Drilling Authority No. [illegible]

Date Issued 26 March 1971

WELL NAME [illegible]

FIELD .....

LOCATION: Unit .....

Area: .....

Section .....

Grid .....

Latitude .....

Longitude .....

U.W.I.R. .....

U.W.I. .....

Rig Release Date: .....

Status .....

Information Release Date .....

CHANGE OF NAME:

DATE RECEIVED	INDEX
26-3-71	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
8-4-71	Application to Amend a Drilling Authority.
	Application to change a Well Name.
20-4-71	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No. .....
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells – Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells – Vitter's Method.
	M.P.R. – Oil – Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale..... Small scale.....

LAND 52-90 (3-69)

Drilling Authority No. 522

Date Issued March 26, 1971

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

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

WELL COMPLETION DATA

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

DEPT. OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT OIL & MINERAL DIVISION
JUN 28 1971
CALGARY 24, ALBERTA
OIL CONSERVATION ENGINEER
Northwest Territories & Yukon Territory

Well name and number HORN R BRALORNE IOE KAKISA N-73

Permit No. 4553 Lease No.

Imperial Oil Enterprises Ltd. (Permittee, Licensee, Lessee) Exploratory Licence No. 1919

Horn River Resources Ltd. (Operator) Exploratory Licence No. 1785

Location: Unit N Section 73 Grid 61°10' N. Lat., 118°00' W.Long

Latitude 61°02'58" N Longitude 118°14'25" W.

Unique well identifier 300N 736110118000

Universal Well Location Reference 61.04944°N., 118.24027°W

	DATE	DEPTH
Spudded	Mar. 28/71	
Suspended		
Resumed Operations		
Finished Drilling	Apr. 5/71	2800 (Drlr)
Deepened		
Complete (gas/oil)		
Abandoned	Apr. 7/71	2808 (Logs)
Rig released	Apr. 7/71	

Pool(s) NA

Interval(s) open to production NA

Elevation: Gr. 758 K.B. 769

Rig No. 9

Drilling Contractor Kenting Oilwell Drilling

Contractor's Business Licence No. 800

CASING RECORD

	Casing Size (Inches)	Grade	Weight	Amount	Set at –	Sacks of Cement and Additives
1.	8 5/8"	J-55	24#	629.10	614	400 sx plus 3% $CaCl_2$
2.						
3.						
4.						
5.						
6.						

GEOLOGICAL TOPS	ELEVATION	
	Depths	Sub-Sea
Hume	2335	-1566
Lower Hume	2394	-1625
Platform		
Chinchaga	2421	-1647
Basal Paleozoic	2432	-1659
Clastics		

CORE RECORD

From	To	Rec.	From	To	Rec.
Nil					

LOG RECORD

Run No.	Type of Log	From	To
1	IES	2808	616
1	BHCSGRC	2807	615

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
Apr. 7/71	2800	2350	120 sx plus 4% Gel
Apr. 7/71	664	564	60 sx plus 2% $CaCl_2$
Apr. 7/71	Surface		5 sx
			Welded on plate and marker tag.

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks
			Nil

SERVICING RECORD (Acidizing, Fracing, etc.)

Date	From	To	Remarks
			Nil

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	I.F.B.H.P.	F.F.B.H.P.	I.H.P.	F.H.P.	REMARKS
1	Apr.6/71	Hume, Chinchaga and Clastics	2380	2800(Drlr) 2808(Logs)	60	60	60	1121	1106	76	174	1132	1128	Recovered 250' of water-cut mud.

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
933-1465	water-cut drilling mud	2380	2800	Hume, Chinchaga and Clastics	Mud filtrate analysis- Resistivity - 1.77 @ 68° Chloride - 1536 mg/ litre

PRESENT STATUS OF WELL

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

Company HORN RIVER RESOURCES LTD.

Signed by [signature]

Title President

Date June 25, 1971

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

File No.
Drilling Authority No. 522

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well [redacted]

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 Horn R Bralorne IOE Kakisa N-73
Location: Unit N Section 73 Grid 61°10' 118°00'
Latitude 61°02'58" Longitude 118°14'25"
From Established Reference Marker
Universal Well Location Reference 61.04944° N 118.24027° W
Permit No. 4553 Lease No.

Imperial Oil Enterprises Ltd.
(Permittee, Licensee, Lessee)

Date of commencement of proposed program March 28, 1971 9:30 A.M.

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at Nil
Gas at Nil
Water at 2380 - 2800 DST #1
Total Depth 2800 Date of last operations April 7, 1971 6:00 P.M.
Present condition of well D & A

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 8 5/8"	24		614 K.B.	400 plus 3% $CaCl_2$	Nil
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	2800-2350	Precambrian, Chinchaga Basal Hume Porosity Hume	120 plus 4%	Gel
2	664-564		60 plus 3%	$CaCl_2$ Top at 547' K.B.

Ran 5 sack plug in top of casing.
Cut casing off 3 feet below ground. Weld on plate and rod with well marker.

The following logs have been run IES BHGSC
Other operations proposed

Operations to be carried out by Kenting Oilwell Drilling Contractor Licence No. 800
Address Ft. Simpson, N.W.T. Address
Responsible Agent in field Gordon Gillis
Dated at Calgary, this 15th Day of April 19 71
Signed by [signature]
Title President Company Horn River Resources Ltd.
Operator's Exploratory Licence No. 1785

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. G. E. Blue on the 6th April 1971.

Dated April 20, 19 71

[signature]
Oil Conservation Engineer

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

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

File No.

Drilling Authority No. 522

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

APR 9 1971

CALGARY 21, ALBERTA

OIL CONSERVATION ENGINEER

Application to Amend a Drilling Authority

This application, in triplicate, must be submitted and approved before commencing operations. If the well location is changed, this application must be accompanied where required, with a plan of survey approved by the Surveyor General.

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made to amend Drilling Authority No. 522, concerning Horn R Bralorne 10K

Kakisa N-73, 61°02'58" N. Lat., 119°14'25" W. Long.
(Name and Number of Well)

The following amendments are required:

Estimated depth at which surface casing to be set is amended from 300 feet (K.B.) to 615 feet (K.B.)

Reasons for the amendments:

Unconsolidated formations encountered to approximately 500 feet - confirming oral request to B.H.J. Thoms.

Dated at Calgary, this 2nd day of April, 19 71.

Signed by [signature]

Title President

Company Horn River Resources Ltd.

(For Oil and Mineral Division use only)

APPROVED

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

Confirming oral approval given on the 30th March 1971 by Mr. G. R. Blue.

Date April 8, 19 71 [signature]
Oil Conservation Engineer

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

IAND 52-90-3 (9-69)

Drilling Authority No. 522

Project No.

File No.

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 here by made for approval to drill:—

Name and number of well HORN R BRALORNE IOE KAKISA N-73

Location: Unit N Section 73 Grid 61°10' N.Lat., 118°00' W.Long.

Latitude 61°02'58" Longitude 118°14'25"

Unique Well Identifier 300N736110118000

Universal Well Location Reference ~~61.0494° N., 118.2402?° W.~~

Elevation: Ground 758 K.B. 769 feet above sea-level.

Well is expected to produce from Middle Devonian Carbonates formation at a depth of about 2200 feet. Expected total final depth 2650

Area assigned to well

(For Oil Conservation Engineer's use only)

Permit No. 4553 Lease No. Acreage 31,000

Permittee, licensee, or lessee Imperial Oil Enterprises Ltd.

Exploratory Licence No. 1674 (1971-72) 1919

Surface owned by Crown or

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

Petroleum and natural-gas rights owned by Crown

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1. 8 5/8"	24#	J-55	New	300	160
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment Middle Devonian Carbonates
G.K. 10" 900 Series Hydril B.O.P.
10" 900 Series Mechanical

Well will be drilled with Rotary Rig No. 9 by Kenting Oilwell Drilling
(Drilling Contractor or company)

Responsible agent of applicant:—

At well Gordon Gillis

Address Gen.Del., Ft.Providence

Contractor's Business Licence No. 800

At registered office F. L. Woolley

Address 1020 Aquitaine Tower, 540 Fifth Ave.S.W. Calgary 1

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

Dated at Calgary, this 25th day of March 19 71

Signed by [signature] Company Horn River Resources Ltd.

Title President Operator's Licence No. 1785

(For Oil and Mineral Division use only)

APPROVED

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

1. Copies of this Drilling Authority shall be exhibited at the Drilling Rig in both the Doghouse and the Drilling Foreman's Office between spud and rig release dates.
2. The Company will submit to this office, on Tuesday of each week, the latest reports

Dated 26th March 19 71 Please see over page

Oil Conservation Engineer

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

IAND 52-90-1 (3-69)

received by radio on the progress of the well.

3. During well drilling and testing operations, every effort shall be made to ensure that drilling fluids, chemicals and wastes shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.

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

5. Surface casing must be set 100 feet into a consolidated formations.

6. Production and intermediate strings of casing are to be approved by the Oil Conservation Engineer before running.

B.H.J. Thoms

B.H.J. Thoms, Oil Conservation Engineer

BRALORNE PETROLEUMS LTD.
736 EIGHTH AVENUE SOUTH WEST
CALGARY 2, ALBERTA
CANADA

DRILLING PROGRAM

re

HORN R. BRALORNE IOE KAKISA N-73

61° 10' North & 116° 00' West

I SURFACE HOLE

a) Drill 12-1/4" (minimum) hole to 300± feet.
b) Take deviation surveys every 100 feet.
Maximum deviation = 2 degrees.
Maximum change in successive surveys = 1-1/2 degrees.
c) In the event circulation is lost, raise viscosity with gel and lime and slug with sawdust.
d) Before 300 feet, raise viscosity to clean hole for running casing.
e) Dummy trip before running surface casing and measure drill pipe. Adjust tally if necessary.
f) Measure K.B. to Ground and record in Tour Book.

II SURFACE CASING

a) Run 8-5/8", 24#, J-55 casing with guide shoe, insert float one (1) joint off bottom and centralizers on the first and third joint.
Thread lock lower connections.
b) Reciprocate casing while conditioning hole.
c) Pump 20 barrels of water ahead of cement.
d) Cement casing to surface using normal Portland plus 2% to 3% Calcium Chloride.
Displace plug to within 10 feet of float.
Do not bump plug.
e) Tag bottom and pull up to full cementing tension.
Land casing at this point.
f) If float is holding, release pressure immediately.
If not, release pressure in stages.
g) After standing cemented at least 8 hours, cut off landing joint one (1) foot below ground level.
Install weld-on 8-5/8" x 8" Series 600 casing bowl and B.O.P.'s.
h) Prior to drilling out, pressure test blind rams and pipe rams to 1000 psi for 15 minutes.

...continued

DRILLING PROGRAM re

HORN R. BRALORNE ICE KAKISA N-73 2/

61° 10' North & 118° 00' West

III MAIN HOLE

a) Drill 7-7/8" hole to core point or total depth as selected by the wellsite geologist using a low solids gel-chemical mud - recommended annular velocity of 120 feet per minute.

b) Take deviation surveys every 500 feet.
Maximum deviation to be eight (8) degrees.
Maximum change in successive surveys to be limited to 1-1/2 degrees.

c) Desired mud properties:

Weight:	8.7 to 9.0 pounds per gallon
Viscosity:	As required to clean hole for coring, testing and logging.
Water Loss:	10 c.c.

d) On last trip before coring or testing, double measure drill pipe and adjust tally if necessary.

James D. Murdoch

JAMES D. MURDOCH.

JDM:mfc

BRALORNE OIL & GAS LIMITED

GEOLOGICAL PROGNOSIS

OPERATOR: HORN RIVER RESOURCES LTD.

WELL NAME & NUMBER: HORN R. BRALORNE ISE KAKISA N-73

LEGAL DESCRIPTION: Unit A, Section 73, Grid 61° 10' N, 118° 00' W.

LATITUDE: 61° 22' 58" North

LONGITUDE: 113° 14' 25" West

PROVINCE: NORTHWEST TERRITORIES

ELEVATIONS: Ground: 758 feet. Kelly Bushing: 769 feet

ESTIMATED TOPS:	DEPTH	SUBSEA	THICKNESS
HAY RIVER (eroded)	60'	+ 709	
ARROWHEAD REEF	1919'	- 1150	
HUME	2219'	- 1450	
LOWER HUME PLATFORM (Hostley)	2319'	- 1550	
CHINCHAGA	2369'	- 1600	
PRE-CAMBRIAN	2594'	- 1825	
TOTAL DEPTH (tentative)	2800'		

SAMPLES: Start: 2 sets of 10 foot Samples at surface.

DAILY REPORTS: BO&G, Calgary: 269-5361. Geological: N. PAARUP Home 242-3829

Engineering: J. D. MURDOCH Home 252-5766

GEOLOGICAL SUPERVISION:

CORING: As per Horn River Resources Ltd.

TESTING: As per Horn River Resources Ltd.

LOGGING: SCHLUMBERGER: Dual Induction Laterolog: 2" scale: T.D. to surface casing.
5" scale: T.D. to 100' above Middle Devonian Carbonate.
BHC Sonic Gamma Ray Caliper: as above
SNP, FDC (optional)

EVALUATION PROCEDURE: Wellsite Geologist will evaluate 10 foot samples from surface to Total Depth. Drill 20 feet into effective porosity of Arrowhead Reef and Drill Stem Test. Further coring and testing will depend on results of above Drill Stem Test. In the event an offreef condition exists, special attention will be given the Lower Hume Platform.

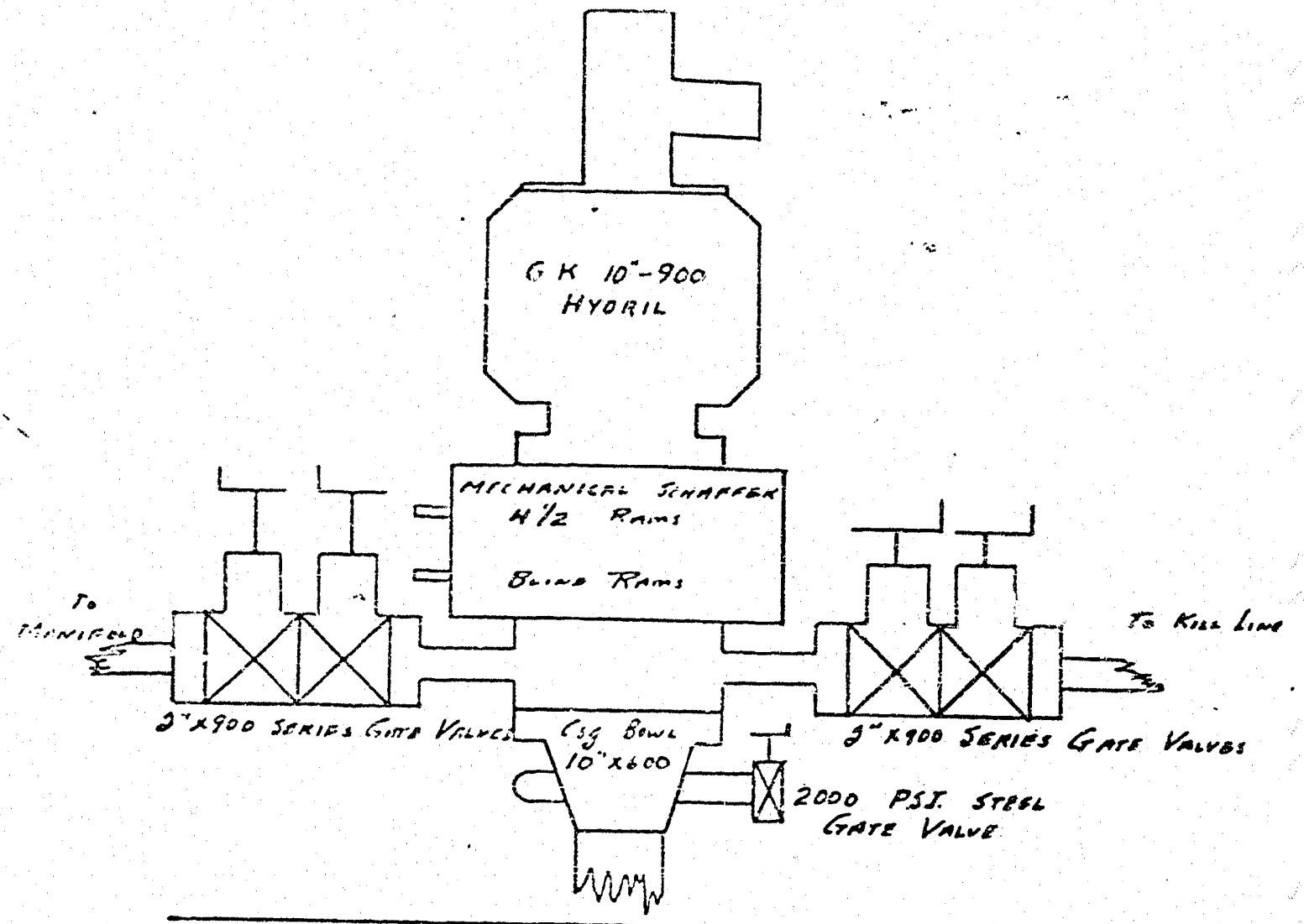
Total Depth will be a depth sufficient to adequately establish the fluid content of any Arrowhead Reef buildup, or to establish the Pre-Cambrian or a depth of 2800 feet, whichever first occurs.

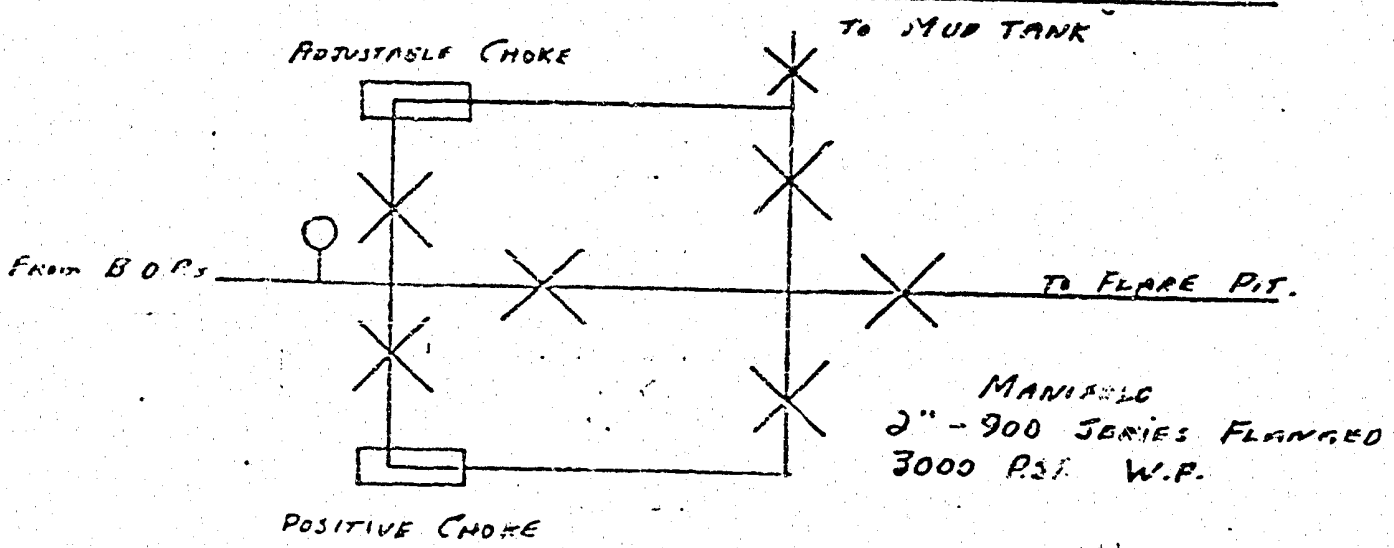
THIS WELL WILL BE DRILLED ON A 'CONFIDENTIAL' STATUS.

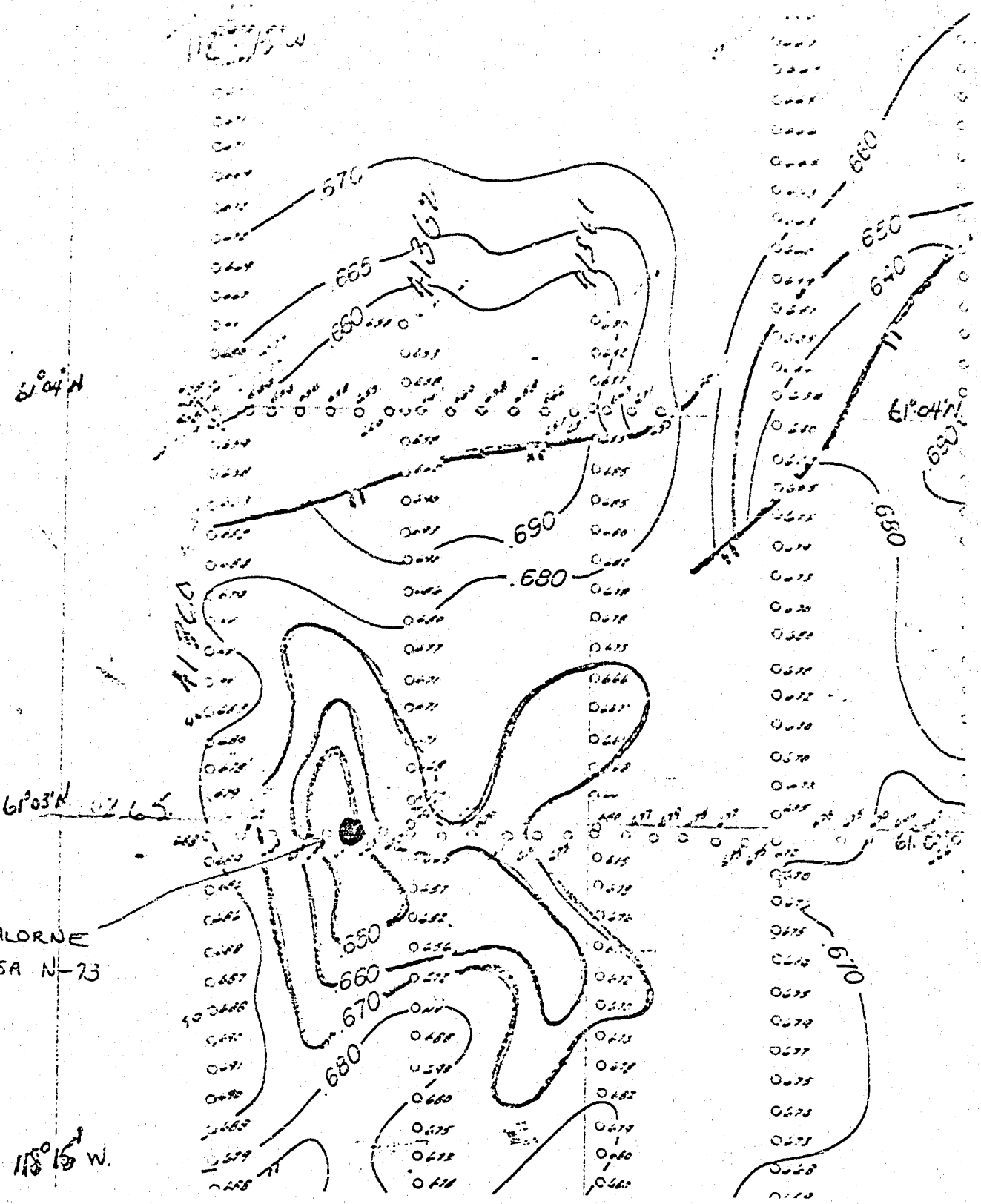
KEATING OFFSHORE DRILLING

DEC 2/70

RIG # 9



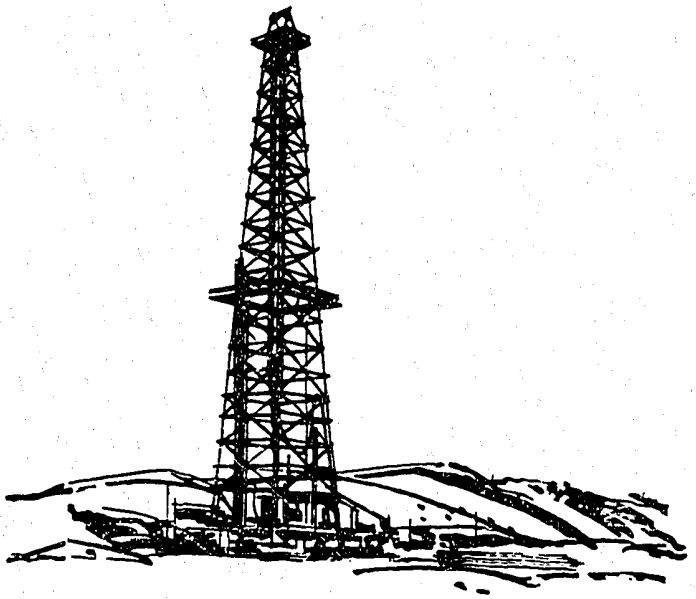



670
665
660
690
680
650
660
670
680
640
650
650
61°04'N
61°03'N
HORN R BRALORNE
JOE KAKISA N-73
118°15' W.

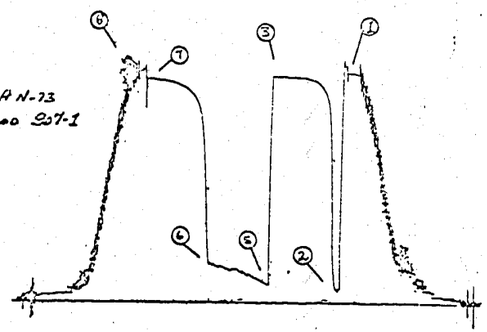
LYNES

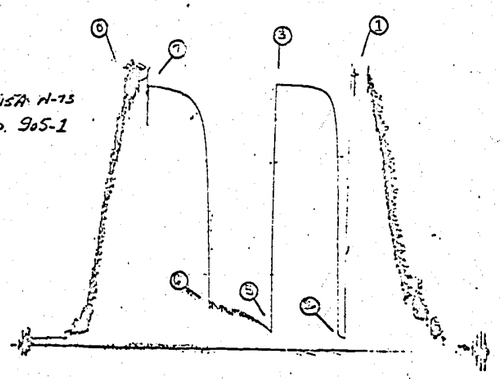
BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools

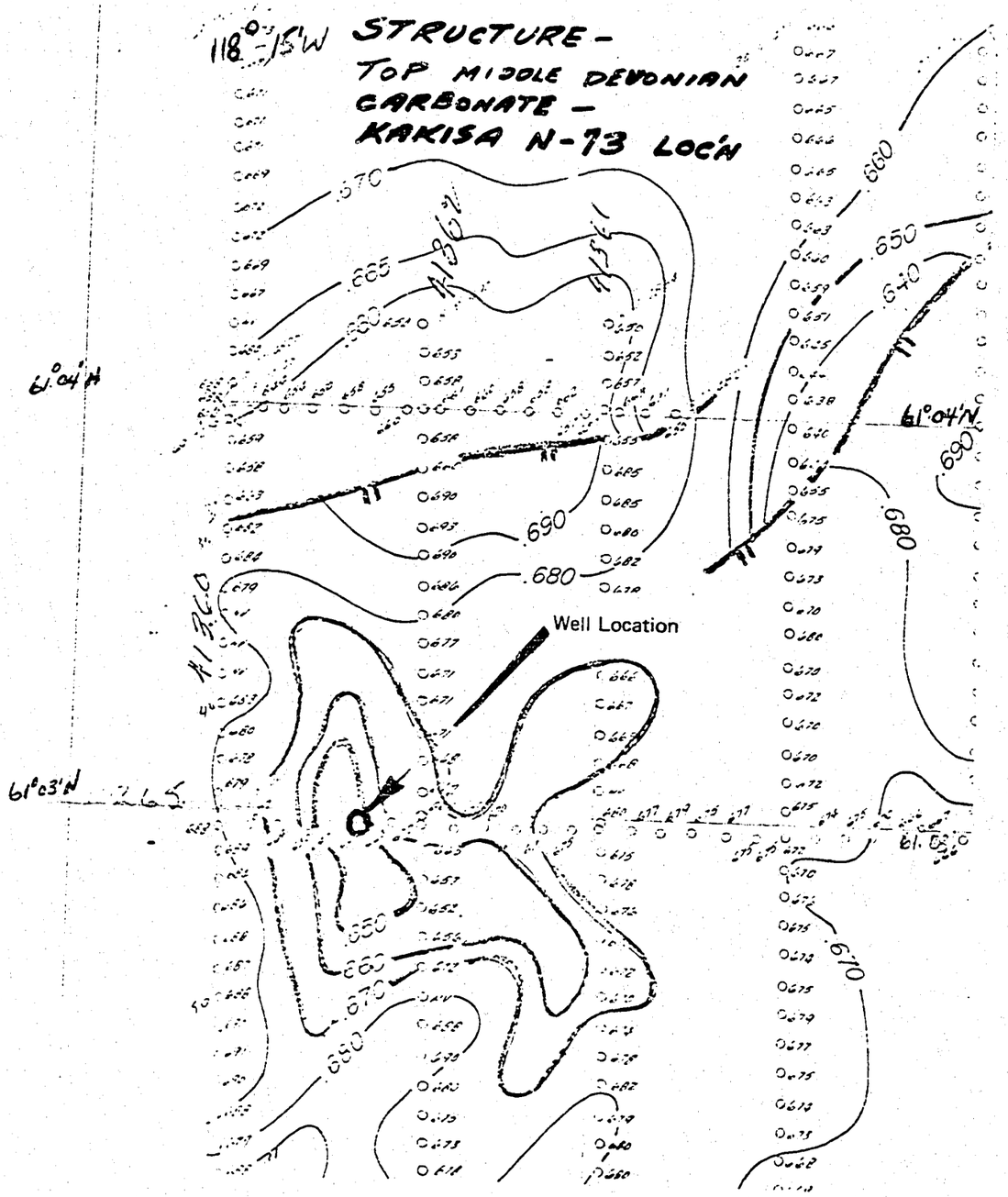


DRILL STEM TEST
TECHNICAL SERVICE REPORT





HORN RIVER RESOURCES LTD.
OPERATION REEF



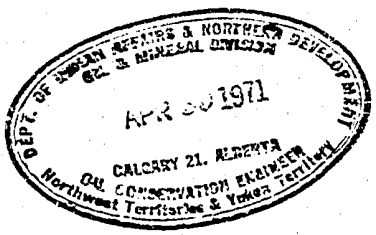
HORN R BRALORNE IOE KAKISA N-73

Pre-Drilling Data

Imperial Oil Enterprises Ltd.
Horn River Bralorne IOE Kakisa N-73 DST # 1

NOMENCLATURE (Definition of Symbols)

Q	=	average production rate during test, bbls./day
Q_g	=	measured gas production rate during test, MCF/day
k	=	permeability, md
h	=	net pay thickness, ft. (when unknown, test interval is chosen)
μ	=	fluid viscosity, centipoise
Z	=	compressibility factor
T_r	=	reservoir temperature, ° Rankine
m	=	slope of final SIP buildup plot, psig/cycle (psig²/cycle for gas)
b	=	approximate radius of investigation, feet
r_w	=	wellbore radius, feet
t_o	=	total flowing time, minutes
P_o	=	Extrapolated maximum reservoir pressure, psig
P_f	=	final flowing pressure, psig
P.I.	=	productivity index, bbls./day/psi
$P.I._t$	=	theoretical productivity index with damage removed, bbl./day/psi
D.R.	=	damage ratio
E.D.R.	=	estimated damage ratio
AOF	=	absolute open flow potential, MCF/D
AOF_t	=	theoretical absolute open flow if damage were removed
$\bar{E}$	=	subsea depth
W	=	water gradient based on salinity
H_w	=	potentiometric surface



In making any interpretation, our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since all interpretations are opinions based on inferences from electrical, mechanical or other measurements, we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not be liable or responsible, except in the case of gross or wilful negligence on our part, for any loss, costs, damages or expenses incurred or sustained by Customer resulting from any interpretation made by any of our agents or employees.

DEFINITION OF SYMBOLS

Recorder Depth 2412 ft. Subsea depth ..... ft. Ticket No. 2963 Hour Recorder No. 905

t_o = 5 Mins. Initial Shut-In Pressure				Second Flow Pressure		t_o = 65 Mins. Final Shut-In Pressure			
Time, Min. Ø	$\frac{t_o + Ø}{Ø}$	PSIG	PSIG² ÷10⁶ (Gas)	Time Defl. .000"	PSIG	Time, Min. Ø	$\frac{t_o + Ø}{Ø}$	PSIG	PSIG² ÷10⁶ (Gas)
0	---	66				0	-----	174	
5	2.000	983				5	14.000	875	
10	1.500	1062				10	7.500	988	
15	1.333	1090				15	5.333	1033	
20	1.250	1103				20	4.250	1057	
25	1.200	1111				25	3.600	1073	
30	1.167	1114				30	3.167	1083	
35	1.143	1117				35	2.857	1089	
40	1.125	1118				40	2.625	1095	
45	1.111	1118				45	2.444	1099	
50	1.100	1119				50	2.300	1102	
55	1.091	1120				55	2.182	1105	
60	1.083	1121				60	2.083	1106	

Recorder Depth ..... ft. Subsea depth ..... ft. Ticket No. ..... Hour Recorder No. .....

t_o = Mins. Initial Shut-In Pressure				Second Flow Pressure		t_o = Mins. Final Shut-In Pressure			
Time, Min. Ø	$\frac{t_o + Ø}{Ø}$	PSIG	PSIG² ÷10⁶ Ø	Time Defl. .000"	PSIG	Time, Min. Ø	$\frac{t_o + Ø}{Ø}$	PSIG	PSIG² ÷10⁶ (Gas)

Interval of Pressure Readings (Mins.) ISIP 5 2nd Flow Press. FSIP 5

Remarks: DST # 1

PRESSURE DATA

Rec. No. 905

Depth 2412 ft.

P_o^2 (Gas) _____ $psig^2$

P_i 1140 psig

m 106 psig/cycle

Initial SIP ⊡ 1129 psig.

2nd SIP △

Final SIP ⊙ 1140 psig.

$\frac{t_p + \phi}{\phi}$

50
40
30
20
10
9
8
7
6
5
4
3
2
1.5
1

600 700 800 900 1000 1100 1200

PSIG (OIL OR WATER)

PRESSURE EXTRAPOLATION PLOT

DST # 1

LYNES UNITED SERVICES LTD.

TEST DATA	= Test No. 1	Lynes Test 1
Formation		T.D. 2808 Ft.
Interval Tested	2380	Ft. to 2808 Ft.
Feet of Net Pay Tested	428	Ft.
Type of Test	Conventional Bottom Hole	
Cushion		Amount Ft.
Started in Hole at	1600 Hrs.	Tool Open at 1730 Hrs.
Pre-Flow	5 Mins.	Initial Shut-in 60 Mins.
2nd Flow	Mins.	Second Shut-in Mins.
Final Flow	60 Mins.	Final Shut-in 60 Mins.
Remarks:		

Blow: Weak air blow, steady throughout the test.

GENERAL INFORMATION	
Company	Imperial Oil Enterprises Ltd.
Address	
Well Name	Horn River Bralorne 10E Kakisa
Well Number	N-73
K.B. Elevation	769 Sub-Sea Elevation
Area	Kakisa Lake Province N.W.T.
Company Rep.	J. Hulkovich
Tester	M. Housenga
Contractor	Kenting Rig No. 9
Ticket No.	2963 Date April 6/71
Service Reports To:	5 - Kenting Oilwell Drilling 40 xeroxed copies to the same.

GAS BLOW MEASUREMENTS

Measured with No gas to surface.

Time	Surface Choke	Reading Inches	Cubic Feet/Day

MUD AND HOLE DATA

Mud Type	Gel Base
Weight	9.1 Viscosity 80 Water Loss 9.8
Filter Cake	2/32" Bottom Hole Temperature 101°
Drill Pipe Size	4 1/2" FH Weight 16.6
Drill Collars	4 1/2"H90 I.D. 2 7/8" Feet Run 175
Main Hole or Casing Size	7 7/8"
Rathole or Liner Size	No. of Feet
Bottom Hole Choke Size	5/8"
Surface Choke Size	
Packer Rubber Size	7"

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

RECOVERY

TOTAL FLUID RECOVERED 250 Ft. Consisting of:

250 Ft. of water cut drilling mud

Ft. of

Ft. of

Ft. of

Test was/was not Reverse Circulated was not

Oil Recovery A.P.I. Water Specific Gravity

Salinity

PRESSURE READINGS

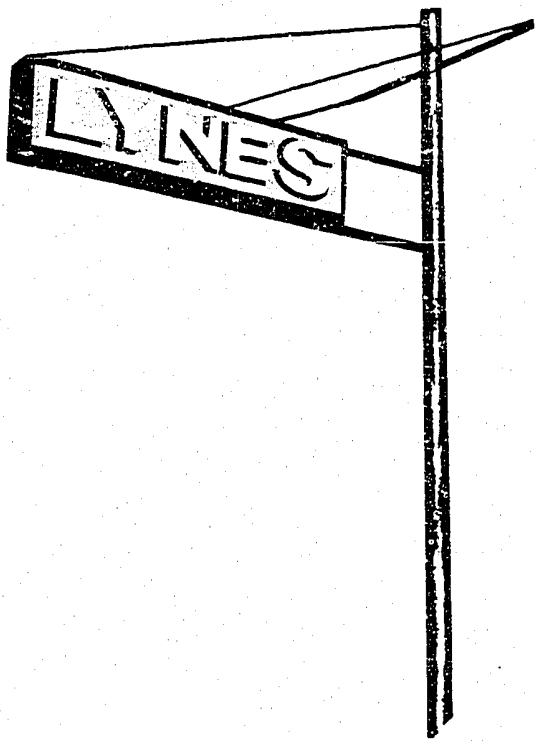
	Inside ___ Outside X	Inside ___ Outside X	Inside ___ Outside ___	Inside ___ Outside ___
	Recorder No. 907	Recorder No. 905	Recorder No.	Recorder No.
	Capacity 3100	Capacity 2700	Capacity	Capacity
	Depth 2407	Depth 2412	Depth	Depth
NUMBER KEY:				
1 - INITIAL HYDROSTATIC	1131	1132		
2 - PRE-FLOW	64	66		
3 - INITIAL SHUT-IN	1113	1121		
4a - 2nd INITIAL FLOW				
4b - 2nd FINAL FLOW				
4c - 2nd SHUT-IN				
5 - 3rd INITIAL FLOW	85	75		
6 - FINAL FLOW	177	74		
7 - FINAL SHUT-IN	1095	1106		
8 - FINAL HYDROSTATIC	1128	1128		

Company: Imperial Oil Enterprises Ltd. (Kenting Oilwell Drilling)

Well Name and Description: Horn River Bralorne 10E Kakisa N-73

Test No.: DST # 1

Date of Test: April 6/71


LYNES

OPERATION REEF
NORTHWEST TERRITORIES
CANADA

Geological and Engineering
REPORT

HORN R BRALORNE IOE KAKISA N-73

PREPARED FOR

HORN RIVER RESOURCES LTD.

PREPARED BY

JAMES A. LEWIS ENGINEERING CO. LTD.

Petroleum Reservoir Analysts

CALGARY - ALBERTA

INTRODUCTION

This is a concise report of the operations conducted at the well,

HORN R BRALORNE IOE KAKISA N-73

The well was drilled through the co-operative exploration program conducted by Horn River Resources Ltd. under

"OPERATION REEF"

This report was compiled by James A. Lewis Engineering Co. Ltd. from drilling data taken from the tour reports of Kenting Oilwell Drilling Ltd. and geological data supplied by Bralorne Oil and Gas Limited.

JAMES A. LEWIS ENGINEERING CO. LTD.

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Section 1

GENERAL

SUMMARY OF WELL DATA

WELL: HORN R BRALORNE IOE KAKISA N-73

NAME OF OPERATOR: Horn River Resources Ltd.
1020 Aquitaine Tower, 540 Fifth Avenue S.W., Calgary 1

LEGAL DESCRIPTION: Unit N, Section 73, Grid 61° 10' N. Lat. 118° 00' W. Long.

LOCATION: LATITUDE: 61° 02' 58" LONGITUDE: 118° 14' 25"

UNIVERSAL WELL LOCATION REFERENCE: Lat. 61. 04944° N., Long. 118. 24027° W

UNIQUE WELL IDENTIFIER: 300N736110118000

CO-ORDINATES:

PERMIT OR LEASE: 4553

PERMITTEE, LICENCEE, LESSEE: Imperial Oil Enterprises Ltd.

DRILLING AUTHORITY: No. 522 DATE: March 26, 1971

CLASSIFICATION: New Field Wildcat

ELEVATION: GROUND: 758' K.B. 769'

DRILLING CONTRACTOR: Kenting Oilwell Drilling Ltd. Rig No. 9 Rotary

WELLSITE GEOLOGIST: R. J. Kirkpatrick, Bralorne Oil and Gas Limited

SURFACE CASING: 8-5/8" - 24 lb. - J-55 & K-55, Set @ 614' with 400 sax + 3% $CaCl_2$

HOLE SIZE: Surface 12-1/4" 0' - 624' Main Hole 7-7/8" 624' - 2,800'

MUD SYSTEM: Gel Chemical

CORES: None Taken

FORMATION TESTS: DST No. 1: 2,380' - 2,308' Chinchaga (E log measurement)

ABANDONMENT PLUGS: Plug No. 1: 2,800' - 2,350' 120 sax + 4% Gel
Plug No. 2: 664' - 564' 60 sax + 2% $CaCl_2$
Plug No. 3: 0' - 5 sax

LOST CIRCULATION: None

LOGS: IES 2,808' - 616'
BHCSGRC 2,802' - 615'

WELL SPUDDED: 9:30 a.m. March 28, 1971

FINISHED DRILLING: 11:00 a.m. April 5, 1971

RIG RELEASED: 6:00 p.m. April 7, 1971

TOTAL DEPTH: 2,800'

STATUS: Drilled and Abandoned

FORMATION TOPS

WELL: HORN R BRALORNE IOE KAKISA N-73

FORMATION	DEPTH, Feet	E-LOG	REMARKS
Hume	2327	2335	-1566 Sub-sea
Lower Hume Platform	2391	2394	-1625 Sub-sea
Chinchaga	2421	2416	-1647 Sub-sea
Basal Paleozoic Clastic	2432	2428	-1659 Sub-sea
TOTAL DEPTH	2800	2808	-2039 Sub-sea

James A. Lewis Engineering Co. Ltd

Section 2

GEOLOGICAL

SAMPLE DESCRIPTION

HORN R BRALORNE IOE KAKISA N-73

10 - 650′	Gravel - vari-colored, angular, some loose medium grained quartz from 40′ and gravel becomes semi-rounded. Scattered stringers of siltstone - light grey, calcareous at 120′. Some coarse granite wash type gravel at 240′. No samples 360′ and 370′. Very coarse gravel from 270′ to 440′. Apparently some shale from 410′ to 440′ as samples are muddy and won't wash up clean. Some siltstone - light grey, calcareous, hard at 600′. Siltstone - 20% and trace sandstone at 650′.
650 - 760′	Siltstone - light grey, calcareous in part, scattered trace of sandstone - light grey, fine grained, at 660′. Some limestone - light grey, crypto-crystalline, very silty. Rare fossil shell chips at 690′. Trace shale - medium grey, silty at 730′. Some limestone - light grey, cryptocrys-taiiine, silty at 750′.
760 - 780′	Shale - medium grey, silty, some siltstone - 30% light grey, calcareous and scattered limestone - light grey, cryptocrystalline silty, siltstone - 60% at 780′.
780 - 800′	Siltstone - light grey, calcareous, some limestone - 10%, fossil fragments shale - 10%.
800 - 810′	Shale - 70%, medium grey, silty, siltstone - 20%, light grey, limestone-10%.
810 - 910′	Siltstone - 50%, light grey, very calcareous, shale - 30%, limestone - 20%, silty, scattered shell fragments and chips of granite wash at 840′ to 910′. Limestone - increasing to 40% at 900′.
910 - 950′	Limestone - 60%, light grey, cryptocrystalline, silty, trace limestone - 5%, tan crypto- to microcrystalline, slightly silty, siltstone 35%, light grey, calcareous, scattered fossil shell fragments at 920′ to 950′. Granite wash chips - cavings??
950 - 1110′	Siltstone - light grey, calcareous, limestone - 30%, light grey, crypto-crystalline, hard, silty, shell fragments and granite wash chips through-out. Limestone - 40%, light grey and light tan, cryptocrystalline, silty at 1100′.
1110 - 1150′	Limestone - 60%, light grey, cryptocrystalline, silty, siltstone - 40%, light grey, calcareous, scattered granite wash cavings at 1130′ and 1140′.

SAMPLE DESCRIPTION (Continued)

HORN R BRALORNE IOE KAKISA N-73

1150 - 1180'	Siltstone - 80% - light grey, calcareous, limestone - 20%, light grey, silty, scattered shell fragments and granite wash chips at 1170'.
1180 - 1280'	Siltstone - 80% - light grey to off-white, chalky in texture, medium soft, non-calcareous, siltstone - 10%, light grey, calcareous, limestone - 10%, light grey, cryptocrystalline at 1200', siltstone - 90%, light grey to off-white, chalky, only very slightly calcareous at 1240', siltstone - 30%, light grey, calcareous at 1260' and 1270'. Siltstone - 90%, light grey, chalky, non-calcareous at 1280'
1280 - 1290'	Shale - 40%, light green-grey, siltstone - 30%, light grey, chalky, siltstone - 30%, light grey, hard, calcareous at 1290'
1290 - 1330'	Shale - 100%, light green-grey, platy in part, some siltstone - light green-grey, at 1320', shale becomes silty grading to siltstone - light green-grey at 1330'.
1330 - 1380'	Siltstone - 70%, light green-grey, shale - 30%, slightly silty.
1380 - 1570'	Shale - 70%, light green-grey, slightly silty, siltstone - 30%, scattered trace limestone - light grey, cryptocrystalline at 1510' and 1520'.
1570 - 1590'	Siltstone - 60%, light grey, shale - 30%, light grey, some limestone - 10%, light grey, cryptocrystalline, at 1580'.
1590 - 1840'	Shale - 70%, light grey, silty in part, siltstone - 30%, some limestone - 10%, tan-brown, cryptocrystalline, silty at 1710' and 1720'.
1840 - 1850'	Siltstone - 90%, brownish-grey, medium soft, non-calcareous, shale - 10%, light grey.
1850 - 1900'	Shale - medium grey, trace of light green-grey, scattered trace siltstone brown, soft at 1860' and 1870'. Trace siltstone - dark grey to black grading to silty shale at 1900'.
	NOTE: 1895' to 1945' Drilled in 25 minutes. Samples lagged below 1900'.

1900 - 2040'	Shale - 80%, medium grey, some chips with black flecks as inclusions, medium soft, silty, siltstone - 20%, medium grey and brown-grey at 1910'. Siltstone - 30% at 1920', scattered trace shale - dark grey to black at 1950', some shale - black at 1990'. No samples at 2020' and 2030'.
2040 - 2160'	Shale - 90%, light grey, trace medium grey, some siltstone, light grey some siltstone - 5%, medium brown at 2140' and 2150', siltstone - brown, 10% at 2160'.
2160 - 2220'	Shale - 80%, dark brown, slightly dolomitic, silty in part, some shale - 20%, dark grey and grey-black.
2220 - 2240'	Shale - dark grey to grey-black.
2240 - 2310'	Shale - medium grey, some dark grey, scattered shale - brown, silty.
2310 - 2340'	Limestone - 30%, medium to dark brown, cryptocrystalline, hard, slightly silty, shale - 70%, dark grey and some black, limestone - 60%, medium brown, trace light brown, cryptocrystalline at 2340'.
2340 - 2370'	Limestone 90%, medium brown, cryptocrystalline, slightly silty in part, scattered trace limestone - light brown, cryptocrystalline, some shale cavings at 2350', some limestone - tan to light brown, chalky at 2360' and 2370'.
2370 - 2390'	Limestone - 80%, light grey to light brown, cryptocrystalline, some limestone - 20%, off-white to tan, chalky, abundant shale cavings throughout 2390'. 5-foot drilling break at 2392' - 2397'.
2390 - 2400'	Dolomite - 60%, medium brown, micro- to very fine crystalline to sugary texture, some brown staining,on chips with poor to fair pin-point porosity at 2400', limestone - 40% light grey to light brown, cryptocrystalline, hard, tight at 2400'.
2400 - 2410'	Dolomite, tan to light brown, microcrystalline to sugary texture, trace poor pin-point porosity with rare chips with scattered mini-vugs at 2410'.

2410 - 2420'	Limestone - light grey to tan, cryptocrystalline to microcrystalline, medium hard, tight, rare chips of Dolomite - light brown, microcrystalline, tight at 2420'. Circulated sample - abundant shale cavings.
2420 - 2430'	Anhydrite - light rust to reddish brown, cryptocrystalline, silty, very hard, angular, abundant shale cavings, trace limestone - light grey, chalky as above.
2430 - 2470'	Siltstone - rust to dark red brown, cryptocrystalline, hard, angular, some mottling with quartz and chalky anhydrite inclusions at 2440'. Anhydrite - 5%, off-white to pink, chalky at 2450' and 2460', abundant shale cavings. Anhydrite - 10%, pink to light rust, chalky at 2470'.
2470 - 2490'	Poor sample. Abundant shale cavings. Some siltstone - light-medium rust, hard, angular.
2490 - 2590'	Siltstone - medium rust, hard, angular, scattered, coarse, clear quartz grains inclusions, trace pink and off-white, chalky anhydrite at 2500', scattered green veining in siltstone, some anhydrite - pink, chalky at 2530', trace loose coarse quartz grains and quartz inclusions at 2560' and 2580'.
2590 - 2660'	Siltstone - medium rusty - brown, hard, angular, coarse quartz grains as inclusions, also very pale green inclusions and dark green veining at 2600'. Clear quartz inclusions and abundant shale cavings at 2610', shale cavings at 2630', abundant coarse quartz grains as inclusions at 2660'.
2660 - 2710'	Siltstone - light brownish - rust, hard, angular, pink to off-white inclusions, and clear quartz inclusion, some siltstone - dark green, medium-hard to soft, and some green partings on chips at 2700'.
2710 - 2750'	Siltstone - light grey brown, hard, angular, pink and clear quartz inclusions, very coarse clear quartz grains and inclusions at 2730', abundant pink inclusions at 2740'.

SAMPLE DESCRIPTION (Continued)

HORN R BRALORNE IOE KAKISA N-73

2750 - 2770'	Siltstone - olive green-grey, medium-hard to soapy appearance, clear quartz and pink inclusions at 2750', abundant pink inclusions at 2770'.
2770 - 2802'	Siltstone - light grey-brown, some olive green-grey, rare clear quartz and some pink inclusions at 2780'. Scattered clear quartz grains and abundant pink inclusions at 2800'.

Total Depth 2802' DRILLER
2808' SCHLUMBERGER

Section 3

DRILLING AND ENGINEERING

SUMMARY OF DAILY DRILLING OPERATIONS

HORN R BRALORNE IOE KAKISA N-73

Date	Depth	Operation
3-27-71	0′	Rigging up.
3-28-71	0′	Preparing to spud.
3-29-71	400′	Drilling 7-7/8" pilot hole. Spudded in with 12-1/4" bit could not make good progress. Drilling gravel. Spudded well 9:30 a.m. March 28, 1971.
3-30-71	685′	Tripping for 12-1/4" bit. Drilled 7-7/8" pilot hole to 685′.
3-31-71	685′	Heading up surface casing. Reamed 7-7/8" hole to 12-1/4" to 624′. Ran 10 joints 8-5/8" - 24 lb./ft. - J-55 new casing and 8 joints 8-5/8" 24 lb./ft. - K-55 new casing plus Guide Shoe and Collar. Overall length 629.10′. Landed at 614′ K.B. Cemented with 400 sacks of neat portland cement plus 3% $CaCl_2$. Three barrels returns. Plug down 9:15 p.m. March 30, 1971.
4- 1-71	1286′	Drilling 7-7/8" hole. Mud wt. 9.0 Vis. 38 Headed up surface casing. Pressure tested Blind Rams to 1,000 psi for 10 minutes. Tested Pipe Rams and Hydril to 1,200 psi held each unit for 10 minutes.
4- 2-71	2037′	Drilling 7-7/8" hole. Mud wt. 9.0 Vis. 38
4- 3-71	2476′	Drilling 7-7/8" hole. Mud wt. 9.1 Vis. 40
4- 4-71	2588′	Drilling 7-7/8" hole. Mud wt. 8.9 Vis. 40
4- 5-71	2774′	Drilling 7-7/8" hole. Mud wt. 9.0 Vis. 50
4- 6-71	2800′	Logging. Ran Induction Electric Log 2808′ to 616′ Ran BHCSGRC Log 2807′ to 616′

SUMMARY OF DAILY DRILLING OPERATIONS (Continued)

HORN R BRALORNE IOE KAKISA N-73

Date	Depth	Operation
4- 7-71	2800'	Abandoning. (2808 Log). Ran DST No. 1: 2380' to 2808' (Lower Hume - Chinchaga and Basal Paleozoic Clastics)
		Times: Initial Flow — 5 minutes
		Initial Shut In — 60 minutes
		Flow — 60 minutes
		Final Shut In — 60 minutes
		Pressures: Initial H.S. — 1131 psi
		Initial Flow — 64 psi
		Initial S.I. — 1113 psi
		Flow — 85 psi
		Final Flow — 117 psi
		Final S.I. — 1095 psi
		Final H.S. — 1128 psi
		Recovered 250' water cut mud.
		Ran Plug No. 1: Total Depth 2808' to 2350', 120 sacks + 4% Gel.
		Running plug no. 2.
4- 8-71		Abandoned. Ran Plug No. 2: 664' to 564', 60 sacks + 2% $CaCl_2$. Felt plug No. 2.
		Ran 5 sacks at surface, cut off casing, welded on plate and marker.
		Rig released 6:00 p.m., April 7, 1971.

DRILL STEM TEST REPORT

WELL: HORN R BRALORNE IOE KAKISA N-73

DATE: April 6, 1971 TEST NO. 1

INTERVAL TESTED: 2380 - 2808' FORMATION: Hume - Chinchaga and Clastics

TOTAL DEPTH DRILLER: 2800' LOGS: IES & BHCSGRC (2808')

HOLE SIZE: 7-7/8" RAT HOLE SIZE: -

TESTING COMPANY: Lynes United OPERATOR: Housenga

MUD		DRILL PIPE		TEST TOOL	
Type	Gel-Chemical	Type	F.H.	Size Rubber	7"
Wt.	9.1	Size	4-1/2"	Type	-
Visc.	80	Size T.J.	5-13/16	Tool Type	-
W.L.	9.7	Collars	4-1/2" H.90	Size Choke	5/8"
pH	-	Jars	-	Wt. to Set	-
F.C.	2/32	Safety Joint	-	Pull Loose	-
Conditions	Good	Pumpout Sub.	-	Fluid Cushion	-

Bit off Bottom	12:30 a.m. 4/6/71	Preflow	5 min.	B.H. Temp.	101 °F.
Start Tester in	4:00 p.m.	I.S.I.	60 min.	Gauge Depths	2407 K.B.
Tester on Bottom	5:15 p.m.	Tool Open	60 min.		2412 K.B.
Tool Open	5:30 p.m.	F.S.I.	60 min.		-
Tool Closed	5:35 p.m.	**Upper Gauge**		**Lower Gauge**	
Tool Open	6:35 p.m.	I.H.S.	1131 psig	I.H.S.	1132 psig
Tool Closed	7:35 p.m.	Preflow	64 psig	Preflow	66 psig
Tool Loose	8:30 p.m.	I.S.I.	1113 psig	I.S.I.	1121 psig
Tool Out	9:45 p.m.	Initial Flow	85 psig	Initial Flow	76 psig
Rubber Condition	-	Final Flow	177 psig	Final Flow	17 psig
Test O.K.	-	Final S.I.	1095 psig	Final S.I.	1106 psig
		F.H.S.	1128 psig	F.H.S.	1128 psig

BLOW: Weak throughout

RECOVERY: 250' water cut mud

James A. Lewis Engineering Co. Ltd.

SURFACE CASING REPORT

HORN R BRALORNE IOE KAKISA N-73

Ran 10 joints 8-5/8" - 24 lb./ft. - J-55 casing plus 8 joints 8-5/8" - 24 lb./ft. K-55 casing plus Guide Shoe and Collar.

Total Length	629.10'
Landed at:	614.00' K.B.

Cemented to surface with 400 sacks of normal Portland cement with 3% Calcium Chloride. Circulated 3 barrels of returns. Plug down 9:15 p.m., March 30, 1971.

SUMMARY OF MUD ADDITIVES

HORN R BRALORNE IOE KAKISA N-73

Hydra-gel	24,900 lbs.
Plaster	450 lbs.
Caustic	300 lbs.
Soda Ash	200
Cement	160
CMC	75
Benex	44

BIT RECORD

WELL: HORN R BRALORNE IOE KAKISA N-73

BIT NO.	SIZE & SER. NO.	DEPTH OUT, Feet	FOOTAGE, Feet	HOURS	WEIGHT, M Pounds	R.P.M.	PUMP PRESSURE, Psi
SURFACE HOLE							
1A	12-1/4	205	205	6½	20	160	
2A	7-7/8	400	190	7½	10-20	200	
3A	7-7/8	415	15	1	10	100	
4A	12-1/4	504	104	7½	20	150	
5A	7-7/8	685	181	5¾	15-20	160	
6A	12-1/4	624	Ream	4	15-25	140	
MAIN HOLE							
1	7-7/8-858808	1490	805	14¼	30	120	
2	7-7/8-30164	2422	932	17	30	130	
3	7-7/8-EH023	2494	72	10¾	35	110	
4	7-7/8-FK882	2494	Ream	3¼	2	80	
5	7-7/8-30178	2800	306	37½	35	45	
TALLY CORRECTION			10				

SUMMARY

Surface Hole 624 of 12-1/4 " 32-1/4 hours on bottom.

Main Hole 2176 of 7-7/8 " 82-3/4 hours on bottom.

Core Hole — of — " — hours on bottom.

SURVEY RECORD

HORN R BRALORNE IOE KAKISA N-73

Depth, Feet	Deviation, Degrees
Surface Hole	
71	3/4
161	1/2
213	7/8
244	1
334	7/8
395	1
444	1
504	7/8
563	1
624	1
Main Hole	
859	3/4
1104	1/2
1405	1
1490	1-3/4
1620	1
1741	1
1925	1-1/2
2047	2
2171	1-3/4
2318	2
2408	1-7/8
2494	1-1/4
2800	3/4

ABANDONMENT REPORT

HORN R BRALORNE IOE KAKISA N-73

Plug No. 1: From Total Depth 2808' (log) to 2350' ran 120 sacks of cement plus 4% Gel. Plug not felt.

Plug No. 2: 664' to 564', ran 60 sacks cement plus 2% $CaCl_2$. Plug felt at 550'

Plug No. 3: Surface, 5 sacks

Casing cut off, cap and marker tag welded on.

Rig released 6:00 p.m., April 7, 1971

Section 4

WELL LOG DATA

HORN R BRALORNE IOE KAKISA N-73

Log	Scale	Interval
Induction Electric	2"/100'	2808' to 616'
	5"/100'	2808' to 2200'
Borehole Compensated Sonic Gamma-Ray Caliper	2"/100'	2807' to 615'
	5"/100'	2807' to 2170'

Section 5

Section 5

CORE LABORATORIES – CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING

Company: Bralorne Oil & Gas Limited — Page: 1 of 1

Well: Horn R. Bralorne IOE Kakisa N-73 — File: 933-1465

Field: Kakisa River Area, N.W.T. — Analyst: LK

Location: 61 02'58:00 N.L. 118 14'25:00 W.L. — Elevation: K.B. 769' Grd. 758'

Formation: _____ — Depth: 2380' - 2808'

Sampled from: DST #1 (Top of Tool) — by: Lynes United Services

Sampling pressure: _____ psig — Sampling temp.: _____ °F — Ambient temp.: _____ °F

Date sampled: Apr. 6/71 — Date received: Apr. 12/71 — Date analysed: Apr. 13/71

Container pressure: _____ — Mud: _____ — Water cushion: _____

Recovery or flowrate: 250' Water-Cut Drilling Mud

Mud Filtrate Analysis

Resistivity = 1.77 Ohm-meters @ 68°F

Chloride = 1,536 mg/liter

KENTING OILWELL DRILLING

DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

RIG No. 9 LOCATION H.R. BRALORNE I.O.E KASIKA N-73 AREA FT. PROVIDENCE DATE APRIL 7 19 71

Tour — Midnight - 8 a.m.

Specify actual hours worked	Hrs.
Driller L. Sanders	12
Derrick F. Fraser	12
Floor B. Cross	12
Floor	
Floor	
Motor M. Johnson	12
Mechanic	
Extra	

Injuries:

Fires:

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked	Hrs.
Driller L. Bryenide	13
Derrick D. Lachance	13
[illegible]	
Motor	
Mechanic	
Extra	

Injuries:

Fires:

Tour — 4 p.m. to Midnight

Specify actual hours worked	Hrs.
Driller C. Bryant	12
Derrick N. Tompkins	12
Floor G. Proctor	12
Floor	
Floor	
Motor L. Lamoyak	12
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons

BITS No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION

MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				

PUMPS						
No. 1	Model	Pressure	S.P.M.	Liner Size		
No. 2	Model	Pressure	S.P.M.	Liner Size		

Additives | At Surveys Degree | MOTOR HOURS 1 2 3 4 5 | Next Oil Change

Size | TRIPS | No. Lines | TON MILES | TOTAL MILES | Slip | Feet or Cut | Feet Left on Spool | Next Slip

General

W.L. F.C. pH.

Stands | Singles | D. Collars | Other Ft. | C.B. Ft. | Subs. Ft. | Ft. Up On Kelly | TOTAL

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons

BITS No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION

MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMPS						
No. 1	Model	Pressure	S.P.M.	Liner Size		
No. 2	Model	Pressure	S.P.M.	Liner Size		

Additives | At Surveys Degree | MOTOR HOURS 1 2 3 4 5 | Next Oil Change

Size | TRIPS | No. Lines | TON MILES | TOTAL MILES | Slip | Feet or Cut | Feet Left on Spool | Next Slip

General

W.L. F.C. pH.

Stands | Singles | D. Collars | Other Ft. | C.B. Ft. | Subs. Ft. | Ft. Up On Kelly | TOTAL

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons

BITS No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMPS						
No. 1	Model	Pressure	S.P.M.	Liner Size		
No. 2	Model	Pressure	S.P.M.	Liner Size		

Additives | At Surveys Degree | MOTOR HOURS 1 2 3 4 5 | Next Oil Change

Size | TRIPS | No. Lines | TON MILES | TOTAL MILES | Slip | Feet or Cut | Feet Left on Spool | Next Slip

General Pull Plug #2 @ 5411'

W.L. F.C. pH.

Stands | Singles | D. Collars | Other Ft. | C.B. Ft. | Subs. Ft. | Ft. Up On Kelly | TOTAL

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	Time Start	Stop	Interval
WAIT ON ORDERS	1900	200	2
TRIP IN OPEN END.	200	315	1¼
CIRC AND WAIT ON CEMENTERS	315	515	2
RUN PLUG #1 - 2850 TO 2808 120 SAX CEMENT + 4% GEN NO FEGN.	515	600	¾
PULL UP AND LAY DOWN	600		
PIPE TO RUN PLUG # 2		800	2.
Company Time Cont'r Time			
RUN PLUG #2 - 664 - 564 60 SAX CEMENT + 2% CaCl2	800	830	½
TRIP OUT & W.O.C.	830	400	7½
RAN 160 SAX CEMENT INTO MOUSEHOLE & RAT HOLE.			
Company Time Cont'r Time			
TRIP IN FEEL PLUG #2	400	415	¼
LAY DOWN DRILL PIPE	415	445	½
DIG CELLAR - CUT OFF CASG -	445		
PUT IN 5 SAX CEMENT - WELD ON PLATE AND NAME PLATE		545	1
TEAR OUT RIG	545	1200	6¼
Rig Released @ 600 P.M April 7 / 1971			
Company Time Cont'r Time			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs. Toolpusher _____

Total Company Time _____ Hrs. Approved by _____

KENTING OILWELL DRILLING

DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

RIG No. 9 LOCATION H.R. BRAZEAU I.O.E. N-73 AREA FT. ST. JOHN DATE APRIL 6 1971

Tour — Midnight - 8 a.m.

Specify actual hours worked	Hrs.
Driller L. SANDER	8
Derrick E. FRASER	8
Floor	
Floor	
Floor B. CROSS	8
Motor M. JOHNSON	8
Mechanic	
Extra	

Injuries:

Fires:

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked	Hrs.
Driller L. BREIDE	8
Derrick D. MACHANIC	8
Floor	
Floor	
Floor	
Motor	
Mechanic	
Extra	

Injuries:

Fires:

Tour — 4 p.m. to Midnight

Specify actual hours worked	Hrs.
Driller A. BRYANT	8
Derrick N. TOMPKINS	8
Floor O. PROCTOR	12
Floor	
Floor	
Motor L. TOMCZAK	12
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
@ 2800	T.D.				6	6¼	2⅛	15			

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION

MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	9.1			
VISCOSITY	80			
GEL				

PUMPS

No. 1	Model D 300	Pressure	600
		S.P.M.	46
		Liner Size	5½ x 14
No. 2	Model	Pressure	
		S.P.M.	
		Liner Size	

W.L. F.C. pH.

Additives

At Surveys Degree

MOTOR HOURS		Next Oil Change
1	248	D.W.
2	248	200
3	248	P.M.
4	248	200
5	248	L.P.

Stands 2603.71 Singles

D. Collars 173.14

Other Ft.

C.B. Ft.

Subs. Ft. 2.95

Ft. Up On Kelly 10.20

TOTAL 2808.56

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip Feet or Cut	Feet Left on Spool	Next Slip
1		8					250

General

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
@ 2800	T.D.				6	6¼	2⅛	14			

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION

MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMPS

No. 1	Model	Pressure	
		S.P.M.	
		Liner Size	
No. 2	Model	Pressure	
		S.P.M.	
		Liner Size	

W.L. F.C. pH.

Additives

At Surveys Degree

MOTOR HOURS		Next Oil Change
1		
2	256	
3	"	
4	"	
5		

Stands Singles

D. Collars 173.34

Other Ft.

C.B. Ft.

Subs. Ft.

Ft. Up On Kelly

TOTAL

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip Feet or Cut	Feet Left on Spool	Next Slip

General

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
@ 2800	T.D.										

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMPS

No. 1	Model	Pressure	
		S.P.M.	
		Liner Size	
No. 2	Model	Pressure	
		S.P.M.	
		Liner Size	

W.L. F.C. pH.

Additives

At Surveys Degree

MOTOR HOURS		Next Oil Change
1	264	
2	"	
3	"	
4	"	
5	"	

Stands Singles

D. Collars

Other Ft.

C.B. Ft.

Subs. Ft.

Ft. Up On Kelly

TOTAL

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip Feet or Cut	Feet Left on Spool	Next Slip

General

Turbo Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

Test-Operated _____ Time _____ Results _____

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	Time Start	Stop	Interval
Circ + WAIT on LOGGERS	12⁰⁰	12³⁰	½
TRIP out To LOG (SLOW)	12³⁰	2³⁰	2
RIG To LOG	2³⁰	3⁰⁰	½
LOG. D.I.L. - LOG D.I.D	3⁰⁰		
NOT WORK		5⁰⁰	2
B.H.C. S.I.G.R.C.	5⁰⁰	8⁰⁰	3

Company Time Cont'r Time

TRIP ON LOG-TOOL	8⁰⁰	11³⁰	3½
LOGS, TEAR OUT LOGERS	11³⁰	3¹⁵	3¾
MAKE UP TEST	3¹⁵	4⁰⁰	¾

Company Time Cont'r Time

RUN IN TEST #1	4⁰⁰	5³⁵	1¼
HEAD UP TEST	5¹⁵	5³⁰	¼
PRE FLOW 5 MIN + INITIAL	5³⁰		
SHUT IN 60 MIN		6³⁰	1
FINAL FLOW 60 MINS	6³⁰	7³⁰	1
FINAL SHUT IN 60 MINS	7³⁰	8³⁰	1
HOIST TEST #1	8³⁰	9⁴⁵	1¼
RECOVER RECORDERS & SEAL	9⁴⁵		
LOAD OUT TEST TOOL		11⁰⁰	2¼
WAIT ON ORDERS	11⁰⁰	12⁰⁰	1

Company Time Cont'r Time

Total Contractor Time _____ Hrs. Toolpusher _____

Total Company Time _____ Hrs. Approved by _____

KENTING OILWELL DRILLING

DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

RIG No. 9 LOCATION H.R. BRALORNE I.R.E. N-73 AREA FT. PROV DATE APRIL 5 19 71 (37)

Tour — Midnight - 8 a.m.

Specify actual hours worked	Hrs.
Driller L SANDER	8
Derrick E. FRASER	8
Floor	
Floor	
Floor B. CROSS	12
Motor M JOHNSON	12
Mechanic	
Extra	

Injuries: NIL

Fires: NIL

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2720	54	2774	6 3/4	78	18	6 1/4	2 7/8	38			

BITS No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
5	7 7/8	X55R	3/13	30178	35	45	280	34 1/2			RWN

MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.	Additives	At Surveys Degree
WEIGHT	8.9	8.9	8.9	8.9	GEL 1000	
VISCOSITY	44	45	45	44	REGUX 2 SACS.	
GEL						

PUMPS		12 Mn.	2 a.m.	4 a.m.	6 a.m.
No. 1	Pressure	600	600	600	600
Model B	S.P.M.	45	45	45	45
300	Liner Size	5 1/2	x14		
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

MOTOR HOURS		Next Oil Change
1	224	D.W.
2	224	200
3	224	P.M.
4	224	200
5	224	L.P.

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1		8						250

General

Stands	224 1.0
Singles	
D. Collars	516.22
Other Ft.	
C.B. Ft.	
Subs. Ft.	2.95
Ft. Up On Kelly	
TOTAL	

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	Time Start	Stop	Interval
DRILL	12 00	2 00	2
SERVICE RIG	2 00	2 15	1/4
DRILL	2 15	2 30	1/4
CHANGE HEAD IN D-300	2 30		
+ INSTALL NEW GLAND			
PACKING SAME		3 00	1/2
DRILL	3 00	7 00	4
REPLACE SUCTION VALVE	7 00		
& CLEAN PUMP SUCTION		7 30	1/2
DRILL	7 30	8 00	1/2
Company Time Cont'r Time			

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked	Hrs.
Driller D. REVELLE	8
Derrick L. LAFRANCE	8
Floor	
Floor	
Floor	
Motor	
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2774	26	2800	3	78	18	6 1/4	2 1/8	38			

BITS No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
5	7 7/8	X55R	3/13	30178	35	44	306	37 1/2			

MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.	Additives	At Surveys Degree
WEIGHT	9.0		9.0			2400 3/4
VISCOSITY	45		65		Gel 28 Sacs	
GEL						
					Bensur 2 Sacs	

PUMPS		8 a.m.	10 a.m.	12 Noon	2 p.m.
No. 1	Pressure				
Model	S.P.M.				
	Liner Size	5 1/2 x 14			
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

MOTOR HOURS		Next Oil Change
1		
2		
3		
4		
5		

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1		8						

General

Stands	2242 H3
Singles	
D. Collars	516.22
Other Ft.	
C.B. Ft.	
Subs. Ft.	2.95
Ft. Up On Kelly	38.10
TOTAL	28.00

REMARKS	Time Start	Stop	Interval
DRILLING	8 00	11 00	3
RIG SERVICE B. OPS	11 00	11 15	1/4
CIRC TO LOG	11 15	12 45	1 1/2
MAKE 10 STAND PUMP TRIP	12 45	1 30	3/4
CIRC W/ ON LOGGERS	1 30	3 15	1 3/4
SURVEY	3 15	3 30	1/4
HOIST	3 30	4 00	1/2
Company Time Cont'r Time			

Tour — 4 p.m. to Midnight

Specify actual hours worked	Hrs.
Driller A. BRYANT	8
Derrick N. TOMPKINS	8
Floor G. PROCTOR	12
Floor	
Floor	
Motor L. TOMCZUK	12
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2800					6	6 1/2	2 7/4				

BITS No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives	At Surveys Degree
WEIGHT				9.1		
VISCOSITY				78		
GEL						

PUMPS		4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1	Pressure				600
Model D-	S.P.M.				65
300	Liner Size		5 1/2 x 14"		
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

MOTOR HOURS		Next Oil Change
1		
2		
3		
4		
5		

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip

General

Stands	260.22
Singles	
D. Collars	173.14
Other Ft.	
C.B. Ft.	
Subs. Ft.	2.95
Ft. Up On Kelly	2.76
TOTAL	280.56

REMARKS	Time Start	Stop	Interval
HOIST	4 00	5 00	1
RIG SER & J BOPS	5 00	5 15	1/4
RUN 3 DC COLLARS &	5 15		
LAY DOWN 12 OF SAME		7 00	1 3/4
RUN IN PIPE & PICK UP	7 00		
12 SINGLES TO REPLACE			
COLLARS		8 15	1 1/4
CIRC HOLE & WAIT ON	8 15		
LOGGERS		12 00	3 3/4
Company Time Cont'r Time			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

D.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs. Toolpusher _____

Total Company Time _____ Hrs. Approved by _____

KENTING OILWELL DRILLING

DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

RIG No. 9 LOCATION H.R. BRAZEAU N-73 I.O.E AREA FT PROV DATE APRIL 4 19 71 (84)

Tour — Midnight - 8 a.m.

Specify actual hours worked	Hrs.
Driller L. SANDER	8
Derrick F. FRASER	8
Floor	
Floor	
Floor B. CROSS	12
Motor M. JOHNSON	12
Mechanic	
Extra	

Injuries: NIL

Fires: NIL

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2526	62	2588	7 3/4	80	18	6 1/4	2 7/8	38			

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
5	7 7/8	X55R	3/13	30178	35	45	94	11 1/4			RUN

MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	9.1	9.0	9.0	9.0
VISCOSITY	53	50	50	51
GEL				

PUMPS

No. 1	Pressure	600	600	600	600
Model D 300	S.P.M.	46	46	46	46
	Liner Size	5 1/2 x 14			
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

Additives: GEL = 1000; BENGY = 2

At Surveys Degree

MOTOR HOURS		Next Oil Change
1	200	D.W.
2	200	200
3	200	P.M.
4	200	200
5	200	L.P.

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip Feet or Cut	Feet Left on Spool	Next Slip
1		8					250

General

Stands	Singles	D. Collars	Other Ft.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	TOTAL
2618.62		516.22			2.95	138	2618.62

(35) Company Time Cont'r Time

REMARKS	Time Start	Stop	Interval
DRILL	12 00	3 30	3 1/2
RIG SERVICE	3 30	3 45	1/4
DRILL	3 45	8 00	4 1/4

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked	Hrs.
Driller BRYEIDE	8
Derrick LACHANCE	8
Floor	
Floor	
Floor	
Motor	
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2580	68	2656	7 3/4	78	18	6 1/4	2 7/8	38			

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
5	7 7/8	X55R	3/13	30178	35	45	162	20			RUN

MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.
WEIGHT	8.9	8.9		
VISCOSITY	40	40		
GEL				

PUMPS

No. 1	Pressure	600	600	
Model	S.P.M.	45	45	
	Liner Size	5 1/2 x 14		
No. 2	Pressure			
Model	S.P.M.			
	Liner Size			

W.L. F.C. pH.

Additives:

At Surveys Degree

MOTOR HOURS		Next Oil Change
1	208	
2	"	
3	"	
4	"	
5	"	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip Feet or Cut	Feet Left on Spool	Next Slip
1		8					

General

Stands	Singles	D. Collars	Other Ft.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	TOTAL
212.93		516.22			2.95	13.90	2656

Company Time Cont'r Time

REMARKS	Time Start	Stop	Interval
RIG SERVICE B.OPS	8 00	8 15	1/4
DRILLING	8 15	4 00	7 3/4

Tour — 4 p.m. to Midnight

Specify actual hours worked	Hrs.
Driller A. BRAGG	8
Derrick N. TOMPKINS	8
Floor G. PROCTOR	12
Floor	
Floor	
Motor L. TOMCZAK	12
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2656	64	2720	7 3/4	78	18	6 1/4	2 7/8	38			

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
5	7 7/8	X55R	3/13	30178	35	40	226	27 1/4			RUN

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT	8.9	8.9	8.9	
VISCOSITY	46	45	46	
GEL				

PUMPS

No. 1	Pressure	600	600	✓
Model D-300	S.P.M.	45	45	✓
	Liner Size	5 1/2 x 14"		
No. 2	Pressure			
Model	S.P.M.			
	Liner Size			

W.L. F.C. pH.

Additives:

At Surveys Degree

MOTOR HOURS		Next Oil Change
1	216	
2	✓	
3	✓	
4	✓	✓
5	✓	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip Feet or Cut	Feet Left on Spool	Next Slip

General

Stands	Singles	D. Collars	Other Ft.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	TOTAL
218.71		516.22			2.95	20.40	2720

Company Time Cont'r Time

REMARKS	Time Start	Stop	Interval
RIG SER & ✓ BOPS	4 00	4 15	1/4
DRILL	4 15	12 00	7 3/4

Company Time Cont'r Time

Toolpusher

Approved by

Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack

B.O.P. Test-Operated Time Results

Total Contractor Time Hrs.

Total Company Time Hrs.

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

KENTING OILWELL DRILLING

DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS

RIG No. 9 LOCATION H.R. BRALORNE I.O.E N-23 AREA E.T. PROV. DATE APR 3 1971 (32)

Tour — Midnight - 8 a.m.

Specify actual hours worked	Hrs.
Driller L. SANDER	8
Derrick E. ERASER	8
Floor	
Floor	
Floor B. CROSS	12
Motor M. JOHNSON	12
Mechanic	
Extra	

Injuries: Nil M. Johnson will transfer from Rig 35

Fires:

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked	Hrs.
Driller BRYEIDE	8
Derrick D. LACHACE	8
Floor	
Floor	
Floor	
Motor	
Mechanic	
Extra	

Injuries:

Fires: N.L.

Tour — 4 p.m. to Midnight

Specify actual hours worked	Hrs.
Driller A. BAYANT	8
Derrick N. TOMPKINS	8
Floor G. PROCTOR	12
Floor	
Floor	
Motor L. TOMCZAK	12
Mechanic	
Extra	

Injuries: N. Tompkins, G. Proctor, L. Tomczak

Fires: Transfer from 35

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2422	54	2476	7 3/4	74	18	6 1/4	2 2/8	38			

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
	3	7 7/8	SL44	3/13	EH023	35	100	54	7 3/4			RUN

MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	9.0	9.1	9.1	9.1
VISCOSITY	34	37	40	41
GEL				

Additives: GEL # 2500; BENEX # 5 sacks; SODA ASH # 100

PUMPS		12 Mn.	2 a.m.	4 a.m.	6 a.m.
No. 1	Pressure	700	700	700	700
Model P 300	S.P.M.	50	50	50	50
	Liner Size		5 1/2 x 14		
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

At Surveys Degree

MOTOR HOURS		Next Oil Change
1	176	D.W.
2	176	200
3	176	P.M.
4	176	200
5	176	L.P.

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1		8						250

General

Stands	2496.68
Singles	
D. Collars	516.22
Other Ft.	
C.B. Ft.	
Subs. Ft.	2.95
Ft. Up On Kelly	
TOTAL	

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2436	18	2494	3	74	18	6 1/4	2 2/8	38			

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
	3	7 7/8		3X13	EH023	35	110					

MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.
WEIGHT	9.1			
VISCOSITY	40			
GEL				

Additives: 1000 GEL; 4 lbs BENEX

PUMPS		8 a.m.
No. 1	Pressure	600
Model	S.P.M.	45
	Liner Size	
No. 2	Pressure	
Model	S.P.M.	
	Liner Size	

W.L. F.C. pH.

At Surveys Degree: 2494 1 1/4

MOTOR HOURS		Next Oil Change
1	184	
2	"	
3	"	
4	"	
5	"	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1		8						

General

Stands	1939.11
Singles	
D. Collars	516.22
Other Ft.	
C.B. Ft.	
Subs. Ft.	2.95
Ft. Up On Kelly	3.72
TOTAL	2494

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2494	32	2526	3 1/2	74	18	6 1/4	2 1/8	38			

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
	4	7 7/8	J44N	3X13	GK882	35	80	U.G. Hole				1-1-1
	5	7 7/8	X55A	3X13	30176		40	32	3 1/2	90	3 1/2	RUN

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT	9.1	9.1		9.1
VISCOSITY	64	56		56
GEL				

Additives: Soda Ash - 100#; C M C - 25#; Gel - 500#; Benex - 2#

PUMPS		4 p.m.	10 p.m.
No. 1	Pressure	600	600
Model P 310	S.P.M.	45	45
	Liner Size	5 1/2 x 14	
No. 2	Pressure		
Model	S.P.M.		
	Liner Size		

W.L. F.C. pH.

At Surveys Degree

MOTOR HOURS		Next Oil Change
1	192	
2	✓	
3	✓	
4	✓	
5	✓	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip

General

Stands	1939.11
Singles	301.11
D. Collars	516.22
Other Ft.	
C.B. Ft.	
Subs. Ft.	2.95
Ft. Up On Kelly	3840
TOTAL	2526

REMARKS	Time Start	Stop	Interval
DRILL	12 00	1 30	1 1/2
SERVICE RIG	1 30	1 45	1/4
DRILL	1 45	8 00	6 1/4
Company Time	**Cont'r Time**		
RIG SERVICE B.O.P's	8 00	8 15	1/4
DRILLING	8 15	11 15	3
SURVEY	11 15	11 30	1/4
TRIP FOR BIT	11 30	2 15	2 3/4
REAM	2 15	4 00	1 3/4
Company Time	**Cont'r Time**		
REAM U.G. HOLE	4 00	6 00	2
TRIP F/BIT	6 00	8 30	2 1/2
DRILL	8 30	12 00	3 1/2
Company Time	**Cont'r Time**		

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs. Toolpusher _____

Total Company Time _____ Hrs. Approved by _____

KENTING OILWELL DRILLING

DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

RIG No. 4 LOCATION H.R. BRALORNE T.O.E. N-73 AREA FT. PROV. DATE APR 2 19 71 (24)

Tour — Midnight - 8 a.m.

Specify actual hours worked	Hrs.
Driller L. SAUDER	8
Derrick E. FRASER	8
Floor	
Floor	
Floor B. CROSS	8
Motor M. JOHNSON	8
Mechanic	
Extra	

Injuries: NIL

Fires: NIL

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
1607	430	2037	6	62	16	6¼	2⅞				

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
2	7⅞	X3A	3/12	30164	30	120	547	8½			RUN

MUD

	12 Mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	9.0	9.0	9.0	8.9
VISCOSITY	34	35	36	35
GEL				

Additives: GEL # 3000; BENEX # 6 SACS; WATER

PUMPS

		12 Mn.	2 a.m.	4 a.m.	6 a.m.
No. 1	Pressure	800	800	800	800
Model 300	S.P.M.	50	50	50	50
	Liner Size	5½ x 14			
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

At Surveys	Degree	MOTOR HOURS		Next Oil Change
1620	1°	1	152	D.W
1741	1°	2	152	200
1925	1½	3	152	P.M.
		4	152	200
		5	152	L.P

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1		8						250

General

Stands	2016.60
Singles	30.49
D. Collars	516.22
Other Ft.	
C.B. Ft.	
Subs. Ft.	2.95
Ft. Up On Kelly	2.91
TOTAL	2047.09

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked	Hrs.
Driller L. BRYENTE	8
Derrick O. LABCHANCE	8
Floor	
Floor VERN HUPP	8
Floor	
Motor	
Mechanic	
Extra	

Injuries: NIL.

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2037	343	2380	7	70	18	6¼	2⅞	38			

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
2	7⅞	X3A	3/12	30164	35/20	160	890	15½			RUN

MUD

	8 a.m.	10 a.m.	12 Noon	2 p.m.
WEIGHT	9.0	9.0	9.0	
VISCOSITY	38	40	38	
GEL				

Additives: 1000 GEL

PUMPS

		8 a.m.	10 a.m.	12 Noon	2 p.m.
No. 1	Pressure	550		550	
Model 300	S.P.M.	38		38	
	Liner Size	5½ x 14			
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

At Surveys	Degree	MOTOR HOURS		Next Oil Change
2047	2°	1	160	
2167	1¾	2	″	
2318	2°	3	″	
		4	″	
		5	″	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1		8						

General

Stands	1821.45
Singles	
D. Collars	516.22
Other Ft.	
C.B. Ft.	
Subs. Ft.	2.95
Ft. Up On Kelly	IN
TOTAL	2380.

Tour — 4 p.m. to Midnight

Specify actual hours worked	Hrs.
Driller A. BRYANT	8
Derrick N. TOMPKINS	8
Floor G. PROCTOR	8
Floor	
Floor	
Motor L. TOMCZAK	12
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
2380	42	2422	1½	70	18	6¼	2⅞	38	BIT #2 OUT @ 2422		

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
2	7⅞	X3A	3/12	30164	20-30	160	932	17			5-2-1
3	V	SL4H	3/13	EH023							

MUD

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT	9.1			
VISCOSITY	35			
GEL				

Additives:

PUMPS

		4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1	Pressure	550			
Model	S.P.M.				
300	Liner Size	5½ x 14			
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

At Surveys	Degree	MOTOR HOURS		Next Oil Change
2408	1¾	1	168	
		2	✓	
		3	✓	
		4	✓	
		5	✓	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip

General Measure 2437.43
Board 2435.37
Diff. .94 no change

Stands	188375
Singles	
D. Collars	516.22
Other Ft.	
C.B. Ft.	
Subs. Ft.	2.95
Ft. Up On Kelly	IN 19.40
TOTAL	2422

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	Time Start	Stop	Interval
SERVICE RIG	12 00	12 15	¼
SURVEY @ 1620	12 15	12 30	¼
DRILL	12 30	2 00	1½
SURVEY @ 1741	2 00	2 15	¼
DRILL	2 15	4 45	2½
SURVEY @ 1925	4 45	5 00	¼
CIRC SAMPLE (GEOLOGIST REQUEST)	5 00	5 30	½
DRILL	5 30	6 45	1¼
WORK ON PUMP	6 45	7 15	½
DRILL	7 15	8 00	¾
(30) Company Time / Cont'r Time			
RIG SERVICE; B.O.P.	8 00	8 15	¼
SURVEY	8 15	8 30	¼
DRILLING 7⅞ HOLE	8 30	10 00	1½
SURVEY	10 00	10 15	¼
DRILLING	10 15	12 45	2½
SURVEY	12 45	1 00	¼
DRILLING	1 00	4 00	3
Company Time / Cont'r Time			
RIG SER & B.O.P.	4 00	4 15	¼
DRILL 7⅞" HOLE	4 15	5 45	1½
CIRC SAMPLE @ GEO REQUEST	5 45	6 15	½
SURVEY @ 2422	6 15	6 30	¼
TRIP F.N.B & MEASURE	6 30		
RUN IN COLLARS		9 00	2½
INSTALL NEW PUMP BEDS ON P-300 PUMP	9 00	10 30	1½
RUN IN PIPE	10 30	11 15	¾
CLEAN 60' TO BTM	11 15	12 00	¾
Company Time / Cont'r Time			

Totco Ring on Bit No. _____ O.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs. Toolpusher _____

Total Company Time _____ Hrs. Approved by _____

KENTING OILWELL DRILLING

DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

RIG No. 9 LOCATION H.R. BRALORNE I-E-E. A-38 AREA FT. PRO DATE APR 1 19 71 (12)

Tour — Midnight - 8 a.m.

Specify actual hours worked	Hrs.
Driller L. SANDER	8
Derrick F. FRASER	8
Floor	
Floor	
Floor B. CROSS	8
Motor M. JOHNSON	8
Mechanic	
Extra	

Injuries: NIL

Fires: NIL

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
829	457	1286	6 3/4	56	18	6 1/4	2 7/8	38			

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
1	7 7/8	Y51B	3/12	858808	25-30	140	601	9 1/2			RUN

MUD

	12 Mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	8.4	8.4	8.5	8.6
VISCOSITY	28	28	29	32
GEL				

Additives: WATER; FEL # 2800; C.M.C # 25; CAUSTIC #100

PUMPS

		12 Mn.	2 a.m.	4 a.m.	6 a.m.
No. 1	Pressure	600	600	600	600
Model B	S.P.M.	54	54	54	54
300	Liner Size		5 1/2	x 14	
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

At Surveys Degree: 859 3/4; 1104 1/2

MOTOR HOURS

		Next Oil Change
1	128	D.W.
2	128	200
3	128	P.M.
4	128	200
5	128	L.P.

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1		8						250

General

Stands 128.43; Singles; D. Collars 516.22; Other Ft.; C.B. Ft.; Subs. Ft. 2.95; Ft. Up on Kelly 38.00; TOTAL 1286.00

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked	Hrs.
Driller L. Bryside	8
Derrick D. Lachance	8
Floor Vern Hupp	8
Floor Mike Demuit	8
Floor	
Motor	
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
1286	204	1490	4 3/4	62	18	6 1/4	2 7/8	38			

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
1	7 7/8	J61G	3X12	858808	30	120	805	14 1/4			4-5-1

MUD

	8 a.m.	10 a.m.	12 Noon	2 p.m.
WEIGHT		9.0	9.0	
VISCOSITY		38		
GEL				

Additives: 15 GEL; 4 lbs BENEX

PUMPS

		8 a.m.	10 a.m.	12 Noon	2 p.m.
No. 1	Pressure		550		
Model	S.P.M.		40		
	Liner Size				
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

At Surveys Degree: 1405 1; 1490 1 3/4

MOTOR HOURS

		Next Oil Change
1	136	
2	✓	
3	✓	
4	✓	
5		

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1		8						

General

Stands 109.65; Singles 29.30; D. Collars 516.22; Other Ft.; C.B. Ft.; Subs. Ft. 2.95; Ft. Up on Kelly 31.86; TOTAL 1490

Tour — 4 p.m. to Midnight

Specify actual hours worked	Hrs.
Driller A. BRYANT	8
Derrick N. TOMPKINS	8
Floor G. PROCTOR	8
Floor	
Floor	
Motor L. TOMCZAK	12
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
1490	117	1607	2 1/2	62	18	6 1/4	2 7/8	38			

BITS

No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
2	7 7/8	X3A	3/12	30164	20	130	117	2 1/4			RUN

MUD

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT		9.4	9.0	
VISCOSITY		32	33	
GEL				

Additives: C.M.C - 25#; Gel - 500#; Benex - 2#

PUMPS

		4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1	Pressure		550	✓	
Model D-300	S.P.M.		44	✓	
	Liner Size		5 1/2	x 14"	
No. 2	Pressure				
Model	S.P.M.				
	Liner Size				

W.L. F.C. pH.

At Surveys Degree:

MOTOR HOURS

		Next Oil Change
1	144	
2	✓	
3	✓	
4	✓	
5	✓	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip

General

Stands 107.95; Singles 3.153; D. Collars 516.22; Other Ft.; C.B. Ft.; Subs. Ft. 2.95; Ft. Up on Kelly 35.40; TOTAL 1620

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	Time Start	Stop	Interval
DRILL	12 00	12 30	1/2
SERVICE RIG	12 30	12 45	1/4
SURVEY @ 859	12 45	1 00	1/4
DRILL	1 00	1 30	1/2
WORK TIGHT HOLE	1 30	2 00	1/2
DRILL	2 00	5 15	3 1/4
SURVEY @ 1104	5 15	5 30	1/4
DRILL	5 30	8 00	2 1/2

Company Time Cont'r Time

RIG SERVICE B.OPs	8 00		
PUT BOLTS IN DRUM ON D.W.		9 15	1 1/4
DRILL	9 15	11 45	2 1/2
SURVEY	11 45	12 00	1/4
DRILLING	12 00	2 15	2 1/4
SURVEY	2 15	2 30	1/4
HOIST A	2 30	3 30	1
TAKE DOWN STAND PIPE WASHED OUT,	3 30	4 00	1/2

Company Time Cont'r Time

RIG. SER + ✓ BOPS	4 00	4 15	1/4
REPAIR STAND PIPE	4 15	5 00	3/4
RUN IN + CLEAN 20' TO BTM	5 00	6 00	1
DRILL	6 00	8 00	2
PULL BIT, HOIST PLUGGED BIT + RUN BACK IN CLEAN 30' TO BTM.	8 00	11 00	3
DRILL	11 00	11 30	1/2
WORK ON D300 PUMP	11 30	12 00	1/2

Company Time Cont'r Time

Total Contractor Time _____ Hrs. Toolpusher _____

Total Company Time _____ Hrs. Approved _____

KENTING OILWELL DRILLING

DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

RIG No. 9 LOCATION H.R. BRALORNE T.O.C. N-73 AREA FT. PROD. DATE MAR. 31 1971

Tour — Midnight - 8 a.m.

Specify actual hours worked	Hrs.
Driller L. SAUDER	8
Derrick F. FRASER	12
Floor	
Floor	
Floor B. CROSS	12
Motor M. JOHNSON	8
Mechanic	
Extra	

Injuries: NIL

Fires: NIL

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked	Hrs.
Driller L. BRYEIDE	8
Derrick D. LALHAUNE	8
Floor	
Floor	
Floor	
Motor	
Mechanic	
Extra	

Injuries:

Fires:

Tour — 4 p.m. to Midnight

Specify actual hours worked	Hrs.
Driller A. BRYANT	8
Derrick M. TOMPKINS	8
Floor G. PROCTOR	12
Floor	
Floor	
Motor L. TOMCZAK	12
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
	@624				16	6¼	2⅞	34			

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION

MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				

Additives:

At Surveys Degree:

MOTOR HOURS		Next Oil Change
1	104	D.W.
2	104	200
3	104	P.m.
4	104	200
5	104	L.P.

PUMPS			
No. 1	Model	Pressure	S.P.M.	Liner Size
No. 2	Model	Pressure	S.P.M.	Liner Size

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1		8						250

General

W.L. F.C. pH.

Stands | Singles | D. Collars | Other Ft. | C.B. Ft. | Subs. Ft. | Ft. Up On Kelly | TOTAL

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
@624					18	6¼	2⅞	38			

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
	1	7⅞	YSIG	3 1/2	858808							

MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

Additives:

At Surveys Degree:

MOTOR HOURS		Next Oil Change
1		
2		
3		
4		
5		

PUMPS			
No. 1	Model	Pressure	S.P.M.	Liner Size
No. 2	Model	Pressure	S.P.M.	Liner Size

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
					58			

General: Slip 58' DRILLING LINE.
Tested flare manifold to 2000# with hydril closed. All valves O.K.

W.L. F.C. pH.

Stands | Singles | D. Collars | Other Ft. | C.B. Ft. | Subs. Ft. | Ft. Up On Kelly | TOTAL

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
685	144	829	2 3/4	56	18	6¼	2⅞	38			

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
	1	7¼	YSIG	3 1/2	858808	20-25	160	144	2¼			RUN

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT			8.4	8.4
VISCOSITY			28	28
GEL				

Additives:

At Surveys Degree:

MOTOR HOURS		Next Oil Change
1	120	
2	″	
3	″	
4	″	
5	″	

PUMPS			
No. 1	Model D-300	Pressure 600	S.P.M. 54	Liner Size 5½ x 14
No. 2	Model	Pressure	S.P.M.	Liner Size

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip

General

W.L. F.C. pH.

Stands 244.11 | Singles 30.45 | D. Collars 516.22 | Other Ft. | C.B. Ft. | Subs. Ft. 2.95 IN | Ft. Up On Kelly | TOTAL 829.17

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	Time Start	Stop	Interval
W.O.C.	12.00	5.15	5¼
SLACK OFF CSG & INSTALL	5.15		
CSG Bowl		5.45	½
NIPPLE UP B.O.P's	5.45	8.00	2¼
Company Time Cont'r Time			
NIPPLE UP B.O.P's	8.00	1.45	5¾
PRESSURE UP BLIND RAMS TO 1000 lbs OK. FOR 10 MINS	1.45	2.15	½
RUN IN D.C's	2.15	3.00	¾
REPAIR MOTOR KELLY	3.00	3.30	½
TRY TO REDRILL MOUSE HOLE	3.30	4.00	½
Company Time Cont'r Time			
REDRILL MOUSE HOLE	4.00	5.00	1
PRESSURE TEST HYDRIL & PIPE RAMS TO 1200 FOR 10 MINS EACH	5.00	6.15	1¼
DRILL OUT FLOAT & SHOE	6.15	7.45	1½
REAM OUT ROCKS UNDER SHOE TO 685	7.45	9.00	1¼
DRILL 7¼ HOLE	9.00	11.00	2
WORK ON D300 Pump	11.00	11.15	¼
DRILL	11.15	12.00	¾
Company Time Cont'r Time			

Total Contractor Time _____ Hrs. Toolpusher _____

Total Company Time _____ Hrs. Approved By _____

KENTING OILWELL DRILLING

DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

RIG No. 9 LOCATION H.R. BRALORNE N-73 KAKISHA AREA DATE Nov 30 / 1971 (3)

Tour — Midnight - 8 a.m.

Specify actual hours worked	Hrs.
Driller L. SANDER	8
Derrick F. FRASER	12
Floor	
Floor	
Floor B. CROSS	12
Motor M. JOHNSON	8
Mechanic	
Extra	

Injuries: NIL

Fires: NIL

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked	Hrs.
Driller J. BREIDE	8
Derrick D. LACHANCE	13
Floor	
Floor	
Floor	
Motor	
Mechanic	
Extra	

Injuries:

Fires:

Tour — 4 p.m. to Midnight

Specify actual hours worked	Hrs.
Driller A. BRYANT	8
Derrick N. TOMPKINS	8
Floor G. PROCTOR	12
Floor	
Floor	
Motor L. TOMCZAK	8
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
504	181	685	5¾	38	16	6¼	2⅞	34			

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
	5A	7⅞	X3A	CON	B.R.	15-20	160	181	5¾			RWN

MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	9.0	9.0	9.0	9.0
VISCOSITY	110	130	140	155
GEL				

Additives: GEL # 1500

At Surveys	Degree
563	1°
624	1°

MOTOR HOURS		Next Oil Change
1	80	D.W
2	80	200
3	80	P.m.
4	80	200
5	80	L.P

PUMPS						
No. 1	Model	300	Pressure	250	250	250
			S.P.M.	72	72	72
			Liner Size	5½ x 14		
No. 2	Model		Pressure			
			S.P.M.			
			Liner Size			

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip Feet or Cut	Feet Left on Spool	Next Slip
1		8					250

General

W.L. F.C. pH.

Stands	181.54
Singles	
D. Collars	460.49
Other Ft.	
C.B. Ft.	
Subs. Ft.	3.85
Ft. Up On Kelly	IN
TOTAL	685.53

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
@	624										

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION

MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

Additives: Gel 1000

MOTOR HOURS		Next Oil Change
1	88	
2	"	
3	"	
4	"	
5	"	

PUMPS						
No. 1	Model		Pressure			
			S.P.M.			
			Liner Size			
No. 2	Model		Pressure			
			S.P.M.			
			Liner Size			

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip Feet or Cut	Feet Left on Spool	Next Slip

General

W.L. F.C. pH.

Stands	
Singles	
D. Collars	
Other Ft.	
C.B. Ft.	
Subs. Ft.	
Ft. Up On Kelly	
TOTAL	

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

Additives:

MOTOR HOURS		Next Oil Change
1	96	
2	✓	
3	✓	
4	✓	
5	✓	

PUMPS						
No. 1	Model		Pressure			
			S.P.M.			
			Liner Size			
No. 2	Model		Pressure			
			S.P.M.			
			Liner Size			

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip Feet or Cut	Feet Left on Spool	Next Slip

General

W.L. F.C. pH.

Stands	
Singles	
D. Collars	
Other Ft.	
C.B. Ft.	
Subs. Ft.	
Ft. Up On Kelly	
TOTAL	

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	Time Start	Stop	Interval
TRIP IN W/BIT # 5A	12⁰⁰	1⁰⁰	1
SERVICE RIG	1⁰⁰	1¹⁵	¼
DRILL 7⅞ HOLE	1¹⁵	2³⁰	1¼
SURVEY @ 563	2³⁰	2⁴⁵	¼
DRILL 7⅞ HOLE	2⁴⁵	4⁰⁰	1¼
CLEAN PUMP SCREEN + VALVES	4⁰⁰	4³⁰	½
DRILL 7⅞ HOLE	4³⁰	6¹⁵	1¾
SURVEY @ 624	6¹⁵	6³⁰	¼
DRILL 7⅞ HOLE	6³⁰	8⁰⁰	1½
Company Time / Cont'r Time			
RIG SERVICE	8⁰⁰	8¹⁵	¼
TRIP FOR 12¼ BIT	8¹⁵	9⁰⁰	¾
CLEAN TO BTM.	9⁰⁰	9³⁰	½
REAM OUT 7⅞ HOLE FROM 504 TO 624	9³⁰	13⁰⁰	4
CIRC HOLE CLEAN	13⁰⁰	20⁰⁰	½
DUMMY TRIP	20⁰⁰	24⁵	¾
CIRC HOLE CLEAN	24⁵	31⁵	½
CLEAN VALVES IN PUMP	31⁵	34⁵	½
HOIST TO RUN CSG	34⁵	40⁰	¼
Company Time / Cont'r Time			
FINISH TRIP OUT	4⁰⁰	5⁰⁰	1
RIG TO RUN CASG	5⁰⁰	5³⁰	½
RAN 8⅝ CASG	5³⁰	9⁰⁰	2½
CIRC + WORK CASG	9⁰⁰	9³⁰	½
CEMENT CASG	9³⁰	9¹⁵	¾
W.O.C.	9¹⁵	12⁰⁰	2¾
RAN 10 JTS 24# IPSCO NEW 8⅝ ST+C J-55 RANGE 2 CASG. RAN 8 JTS NEW 24# K 55 ST+C MANNESMAN CASG. CASG TOTAL 629.10 LANDED @ 614 K.B. CEMENTED W/400 SX NORMAL FOLLOWED + 3% CaCl2 3 BBLS RETURNED PLUG DOWN @ 915 P.M. RAN A TOTAL OF 18 JTS CASG.			
Company Time / Cont'r Time			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs. Toolpusher _____

Total Company Time _____ Hrs. Approved by _____

KENTING OILWELL DRILLING

DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

RIG No. 4 LOCATION H.R. BRA LORNE I.O.E. KAKASHEE AREA F.T. PROVEDEN DATE APR 29 19 71

Tour — Midnight - 8 a.m.

Specify actual hours worked	Hrs.
Driller L. SANDER	8
Derrick F. FRASER	12
Floor	
Floor	
Floor E. CROSS	12
Motor M. JOHNSON	8
Mechanic	
Extra	

Injuries: NIL

Fires: NIL

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked	Hrs.
Driller BRYEIDE	8
Derrick LACHANCE	8
Floor	
Floor	
Motor	
Mechanic	
Extra	

Injuries:

Fires:

Tour — 4 p.m. to Midnight

Specify actual hours worked	Hrs.
Driller A. BRYANT	8
Derrick N. TOMPKINS	8
Floor G. PROCTOR	12
Floor	
Floor	
Motor L. FRANCIS	12
Mechanic	
Extra	

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
290	110	400	4 1/4	28	6	6 1/4	2 7/8	15			

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
	2A	7 7/8	X3A	CON	R.R.	6/15	60/sec	195	7 1/4			T-L-1
	2A	7 7/8	TIAG	CON	R.R.							

MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	89			
VISCOSITY	150			
GEL				

Additives: Plaster 1 SX

At Surveys	Degree
334	7/8°
395	1°

MOTOR HOURS		Next Oil Change
1	56	D.W
2	56	200
3	56	P.m.
4	56	200
5	56	L.P.

PUMPS			
No. 1	Pressure	200	
	Model	S.P.M.	72
		Liner Size	5 1/2 x 14
No. 2	Pressure		
	Model	S.P.M.	
		Liner Size	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1		8						250

General

W.L. F.C. pH.

Stands 6 | Singles | D. Collars 171.81 | Other Ft. | C.B. Ft. | Subs. Ft. 5.50 | Ft. Up On Kelly IN | TOTAL 400.5

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
400	15	415	1	32							

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
	3A	7 7/8	TIAG	OUT	R.R.	20	150	15	1	8.7.1		
	4A	12 1/4	OSC 3	CON		15	150	193	2 1/4		2 1/4	

MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

Additives: Gel 600 Plaster of Paris Caustic 1 SX

MOTOR HOURS		Next Oil Change
1	64	
2		
3		
4		
5		

PUMPS			
No. 1	Pressure		
	Model	S.P.M.	
		Liner Size	
No. 2	Pressure		
	Model	S.P.M.	
		Liner Size	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip

General

W.L. F.C. pH.

Stands | Singles | D. Collars 344.46 | Other Ft. | C.B. Ft. | Subs. Ft. 5.50 | Ft. Up On Kelly IN | TOTAL

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS No.	O.D.	I.D.	Wgt.	FUEL Gals.	WATER Bbls.	COAL Tons
415	89	504	5 1/4	36	16	6 1/4	2 1/4				

BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
	4A	12 1/4	OSC-3	CON	RR	20	150	104	1 1/4			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY	125	160	180	
GEL				

Additives: Cement 2 SX

At Surveys	Degree
4111	1°
504	7/8

MOTOR HOURS		Next Oil Change
1	72	
2	✓	
3	✓	
4	✓	
5	✓	

PUMPS					
No. 1	Pressure	200	✓	✓	
	Model	S.P.M.	72	✓	✓
		Liner Size	5 1/2 x 14		
No. 2	Pressure				
	Model	S.P.M.			
		Liner Size			

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip

General

W.L. F.C. pH.

Stands | Singles | D. Collars 328.64 | Other Ft. | C.B. Ft. | Subs. Ft. | Ft. Up On Kelly IN | TOTAL 504.64

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	Time Start	Stop	Interval
SERVICE RIG	12 00	12 15	1/4
DRILL 7 7/8 HOLE - GRAVEL	12 15		
+ BOULDERS		1 30	1 1/4
SURVEY @ 334 GRAVEL	1 30	1 45	1/4
DRILL 7 7/8 PILOT HOLE - BOULDERS	1 45	3 30	2 3/4
WORK ON PUMP	3 30	4 30	1
DRILL 7 7/8 PILOT HOLE	4 30		
ROCKS + BOULDERS		5 45	1 1/4
SURVEY @ 395	5 45	6 00	1/4
TRIP F.W.B CLEAN 150'	6 00		
TO BOTTOM		8 00	2

Company Time	Cont'r Time			
CLEAN TO BOTTOM		8 00	10 30	2
RIG SERVICE		10 00	10 15	1/4
DRIL 7 7/8 HOLE		10 15	11 15	1
TRIP OUT LAY DOWN BIT		11 15		
TRIP IN W/ 12 1/4 BIT			1 15	2
REAM 12 1/4 FROM 77		1 15	2 00	3/4
REPAIR REVERSE COUPLING		2 00	2 30	1/2
REAM 12 1/4 @ 388		2 30	4 00	1 1/2

Company Time	Cont'r Time			
RIG SER		4 00	4 15	1/4
~~REAM 1/4~~ DRILL 12 1/4		4 15	5 30	1 1/4
SURVEY		5 30	5 45	1/4
CLEAN PUMP + TIGHTEN		5 45		
PUMP BEDS			6 45	1
DRILL 12 1/4 GRAVEL + BOULDERS		6 45	10 45	4
SURVEY + HOIST TO ~~DRILL~~ DRILL 7 7/8		10 45		
PILOT HOLE			12 00	1 1/4

Company Time	Cont'r Time			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs. Toolpusher _____

Total Company Time _____ Hrs. Approved by _____

KENTING OILWELL DRILLING
DIVISION OF KENTING EXPLORATION SERVICES LTD.

DAILY DRILLING REPORT

RIG No. 9 LOCATION H.R. Bralorne I.O.E. Kaneesha AREA Ft. Providence DATE 3/28 1971

Tour — Midnight - 8 a.m.

Specify actual hours worked		Hrs.
Driller	L. Sander	8
Derrick	F. Fraser	12
Floor		
Floor		
Floor	B. Cross	12
Motor	M. Johnson	8
Mechanic		
Extra		

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	Drill Collars No.	O.D.	I.D.	Wgt.	Fuel Gals.	Water Bbls.	Coal Tons
0		0			5	6¼	2⅞	12			

BITS: No. | Size | Type | Size Jets | Serial No. | Weight | R.P.M. | Ft. Drilled | Hrs. | Feet Reamed | Hrs. | CONDITION — (blank)

MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				

Additives: 50# Caustic 12⁰⁰; 35 Sacks Gel. 7⁰⁰

At Surveys Degree: —

MOTOR HOURS: 1, 2, 3, 4, 5 — Next Oil Change: —

PUMPS: No. 1 Pressure / Model S.P.M. / Liner Size; No. 2 Pressure / Model S.P.M. / Liner Size — (blank)

Size | TRIPS | No. Lines | TON MILES | TOTAL MILES | Slip | Feet or Cut | Feet Left on Spool | Next Slip — (blank)

General:

W.L. F.C. pH.

Stands: — Singles: — D. Collars: 171.81 Other Ft.: — C.B. Ft.: — Subs. Ft.: 5.50 Ft. Up On Kelly: — TOTAL: —

Tour — 8 a.m. to 4 p.m.

Specify actual hours worked		Hrs.
Driller	L. Bryeide	8
Derrick	D. Lachance	8
Floor		
Floor		
Floor		
Motor		
Mechanic		
Extra		

Injuries: Nil.

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	Drill Collars No.	O.D.	I.D.	Wgt.	Fuel Gals.	Water Bbls.	Coal Tons
0	200	200	5½	28	6	6¼	2⅞	12			

BITS No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
1A	12¼	CON			10/15	160	200	5½			

MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.
WEIGHT				
VISCOSITY			80	
GEL				
PUMPS No. 1 Pressure			250	
Model S.P.M.			96	
Liner Size				

Additives: 15 Gel; 4 Palsa; 50 Caustic

At Surveys Degree: 71 — ¾; 161 — ½

TRIPS: 1 No. Lines: 8

General: K.B. to G.L. 12.50

W.L. F.C. pH.

Stands: — Singles: — D. Collars: 171.81 Other Ft.: — C.B. Ft.: — Subs. Ft.: 5.50 Ft. Up On Kelly: 13 TOTAL: 200

Tour — 4 p.m. to Midnight

Specify actual hours worked		Hrs.
Driller	A. Bryant	8
Derrick	N. Tompkins	8
Floor	G. Proctor	12
Floor		
Floor		
Motor	L. Tomczak	12
Mechanic		
Extra		

Injuries:

Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	Drill Collars No.	O.D.	I.D.	Wgt.	Fuel Gals.	Water Bbls.	Coal Tons
200	90	290	4¼	22	6	6¼	2⅞	12			

BITS No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
1A	12¼	Con			20	160	205	6½			
2A	7⅞				20	100	80	3¼			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY	95	150	175	160
GEL				
PUMPS No. 1 Pressure	250	✓		
Model S.P.M.	74	✓		
Liner Size	5½ X 14"			

Additives: Caustic 50#

At Surveys Degree: 213 — ⅞; 244 — 1.

General:

W.L. F.C. pH.

Stands: 132.36 Singles: — D. Collars: 171.81 Other Ft.: — C.B. Ft.: — Subs. Ft.: 5.50 Ft. Up On Kelly: 15 TOTAL: 290

Otco Ring on Bit No. ______ D.P. Calipered Date ______ Results ______ From Pipe Rack ______

O. 9. Test-Operated ______ Time ______ Results ______

DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	Start	Stop	Interval
Rig to Spud	12⁰⁰	1⁰⁰	1
Drill Rat Hole - Boulders	1⁰⁰	5⁰⁰	4
Drill Mouse Hole	5⁰⁰	8⁰⁰	3

Company Time Cont'r Time

REMARKS	Start	Stop	Interval
Rig Service	8⁰⁰	8¹⁵	¼
Drill Mouse Hole	8⁰⁰	9⁰⁰	3/4
Rig to Spud	9⁰⁰	9³⁰	½
Drill 12¼ Hole	9³⁰	10⁰⁰	½
Mix Mud	10⁰⁰	10³⁰	½
Drill	10³⁰	11⁰⁰	½
Survey	11⁰⁰	11¹⁵	¼
Drill	11¹⁵	2¹⁵	3
Survey	2¹⁵	2³⁰	¼
Drill	2³⁰	4⁰⁰	1½

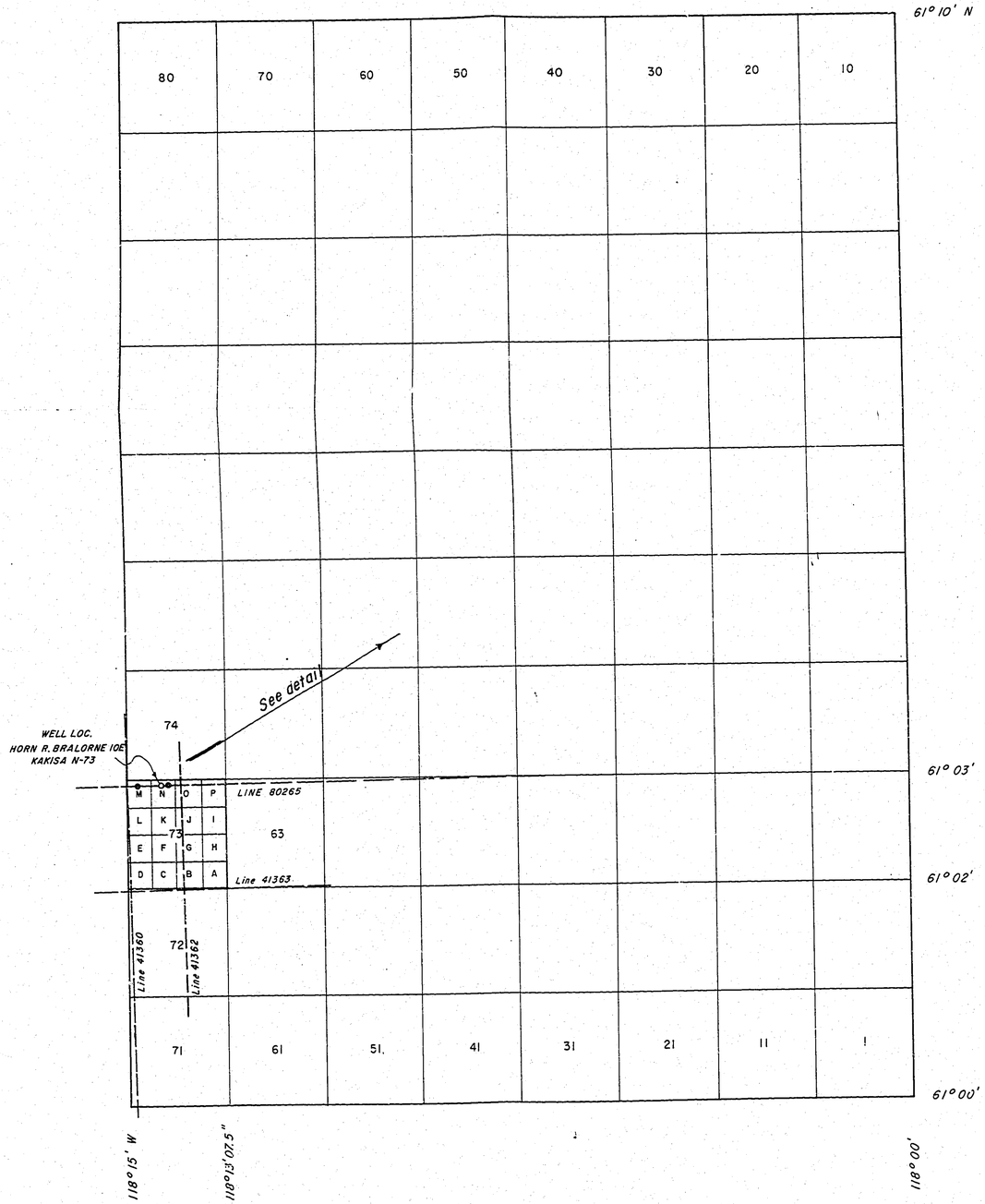
Company Time Cont'r Time

REMARKS	Start	Stop	Interval
Rig Ser + Repair Rotary Chain	4⁰⁰	5⁰⁰	1
Drill Boulders	5⁰⁰	6⁰⁰	1
Hoist + Run 7⅞ Pilot Bit	6⁰⁰	7⁰⁰	1
Drill 7⅞ Pilot Hole	7⁰⁰	8³⁰	1½
Replace Rotary Chain	8³⁰	9³⁰	1
Survey	9³⁰	9⁴⁵	¼
Drill 7⅞ Pilot Hole	9⁴⁵	10¹⁵	½
Clean Gravel Out of Pump	10¹⁵	10⁴⁵	½
Drill 7⅞ Pilot Hole	10⁴⁵	11⁰⁰	¼
Survey	11⁰⁰	11¹⁵	¼
Drill 7⅞ Pilot Hole	11¹⁵	12⁰⁰	¾

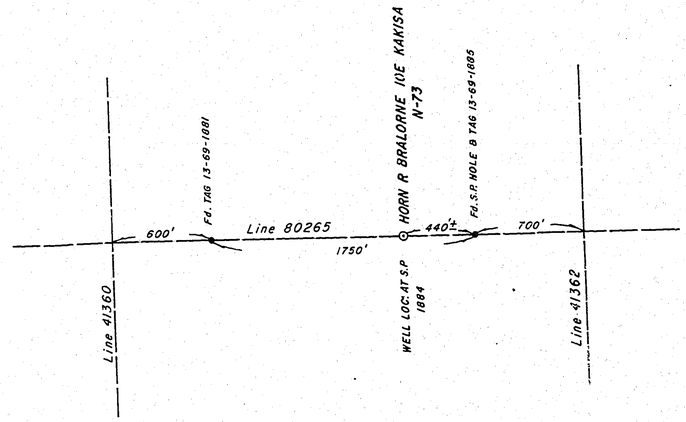
Company Time Boulders + Cont'r Time Gravel

Total Contractor Time ______ Hrs. Toolpusher [signature]

Total Company Time ______ Hrs. Approved by ______



NOTE : Relative to Seismic information supplied by client.



DETAIL

NOT TO SCALE

Note : Well is to be drilled at Shot Point No. 1884, Line 80265.

HORN RIVER RESOURCES LTD.

PLAN

SHOWING SHOT POINT LOCATION OF

HORN R BRALORNE IOE KAKISA N-73

MILLS LAKE AREA

NORTHWEST TERRITORIES

Scale 1" = 1 mile

GRID AREA : 61° 10' N., 118° 00' W.

Certified correct, April 5th, 1971.

A. S. Dozzi
Dominion Land Surveyor

SIGNATURES FOR
HORN RIVER RESOURCES LTD.

CANADIAN ENGINEERING SURVEYS CO. LTD.
EDMONTON ALBERTA

JOB NO. :	C – 6532
DATE :	APR. 5th, 1971
DRWG. NO. :	6532 – M – 1

N.T.S. 85-E