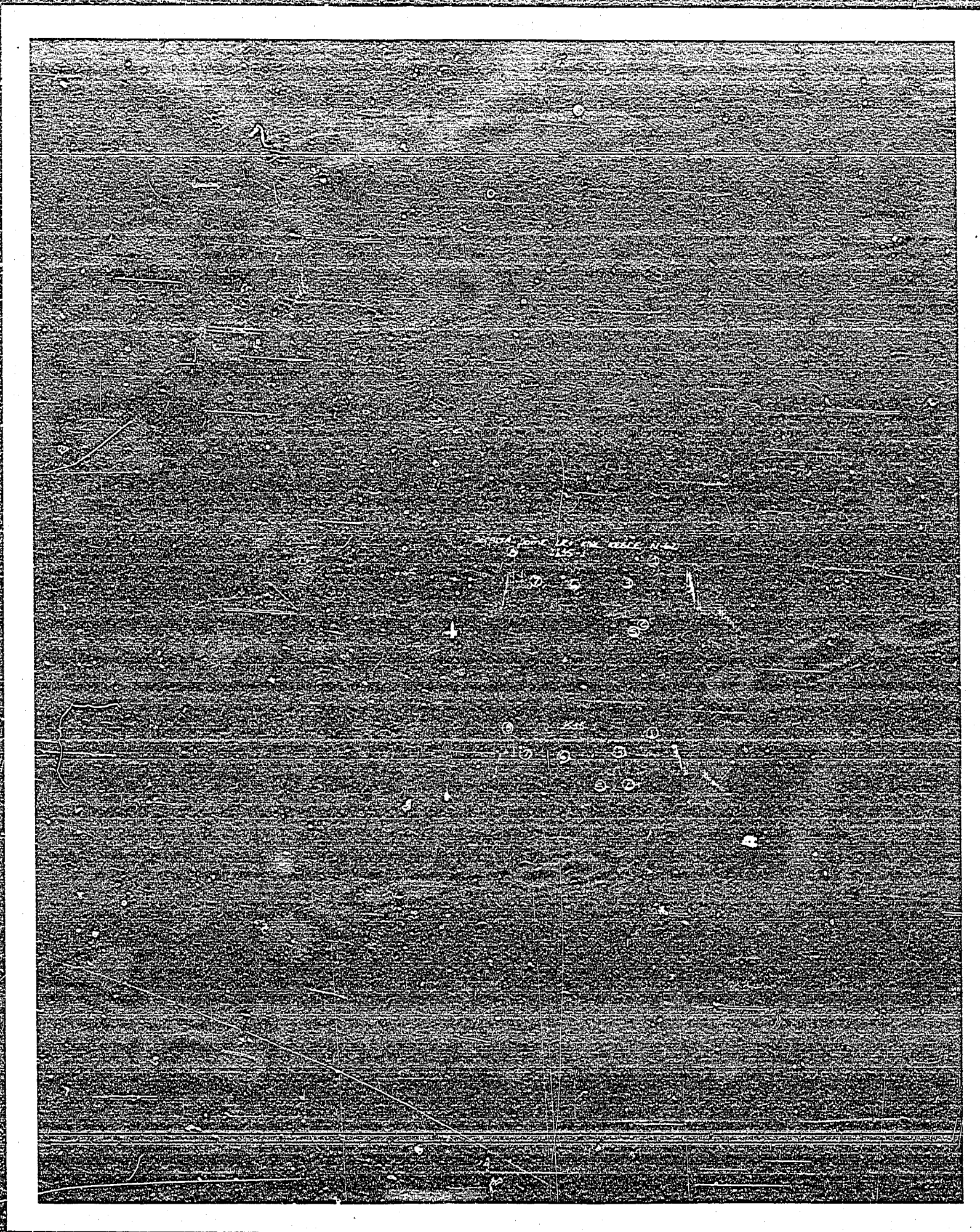
EXTRAPOLATION OF SECOND SHUT-IN = 1179.73 M= 8.71



LYNES UNITED SERVICES LTD.



PRESSURE EXTRAPOLATION PLOT



LYNES UNITED SERVICES LTD.

TEST DATA				Lynes Test		GENERAL INFORMATION	
Formation	Ronning		T.D.	4199		Company	Western Decalta Petroleums Ltd.
Interval Tested	3350		Ft. to	3430		Address	
Interval Tested	80		Ft.	Net Pay Tested		Ft.	
Type of Test	Conventional Straddle						
Cushion	Amount		Ft.	Well Name	Decalta Dome LRI et al Keele		
Started in Hole at	9:30 Hrs.		Took Open at	12:15 Hrs.		Well Number	N-62
Pre-Flow	5 Mins.		Initial Shut-in	60 Mins.		K.B. Elevation	732 Sub-Sea Elevation
2nd Flow	Mins.		Second Shut-in	Mins.		Area	Norman Wells Province N.W.T.
Final Flow	60 Mins.		Final Shut-in	90 Mins.		Company Rep.	John Onko
Remarks: Weak air blow on preflow. Weak air blow increasing to strong rapidly on final Blow: opening. Strong air blow throughout test.				Tester W. Goodwin			
				Contractor Guthrie McLaren Ria No. 7H			
				Ticket No. 7593 Date Oct. 18/73			
				Service Reports To: Above (15)			
GAS BLOW MEASUREMENTS							
Measured with				MUD AND HOLE DATA			
				Mud Type Gel Chem			
				Weight 10.8 Viscosity 255 Water Loss 5.4			
				Filter Cake 2/32 Bottom Hole Temperature			
				Drill Pipe Size 3 1/2 IF Weight 13.6			
				Drill Collars 5 1/4 I.D. 2 Feet Run 180			
				Main Hole or Casing Size 6 1/4			
				Rathole or Liner Size No. of Feet			
				Bottom Hole Choke Size 1/2			
				Surface Choke Size			
				Packer Rubber Size 5 1/2			
				REMARKS Shut-in pressures suggest relatively high permeability within the interval tested.			
RECOVERY							
TOTAL FLUID RECOVERED 1140				Ft. Consisting of:			
180 Ft. of drilling fluid							
960 Ft. of salt water							
Ft. of							
Ft. of							
Test was/was not Reverse Circulated							
Oil Recovery A.P.I.				Water Specific Gravity			
Salinity 9,620 PPM Salt							

PRESSURE READINGS

Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside
Recorder No.	8870	Recorder No.	1535	Recorder No.	2235	Recorder No.	
Capacity	4300	Capacity	4200	Capacity	3350	Capacity	
Depth	3360	Depth	3365	Depth	3445	Depth	

NUMBER KEY:

- INITIAL HYDROSTATIC
- PRE-FLOW
- INITIAL SHUT-IN
- 2nd INITIAL FLOW
- 2nd FINAL FLOW
- 2nd SHUT-IN
- 3rd INITIAL FLOW
- FINAL FLOW
- FINAL SHUT-IN
- FINAL HYDROSTATIC

1836	1841	1920	
372	401		
1404	1396		
		Below	
		Straddle	
148	154		
632	621		
1396	1394		
1800	1810	1892	

Western Decalta Petroleums Ltd.

Company

Decalta Dome LRI et al Keele N-62

Well Name and Description

#4
Test No.

Oct. 18/73
Date of Test

NES UNITED SERVICES LTD.

WELL NAME - DECALTA DOME LRI ET AL KEELE

LOCATION - N-62

DST NUMBER - 4

INTERVAL TESTED - 3350 TO 3430

RECORDER NO. - 1535

DEPTH - 3365

INITIAL SHUT IN PRESSURE

TIME(MIN) ϕ	$\frac{T + \phi}{\phi}$	PSIG
0	0.0000	401
5	2.0000	1390
10	1.5000	1393
15	1.3333	1394
20	1.2500	1394
25	1.2000	1395
30	1.1667	1395
35	1.1429	1395
40	1.1250	1395
45	1.1111	1396
50	1.1000	1396
55	1.0909	1396
60	1.0833	1397

EXTRAPOLATION OF INITIAL SHUT-IN = 1396.85

LYNES UNITED SERVICES LTD.

WELL NAME - DECALTA DOME LPI ET AL KEELE

LOCATION - N-62

DST NUMBER - 4

INTERVAL TESTED - 3350 TO 3430

RECORDER NO. - 1535

DEPTH - 3365

SECOND SHUT IN PRESSURE

TIME(MIN) ϕ	$\frac{T + \phi}{\phi}$	PSIG
0	0.0000	1321
9	8.2222	1377
18	4.6111	1383
27	3.4074	1387
36	2.8056	1389
45	2.4444	1390
54	2.2027	1391
63	2.0317	1391
72	1.9020	1393
81	1.8025	1393
90	1.7222	1394

EQ. FITTED LINE IS $\log((T+\phi)/\phi) = -0.03863 \text{ PSIG} + 54.08963$

EXTRAPOLATION OF SECOND SHUT-IN = 1400.11 MP = 25.89

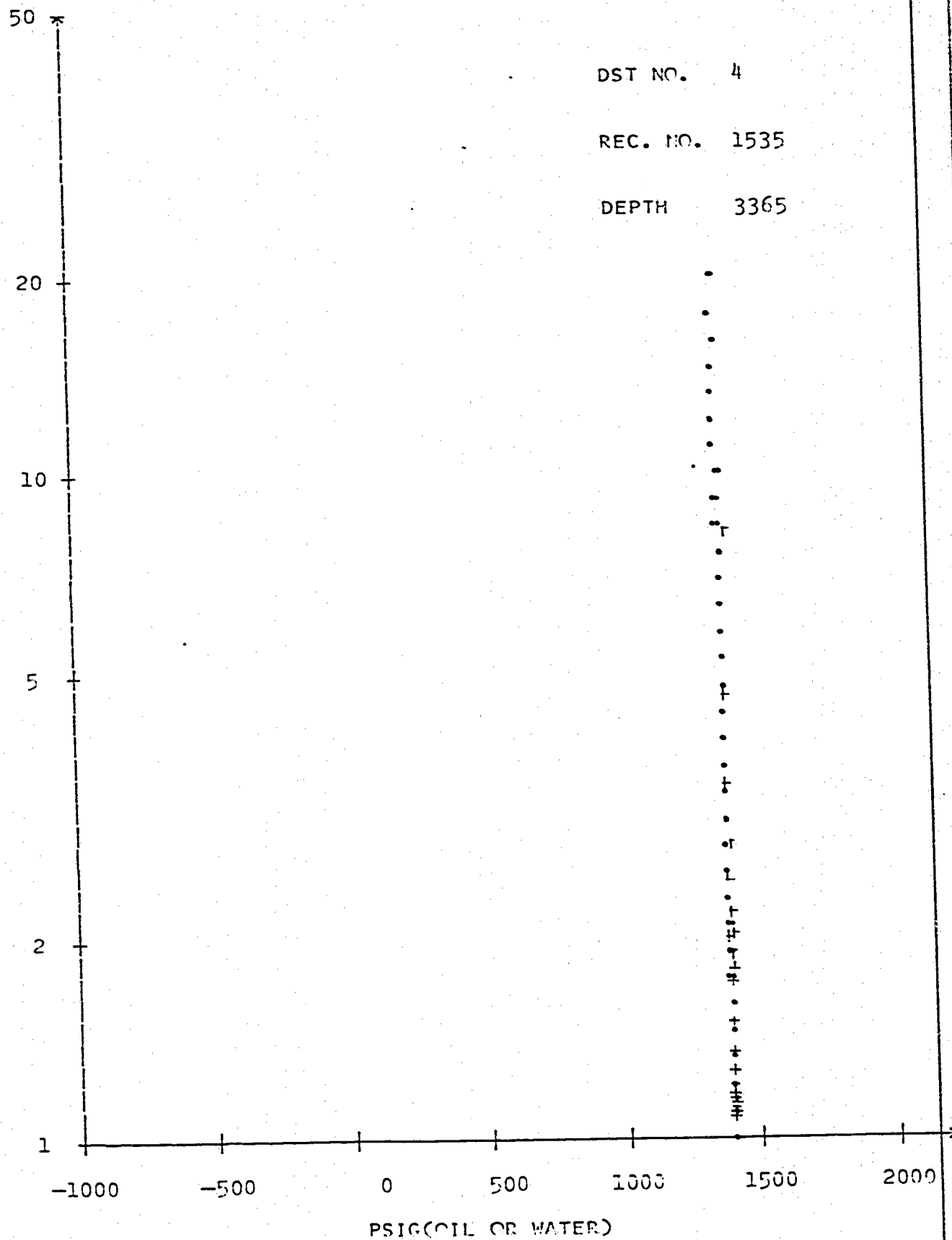
LYNES UNITED SERVICES LTD.

DST NO. 4

REC. NO. 1535

DEPTH 3365

$$\frac{T_0 + \phi}{\phi}$$



PRESSURE EXTRAPOLATION PLOT

DAILY DRILLING REPORT

Form 6

Lease Well Name KERLE RIVER N-62 Date OCT. 21 1973

Location -- Lat. Sec. Twp. Rge. W. M.

Weather Condition CloudRoad Conditions 1/1Nearest Town NEEDHAM HILLSWater - Source 1/1Miles Hauled 1/1Pumped 1/1Camp Distance from Rig 1/1Reason for Extra L. Plans 1/1

Remarks

OPERATOR

SIGNATURE OF OPERATOR'S REPRESENTATIVE WESTERN DECATIASIGNATURE OF CONTRACTOR'S TOOL PUSHER R. RutherfordRig No. 7-H Drill Pipe String 4 3/4 O.D. 11No. 1 MANUFACTURER EMSCO TYPE C-350 STROKE LENGTH 7"

LAST CASING TUBING OR LINER

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

TIME DISTRIBUTION - HOURS

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

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P.	Fe. Bit No.	Time
	Singles D.P.	Fe. Size	Weight
	D.C.	Mic	Visc.-Sec.
	I.D. O.D.	Fe. Type	W.L.-C.C.
	D.C.	No. No.	FL TR. CK.
	I.D. O.D.	Fe. Size	PH
	Sb. Body O.D.	Fe. Ser. No.	SD Cont. %
	Sb. Body O.D.	Fe. Depth Out	Pressure Gradient
	Rm. Body O.D.	Fe. Depth In	
	Subs O.D.	Fe. Total Ftg.	Mud & Chemicals Added
	Bit or C.B.	Fe. Total Hr. Run	Type Amt. Type Amt.
	Kelly Down	Fe. Cond. of Bit	
	Total	Fe. 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	Driller <u>Brian Spence</u>

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 Ftg.							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com-d-C
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
								WASH UP RIG	
								TEAR OUT BEPS	
								CUT OF BOWL + WELDED CAP.	
								Rig Released @ 4 AM.	
								using D 500 Skidder Cut	
								D 311 light plant	

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P.	Fe. Bit No.	Time
	Singles D.P.	Fe. Size	Weight
	D.C.	Mic	Visc.-Sec.
	I.D. O.D.	Fe. Type	W.L.-C.C.
	D.C.	No. No.	FL TR. CK.
	I.D. O.D.	Fe. Size	PH
	Sb. Body O.D.	Fe. Ser. No.	SD Cont. %
	Sb. Body O.D.	Fe. Depth Out	Pressure Gradient
	Rm. Body O.D.	Fe. Depth In	
	Subs O.D.	Fe. Total Ftg.	Mud & Chemicals Added
	Bit or C.B.	Fe. Total Hr. Run	Type Amt. Type Amt.
	Kelly Down	Fe. Cond. of Bit	
	Total	Fe. 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	Driller <u>D. L. Pind</u>

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 Ftg.							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com-d-C
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
8:00	8:15	15						RIG SERV.	
8:15	4:00	7:45						TEAR DOWN RIG	
								206 hauled WATER TO wash up RIG	
								205 " CORE BBS TO Rahodini	
								1600 of Planks To Silene River	
								Back SITE	

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P.	Fe. Bit No.	Time
	Singles D.P.	Fe. Size	Weight
	D.C.	Mic	Visc.-Sec.
	I.D. O.D.	Fe. Type	W.L.-C.C.
	D.C.	No. No.	FL TR. CK.
	I.D. O.D.	Fe. Size	PH
	Sb. Body O.D.	Fe. Ser. No.	SD Cont. %
	Sb. Body O.D.	Fe. Depth Out	Pressure Gradient
	Rm. Body O.D.	Fe. Depth In	
	Subs O.D.	Fe. Total Ftg.	Mud & Chemicals Added
	Bit or C.B.	Fe. Total Hr. Run	Type Amt. Type Amt.
	Kelly Down	Fe. Cond. of Bit	
	Total	Fe. 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	Driller

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 Ftg.							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com-d-C
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	

WIRE LINE RECORD

Reel No. 1
No. of Lines 1 Size 1/2"
Feet Shipped 100
Feet Cut Off 10
Present Length 90
Ton Mi. or Trips Since Last Cut 10
Cumulative Ton Mi. or Trips 10
No. of Days From Spud 1
Cumulative Rotating Hrs. 10

CUTHBERT McLAREN
Drilling Co.

DAILY DRILLING REPORT

Form 6

Lease Well Name Keokuk River No. 2 Date Oct 20, 1973

Location — Loc. — Sec. — Twp. — Rge. — W. — M. Oct 20, 1973

Weather Condition N/A Road Conditions N/A Nearest Town Marion, W. Va. Water Source River Miles Hauled 1.2 Pumped 2 Camp Distance from Rig 2 miles Reason for Extra L. Plant Camp

OPERATOR

Rig No. 7-4
DWKS

Drill Pipe String

Tool Joint N3/4 O.D.

No. 1 Size 1 1/2 Type IF

MANUFACTURER

TYPE

STROKE LENGTH

LAST CASING TUBING OR LINER

1. EMSCO C-350 7

2.

3.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

R. Rutherford

TIME DISTRIBUTION—HOURS

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

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 Lbs.	Pump Pres.	Pump No. 1	Pump No. 2	Method Run
	Stands D.P.	Ft. Bit No.	Time	From	To	Ft.							
	Singles D.P.	Ft. Size	Weight										
	D.C.	Mfg.	Visc.-Sec.										
	I.D. O.D.	Ft. Type	W.L.-C.C.										
	D.C.	No. Nozzle	FL TR. CK										
	I.D. O.D.	Ft. Size	PH										
	Srb. Body O.D.	Ft. Ser. No.	SD Cont. %	Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D T	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
	Srb. Body O.D.	Ft. Depth Out	Pressure Gradient	12:00	1:30	1 1/2							
	Rmr. Body O.D.	Ft. Depth In		1:30	2:15	3/4							
	Subs. O.D.	Ft. Total Ftg.		2:15	3:30	1 1/4							
	Bit or C.B.	Ft. Total Hr. Run		3:30	5:00	1 1/2							
	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											

W.O.C.
Run in + Feat Plug # 2 Plug @ 2785
Pull up to 570 + Run Plug # 3
W.O.C.
Plug # 3 41 SKS CONST Cement Plug
5390 CaCl₂ Plug down @
3:30 AM. From 570 to 470.

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	

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 Lbs.	Pump Pres.	Pump No. 1	Pump No. 2	Method Run
	Stands D.P.	Ft. Bit No.	Time	From	To	Ft.							
	Singles D.P.	Ft. Size	Weight										
	D.C.	Mfg.	Visc.-Sec.										
	I.D. O.D.	Ft. Type	W.L.-C.C.										
	D.C.	No. Nozzle	FL TR. CK										
	I.D. O.D.	Ft. Size	PH										
	Srb. Body O.D.	Ft. Ser. No.	SD Cont. %	Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D T	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
	Srb. Body O.D.	Ft. Depth Out	Pressure Gradient	5:00	11:00	3							
	Rmr. Body O.D.	Ft. Depth In		11:00	12:30	1 1/2							
	Subs. O.D.	Ft. Total Ftg.		11:30	3:30	4							
	Bit or C.B.	Ft. Total Hr. Run		3:30	4:00	1/2							
	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											

W.O.C.
Run in Feat Plug # 3 Plug @ 475
LAY DOWN D.P.
CLEAN UP RIG.
Using D 500 Skidder Cat
D 311 Light Plant

Reel No.	
No. of Lines	Size
Feet Shipped	
Feet Cut Off	
Present Length	
Ton Mi. or Trips Since Last Cut	
Cumulative Ton Mi. or Trips	
No. of Days From Spud	
Cumulative Rotating Hrs.	

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D R.M.R. Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Pres.	Pump No. 1	Pump No. 2	Method Run
	Stands D.P.	Ft. Bit No.	Time	From	To	Ft.							
	Singles D.P.	Ft. Size	Weight										
	D.C.	Mfg.	Visc.-Sec.										
	I.D. O.D.	Ft. Type	W.L.-C.C.										
	D.C.	No. Nozzle	FL TR. CK										
	I.D. O.D.	Ft. Size	PH										
	Srb. Body O.D.	Ft. Ser. No.	SD Cont. %	Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D T	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
	Srb. Body O.D.	Ft. Depth Out	Pressure Gradient	4:00	12:00	8							
	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											

Wash Down Rig + Bops
helicopter
hauled Schlumberger Equipment To Noma
hauled water
Took Geo. Tester + Cement to Noma

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name Keele River #62 Date Oct 19 1973

Location - Loc. Sec. Twp. Rge. W. M. Oct 19 1973 Weather Cold Road Conditions Nil Nearest Town Norman Wells Water Source River Miles Hauled 1 1/2 Pumped 1 1/2 Camp Distance from Rig 1 mi Reason for Extra L. Plant Camp

OPERATOR

Rig No. 7-4
DWS

Drill Pipe String 4 3/4 O.D. Tool Joint IF

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 Western Decalta

SIGNATURE OF CONTRACTOR'S TOOL PUSHER R. Rutherford

MANUFACTURER Emsec TYPE C350 STROKE LENGTH 7"

7" Semless 20 SKS 16 523.70 10.80 510 Cemented w/135

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			

MORNING TOUR

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

COMPLETION WORK	
A Perforating	
B Tubing Tapes	
C Swabbing	
D Trating	
E Additional	
Totals	

TIME SUMMARY (Office Use Only)

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

DAY TOUR

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

EVENING TOUR

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

WIRE LINE RECORD	
Reel No.	
No. of Lines	Size
Feet Shipped	
Feet Cut Off	
Present Length	
Ion Mi. or Trips Since Last Cut	
Cumulative Ion Mi. or Trips	
No. of Days From Spud	
Cumulative Rotating Hrs.	

Head up TEST #4
Testing
Hoist D.S.T. #4
Lay down Testing Tools

Using Disc Skidder Cat
D3H Light Plant

Rig Set
Lay down Testing Tools
Run in D.C. + Lay down Same
Run in Hole with D.P. + Pick up 8 single
Circ + wait on orders

Helicopter
2 Shift Changes
Took mud men with logs to Dahadianni
Took Schlumberger men to Norman Wells
hauled water

Circ - w/2.0.
Run Plug # 1 + displace same.
Pull up to 2890
Run Plug # 2 + displace same
w/2.0.
Plug #1 From 4199 to 4100 66 Bags
Const. Cement Plug 25% excess.
Plug down @ 5:15 PM
Plug #2 From 2890 to 2790 35 Bags
Const. Cement Plus 3% Ca C12 Plug down
@ 6:15 PM Feet in 8 hrs.

CUTLER McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name **KEELE RIVER** Date **OCT 18 1973**

Location - Lat. Sec. Twp. Rge. W. M.

Weather Condition

Road Conditions

Nearest Town

Water - Source

Miles Hauled

Pumped

Camp Distance from Rig

Reason for Extra L. Plant

OPERATOR

Rig No.

Drill Pipe

Tool Joint

434 O.D.

PUMPS

No.

MANUFACTURER

TYPE

STROKE LENGTH

LAST CASING TUBING OR LINER

Size

Make

Wt. & Gr.

No Joints

Feet

RKB. to CSG. HD.

Set at

Remarks

WESTERN DICHALIA
SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

R. R. Thibault

TIME DISTRIBUTION - HOURS

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

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 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run SGL-S Par-d-P Com d-C
	Stands D.P.	39 40 50	Bit No. 14	Time 1200 300									
	Singles D.P.		Size 6.54	Weight 10.6 10.8									
	D.C.		Mfg SEC	Visc-Sec 340 255									
9	I.D. O.D.	23248	Type M4R	W.L.-C.C. 5.4									
	D.C.		No. 3	FL TR. CK 352									
	I.D. O.D.		Size 12	PH 10.5 10.5									
	Sub Body O.D.		Ser No. 44252	SD Cont. %									
	Rmt Body O.D.		Depth Out K	Pressure Gradient									
	Subs O.D.	2.95	Depth In E										
	Bit or C.B.		Total Ftg 19	Mud & Chemicals Added									
	Kelly Down	2652	Total Hr Run 12	Type Amt Type Amt									
	Total	4199	Reamer No. 12										
	Wt. of String	82	Reamer Type R										
	Pipe in Hole		Water Charges Reg. Hrs. O.T. Hrs.										
	Pipe on Racks		Trucker										
	Total Pipe on Lease		Trucker										

Hour Started	Hour Stopped	Elapsed Time
1200	1215	15
1215	530	54
530	800	24

RIG SERV.
CIRCULATING TO AOB
HOIST TO LOB

Using DSCO Skidder, Cats
D311 Light Plant

COMPLETION WORK
A. Perforating
F. 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	

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 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run SGL-S Par-d-P Com d-C
	Stands D.P.		Bit No.	Time									
	Singles D.P.		Size	Weight									
	D.C.		Mfg	Visc-Sec									
	I.D. O.D.		Type	W.L.-C.C.									
	D.C.		No.	FL TR. CK									
	I.D. O.D.		Size	PH									
	Sub Body O.D.		Ser No.	SD Cont. %									
	Rmt Body O.D.		Depth Out	Pressure Gradient									
	Subs O.D.		Depth In										
	Bit or C.B.		Total Ftg	Mud & Chemicals Added									
	Kelly Down		Total Hr Run	Type Amt Type Amt									
	Total		Reamer No.										
	Wt. of String		Reamer Type										
	Pipe in Hole		Water Charges Reg. Hrs. O.T. Hrs.										
	Pipe on Racks		Trucker										
	Total Pipe on Lease		Trucker										

Hour Started	Hour Stopped	Elapsed Time
800	830	30
830	900	30
900	400	10

RIG UP TO LOB
LOGGING
Rig Service & Change Oil in Motor
1 Shift Change
Hauled 4 Loads WATER
Took Crew to Ngamen Wells helicopter
Went down on RETURN TRIP

WIRE LINE RECORD
Reel No.
No. of Lines 6 Size 1"
Feet Slipped 505
Feet Cut Off 505
Present Length 4795
Ton. Mi. or Trips Since Last Out 341
Cumulative Ton. Mi. or Trips 3653
No. of Days From Spud
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 SGL-S Par-d-P Com d-C
	Stands D.P.		Bit No.	Time									
	Singles D.P.		Size	Weight									
	D.C.		Mfg	Visc-Sec									
	I.D. O.D.		Type	W.L.-C.C.									
	D.C.		No.	FL TR. CK									
	I.D. O.D.		Size	PH									
	Sub Body O.D.		Ser No.	SD Cont. %									
	Rmt Body O.D.		Depth Out	Pressure Gradient									
	Subs O.D.		Depth In										
	Bit or C.B.		Total Ftg	Mud & Chemicals Added									
	Kelly Down		Total Hr Run	Type Amt Type Amt									
	Total		Reamer No.										
	Wt. of String		Reamer Type										
	Pipe in Hole		Water Charges Reg. Hrs. O.T. Hrs.										
	Pipe on Racks		Trucker										
	Total Pipe on Lease		Trucker										

Hour Started	Hour Stopped	Elapsed Time
400	600	2
600	800	2
800	830	30
830	1000	14
1000	1200	2

LOGGING
Tear Out Loggers
Pressure & Pick up 72 STD
Pick up Testing Tool
Run 1st with Test #4

Driller *Brian Sauer*

CUTLER & LARSEN
Drilling Co.

DAILY DRILLING REPORT

Form 6

Lease Well Name **KEELE RIVER 8-02** Date **OCT 17 1977**

Location — Lst. Sec. Twp. Rge. W. M.

Weather Condition

Road Conditions

Nearest Town

Water Source

Camp Distance from Rig

OPERATOR

Rig No.

Drill Pipe String

Tool Joint

4 3/4 O.D.

PUMPS

LAST CASING TUBING OR LINER

Size

Make

Wt. & Gr.

No Joints

Feet

RKB. to CSB. HD.

Set at

Remarks

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

R. R. Rufford

TIME DISTRIBUTION - HOURS

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

MORNING TOUR

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
Standards D.P.	3940.50	Bit No. 14	Time 3:00 5:00 7:00
Singles D.P.		Size 6 3/4	Weight 10.0 10.0 10.0
D.C.		Mfg SEC	Visc-Sec 141 143 141
1 D. O.D.	232.48	Type 10 1/4	W.L.C.C.
D.C.		No 3	FL TR CK
1 D. O.D.		Size 12	PH 12+ 12+ 12+
Sub Body O.D.		Set No. 44282	SD Cont. %
Sub Body O.D.		Depth Out R	Pressure Gradient
Sub Body O.D.		Depth In E	
1 Subs O.D.	2.95	Total Ftg A	Mud & Chemicals Added
Bit or C.B.		Total Hr Run 11	Type Amt Type
Kelly Down	26.52	Cond of Bit 1	Spartan 110000
Total	41.99	Reamer No. 16	
Wt. of String	82	Reamer Type B	
Pipe in Hole		Water Charges Reg. Hrs. O.T. Hrs.	
Pipe on Racks		Trucker	
Total Pipe on Lease		Trucker	Driller <i>W. R. Rufford</i>

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		Metboo Run
From	To	Ftg								Liner Size	S.P.M.	Liner Size	S.P.M.	SGL-S Par'el- Com d-

COMPLETION WORK

Totals

TIME SUMMARY (Office Use Only)

Day Work	
Hrs W/DP	
Hrs WO/DP	
Hrs Standby	
Total Day Work	5 5 5

DAY TOUR

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
Standards D.P.	3940.50	Bit No. 14	Time 9:00 1:00 3:00
Singles D.P.		Size 6 3/4	Weight 10.4 10.8
D.C.		Mfg SEC	Visc-Sec 140 165
1 D. O.D.	232.48	Type 10 1/4	W.L.C.C. 8.8 8.8
D.C.		No 3	FL TR CK
1 D. O.D.		Size 12	PH 12+ 12+
Sub Body O.D.		Set No. 44282	SD Cont. %
Sub Body O.D.		Depth Out R	Pressure Gradient
Sub Body O.D.		Depth In E	
1 Subs O.D.	2.95	Total Ftg A	Mud & Chemicals Added
Bit or C.B.		Total Hr Run 11	Type Amt Type
Kelly Down	26.52	Cond of Bit 1	Spartan 22500
Total	41.99	Reamer No. 16	
Wt. of String	82	Reamer Type B	
Pipe in Hole		Water Charges Reg. Hrs. O.T. Hrs.	
Pipe on Racks		Trucker	
Total Pipe on Lease		Trucker	Driller <i>W. R. Rufford</i>

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	Ftg									Liner Size	S P M	Liner Size	S P M	SGL- Par el- Com'd
													</		

Reel No.	
No. of Lines	8 Size 1
Feet Shipped	505
Feet Cut Off	505
Present Length	4195
Ton Mi. or Trips Since Last Cut	290
Cumulative Ton Mi. or Trips	3602
No. of Days From Spud	
Cumulative Rotating Hrs.	

EVENING TOUR

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
Standards D.P.	3940.50	Bit No. 14	Time 4:00 7:00 11:00
Singles D.P.		Size 6 3/4	Weight 10.9 10.9 10.9
D.C.		Mfg SEC	Visc-Sec 165 169 350
8 D. O.D.	232.48	Type 10 1/4	W.L.C.C. 8.2 8
D.C.		No 3	FL TR CK
1 D. O.D.		Size 12	PH 12+ 12+ 12+
Sub Body O.D.		Set No. 44282	SD Cont. %
Sub Body O.D.		Depth Out R	Pressure Gradient
Sub Body O.D.		Depth In E	
1 Subs O.D.	2.95	Total Ftg A	Mud & Chemicals Added
Bit or C.B.		Total Hr Run 11	Type Amt Type
Kelly Down	26.52	Cond of Bit 1	
Total	41.99	Reamer No. 16	
Wt. of String	52	Reamer Type B	
Pipe in Hole		Water Charges Reg. Hrs. O.T. Hrs.	
Pipe on Racks		Trucker	
Total Pipe on Lease		Trucker	Driller

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 Ftg							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par'l-P Com'd-C
Deviation Record	Depth	Dev	Direction	Depth	Dev	Direction	Depth	Dev	Direction
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
4:00	5:15	1 1/4						Run 16th back in (4135.00)	
5:15	6:15	1						Pick up Kelly & Break Circ	
								Clean to Bottom (4199.05)	
6:15	6:30	15						Rig Service	
6:30	6:55	25						Conditioning hole to log	

GUTHRIE McLAREN
Drilling Co.

DAILY DRILLING REPORT

Form 6

Lease Name **KEEFE RIVER #2** Date **OCT 16 1978**

Location - Lat. Sec. Twp. Rge. W. M. **434 O.D.**

Weather Condition

Road Conditions

Nearest Town

Water Source

Miles Hauled

Pumped

Reason for Extra L. Plant

1701

OPERATOR

Rig No.

Drill Pipe

Tool Joint

No.

Size

Type

Thd

MANUFACTURER

TYPE

STROKE

LNGTH

LAST

CASING

TUBING

OR LINER

Size

Make

Wt. & Gr

No Joints

Feet

RKB. to

CGG. HD.

Set at

Remarks

WESTERN DECATIA

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION - HOURS

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

MORNING TOUR

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P.	Ft. Bit No. 14	Time
	Singles D.P.	Ft. Size 6 1/4	Weight
	D.C.	Mfg. SEC	Visc.-Sec.
4	I.D. O.D. 232 1/8	Type M4N	W.L.-C.C.
	D.C.	No. 3	FL TR. CK
	I.D. O.D.	No. 12	PH
	Sub Body O.D.	Ft. Ser. No. 442892	SD Cont. %
	Sub Body O.D.	Ft. Depth Out R	Pressure Gradient
	Rmr Body O.D.	Ft. Depth In F	
	Subs O.D.	Ft. Total Ftg. F	Mud & Chemicals Added
	Bit or C.B.	Ft. Total Hr Run 11	Type Amt Type
	Kelly Down	Ft. Cond. of Bit 1	
	Total	Ft. Reamer No. 16	
	Wt. of String	Lbs. Reamer Type C	
	Pipe in Hole	Jts. Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe on Racks	Jts. Truck	
	Total Pipe on Lease	Jts. Truck	Driller <i>James S. Jones</i>

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 Ftg							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com d-C
Deviation Record	Depth	Dev	Direction	Depth	Dev	Direction	Depth	Dev	Direction
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D T	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
12 10 12 15	12 15 12 45	12 45 1 30						RIG SERVICE	
12 45 1 30	1 30 2 15	2 15 3 30						LAY DOWN LOGGING TOOLS	
2 15 3 30	3 30 3 45	3 45 4 15						RUN IN 4 STD OF DG.	
3 45 4 15								WASH KELLY OUT WITH STEAM	
								RUN IN	
								BREAK CIRC	
								CLEAN TO BOTTOM	
								Using D500 Skidder Cat	
								D311 Light Plant	

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

DAY TOUR

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P.	Ft. Bit No. 14	Time 9:00 10:00 3:00
	Singles D.P.	Ft. Size 6 1/4	Weight 95 97
	D.C.	Mfg. SEC	Visc.-Sec. 90 120
4	I.D. O.D.	Type M4N	W.L.-C.C. 7.8
	D.C.	No. 3	FL TR. CK
	I.D. O.D.	No. 12	PH 10 12
	Sub Body O.D.	Ft. Ser. No. 442892	SD Cont. %
	Sub Body O.D.	Ft. Depth Out R	Pressure Gradient
	Rmr Body O.D.	Ft. Depth In F	
	Subs O.D.	Ft. Total Ftg. F	Mud & Chemicals Added
	Bit or C.B.	Ft. Total Hr Run 11	Type Amt Type
	Kelly Down	Ft. Cond. of Bit 1	
	Total	Ft. Reamer No. 16	
	Wt. of String	Lbs. Reamer Type C	
	Pipe in Hole	Jts. Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe on Racks	Jts. Truck	
	Total Pipe on Lease	Jts. Truck	Driller <i>W. Jones</i>

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 Ftg							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com d-C
Deviation Record	Depth	Dev	Direction	Depth	Dev	Direction	Depth	Dev	Direction
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D T	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
8:00 10:00	10:00 10:15	10:15 4:00						Clean To Bottom Out Bridge From 3340-	
10:00 10:15								Run in 6 STD of DP to 3678	
10:15 4:00								Pick up Kelly Break Circ Clean to Bottom	
								From 3678 to 3878	
								Helicopter hauled 5 tons weight material	
								2 Loads Gel 4 Loads Fuel, Two	
								Load Water + Two Shift Changes	

TIME SUMMARY (Office Use Only)
Day Work
Hrs. W/DP
Hrs. WO/DP
Hrs. Standby
Total Day Work

EVENING TOUR

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P.	Ft. Bit No. 14	Time 4:00 7:00 11:00
	Singles D.P.	Ft. Size 6 1/4	Weight 9.9 9.8 9.8
	D.C.	Mfg. SEC	Visc.-Sec. 195 175 134
4	I.D. O.D. 232 1/8	Type M4N	W.L.-C.C. 7.8 7.2
	D.C.	No. 3	FL TR. CK 3.2 3.2 3.2
	I.D. O.D.	No. 12	PH 12 12 12
	Sub Body O.D.	Ft. Ser. No. 442892	SD Cont. %
	Sub Body O.D.	Ft. Depth Out R	Pressure Gradient
	Rmr Body O.D.	Ft. Depth In F	
	Subs O.D.	Ft. Total Ftg. F	Mud & Chemicals Added
	Bit or C.B.	Ft. Total Hr Run 11	Type Amt Type
	Kelly Down	Ft. Cond. of Bit 1	
	Total	Ft. Reamer No. 16	
	Wt. of String	Lbs. Reamer Type C	
	Pipe in Hole	Jts. Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe on Racks	Jts. Truck	
	Total Pipe on Lease	Jts. Truck	Driller

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 Ftg							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com d-C
Deviation Record	Depth	Dev	Direction	Depth	Dev	Direction	Depth	Dev	Direction
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D T	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
4:00 4:15	4:15 12:00	12:00 7:15						Rig Service	
4:15 12:00								From 3878 to 4024	

WIRE LINE RECORD
Reel No.
No. of Lines
Size
Feet Slipped
Feet Cut Off
Present Length
Ton Mts. or Trips Since Last Cut
Cumulative Ton Mts. or Trips
No. of Days From Spud
Cumulative Rotating Hrs.

Form 6

Handwritten form for drilling operations. Includes sections for: Lease Well Name (KEELE RIVER 062), Date (OCT 15 1973), Operator (WESTERN DECATIA), Signature of Operator's Representative (R. Rutherford), Time Distribution (Morning, Day, Evening), Completion Work (A. Perforating, B. Tubing, etc.), Wire Line Record, and various tables for Drilling Assembly, Bit Record, Mud Record, Footage, and Details of Operations in Sequence and Remarks.

GUTHRIE McLAREN
Drilling Co.

DAILY DRILLING REPORT

Form 6

Lease Well Name **KEELE BURR H-62** Date **OCT 14 1975**

Location - Loc. Sec. Twp. Rge. W. M. **1075**

Weather Condition

Road Conditions **WIL**

Nearest Town **WILSON**

Water - Source **RIVER**

Camp Distance from Rig **2 mi**

OPERATOR WESTER DEGLIA	Rig No. 74	Drill Pipe String NH	Tool Joint 434	OD 1F	PUMPS	MANUFACTURER EMSCO	TYPE 250	STROKE LENGTH 7"	LAST CASING TUBING OR LINER	Size 7	Male SINNES	Wt. & Gr. 20 SIN	No Joints 16	Feet 52370	RKB to CSG. HD. 1030	Set at 510	Remarks OPENED BY 15 SIN
----------------------------------	----------------------	--------------------------------	--------------------------	-----------------	-------	------------------------------	--------------------	----------------------------	-----------------------------	------------------	-----------------------	----------------------------	------------------------	----------------------	--------------------------------	----------------------	------------------------------------

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

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
59	Stands D.P. 36	Bit No. 12	Time 1:00
1	Singles D.P. 36.92	Size 6 1/4	Weight 9.3
	D.C. 3	Mfg. HW	Visc.-Sec. 61
7	ID. 200.95	Type T 33	W.L.-C.C. 12
	D.C. 3	No. 2	FL TR. CK. 252
11	ID. 300.77	Size 11 1/4	PH 12
	Sb. Body O.D.	Depth Out	SD Cont. %
	Rm. Body O.D.	Depth In	Pressure Gradient
1	Subs. O.D. 485	Total Ftg.	Mud & Chemicals Added
1	Subs. O.D. 295	Total Hr. Run	Type Amt. Type Amt.
	Bit or C.B.	Cond. of Bit	
	Kelly Down 28.56	Reamer No.	
	Total 41.95	Reamer Type	
	Wt. of String 620	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe in Hole	Trucker	
	Pipe on Rack	Trucker	
	Total Pipe on Lease	Trucker	

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									
4156	4195									
Deviation Record: Depth, Dev., Direction, Depth, Dev., Direction, Depth, Dev., Direction Hour Started: 12:00, Hour Stopped: 2:00, Elapsed Time: 2 Details of Operations in Sequence and Remarks: DRAB RIG SERU DRAB PULL 15 STD DUMMYP TYPE TIGHT Helicopter made ONE Trip To Norman Wells For Schlumberger Equipment hauled TWO Loads Fuel, Two Pallets Cement + Tank Empty Fuel Tanks + Cat Back To Camp Site Two Trips CREW Change.										

TIME SUMMARY (Office Use Only)			
	Morn	Day	Eve
Drill Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work	8	8	8

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
60	Stands D.P. 36	Bit No. 12	Time 11:00
1	Singles D.P. 36.92	Size 6 1/4	Weight 9.3
	D.C. 3	Mfg. HW	Visc.-Sec. 75
7	ID. 200.95	Type T 33	W.L.-C.C. 12.6
	D.C. 3	No. 2	FL TR. CK. 11-10
11	ID. 300.77	Size 11 1/4	PH 12
	Sb. Body O.D.	Depth Out	SD Cont. %
	Rm. Body O.D.	Depth In	Pressure Gradient
1	Subs. O.D. 485	Total Ftg.	Mud & Chemicals Added
1	Subs. O.D. 295	Total Hr. Run	Type Amt. Type Amt.
	Bit or C.B.	Cond. of Bit	
	Kelly Down	Reamer No.	
	Total	Reamer Type	
	Wt. of String 620	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe in Hole	Trucker	
	Pipe on Rack	Trucker	
	Total Pipe on Lease	Trucker	

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									
4195										
Deviation Record: Depth, Dev., Direction, Depth, Dev., Direction, Depth, Dev., Direction Hour Started: 8:00, Hour Stopped: 9:30, Elapsed Time: 1 1/2 Details of Operations in Sequence and Remarks: Rig Serv BOPs + Motor shut off's ok Finish Dummy Trip Ream to Bottom Circ + Condition Mud Trip out to Log Rig up taking Log										

WIRE LINE RECORD	
Reel No.	Size
No. of Lines 6	Size 1
Feet Shipped 505	
Feet Cut Off 505	
Present Length 4495	
Ton Mi. or Trips Since Last Cut 270	
Cumulative Ton Mi. or Trips 3519	
No. of Days From Spud 22	
Cumulative Rotating Hrs.	

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
59	Stands D.P. 36	Bit No. 13	Time
1	Singles D.P. 36.5692	Size 6 1/4	Weight
	D.C. 3	Mfg. Sec	Visc.-Sec.
7	ID. 200.95	Type M 414	W.L.-C.C.
	D.C. 3	No. 3	FL TR. CK.
11	ID. 300.77	Size 12	PH
	Sb. Body O.D.	Depth Out	SD Cont. %
	Rm. Body O.D.	Depth In	Pressure Gradient
1	Subs. O.D. 295	Total Ftg.	Mud & Chemicals Added
	Bit or C.B.	Total Hr. Run	Type Amt. Type Amt.
	Kelly Down 33.41	Cond. of Bit	
	Total 41.95	Reamer No.	
	Wt. of String 630	Reamer Type	
	Pipe in Hole	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe on Rack	Trucker	
	Total Pipe on Lease	Trucker	

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									
4195										
Deviation Record: Depth, Dev., Direction, Depth, Dev., Direction, Depth, Dev., Direction Hour Started: 4:00, Hour Stopped: 5:00, Elapsed Time: 1 Details of Operations in Sequence and Remarks: Finish Trip Rig up Loggers Log Run In w/ 6 1/4 bit BREAK GIRL CLEAN TO BOTTOM. Out Bridge From 3395 - 3415 RUN IN CLEAN TO BOTTOM Measure 4201.32 Ream 4195.72 5.60 Cor.										

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

1871

Lease Well Name **KEELE RIVER N-62** Date **Oct 11 1973**

Location - Lat. Sec. - Twp. - Rge. - W. M. **Oct 11 1973**

Weather Condition **CLEAR** Road Conditions **N/A** Nearest Town **HERMAN WELLS** Water - Source **RIVER** Miles Hauled **7** Camp Distance from Rig **7 miles** Reason for Extra L. Plant **CAMP**

OPERATOR **WESTERN DECATR**

Rig No. **7-4** Drill Pipe String **H34 O.D.** PUMPS

No. **1** MANUFACTURER **EMSCO** TYPE **C-350** STROKE LENGTH **7"**

SIGNATURE OF OPERATOR'S REPRESENTATIVE *[Signature]* SIGNATURE OF CONTRACTOR'S TOOL PUSHER *[Signature]*

Size **7"** Make **SEAMLESS** Wt. & Gr. **20 SKS** No Joints **16** Feet **523.70** RKB to CSG. HD. **10.80** Set at **510** Remarks **CEMENTED @ 135 SKS**

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP		PUMP NO. 1		PUMP NO. 2		METHOD RUN									
Morn	Day	Even		NO	Stands D.P.	Feet	Bit No.	Time	Weight	Visc-Sec	W.L.-CC	FL TR CK	PH	SD Cont. %	Pressure Gradient	From	To	Fig	DR-D RM-R Core-C	Core No.	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Liner Size	S.P.M.	Liner Size	S.P.M.	SGL-S Par d-P Com d-C	
				49	Stands D.P.	3037.01	11	2:00	9.2	44	10.0	32	10.5			3509	3580	71	D			60	1200	5"	120				
				1	Singles D.P.	54	6 1/4																						
				7	D.C. 5/4	200.95	H.W.																						
				11	I.D. O.D.	300.77	J-33																						
					D.C. 4 3/4		No. 2 1																						
					I.D. O.D.		Size 10 11																						
					Sub Body O.D.		Set No. VR324																						
					Sub Body O.D.		Depth Out																						
					Rmr Body O.D.	4.85	Depth In	3086																					
					Subs O.D.	2.95	Total Fig	494																					
					Bit or C.B.		Total Hr Run	55 3/4																					
					Kelly Down	53.47	Cond of Bit																						
					Total	3580	Reamer No.																						
					Wt. of String	58 M	Reamer Type																						
					Pipe in Hole	99	Water Charges	Reg. Hrs. O.T. Hrs.																					
					Pipe on Racks	12	Trucker																						
					Total Pipe on Lease	111	Trucker																						
					Driller	Brian Samson																							

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRUG
RIG SEAU
DRUG

helicopter Two Trips To Norman Wells Crew
Change & Greases + Supplies
hauled Two hours pipe ONE Load
Fuel 2 Crew Change.

TIME SUMMARY (Office Use Only)				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP		PUMP NO. 1		PUMP NO. 2		METHOD RUN								
Day Work	Hrs W/DP	Hrs WO/DP	Hrs Standby	NO	Stands D.P.	Feet	Bit No.	Time	Weight	Visc-Sec	W.L.-CC	FL TR CK	PH	SD Cont. %	Pressure Gradient	From	To	Fig	DR-D RM-R Core-C	Core No.	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Liner Size	S.P.M.	Liner Size	S.P.M.	SGL-S Par d-P Com d-C
				50	Stands D.P.	3098.64	11	9:00	9.2	68	11.0	32	9.5			3580	3642	62	D			60	1200	5"	120			
				1	Singles D.P.	54	6 1/4																					
				7	D.C. 5/4	200.95	H.W.																					
				11	I.D. O.D.	300.77	J-33																					
					D.C. 5 3/4		No. 2 1																					
					I.D. O.D.		Size 10 11																					
					Sub Body O.D.		Set No. VR324																					
					Sub Body O.D.		Depth Out	3642																				
					Rmr Body O.D.	4.85	Depth In	3086																				
					Subs O.D.	2.95	Total Fig	556																				
					Bit or C.B.		Total Hr Run	6.2 3/4																				
					Kelly Down	34.74	Cond of Bit	111																				
					Total	3642	Reamer No.																					
					Wt. of String	58 M	Reamer Type																					
					Pipe in Hole		Water Charges	Reg. Hrs. O.T. Hrs.																				
					Pipe on Racks		Trucker																					
					Total Pipe on Lease		Trucker																					
					Driller	Donny L. Lee																						

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRUG
RIG SIFK. - a b.o.p. - a CHECK METER HANSON
DRUG
Horse Drop Survey
Pull out BIT #11

Using 2311 Light Plant
D See Skidder Set.

WIRE LINE RECORD				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP		PUMP NO. 1		PUMP NO. 2		METHOD RUN								
Reel No.	No. of Lines	Size		NO	Stands D.P.	Feet	Bit No.	Time	Weight	Visc-Sec	W.L.-CC	FL TR CK	PH	SD Cont. %	Pressure Gradient	From	To	Fig	DR-D RM-R Core-C	Core No.	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Liner Size	S.P.M.	Liner Size	S.P.M.	SGL-S Par d-P Com d-C
				51	Stands D.P.	3129.77	12																					
				7	Singles D.P.	54	6 1/4																					
				11	D.C. 5/4	200.95	H.W.																					
					I.D. O.D.	300.77	J-33																					
					D.C. 4 3/4		No. 2 1																					
					I.D. O.D.		Size 11 10																					
					Sub Body O.D.		Set No. VR544																					
					Sub Body O.D.		Depth Out	3642																				
					Rmr Body O.D.	4.85	Depth In	3642																				
					Subs O.D.	2.95	Total Fig	13																				
					Bit or C.B.		Total Hr Run	134																				
					Kelly Down	16.61	Cond of Bit																					
					Total	3655	Reamer No.																					
					Wt. of String	60 M	Reamer Type																					
					Pipe in Hole		Water Charges	Reg. Hrs. O.T. Hrs.																				
					Pipe on Racks		Trucker																					
					Total Pipe on Lease		Trucker																					
					Driller																							

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

Pull out Change B.T.s & Blind Rams
Run in hole with BIT #12
DRUG
CONDITION MUD
DRUG



DAILY DRILLING REPORT

Form 6

Lease
Well Name **KREELE RIVER N-62** Date
Location - Lnd. Sec. Twp. Rge. W. M. **Oct 9 1973**Weather Condition **Cold** Road Conditions **N-6** Nearest Town **NORMAN WELLS** Water - Source **RIVER** Miles Hauled **2.125** Camp Distance from Rig **2.125** Reason for Extra L. Plant **Camp**

OPERATOR WESTERN DECATAL	Rig No. 7-H	Drill Pipe String 2-1/4	Tool Joint 4 3/4	O.D. 1 1/2	PUMPS No. 1 Size 1 1/2 Type 1 1/2	No. 1 MANUFACTURER Emsco TYPE C-350 STROKE LENGTH 7"	LAST CASING TUBING OR LINER	Size 7" Make SEMPRESS Wt. & Gr. 20.5KS No Joints 16 Feet 523.70 RKB to CSG. HD 10.30 510 CEMENTED @ 135 SKS	Remarks 3 SKS COAST CEMENT 2% CAP
SIGNATURE OF OPERATOR'S REPRESENTATIVE R. D. [Signature]		SIGNATURE OF CONTRACTOR'S TOOL PUSHER R. D. [Signature]							

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																
Rig Up & Tear Down	Morn	Day	Even	NO	Stands D.P.	Feet	Bit No.	Time	Weight	Visc-Sec	W.L.C.C.	FL TR CK	PH	SD Cont. %	Pressure Gradient	Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc D.T.	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run	
Drilling Actual	7 1/2	7 1/2	7 1/2	43	2632.17		11	2:00	9.1	34	35	36	10.0	9.5	9.5		12:00	1:15	1 1/4						60	20000	1000	5"	120	
Reaming				7	200.95		11	1:00	9.1	34	35	36	10.0	9.5	9.5		1:15	1:30	1 1/4						60	20000	1000	5"	120	
Conditioning Mud & Circulating				11	300.77		11	1:00	9.1	34	35	36	10.0	9.5	9.5		1:30	1:45	1 1/4						60	20000	1000	5"	120	
Trips				11	300.77		11	1:00	9.1	34	35	36	10.0	9.5	9.5		1:45	8:00	6 1/4						60	20000	1000	5"	120	
Lubricate Rig	1/4	1/4	1/4																											
Deviation Survey	1/4	1/4	1/4																											
Test BOP																														
Cut Off Drilling Line																														
Repart 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																														
F Additional																														
Totals	8	5	3																											
TIME SUMMARY (Office Use Only)				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																
Day Work				44	2729.40		11	8:00	9.1	36	35	35	9.5	10.5	10.5		8:00	3:15	3 1/4						50	20000	1000	5"	120	
Hrs W/DP				7	200.95		11	1:00	9.1	36	35	35	9.5	10.5	10.5		3:15	12:00	3 1/4						50	20000	1000	5"	120	
Hrs WO/DP				11	300.77		11	1:00	9.1	36	35	35	9.5	10.5	10.5		12:00	12:15	1 1/4						50	20000	1000	5"	120	
Hrs Standby																														
WIRE LINE RECORD				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																
Reel No.				45	2791.40		11	5:00	9.1	35	35	35	10.5	10.5	10.5		4:00	7:15	3 1/4						60	20000	1000	5"	120	
No. of Lines	8			1	200.95		11	1:00	9.1	35	35	35	10.5	10.5	10.5		7:15	7:30	1 1/4						60	20000	1000	5"	120	
Feet Shipped	505			7	200.95		11	1:00	9.1	35	35	35	10.5	10.5	10.5		7:30	10:45	3 1/4						60	20000	1000	5"	120	
Feet Cut Off	505			11	300.77		11	1:00	9.1	35	35	35	10.5	10.5	10.5		10:45	11:00	1 1/4						60	20000	1000	5"	120	
Present Length	4495																													
Ton Mi. or Trips Since Last Cut	143 (4 1/2)																													
Cumulative Ton Mi. or Trips	3392																													
No. of Days From Spud	19																													
Cumulative Rotating Hrs.	210 1/4																													
WIRE LINE RECORD				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																
Reel No.				45	2791.40		11	5:00	9.1	35	35	35	10.5	10.5	10.5		4:00	7:15	3 1/4						60	20000	1000	5"	120	
No. of Lines	8			1	200.95		11	1:00	9.1	35	35	35	10.5	10.5	10.5		7:15	7:30	1 1/4						60	20000	1000	5"	120	
Feet Shipped	505			7	200.95		11	1:00	9.1	35	35	35	10.5	10.5	10.5		7:30	10:45	3 1/4						60	20000	1000	5"	120	
Feet Cut Off	505			11	300.77		11	1:00	9.1	35	35	35	10.5	10.5	10.5		10:45	11:00	1 1/4						60	20000	1000	5"	120	
Present Length	4495																													
Ton Mi. or Trips Since Last Cut	143 (4 1/2)																													
Cumulative Ton Mi. or Trips	3392																													
No. of Days From Spud	19																													
Cumulative Rotating Hrs.	210 1/4																													
WIRE LINE RECORD				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																
Reel No.				45	2791.40		11	5:00	9.1	35	35	35	10.5	10.5	10.5		4:00	7:15	3 1/4						60	20000	1000	5"	120	
No. of Lines	8			1	200.95		11	1:00	9.1	35	35	35	10.5	10.5	10.5		7:15	7:30	1 1/4						60	20000	1000	5"	120	
Feet Shipped	505			7	200.95		11	1:00	9.1	35	35	35	10.5	10.5	10.5		7:30	10:45	3 1/4						60	20000	1000	5"	120	
Feet Cut Off	505			11	300.77		11	1:00	9.1	35	35	35	10.5	10.5	10.5		10:45	11:00	1 1/4						60	20000	1000	5"	120	
Present Length	4495																													
Ton Mi. or Trips Since Last Cut	143 (4 1/2)																													
Cumulative Ton Mi. or Trips	3392																													
No. of Days From Spud	19																													
Cumulative Rotating Hrs.	210 1/4																													
WIRE LINE RECORD				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																
Reel No.				45	2791.40		11	5:00	9.1	35	35	35	10.5	10.5	10.5		4:00	7:15	3 1/4						60	20000	1000	5"	120	
No. of Lines	8			1	200.95		11	1:00	9.1	35	35	35	10.5	10.5	10.5		7:15	7:30	1 1/4						60	20000	1000	5"	120	
Feet Shipped	505			7	200.95		11	1:00	9.1	35	35	35	10.5	10.5	10.5		7:30	10:45	3 1/4						60	20000	1000	5"	120	
Feet Cut Off	505			11	300.77		11	1:00	9.1	35	35	35	10.5	10.5	10.5		10:45	11:00	1 1/4						60	20000	1000	5"	120	
Present Length	4495																													
Ton Mi. or Trips Since Last Cut	143 (4 1/2)																													
Cumulative Ton Mi. or Trips	3392																													
No. of Days From Spud	19																													
Cumulative Rotating Hrs.	210 1/4																													
WIRE LINE RECORD				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																
Reel No.				45	2791.40		11																							



DAILY DRILLING REPORT

Form 6

Lease Well Name **KRELE RIVER N-62**

Date

Location - Lsd. Sec. Twp. Rge. W. M. **Oct 6 1973**Weather Condition **Cloudy**Road Conditions **NIL**Nearest Town **NORMAN WELLS**Water - Source **RIVER**

Miles Hauled

Pumped

Camp Distance from Rig

Reason for Extra L. Plant

7 miles Camp

OPERATOR

Rig No.

Drill Pipe String

Tool Joint

H 3/4 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

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

1. **EMSCO**TYPE **C-350**STROKE LENGTH **2**

7" SEWLESS

20 SXS

16

52370

10.80

510

CEMENTED @ 135 SXS

3 SXS COAST CEMENT

370 C/L

TIME DISTRIBUTION - HOURS

Morn Day Eve

Rig Up & Tear Down

Drilling Actual

Reaming

Conditioning Mud & Circulating

Trips

Lubricate Rig

Deviation Survey

Test B.O.P.

Cut Off Drilling Line

Repair Rig

Coring

Wire Line Logging

Running Casing & Cementing

Waiting on Cement

Drill Stem Test

Other

Fishing

Completion Work

A. Perforating

B. Tubing Trips

C. Swabbing

D. Testing

E. Additional

Totals

TIME SUMMARY (Office Use Only)

Day Work

Hrs. W/DP

Hrs. WO/DP

Hrs. Standby

Total Day Work

WIRE LINE RECORD

Reel No.

No. of Lines

Size

Feet Shipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud

Cumulative Rotating Hrs.

NO.

DRILLING ASSEMBLY AT END OF TOUR

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

SGL-S

Par-el-P

Com d-C

43

D.P.

Ft.

Bit No.

10

Time

From

To

Ftge

DR. D. RM. R. Core-C

Core No.

FORMATION (SHOW CORE RECOVERY)

Rotary RPM

Wt. on Bit 1000 Lbs.

Pump Press

Pump No. 1

Pump No. 2

Method Run

SGL-S

Par-el-P

Com d-C

1

D.P.

Ft.

Size

6 3/4

Weight

3040

7

I.D. O.D.

Ft.

Type

MAN

Visc.-Sec.

3040

5

I.D. O.D.

Ft.

No.

2

FL TR. CK

3040

1

Srb. Body O.D.

Ft.

Ser. No.

433511

SD Cont. %

3040

1

Srb. Body O.D.

Ft.

Depth Out

3043

Pressure Gradient

3040

1

Rmr. Body O.D.

Ft.

Depth In

3043

PH

3040

1

Subs O.D.

Ft.

Total Ftg

3043

Mud & Chemicals Added

3040

1

Bit or C.B.

Ft.

Total Hr. Run

3043

Type

3040

1

Kelly Down

Ft.

Cond. of Bit

3043

Type

3040

Total

Ft.

Reamer No.

3043

Type

3040

Wt. of String

Lbs.

Reamer Type

3043

Type

3040

Pipe in Hole

Jts.

Water Charges

Reg. Hrs. O.T. Hrs.

Type

3040

Pipe on Racks

Jts.

Trucker

3043

Type

3040

Total Pipe on Lease

Jts.

Trucker

3043

Type

3040

Driller

3043

Type

3043

Type

3040

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

SGL-S

Par-el-P

Com d-C

43

Stand D.P.

Ft.

Bit No.

10

Time

From

To

Ftge

DR. D. RM. R. Core-C

Core No.

FORMATION (SHOW CORE RECOVERY)

Rotary RPM

Wt. on Bit 1000 Lbs.

Pump Press

Pump No. 1

Pump No. 2

Method Run

SGL-S

Par-el-P

Com d-C

1

Stand D.P.

Ft.

Size

6 3/4

Weight

3040

D.C.

Ft.

Mfg

SEC

Visc.-Sec.

3040

I.D. O.D.

Ft.

Type

MAN

W.L.-C.C.

3040

D.C.

Ft.

No.

2

FL TR. CK

3040

I.D. O.D.

Ft.

No.

10

PH

3040

Srb. Body O.D.

Ft.

Ser. No.

433511

SD Cont. %

3040

Srb. Body O.D.

Ft.

Depth Out

3043

Pressure Gradient

3040

Rmr. Body O.D.

Ft.

Depth In

3043

PH

3040

Subs O.D.

Ft.

Total Ftg

3043

Mud & Chemicals Added

3040

Bit or C.B.

Ft.

Total Hr. Run

3043

Type

3040

Kelly Down

Ft.

Cond. of Bit

3043

Type

3040

Total

Ft.

Reamer No.

3043

Type

3040

Wt. of String

Lbs.

Reamer Type

3043

Type

3040

Pipe in Hole

Jts.

Water Charges

Reg. Hrs. O.T. Hrs.

Type

3040

Pipe on Racks

Jts.

Trucker

3043

Type

3040

Total Pipe on Lease

Jts.

Trucker

3043

Type

3040

Driller

3043

Type

3043

Type

3040

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

GUTHRIE McLAREN
Drilling Co.

DAILY DRILLING REPORT

Form 6

Lease Name **KEELE RIVER N-62**

Date

Location - Lat. Sec. Twp. Rge. W. M. **Oct 5 1973**

Weather Condition **Cold**

Road Conditions **N-12**

Nearest Town **NORMAN**

Water Source **RIVER**

Camp Distance from Rig **7 miles**

OPERATOR

Rig No. **7-17**
DWKS **N-4**

Drill Pipe String

Tool Joint **2 3/4 O.D.**

No. **2** Size **3 1/2** Type **IF**

No.

MANUFACTURER

TYPE

STROKE LENGTH

LAST CASING TUBING OR LINER

Size

Make

Wt. & Gr.

No Joints

Feet

RKB. to CSO. HD.

Set at

Remarks

WESTERN DECATAL

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

R. Rutherford

1. **EMSCO**

C-350

7

7" SERIES 20 SPS

16

523.70

10.80

510

CEMENTED @ 135'

3 SPS COAST CEMENT

2% Cal

TIME DISTRIBUTION - HOURS

Morn Day Eve

Rig Up & Tear Down

Drilling Actual

Reaming

Conditioning Mud & Circulating

Trips

Lubricate Rig

Deviation Survey

Test B.O.P.

Cut Off Drilling Line

Repair Rig

Coring

Wire Line Logging

Running Casing & Cementing

Waiting on Cement

Drill Stem Test

Other

8 5 1/2 2 1/2

Fishing

A. Perforating

B. Tubing Trips

C. Swabbing

D. Testing

E. Additional

Totals

8 5 8

TIME SUMMARY

(Office Use Only)

Day Work

Hrs. W/DP

Hrs. WO/DP

Hrs. Standby

Total Day Work

WIRE LINE RECORD

Reel No.

No. of Lines **8** Size **1**

Feet Slipped **505**

Feet Cut Off **505**

Present Length **4495**

Ton M. of Trips Since Last Cut **111** **3 1/2**

Cumulative Ton M. of Trips **3360**

No. of Days From Spud **15**

Cumulative Rotating Hrs. **169 3/4**

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D P.M.-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size S.P.M.	Pump No. 2 Liner Size S.P.M.	Method Run SGL-S Par-el-P Com'd-C
43	Stands D.P.	10	Time	From To Fig.									
1	Singles D.P.	2669.86 Ft. Size 6 1/4	Weight	3043									
7	D.C. 5 1/4 I.D. O.D.	200.95 Ft. Type MAN	Visc.-Sec. W.L.-C.C.										
5	D.C. 4 3/4 I.D. O.D.	135.87 Ft. Nozzle No. 2 1 Size 10 11	FL TR CK	Deviation Record	Depth	Dev	Direction	Depth	Dev	Direction	Depth	Dev	Direction
	Sub Body O.D.	433511	PH	Hour Started	Hour Stopped	Elapsed Time	A B C D Acc D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
1	Rmr Body O.D.	4.85 Ft. Depth In 3043	SD Cont. %	12:00	8:00	8		Dig Holes to Blast Sump					
1	Subs O.D.	2.95 Ft. Total Fig.	Pressure Gradient					Using D-1000 SKIDDER COTS					
	Bit or C.B.							D-1000 SKIDDER COTS					
	Kelly Down	28.52 Ft. Cond. of Bit						CHECKED FIRE EXTINGUISHERS					
	Total	3043 Ft. Reamer No.						HELD SAFETY MEETING ON "GOOD HOUSE KEEPING"					
	Wt. of String	46,000 Lbs. Reamer Type											
	Pipe in Hole	87 Jts. Water Charges Reg. Hrs. O.T. Hrs.											
	Pipe on Racks	16 Jts. Trucker											
	Total Pipe on Lease	103 Jts. Trucker											
			Driller <i>Brian Spence</i>										
43	Stands D.P.	10	Time	From To Fig.									
1	Singles D.P.	2669.86 Ft. Size 6 1/4	Weight	3043									
7	D.C. 5 1/4 I.D. O.D.	200.95 Ft. Type MAN	Visc.-Sec. W.L.-C.C.										
5	D.C. 4 3/4 I.D. O.D.	135.87 Ft. Nozzle No. 2 1 Size 10 11	FL TR CK	Deviation Record	Depth	Dev	Direction	Depth	Dev	Direction	Depth	Dev	Direction
	Sub Body O.D.	433511	PH	Hour Started	Hour Stopped	Elapsed Time	A B C D Acc D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
1	Rmr Body O.D.	4.85 Ft. Depth In 3043	SD Cont. %	8:00	8:15	14		RIG SERV ~ BOPS					
1	Subs O.D.	2.95 Ft. Total Fig.	Pressure Gradient	8:15	12:30	4 1/4		DIG HOLES TO BLAST SUMP					
	Bit or C.B.			12:30	2:45	2 1/4		RUN IN					
	Kelly Down	28.52 Ft. Cond. of Bit		2:45	3:00	1/4		BREAK CIRC.					
	Total	3043 Ft. Reamer No.		3:00	4:00	1		DIG HOLES TO BLAST SUMP ~ CIRCULATING					
	Wt. of String	46,000 Lbs. Reamer Type											
	Pipe in Hole	87 Jts. Water Charges Reg. Hrs. O.T. Hrs.											
	Pipe on Racks	16 Jts. Trucker											
	Total Pipe on Lease	103 Jts. Trucker											
			Driller <i>Dwayne Libon</i>										
43	Stands D.P.	10	Time	From To Fig.									
1	Singles D.P.	2669.86 Ft. Size 6 1/4	Weight	3043									
7	D.C. 5 1/4 I.D. O.D.	200.95 Ft. Type MAN	Visc.-Sec. W.L.-C.C.										
5	D.C. 4 3/4 I.D. O.D.	135.87 Ft. Nozzle No. 2 1 Size 10 11	FL TR CK	Deviation Record	Depth	Dev	Direction	Depth	Dev	Direction	Depth	Dev	Direction
	Sub Body O.D.	433511	PH	Hour Started	Hour Stopped	Elapsed Time	A B C D Acc D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
1	Rmr Body O.D.	4.85 Ft. Depth In 3043	SD Cont. %	4:00	7:15	3 1/4		RIG SERV					
1	Subs O.D.	2.95 Ft. Total Fig.	Pressure Gradient	4:15	9:30	3 1/4		DIG HOLES TO BLAST SUMP ~ CIRCULATING					
	Bit or C.B.			2:30	8:00	1/2		RIG TO BLAST SUMP & BLAST SAME AT 8:00					
	Kelly Down	28.52 Ft. Cond. of Bit		8:00	12:00	4		CLEAN OUT SUMP WITH 0.500 COTS					
	Total	3040 Ft. Reamer No.											
	Wt. of String	46,000 Lbs. Reamer Type											
	Pipe in Hole	87 Jts. Water Charges Reg. Hrs. O.T. Hrs.											
	Pipe on Racks	16 Jts. Trucker											
	Total Pipe on Lease	103 Jts. Trucker											
			Driller										



DAILY DRILLING REPORT

Form 6

Lease Well Name **Keele River N-62**

Date

Location - Lat. Sec. Twp. Rge. W. M. **Oct 4 1973**Weather Condition **COOL**Road Conditions **Nil**Nearest Town **Norman Wells**Water - Source **River**

Miles Hauled

Camp Distance from Rig **2 Camp miles**

Reason for Extra L. Plant

OPERATOR

Rig No.

Drill Pipe

Tool Joint

No.

Size

Type

O.D.

PUMPS

Size

Make

Wt. & Gr.

No Joints

Feet

RKB to

CSG. HD.

Set at

Remarks

Western Dacalita

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

MANUFACTURER **EMSCO**TYPE **C350**STROKE LENGTH **5"**

LAST CASING TUBING OR LINER

7" Seamless 20 sks 16 523.20 19.80 510 Cement w/ 155 sks 3 sks Const Cement 2% Cal.

TIME DISTRIBUTION - HOURS

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

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
Standards D.P.	Feet	Bit No. 9	Time 1:00 4:00 7:00
1 Singles D.P.	2638.82	Size 6 3/4	Weight 9.1 9.2 9.3
D.C. 5 1/4		Mfg SEC	Visc-Sec 37 48 40
7 I.D. O.D.	200.95	Type M4H	W.L.CC
D.C. 4 3/4		No. 2 = 1	FL TR CK
5 I.D. O.D.	135.57	Size 10 = 11	PH 9.5 9.5 9.5
Sub. Body O.D.		Set No. 436437	SD Cont. %
Sub. Body O.D.		Depth Out	Pressure Gradient
Rmr. Body O.D.	4.85	Depth In 2974	
Subs O.D.	2.95	Total Ftg 49	Mud & Chemicals Added
Bit or C.B.		Total Hr Run 15	Type Amt Type Amt
Kelly Down	39.52	Cond. of Bit	Gel 1500
Total	3023	Reamer No.	Soda Ash 100
Wt. of String	46000	Reamer Type	
Pipe in Hole	86	Water Charges Reg. Hrs. O.T. Hrs.	
Pipe on Racks	17	Trucker	
Total Pipe on Lease	103	Trucker	

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	Ftg								Liner Size	S.P.M.	Liner Size	S.P.M.	SGL-S Par el-P Com'd-C		
3000	3023	4 1/2	DRD				110	2500	1000	5"	120					
		23														
Deviation Record		Depth		Dev	Direction		Depth		Dev	Direction		Depth		Dev	Direction	
		3023		4 1/2"												
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc DT	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
12:00	12:45	1/2						Rig Set ✓ Bops + Motor shut off on								
12:15	7:45	7 1/2						DRUGG hole								
7:45	8:00	1/2						Survey								

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name **Keele River N62**

Date

Location - Lnd. Sec. Twp. Rge. W. M. **Oct 3 1973**

Weather Condition **Cool**

Road Conditions **Nil**

Nearest Town **Nearmawells**

Water - Source **River**

Camp Distance from Loc. **2 miles**

Reason for Extra L. Plant **Camp**

OPERATOR

Western Dacota

SIGNATURE OF OPERATOR'S REPRESENTATIVE

Rig No. **7H**
DWKS **N4**

Drill Pipe String **4 3/4**
Tool Joint **IF**

O.D.

PUMPS

MANUFACTURER **EMSCO**

TYPE **C350**

STROKE LENGTH **5"**

*LAST CASING TUBING OR LINER

Size

Make

Wt. & Gr.

No Joints

Feet

RKB. to CSG. HD.

Set at

Remarks

7" Semless 20sk 16

523701080

570

Cement w/135sk

3sk's Coast Cement

2 % Cal.

TIME DISTRIBUTION - HOURS

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

COMPLETION WORK

A. Perforating	
B. Tubing Traps	
C. Swabbing	
D. Testing	
E. Additional	

Totals **8 8 8**

TIME SUMMARY (Office Use Only)

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

WIRE LINE RECORD

Reel No.	
No. of Lines	8
Size	1
Feet Slipped	505
Feet Cut Off	505
Present Length	4495
Ton Mi. or Trips Since Last Cut	79 2 1/2
Cumulative Ton Mi. or Trips	3328
No. of Days From Spud	13
Cumulative Rotating Hrs.	154 1/4

MORNING TOUR

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
79	Stand D.P. 2422.88 Ft.	Bit No. 8	Time 5:00 7:00
	Singles D.P. 5 1/4	Size 6 1/4	Weight 89 9.0
	D.C. 5 1/4	Mfg. H.W.	Visc. Sec. 43 36
7	I.D. O.D. 200.95 Ft.	Type J-33	W.L.C.C. 11.6
	D.C. 4 3/4	No. 2-1	FL TR. CK. 32
11	I.D. O.D. 300.77 Ft.	Nozzle 10-11	PH 10 10
	Sib Body O.D.	Ser. No. VR823	SD Cont. %
	Sib Body O.D.	Depth Out 2644	Pressure Gradient
1	Rm Body O.D. 485 Ft.	Depth In 2644	
1	Subs O.D. 295 Ft.	Total Ftg. 300	
	Bit or C.B.	Total Hr. Run 23 3/4	
	Kelly Down 11.60 Ft.	Cond. of Bit 111	
	Total	Reamer No.	
	Wt. of String 50.000 Lbs.	Reamer Type	
	Pipe in Hole 79 Jts.	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe on Racks 24 Jts.	Trucker	
	Total Pipe on Lease 103 Jts.	Trucker	

Driller **Dave Apath**

FOOTAGE	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
From To Ftg.					Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com d-C
2395 2944 49	DR-D		60	1500	5" 120		
2944 2974 30			120	2000	5" 120		
2974							
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
Hour Started Hour Stopped Elapsed Time	A B C D Acc DT						
12:00 12:15 15							
12:15 12:30 15							
12:30 2:00 1 1/2							
2:00 2:30 30							
2:30 3:30 1							
3:30 5:00 1 1/2							
Rig Ser ✓ BOPS + Motor shut off's ok. Finish Laying down test Work on Hydrumatic Run in w/Bit Work on Hydrumatic Finish Running in w/Bit Break Circ + DRLG 6 1/4" hole							

DAY TOUR

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
42	Stand D.P.	Bit No. 8 9	Time 9:00 4:00
1	Singles D.P. 2607.87 Ft.	Size 6 1/4 6 1/4	Weight 9.0 9.0
	D.C. 5 1/4	Mfg. H.W. SEC	Visc. Sec. 37 36
7	I.D. O.D. 200.95 Ft.	Type J-33	W.L.C.C. 11.6
	D.C. 4 3/4	No. 2 1 2 1	FL TR. CK. 32
5	I.D. O.D. 135.87 Ft.	Nozzle 10 11 10 11	PH 10.5 10.1
	Sib Body O.D.	Ser. No. VR823 436437	SD Cont. %
	Sib Body O.D.	Depth Out 2974	Pressure Gradient
1	Rm Body O.D. 485 Ft.	Depth In 2644 2974	
1	Subs O.D. 295 Ft.	Total Ftg. 330	
	Bit or C.B.	Total Hr. Run 26 3/4	
	Kelly Down 21.51 Ft.	Cond. of Bit 111	
	Total	Reamer No.	
	Wt. of String 46.000 Lbs.	Reamer Type	
	Pipe in Hole 85 Jts.	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe on Racks 18 Jts.	Trucker	
	Total Pipe on Lease 103 Jts.	Trucker	

Driller **B. Spence**

FOOTAGE	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
From To Ftg.					Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com d-C
2944 2974 30			60	1500	5" 120		
2974			120	2000	5" 120		
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
Hour Started Hour Stopped Elapsed Time	A B C D Acc DT						
9:00 10:45 1 1/2							
10:45 11:00 15							
11:00 11:15 15							
11:15 11:30 15							
11:30 2:00 2 1/2							
2:00 2:15 15							
2:15 3:00 45							
3:00 3:15 15							
3:15 4:00 45							
DRLG Rig Ser ✓ BOPS Survey DRLG TRIP FOR BIT Work on Hydrumatic Finish Running in Break Circ + Clean to Bottom (No Fil) DRLG (Drill Collars in Derrick - 164.90)							

EVENING TOUR

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
86	Stand D.P.	Bit No. 5	Time 6:00 9:00 11:00
	Singles D.P. 2638.82 Ft.	Size 6 1/4	Weight 91 91 91
	D.C. 5 1/4	Mfg. SEC	Visc. Sec. 36 37 37
7	I.D. O.D. 200.95 Ft.	Type MAN	W.L.C.C.
	D.C. 4 3/4	No. 2 1	FL TR. CK.
6	I.D. O.D. 135.87 Ft.	Nozzle 10 11	PH 10.0 9.5
	Sib Body O.D.	Ser. No. 436437	SD Cont. %
	Sib Body O.D.	Depth Out	Pressure Gradient
1	Rm Body O.D. 485 Ft.	Depth In 2974	
1	Subs O.D. 295 Ft.	Total Ftg. 26	
	Bit or C.B.	Total Hr. Run 7 1/2	
	Kelly Down 16.56 Ft.	Cond. of Bit	
	Total	Reamer No.	
	Wt. of String 46.000 Lbs.	Reamer Type	
	Pipe in Hole 86 Jts.	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe on Racks 17 Jts.	Trucker	
	Total Pipe on Lease 103 Jts.	Trucker	

Driller

FOOTAGE	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
From To Ftg.					Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com d-C
2974 3000 26	DR-D		110	2500	5" 120		
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
Hour Started Hour Stopped Elapsed Time	A B C D Acc DT						
4:00 8:00 4							
8:00 8:15 15							
8:15 8:30 15							
8:30 12:00 3 1/2							
DRLG Rig Ser ✓ BOPS ok. Survey DRLG 6 1/4" hole							

EXTRA CREW TEAROUT WATER LINES

GUTHRIE McLAREN
Drilling Ltd.

Form 6

OUTERMAN Drilling Ltd. Lease Well Name Keele River & G-2 Date Oct 1 1973 Weather Condition COOL Road Conditions Nil Nearest Town Norman Wells Water - Source River Miles Hauled Pumped Camp Distance from Rig 7 miles Reason for Extra L. Plant Camp

OPERATOR Western Dacota SIGNATURE OF OPERATOR'S REPRESENTATIVE SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION - HOURS

NO. DRILLING ASSEMBLY AT END OF TOUR BIT RECORD MUD RECORD FOOTAGE

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME SUMMARY (Office Use Only)

WIRE LINE RECORD

NO. DRILLING ASSEMBLY AT END OF TOUR BIT RECORD MUD RECORD FOOTAGE

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

NO. DRILLING ASSEMBLY AT END OF TOUR BIT RECORD MUD RECORD FOOTAGE

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

CUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name **Keele River 62** Date **Sept 29 1973**

Location - Lat. Sec. Twp. Rge. W. M. **Sept 29 10 73**

Weather Condition **Cloud**

Road Conditions **N:1**

Nearest Town **Norman Wells**

Water - Source **River**

Camp Distance from Rig **7 miles**

OPERATOR

Rig No. **7 H**

Drill Pipe String **4 3/4**

Tool Joint **4 3/4**

Size **4 3/4**

Type **IF**

OD **4 3/4**

PUMPS

MANUFACTURER **EMSCO**

TYPE **C350**

STROKE LENGTH **5"**

LAST CASING TUBING OR LINER

Size **7"**

Make **Samless**

Wt. & Gr. **20 sks**

No Joints **16**

Feet **523.70**

RKB to CSG. HD. **1080**

Set at **510**

Remarks **Cementw/185 sks**

3 sks crust cement

2% Cal.

SIGNATURE OF OPERATOR'S REPRESENTATIVE **Western Decalta**

SIGNATURE OF CONTRACTOR'S TOOL PUSHER **H. S. Sule**

TIME DISTRIBUTION - HOURS

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

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
53	Stand D.P. 1623.32	Bit No. 6	Time 1:00 4:00 7:00
	Singles D.P.	Size 6 1/4	Weight 8.3 55 40
	D.C. 5 1/4	Mfr H-W	Visc.-Sec. 35 45 40
7	ID. O.D. 300.95	Type J-33	W.L.-C.C.
	D.C. 4 3/4	No. 2 = 1	FL TR CK
11	ID. O.D. 300.77	Size 10 = 9	PH 10 10 10
	Sib Body O.D.	Ser No. VN265	SD Cont. %
	Sib Body O.D.	Depth Out	Pressure Gradient
1	Rim Body O.D. 4.85	Depth In 1853	
1	Subs O.D. 2.95	Total Frg 305	Mud & Chemicals Added
	Bit or CB	Total Hr Run 15 3/4	Type Amt Type Amt
	Kelly Down 35.16	Cond of Bit	Gel 4000 lbs
	Total 2158.00	Reamer No.	CRUSTIC 100 lbs
	Wt. of String 42.000	Reamer Type	
	Pipe in Hole 53	Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe on Racks 19	Trucker	
	Total Pipe on Lease 71	Trucker	

FOOTAGE	DR-D RMR-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 SOL-S Par-el-P Com'd-C
From To Figs.									
1998 2158 165 DRD				60	1500	1000	5	130	
Deviation Record	Depth	Dev	Direction	Depth	Dev	Direction	Depth	Dev	Direction
Hour Started Hour Stopped Elapsed Time	A	B	C	D	Acc D T	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS			
12:00 12:15 1/4						Rig Ser ✓ BOPS + Motor shut off's OK			
12:15 4:00 3 3/4						DRLG 6 1/4 hole			
4:00 4:15 1/4						Survey			
4:15 5:00 3 3/4						DRLG 6 1/4 hole			

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

TIME SUMMARY (Office Use Only)

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

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
29	Stand D.P. 1716.94	Bit No. 6	Time 9:00 12:00 3:00
	Singles D.P.	Size 6 1/4	Weight 8.8 8.8 8.8
	D.C. 5 1/4	Mfr H.W	Visc.-Sec. 52 33 33
7	ID. O.D. 200.95	Type J-33	W.L.-C.C.
	D.C. 4 3/4	No. 2 1/4	FL TR CK
11	ID. O.D. 300.77	Size 10 1/4	PH 10.0 10.0 10.0
	Sib Body O.D.	Ser No. VN265	SD Cont. %
	Sib Body O.D.	Depth Out	Pressure Gradient
1	Rim Body O.D. 4.85	Depth In 1853	
1	Subs O.D. 2.95	Total Frg 413	Mud & Chemicals Added
	Bit or CB	Total Hr Run 22 1/4	Type Amt Type Amt
	Kelly Down 39.54	Cond of Bit	Gel 2000F
	Total 2266	Reamer No.	
	Wt. of String 45.000	Reamer Type	
	Pipe in Hole 58	Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe on Racks 32	Trucker	
	Total Pipe on Lease 90	Trucker	

FOOTAGE	DR-D RMR-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 SOL-S Par-el-P Com'd-C
From To Figs.									
2158 2266 108 0				60	15M/1000	5	114		
Deviation Record	Depth	Dev	Direction	Depth	Dev	Direction	Depth	Dev	Direction
Hour Started Hour Stopped Elapsed Time	A	B	C	D	Acc D T	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS			
8:00 8:30 1/2						DRLG			
8:30 8:45 1/4						RIG SERV			
8:45 9:00 1/4						SURVEY			
9:00 11:15 2 1/4						DRLG			
11:15 11:45 1/2						CONSERVATION BOARD RIG CHECK (OK)			
11:45 3:30 3 3/4						DRLG			
3:30 4:00 1/2						SURVEY + REPAIR BROKEN TAPCO LINE			

WIRE LINE RECORD	
Reel No.	
No. of Lines	
Feet Shipped	
Feet Cut Off	
Present Length	
Ton Mi. or Trips Since Last Cut	
Cumulative Ton Mi. or Trips	
No. of Days From Spud	
Cumulative Rotating Hrs.	

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
60	Stand D.P. 1841.74	Bit No. 6	Time 6:00 9:00 11:00
	Singles D.P.	Size 6 1/4	Weight 8.9 8.9 8.9
	D.C. 5 1/4	Mfr H.V.	Visc.-Sec. 35 35 40
7	ID. O.D. 200.95	Type J-33	W.L.-C.C.
	D.C. 4 3/4	No. 2 1/4	FL TR CK
11	ID. O.D. 300.77	Size 10 1/4	PH 10 10
	Sib Body O.D.	Ser No. VN265	SD Cont. %
	Sib Body O.D.	Depth Out	Pressure Gradient
1	Rim Body O.D. 4.85	Depth In 1853	
1	Subs O.D. 2.95	Total Frg 538	Mud & Chemicals Added
	Bit or CB	Total Hr Run 29 3/4	Type Amt Type Amt
	Kelly Down 39.74	Cond of Bit	
	Total 2391.000	Reamer No.	
	Wt. of String 46.000	Reamer Type	
	Pipe in Hole 60	Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe on Racks 30	Trucker	
	Total Pipe on Lease 98	Trucker	

FOOTAGE	DR-D RMR-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 SOL-S Par-el-P Com'd-C
From To Figs.									
2266 2391 125				60	10000	1000	5	118	
Deviation Record	Depth	Dev	Direction	Depth	Dev	Direction	Depth	Dev	Direction
Hour Started Hour Stopped Elapsed Time	A	B	C	D	Acc D T	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS			
4:00 8:00 4						DRLG 6 1/4 Hole			
8:00 8:15 1/4						Rig Ser ✓ BOPS + Pipenrams OK			
8:15 9:45 1 3/4						DRLG 6 1/4 hole			
9:45 10:00 1/4						Survey			
10:00 12:00 2						DRLG 6 1/4 hole			



DAILY DRILLING REPORT

Form 6

Lease Well Name *Barro Colorado L. R. Rd. Rd. Rd.*Location - Lat. *N-62* Sec. *1* Twp. *1* Rge. *1* W. *1* M. *1* Date *Sept 28 1973*Weather Condition *CCO*Road Conditions *NYL*Nearest Town *Norman Wells*Water - Source *River*Miles Hauled *16*Pumped *16*Camp Distance from Rig *1* milesReason for Extra L. Plant *Camp*

OPERATOR

Western Drilling

SIGNATURE OF OPERATOR'S REPRESENTATIVE

Rig No. *7H*

DWKS

N+

Drill Pipe

String

Tool Joint

4 3/4

O.D.

No.

Size

Type

IF

No.

MANUFACTURER

TYPE

STROKE

LENGTH

LAST

CASING

TUBING

OR LINER

Size

Make

Wt. & Gr.

No

Feet

RKB to

CSG. HD.

Set at

Remarks

*7" seamless 20 sks 16 533.70 1040 510 Cement w/135 sks**3 sks of cement**2 1/2 gal*

TIME DISTRIBUTION - HOURS

Morn Day Eve

Rig Up & Tear Down

Drilling Actual

Reaming

Conditioning Mud & Circulating

Trips

Lubricate Rig

Deviation Survey

Test BOP

Cut Off Drilling Line

Repair Rig

Coring

Wire Line Logging

Running Casing & Cementing

Waiting on Cement

Drill Stem Test

Misc. Lost

Circ. Amt.

*24**1*

DRILLING ASSEMBLY AT END OF TOUR

Standards D.P.

Feet

*45**1379.37**7**5 1/4**200.45**11**4 3/4**300.77**1**4 1/2**4.85**1**2 1/2**2.45**1**22.11**1**1910.00**41.000**45**26**71*

BIT RECORD

Bit No.

6

Size

6 1/4

Mfg.

H-W

Type

7-33

No.

2-1

Size

10-9

Ser. No.

VN265

Depth Out

1553

Depth In

50

Total Ftg.

3 1/2

Total Hr.

3 1/2

Reamer No.

3000

Reamer Type

SAW

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

SAW

Trucker

SAW

Trucker

SAW

Trucker

SAW

Trucker

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SAW

Trucker

SAW

Trucker

MUD RECORD

Time

*4:00**6:30*

Weight

8.7

Visc. Sec.

4.9

W.L.C.C.

FLTR. CK

PH

9.0

SD Cont. %

Pressure

Gradient

3000

Mud & Chemicals Added

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

Type

SAW

Amt.

3000

CUTLIE McLAREN
Drilling Co.

DAILY DRILLING REPORT

Form 6

Lease Well Name **KEELE RIVER 8-62** Date **SEPT 27 1973**

Location - Lat. Sec. Twp. Rge. W. M.

Weather Condition

Road Conditions **MIL**

Nearest Town **WERNERS**

Water - Source **RIVER**

Miles Hauled

Pumped

Camp Distance from Rig

Reason for Extra L. Plant

OPERATOR
E. ESTERL DE CALTA

Rig No. **74**
DWKS **74**

Drill Pipe String **4 3/4** OD

Tool Joint **4 3/4** OD

PUMPS

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

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER
A. E. Eild & Ruthym

No. MANUFACTURER TYPE STROKE LENGTH

1. **EMSCO** **C. 3 1/2** **5"**

LAST CASING TUBING OR LINER

7" Summit 20 RS 16 12370 10 50 510 0.64 12370 2/15
3RS OF CAST IRON
22 CAL.

TIME DISTRIBUTION - HOURS

	Morn	Day	Even
Rig Up & Tear Down			
Drilling Actual	2 1/2		
Reaming			
Conditioning Mud & Circulating			
Trips	2 1/4		
Lubricate Rig	1 1/2		
Deviation Survey	1 1/2		
Test BOP			
Cut Off Drilling Line	1 1/4		
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
37	Stand D.P. 1132.15 Ft.	Bit No. 54 5	Time 5:00 2:00
	Singles D.P.	Size 6 1/4 6 1/4	Weight T 8.7 5.7
	D.C. 5 1/4	Mfg. SEC SEC	Visc.-Sec. R 3.5 3.8
7	I.D. O.D. 200.95 Ft.	Type MDL 54J	W.L.-CC. 1
	D.C. 4 3/4	No. 1 2 1	FL TR CK P 10.5 11.0
11	I.D. O.D. 300.77 Ft.	Size 9 10 10 9	PH
	Sib Body O.D.	Ser. No. 91437 429161	SD Cont. %
	Rm Body O.D.	Depth Out 1623	Pressure Gradient
1	Rm Body O.D. 4.85 Ft.	Depth In 1432 1623	
1	Subs O.D. 2.95 Ft.	Total Fg 191 52	Mud & Chemicals Added
	Bit or C.B.	Total Hr Run 10	Type Amt Type Amt
	Kelly Down 13.32 Ft.	Cond. of Bit 521	GEL 1200
	Total	Reamer No.	CRUSTIC 50
	Wt. of String 40.000 Lbs.	Reamer Type	
	Pipe in Hole	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe on Racks	Trucker	
	Total Pipe on Lease	Trucker	
		Driller George L. H.	

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 Fg							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com'd-C
1620 1673 52 D							5 125		
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Hour Started Hour Stopped Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS			
1200 1230 1/2						DRILL 6 1/4 HOLE			
1230 1301 1/2						HOIST FOR BIT			
1301 1315 1/4						RUN IN W/ BIT 5			
1315 1330 1/4						SLIP & CUT LINE 90 FT			
1330 1345 1/4						RIG SERV			
1345 1415 1/2						RLD IN			
1415 1430 1/4						BREAK CIRC			
1430 1500 1/2						CLEAN 15 FT OF FILL			
1500 800 3						DRILL 6 1/4 HOLE			

COMPLETION WORK
A Perforating
B Tubing Trips
C Swabbing
D Testing
E Additional
Totals 8 1/2

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
37	Stand D.P. 1255.32 Ft.	Bit No. 5	Time 1:00 12:00 3:00
	Singles D.P.	Size 6 1/4	Weight 5.0 8.7 5.7
	D.C. 4 1/2	Mfg. SEC	Visc.-Sec. 31 3.4 3.0
7	I.D. O.D. 200.95 Ft.	Type MDL	W.L.-CC. 1
	D.C. 4 1/2	No. 2 1	FL TR CK
11	I.D. O.D. 300.77 Ft.	Size 10 10 9	PH
	Sib Body O.D.	Ser. No. 42770	SD Cont. %
	Rm Body O.D.	Depth Out	Pressure Gradient
1	Rm Body O.D. 4.85 Ft.	Depth In 1223	
1	Subs O.D. 2.95 Ft.	Total Fg 191	Mud & Chemicals Added
	Bit or C.B.	Total Hr Run 10	Type Amt Type Amt
	Kelly Down 13.32 Ft.	Cond. of Bit	GEL 2000
	Total	Reamer No.	CRUSTIC 50
	Wt. of String 40.000 Lbs.	Reamer Type	
	Pipe in Hole	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe on Racks	Trucker	
	Total Pipe on Lease	Trucker	
		Driller George L. H.	

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 Fg							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com'd-C
1273 1314 1/2							5 125		
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Hour Started Hour Stopped Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS			
1200 1230 1/2						DRILL 6 1/4 HOLE			
1230 1301 1/2						HOIST FOR BIT			
1301 1315 1/4						RUN IN W/ BIT 5			
1315 1330 1/4						SLIP & CUT LINE 90 FT			
1330 1345 1/4						RIG SERV			
1345 1415 1/2						RLD IN			
1415 1430 1/4						BREAK CIRC			
1430 1500 1/2						CLEAN 15 FT OF FILL			
1500 800 3						DRILL 6 1/4 HOLE			

TIME SUMMARY (Office Use Only)
Day Work
Hrs. W/DP
Hrs. WO/DP
Hrs. Standby

NO	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
37	Stand D.P. 1516.13 Ft.	Bit No. 5 6	Time 1:00 12:00 11:00
	Singles D.P.	Size 6 1/4 6 1/4	Weight 5.0 8.7 5.7
	D.C. 4 1/2	Mfg. SEC H.W.	Visc.-Sec. 31 3.4 3.0
7	I.D. O.D. 200.95 Ft.	Type MDL 54J	W.L.-CC. 1
	D.C. 4 1/2	No. 2 1 2 1	FL TR CK
11	I.D. O.D. 300.77 Ft.	Size 10 10 9	PH
	Sib Body O.D.	Ser. No. 42770 VN 265	SD Cont. %
	Rm Body O.D.	Depth Out 1853	Pressure Gradient
1	Rm Body O.D. 4.85 Ft.	Depth In 1623 1853	
1	Subs O.D. 2.95 Ft.	Total Fg 230 6	Mud & Chemicals Added
	Bit or C.B.	Total Hr Run 12 3/4 1	Type Amt Type Amt
	Kelly Down 32.85 Ft.	Cond. of Bit 1851	GEL 1400
	Total	Reamer No.	
	Wt. of String 40.000 Lbs.	Reamer Type	
	Pipe in Hole	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe on Racks	Trucker	
	Total Pipe on Lease	Trucker	
		Driller George L. H.	

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 Fg							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par-el-P Com'd-C
1273 1314 1/2							5 125		
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Hour Started Hour Stopped Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS			
1200 1230 1/2						DRILL 6 1/4 HOLE			
1230 1301 1/2						HOIST FOR BIT			
1301 1315 1/4						RUN IN W/ BIT 5			
1315 1330 1/4						SLIP & CUT LINE 90 FT			
1330 1345 1/4						RIG SERV			
1345 1415 1/2						RLD IN			
1415 1430 1/4						BREAK CIRC			
1430 1500 1/2						CLEAN 15 FT OF FILL			
1500 800 3						DRILL 6 1/4 HOLE			

WIRE LINE RECORD
Reel No.
No. of Lines 4 Size 1/2
Feet Slipped 90
Feet Cut Off 90
Present Length
Ton Mi. or Trips Since Last Cut
Cumulative Ton Mi. or Trips
No. of Days From Spud
Cumulative Rotating Hrs.

Form 6

GUTHRIE McLAREN
Drilling Ltd.

Lease Well Name KEELE RIVER #2 Date 5/17/25										Weather Condition WIL Road Conditions WIL Nearest Town WILKES Water - Source WILKES Camp Distance from Rig 2.0 Miles Miles Hauled 0 Pumped 0 Reas. for Extra L. Plant 0																																																																																																																																																					
OPERATOR R. R. Rufford		Rig No. 71		Drill Pipe String 4311		Tool Joint 4311		O.D. 4.311		PUMPS		LAST CASING TUBING OR LINER		Size 7"		Make Summit		Wt. & Gr. 26.15		No Joints 16		Feet 563-70		RKB to CSG. HD 210		Set at 210		Remarks 210																																																																																																																																			
SIGNATURE OF OPERATOR'S REPRESENTATIVE R. R. Rufford										SIGNATURE OF CONTRACTOR'S TOOL PUSHER R. R. Rufford																																																																																																																																																					
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 Lbs.										Pump Press										Pump No. 1										Pump No. 2										Method Run																																																	
MORNING TOUR										20 Stands D.P. 111.75										Bit No. 32										Time 1:00 5:00 7:00										From 1155										To 1155										Page 1										DR-D R.M.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										Singles D.P.										Size 6 1/4										Weight 88 8.9 9.0										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
Drilling Actual										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Reaming										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Trips										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Lubricate Rig										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Deviation Survey										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Test B.O.P.										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Cut Off Drilling Line										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Repair Rig										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Wire Line Logging										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Running Casing & Cementing										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Waiting on Cement										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Drill Stem Test										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Other										D.C. 111.75										Mile 111.75										Visc. 29 35 52										W.L.-CC										FL TR. CK										Hour Started										Hour Stopped										Elapsed Time										A										B										C										D										Acc D.T.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																			
Fishing										D.C. 111.75										Mile 111																																																																																																																																											



DAILY DRILLING REPORT

Form 6

Lease		Date		Location		Weather		Road		Nearest		Water		Camp		Distance	
Well Name		No.		Lat. Long.		Temp. Wind.		Condition		Town		Source		Miles		From Rig	
WESTERN DEATH		11		24 19 28		52 77 24 19 28		10 11		HARMON		10 11		2 1/2		10 11	
OPERATOR		Rig No.		Drill Pipe		Tool Joint		PUMPS		Size		Make		Wt. & Gr.		No. Joints	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		DWKS		No. Size		Type Thd		No. MANUFACTURER		TYPE		STROKE LENGTH		LAST CASING TUBING OR LINER		Remarks	
B. Rutherford		11		11		11		11		11		11		11		11	
TIME DISTRIBUTION—HOURS		Morn		Day		Eve		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE	
Rig Up & Tear Down		1 1/2		1 1/2		1 1/2		7		Stand D.P.		Feet		Time		From To	
Drilling Actual		1 1/2		1 1/2		1 1/2		7		Single D.P.		Feet		Weight		777 244 D	
Reaming		1 1/2		1 1/2		1 1/2		7		D.C.		Feet		Visc-Sec		28 29 25	
Conditioning Mud & Circulating		1 1/2		1 1/2		1 1/2		7		I.D.		Feet		W.L.-C.C.		546 1 1/2	
Trips		1 1/2		1 1/2		1 1/2		7		D.C.		Feet		FL TR. CK.		656 1 1/2	
Lubricate Rig		1 1/2		1 1/2		1 1/2		7		I.D.		Feet		PH		777 1 1/2	
Deviation Survey		1 1/2		1 1/2		1 1/2		7		Subs		Feet		SD Cont. %		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
Test B.O.P.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Pressure Gradient		Rig Service	
Cut Off Drilling Line		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Mud & Chemicals Added		Change Oil in Rotary Transmitted	
Repair Rig		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Coring		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey 839	
Wire Line Logging		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Running Casing & Cementing		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey	
Waiting on Cement		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Drill Stem Test		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Pull out of Hole Layed Down 5 Sing	
Other		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D500 Skidder cat	
Fishing		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D31 Light Plant	
COMPLETION WORK		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
A Perforating		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Rig Service	
B Tubing Trips		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Change Oil in Rotary Transmitted	
C Swabbing		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
D Testing		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey 839	
E Additional		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Totals		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Pull out of Hole Layed Down 5 Sing	
TIME SUMMARY (Office Use Only)		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D500 Skidder cat	
Day Work		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D31 Light Plant	
Hrs. W/DP		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
Hrs. WO/DP		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Rig Service	
Hrs. Standby		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Change Oil in Rotary Transmitted	
Total Day Work		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
WIRE LINE RECORD		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey	
Reel No.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
No. of Lines		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Pull out of Hole Layed Down 5 Sing	
Feet Slipped		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D500 Skidder cat	
Feet Cut Off		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D31 Light Plant	
Present Length		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
Ten Mi. or Trips Since Last Cut		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Rig Service	
Cumulative Ten Mi. or Trips		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Change Oil in Rotary Transmitted	
No. of Days From Spud		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Cumulative Drilling Hrs.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey	
Total Day Work		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
WIRE LINE RECORD		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Pull out of Hole Layed Down 5 Sing	
Reel No.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D500 Skidder cat	
No. of Lines		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D31 Light Plant	
Feet Slipped		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
Feet Cut Off		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Rig Service	
Present Length		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Change Oil in Rotary Transmitted	
Ten Mi. or Trips Since Last Cut		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Cumulative Ten Mi. or Trips		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey	
No. of Days From Spud		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Cumulative Drilling Hrs.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Pull out of Hole Layed Down 5 Sing	
Total Day Work		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D500 Skidder cat	
WIRE LINE RECORD		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D31 Light Plant	
Reel No.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
No. of Lines		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Rig Service	
Feet Slipped		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Change Oil in Rotary Transmitted	
Feet Cut Off		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Present Length		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey	
Ten Mi. or Trips Since Last Cut		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Cumulative Ten Mi. or Trips		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Pull out of Hole Layed Down 5 Sing	
No. of Days From Spud		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D500 Skidder cat	
Cumulative Drilling Hrs.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D31 Light Plant	
Total Day Work		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
WIRE LINE RECORD		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Rig Service	
Reel No.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Change Oil in Rotary Transmitted	
No. of Lines		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Feet Slipped		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey	
Feet Cut Off		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Present Length		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Pull out of Hole Layed Down 5 Sing	
Ten Mi. or Trips Since Last Cut		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D500 Skidder cat	
Cumulative Ten Mi. or Trips		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D31 Light Plant	
No. of Days From Spud		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
Cumulative Drilling Hrs.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Rig Service	
Total Day Work		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Change Oil in Rotary Transmitted	
WIRE LINE RECORD		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Reel No.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey	
No. of Lines		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Feet Slipped		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Pull out of Hole Layed Down 5 Sing	
Feet Cut Off		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D500 Skidder cat	
Present Length		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D31 Light Plant	
Ten Mi. or Trips Since Last Cut		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
Cumulative Ten Mi. or Trips		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Rig Service	
No. of Days From Spud		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Change Oil in Rotary Transmitted	
Cumulative Drilling Hrs.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Total Day Work		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey	
WIRE LINE RECORD		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Reel No.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Pull out of Hole Layed Down 5 Sing	
No. of Lines		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D500 Skidder cat	
Feet Slipped		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D31 Light Plant	
Feet Cut Off		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
Present Length		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Rig Service	
Ten Mi. or Trips Since Last Cut		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Change Oil in Rotary Transmitted	
Cumulative Ten Mi. or Trips		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
No. of Days From Spud		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey	
Cumulative Drilling Hrs.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Total Day Work		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Pull out of Hole Layed Down 5 Sing	
WIRE LINE RECORD		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D500 Skidder cat	
Reel No.		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Using D31 Light Plant	
No. of Lines		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
Feet Slipped		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Rig Service	
Feet Cut Off		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Change Oil in Rotary Transmitted	
Present Length		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
Ten Mi. or Trips Since Last Cut		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Survey	
Cumulative Ten Mi. or Trips		1 1/2		1 1/2		1 1/2		7		Subs		Feet		Type Amt		Drilling 6 1/4 hole	
No. of Days From Spud		1 1/2		1 1/2		1 1/2		7		Subs		Feet</					

CUTLER McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name **KEEL RIVER #162** Date

Location - Lnd. Sec. Twp. Rge. W. M. **55° 23' 10" N 107° 12' 30" W**

Weather Condition

Road Conditions

Nearest Town

Water Source

Miles Hauled

Pumped

Camp Distance from Rig

Reason for Extra L. Plant

OPERATOR WESTERN DRILLING	Rig No. 44	Drill Pipe String 4 3/4" O.D.	Tool Joint 4 3/4" 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	SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>R. Rothfuss</i>	No.	Size	Type	STROKE LENGTH	1.	MANUFACTURER	TYPE	7				
		2.											
		3.											

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE			FORMATION (SHOW CORE RECOVERY)		Rotary RPM		Wt. on Bit 1000 Lbs.		Pump Press		Pump No. 1		Pump No. 2		Method Run	
Morn	Day	Even		Stands D.P.	Feet	Bit No.	Time	Weight	Visc. Sec.	From	To	Page	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction	Liner Size	S.P.M.	Liner Size	S.P.M.	S.G.L.S. Par. el-P Com'd-C
				Singles D.P.	Feet	Size																				
				D.C.	Feet	Mfg.																				
				I.D. O.D.	Feet	Type																				
				D.C.	Feet	No.																				
				I.D. O.D.	Feet	Size																				
				Sb. Body O.D.	Feet	Set No.																				
				Sb. Body O.D.	Feet	Depth Out																				
				Rmr. Body O.D.	Feet	Depth In																				
				Subs O.D.	Feet	Total Feet																				
				Bit or C.B.	Feet	Total Hrs. Run																				
				Kelly Down	Feet	Cond. of Bit																				
				Total	Feet	Reamer No.																				
				Wt. of String	Lbs.	Reamer Type																				
				Pipe in Hole	Jts.	Water Charges																				
				Pipe on Racks	Jts.	Reg. Hrs. O.T. Hrs.																				
				Total Pipe on Lease	Jts.																					

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE			FORMATION (SHOW CORE RECOVERY)		Rotary RPM		Wt. on Bit 1000 Lbs.		Pump Press		Pump No. 1		Pump No. 2		Method Run	
Morn	Day	Even		Stands D.P.	Feet	Bit No.	Time	Weight	Visc. Sec.	From	To	Page	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction	Liner Size	S.P.M.	Liner Size	S.P.M.	S.G.L.S. Par. el-P Com'd-C
				Singles D.P.	Feet <td>Size</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Size																				
				D.C.	Feet	Mfg.																				
				I.D. O.D.	Feet <td>Type</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Type																				
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				Subs O.D.	Feet	Total Feet																				
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Morn	Day	Even		Stands D.P.	Feet	Bit No.	Time	Weight	Visc. Sec.	From	To	Page	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction	Liner Size	S.P.M.	Liner Size	S.P.M.	S.G.L.S. Par. el-P Com'd-C
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				Wt. of String	Lbs.	Reamer Type																				
				Pipe in Hole	Jts.	Water Charges																				
				Pipe on Racks	Jts.	Reg. Hrs. O.T. Hrs.																				
				Total Pipe on Lease	Jts.																					

WIRE LINE RECORD

Reel No.	
No. of Lines	Size
Feet Shipped	
Feet Cut Off	
Present Length	
Ton Mi. or Trips Since Last Cut	
Cumulative Ton Mi. or Trips	
No. of Days From Spud	
Cumulative Rotating Hrs	

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name **NEEL RIVER N-62** Date **SEPT 22 1971**

Location - Lat. Sec. Twp. Rge. W. M. **SEPT 22 1971**

Weather Condition **Cloudy** Road Conditions **Wet** Nearest Town **Lebanon, Tenn.** Water Source **Well** Miles Hauled **1** Camp Distance from Rte **7.25** Reason for Extra L. Plant **None**

OPERATOR DR. STEVE D. MILLER	Rig No. 74 DWXS	Drill Pipe String No. 1 Size 1 1/2 Type IF	Tool Joint 4 3/4 O.D.	PUMPS	MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER	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 W. R. R. R. R. R.		1. 7' Sum. Tube		25' KS		1 1/2"		5232		1036		510		Cemented w/ 135

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		Pump No. 1		Pump No. 2		Method Run				
Morn	Day	Even		Stands D.P.	Feet	Bit No.	Time	Weight	Visc. Sec.	W.L. - C.C.	FL TR CK	PH	SD Cont. %	Pressure Gradient	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Liner Size	SPM	Liner Size	SPM	Method Run
				Singles D.P.	Feet	Size																
				D.C.	Feet	Mfg.																
				I.D. O.D.	Feet	Type																
				D.C.	Feet	No. Size																
				I.D. O.D.	Feet	No. Size																
				Sub Body O.D.	Feet	Set No.																
				Sub Body O.D.	Feet	Depth Out																
				Sub Body O.D.	Feet	Depth In																
				Subs O.D.	Feet	Total Feet																
				Bit or C.B.	Feet	Total Hr Run																
				Kelly Down	Feet	Cond. of Bit																
				Total	Feet	Reamer No.																
				Wt. of String	Lbs.	Reamer Type																
				Pipe in Hole	Jts	Water Changes	Reg. Hrs. O.T. Hrs.															
				Pipe on Racks	Jts	Trucker																
				Total Pipe on Lease	Jts	Trucker																

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		Pump No. 1		Pump No. 2		Method Run				
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				Sub Body O.D.	Feet	Set No.																
				Sub Body O.D.	Feet	Depth Out																
				Sub Body O.D.	Feet	Depth In																
				Subs O.D.	Feet	Total Feet																
				Bit or C.B.	Feet	Total Hr Run																
				Kelly Down	Feet	Cond. of Bit																
				Total	Feet	Reamer No.																
				Wt. of String	Lbs.	Reamer Type																
				Pipe in Hole	Jts	Water Changes	Reg. Hrs. O.T. Hrs.															
				Pipe on Racks	Jts	Trucker																
				Total Pipe on Lease	Jts	Trucker																

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Morn	Day	Even		Stands D.P.	Feet	Bit No.	Time	Weight	Visc. Sec.	W.L. - C.C.	FL TR CK	PH	SD Cont. %	Pressure Gradient	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Liner Size	SPM	Liner Size	SPM	Method Run
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				Sub Body O.D.	Feet	Set No.																
				Sub Body O.D.	Feet	Depth Out																
				Sub Body O.D.	Feet	Depth In																
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				Kelly Down	Feet	Cond. of Bit																
				Total	Feet	Reamer No.																
				Wt. of String	Lbs.	Reamer Type																
				Pipe in Hole	Jts	Water Changes	Reg. Hrs. O.T. Hrs.															
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WIRE LINE RECORD

Reel No. _____

No. of Lines _____ Size _____

Feet Shipped _____

Feet Cut Off _____

Present Length _____

Ton Mi. or Trips Since Last Cut _____

Cumulative Ton Mi. or Trips _____

No. of Days From Spud _____

Cumulative Rotating Hrs. _____

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

W.O.C

Cut off Casing + Weld on Bore

Helicopter Slung in 4 Loads on

Slumberger Equipment

Geologists Trailer, Water Pump.

Using D 500 Skidder CAT

Sent out Equipment on Barge 7. lay

For Hay River NT-Husky

Form 6

[illegible]

