

Drilling Authority No. 512
Date Issued 12 March 1971

WELL NAME Horn R Decalto Tenn et al Hobbsfield 4-22
FIELD
LOCATION: Unit Section 08 Grid 62-42-382-20
Latitude 41-27-32 Longitude 112-30-17
U.W.L.R. 61.62556 --- 112.50172
U.W.I. 3001086110110300

Rig Release Date:
Status:
Information Release Date:

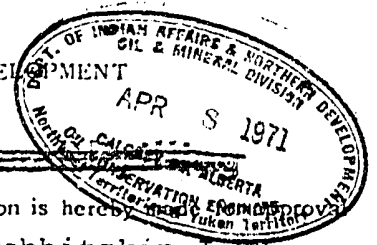
CHANGE OF NAME:

DATE RECEIVED	INDEX
12 March 1971	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
6-51-71	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.....



File No. 519
Drilling Authority No.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION



Application to Abandon a Well

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby
to abandon, to suspend drilling:— Horn R Decalta Tenn et al Rabbitskin 1-08
Name and number of well
Location: Unit 1 Section 08 Grid 61°40'; 119°30'
Latitude 61°37'32" Longitude 119°30'17"
From Established Reference Marker
Universal Well Location Reference Lat. 61.62556° N., Long. 119.50472° W.
Permit No. 4186 Lease No.
Western Decalta Petroleum Limited & Tenneco
Oil and Minerals Ltd. (Licencee, Lessee)
Date of commencement of proposed program Spud: March 23, 1971 10:45 A.M.

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at Nil
Gas at Nil
Water at Nil DST #1 1725 - 1790
Total Depth 2053 K.B. Date of last operations Rig released March 31, 1971
Present condition of well D and A 8:00 A.M.

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 7"	23"		203 K.B.	110 sacks cement + 3% CaCl	2NIL
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
1	2053 to 1500	Precambrian, Chinchaga Slave Point	90 + 4%	Gel
2	253 to Surface		45 + 4%	Gel
Cut casing off 3 feet below ground. Weld on plate and rod with well marker.				

The following logs have been run IES, BHCSG
Other operations proposed Nil

Operations to be carried out by Big Indian Drilling Co. Ltd. Contractor Licence No. 791
Address Ft. Providence, N.W.T. Address
Responsible Agent in field Dennis Comm
Dated at Calgary, this 5 Day of April 1971
Signed by J. H. Galloway Company Horn River Resources Ltd.
Title President 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:

Dated April 8, 1971, Oil Conservation Engineer

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

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

Drilling Authority No. 519

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 hereby made for approval to drill:--

Name and number of well Horn R Decalta Tenn et al Rabbitskin I-08

Location: Unit I Section 08 Grid 61° 40' 119° 30'

Latitude 61° 37' 32" Longitude 119° 30' 17"

Unique Well Identifier 300I086140119300

Universal Well Location Reference Lat. 61.62556° N Long. 119.50472° W.

Elevation: Ground 690 feet above sea level.

Well is expected to produce from Horn Plateau Reef formation at a depth

of about 1450 feet. Expected total final depth 2000

Area assigned to well

(for Oil Conservation Engineer's use only)

Permit No. 4186 Lease No. Acreage 60948

Permittee, licensee, or lessee Western Decalta Petroleum Limited & Tenneco Oil & Minerals Ltd.

Exploratory Licence No. 1696, 1389

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. 7	20	J-55	Used	220	90
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment Middle Devonian Carbonates

2 - B.O.P.'s 8" - 900 Series Ram type B.O.P.

8" - 900 Series Regan Torus bag type B.O.P.

Well will be drilled with Rotary Rig No. 57 by Big Indian Drilling Co. Ltd.

(Drilling Contractor or company)

Responsible agent of applicant:--

Contractor's Business Licence No. 791

At well Al Whitteron

At registered office F. L. Woolley

Address Gen. Del. Ft. Providence N.W.T. 1020 Aquitaine Tower

Address 540 - 5th Avenue S.W. Calgary

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

Dated at Calgary, this 18th day of March 1971

Signed by F. L. Woolley 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 Dohouse 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 19th March 1971 Please see over page

Oil Conservation Engineer

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

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. Do draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
5. Any additional strings of casing are to be approved by the Oil Conservation Engineer prior to running.



B.H.J. Thoms, Oil Conservation Engineer

HORN R DECALTA TENN ET AL RABBITSKIN I-08

61° 37' 35" N, 119° 30' 10" W

GEOLOGICAL PROGNOSIS

Grd. 690'

K.B. 700'

	DEPTH	ELEVATION
Glacial Drift	0	+700
Fort Simpson Sh.	100	+600
Horn River	1175	-475
Horn Plateau Reef	1250	-550
Silt	1765	-1065
Chinchaga	1785	-1085
Red Beds	1965	-1265
Pre Cambrian	1975	-1275

Coring -

Cut core as soon as porosity in Horn Plateau Reef is established.

Testing -

Test upper part of reef as soon as sufficient porosity for satisfactory test has been opened up.

If water recovered, resume drilling. If water free hydrocarbon is recovered core and test until zone fully evaluated.

Samples -

10' samples will be caught from grass roots to T.D. 1 set of bottled samples will be made up at the rig. The remainder of the sample will be forwarded to the Geological Survey of Canada in Calgary.

Logs -

Unless additional logs are requested, Induction Electric and Gamma Sonic Caliper logs will be run on reaching T.D.

PREPARED BY A.M. PATTERSON

Shillockley

Drilling Authority No. 519
Date Issued March 19/71

LAND 13-80 (2) (3-70)

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

WELL COMPLETION DATA

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



Well name and number	Horn R. Decalta Tenn. et al. Rabbitskin I-08
Permit No. 4186	Lease No.
Western Decalta, Tenneco (Permittee, Licensee, Lessee)	Exploratory Licence No. 1696 and 1389
Horn River Resources Ltd.	Exploratory Licence No. 1785

Location: Unit I Section 8 Grid 61°40' N.Lat., 119°30' W.Long.
Latitude 61°37'32" N. Longitude 119°30'17" W.Long.
Unique well identifier 300 I 086140119300
Universal Well Location Reference Lat. 61.62556° N. 119.50472° W.

	DATE	DEPTH	Pool(s).....NA.....
Spudded.....	Mar.23/71		Interval(s) open to production.....NA.....
Suspended.....			
Resumed Operations.....			
Finished Drilling.....	Mar.29/71	2053(Drlr)	
Deepened.....			Elevation: Gr. 690.....K.B. 700.....
Complete (gas/oil).....			Rig No. 57.....
Abandoned.....	Mar.31/71	2054(Log)	Drilling Contractor.....Big Indian Drilling Co.....
Rig released.....	Mar.31/71		Contractor's Business Licence No. 791.....

CASPER RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at -	Sacks of Cement and Additives
1. 7	J-55	20#	193.44	204	110 sx / 3% CaCl ₂
2.					
3.					
4.					
5.					
6.					

[illegible]

CEMENTING RECORD (Plug, Squeeze, etc.)				PERFORATING RECORD (Bullet, Jet)				SERVICING RECORD (Acidizing, Fracing, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
Mar.30/71	2053	1500	90 sx / 4% Gel				Nil				Nil
31/71	255	Surface	40 sx / 4% Gel								
			Welded on steel plate and well marker								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	L.S.L Mins.	F.S.L Mins.	L.S.L.B.H.P.	F.S.L.B.H.P.	L.F.B.H.P.	F.F.B.H.P.	L.H.P.	F.H.P.	REMARKS
1	Mar.30/71	Chinchaga	1725	1795	60	60	60	783	717	40	40	831	823	Weak blow - recovered 55 ft. drilling mud.

ANALYSIS						PRESENT STATUS OF WELL				
Lab. No.	Sample	From	To	Source	Remarks	Oil		(Interval.)	Company	
933-1565	drilling mud	1725	1795	Chinchaga	9,267 mg/liter				Signed by	<i>Chas. Welley</i>
Core Lab.						Gas		(Interval.)	Title	President
						Dry	X		Date	June 23, 1971
						Susp.				

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

OPERATION REEF
NORTHWEST TERRITORIES
CANADA

Geological and Engineering
REPORT

HORN R DECALTA TENN et al RABBITSKIN I-08

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 Decalta Tenn et al Rabbitskin 1-08

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 Big Indian Drilling Co. Ltd. and geological data supplied by Western Decalta Petroleums Ltd.

JAMES A. LEWIS ENGINEERING CO. LTD.



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Section 1

GENERAL

SUMMARY OF WELL DATA

WELL: Horn R Decalta Tenn et al Rabbitskin I-08

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

LEGAL DESCRIPTION: Unit I, Section 08, Grid 61° 40' N Lat. 119° 30' W. Long.

LOCATION: LATITUDE: 61° 37' 32" LONGITUDE: 119° 30' 17"

UNIVERSAL WELL LOCATION REFERENCE: Lat. 61. 62556° N., Long 119. 50472° W

UNIQUE WELL IDENTIFIER: 3001086140119300

CO-ORDINATES: None

PERMIT OR LEASE: Permit No. 4186

PERMITTEE, LICENCEE, LESSEE: Western Decalta Petroleum Limited and Tenneco Oil & Minerals Ltd.

DRILLING AUTHORITY: No. 519 DATE: March 19, 1971

CLASSIFICATION: New Field Wildcat

ELEVATION: GROUND: 690' K.B. 700'

DRILLING CONTRACTOR: Big Indian Drilling Co. Ltd. Rig No. 57 Rotary

WELLSITE GEOLOGIST: W. B. Gallup, Western Decalta Petroleum Ltd.

SURFACE CASING: 7" - 20 lb. - J-55 New. Landed at 204', 110 sax + 3% CaCl₂

HOLE SIZE: Surface Hole 9-7/8", 0' - 204' Main Hole 6-1/4" - 204' - 2,053'

MUD SYSTEM: Gel Chemical

CORES: No. 1: 1,360' - 1,410' Horn Plateau

FORMATION TESTS: DST No. 1: 1,725' - 1,795' Horn Plateau Chinchaga

ABANDONMENT PLUGS: Plug No. 1: 2,053' - 1,500', 90 sax + 4% Gel
Plug No. 2: 255' - surface, 45 sax + 4% Gel

LOST CIRCULATION: None

LOGS: IES 2,053' - 204'
BHCSGRC 2,053' - 204'

WELL SPUDDED: 10:45 a.m. March 23, 1971

FINISHED DRILLING: 6:45 p.m. March 29, 1971

RIG RELEASED: 8:00 a.m. March 31, 1971

TOTAL DEPTH: 2,053

STATUS: Drilled and Abandoned

Section 2
GEOLOGICAL

FORMATION TOPS

<u>Formation</u>	<u>Sample</u>	<u>E. Log</u>
Glacial Drift	0-50'	above casing shoe
Ft. Simpson	50'	above casing shoe
Horn River	1165?	1080'
Horn Plateau?	1280?	1260'
Chinchaga	1765	1770'
Granite Wash	2040	2030'
Precambrian	2046	No log

T.D. Driller 2053'

Schlumberger 2054'

SAMPLE DESCRIPTION

Horn R Decalta Tenn et al Rabbitskin I-08

0 - 50'	Glacial drift - till
	FORT SIMPSON FORMATION
50 - 1165'	Shale, dark grey to black, soft, somewhat platy and fissile.
	HORN RIVER FORMATION
1165 - 1280'	Shale, dark grey, micaceous, slightly calcareous at top becoming more so and more indurated downward.
	HORN PLATEAU FORMATION?
1280 - 1340'	Limestone, dark grey, finely crystalline, in part dolomitic, traces of pyrite.
1340 - 1360'	Limestone, grey and grey buff, crystalline. Traces of porosity? at 1355' - drilling break. Samples badly contaminated. Traces of pyrite and galena - cavings?
1360 - 1410'	Core Number 1.
1410 - 1540'	Shale, black, non calcareous, traces of pyrite. Drills very rapidly (2 - 3 minutes per foot) due to brittle nature.
1540 - 1573'	Shale, dark grey, slightly calcareous, pyritic.
1573 - 1580'	Limestone, grey, finely crystalline with profuse pyrite.
1580 - 1620'	Limestone, grey to dark grey, finely crystalline.
1620 - 1740'	Limestone, grey-buff, crystalline with some dense buff limestone. Fairly profuse clear calcite crystals. Traces of dolomite.
1740 - 1765'	Limestone, buff, crystalline, pyrobituminous with profuse white calcite crystals at 1750' - 1760' - apparently a fracture zone.

SAMPLE DESCRIPTION (Continued)

Horn R Decalta Tenn et al Rabbitskin I-08

CHINCHAGA FORMATION

1765 - 1770'	Shale, green, slightly silty, soft, fissile.
1770 - 1790'	Dolomite, grey-brown, granular or cryptocrystalline, anhydritic.
1790 - 1820'	Dolomite, grey brown, cryptocrystalline and anhydritic with interbeds of white anhydrite and dense buff dolomite.
1820 - 1880'	Dolomite, dense, buff, with interbedded white anhydrite.
1880 - 1920'	Anhydrite, white, with little or no carbonate.
1920 - 2040'	Dolomite, buff to reddish buff, dense with minor amounts of included anhydrite; "Red Beds".
2040 - 2046'	Granite Wash

PRECAMBRIAN

2046 - 2053'	Basement - white feldspar granite.
--------------	------------------------------------

TOTAL DEPTH 2053'

CORE DESCRIPTION

Horn R Decalta Tenn et al Rabbitskin I-08

CORE NO. 1

1360 - 1410'	Recovered.
1360 - 1370'	Limestone somewhat dolomitic, dark grey, dense, indurated, aphanitic, with thin interbeds of dark grey, buff, finely crystalline limestone.
1370 - 1410'	Shale, black, indurated, non calcareous, displays pronounced vertical fracture. Well bedded. Traces of disseminated pyrite.

GEOLOGY

The Horn Resources Tenn. et al Rabbitskin I-08 well was drilled to test what was thought to be a development of the Horn Plateau Reef. Only a very poor development was present.

The glacial drift which here overlies the Ft. Simpson shale was relatively thin (50') is a till. It presented no drilling problem and should not be any problem in seismic investigations.

The Horn Plateau Formation is stated by Norris¹, that the Horn Plateau formation lies on the Horn River formation. It might be more correct to state that the reef is encased by and is a facies of the Horn River formation.

In the bore hole a dark grey calcareous shale occurring at 1165' was identified as the Horn River formation and a limestone at 1280' - 1370' was tentatively termed Horn Plateau. It may be more correct to use the term "Horn Plateau" only with respect to biohermal or bioclastic carbonates within the Horn River and to regard any other carbonates simply as equivalent to the limestone ledges along Horn River in the type locality of the formation of that name.

¹ A. W. Norris - "Stratigraphy of Middle Devonian and Older Paleozoic Rocks of the Great Slave Lake Region, Northwest Territories", G.S.C. Memoir 322.

Elevations of outcrops indicate that the Horn River formation underlies the Horn Plateau. However, in subsurface, a dark brownish shale about 100' thick identified as "Horn River" overlies the reef. At the Decalta et al Trout River hole, 20 miles west of this location, it was found to be bituminous.

Because of the interfingering of Middle Devonian facies towards Great Slave Lake, identification of formations is difficult, but this situation applies more to sediments older than the Horn River - Horn Plateau facies.

Respectfully submitted,

W. B. Gallup

W. B. Gallup

Section 3

DRILLING AND ENGINEERING

SUMMARY OF DAILY DRILLING OPERATIONS

Horn R Decalta Tenn et al Rabbitskin I-08

Date	Depth	Operation
3-22-71	0'	Moving on and rigging up.
3-23-71	0'	Rigging up to spud in.
3-24-71	204'	Heading up surface casing. Spuded in 10:45 a.m., March 23, 1971. Drilled 9-7/8" surface hole to 204'. Ran 5 joints 7" - 20 lb. - J-55 (used) casing plus Guide Shoe and Collar. Landed at 204'. Cemented with 110 sacks of neat portland cement plus 3% CaCl ₂ . Good cement returns. Plug down 12:30 a.m., March 24, 1971.
3-25-71	1337'	Drilling 6-1/4" hole. Mud wt. 8.8 lb./gal. Vis. 40 Headed up tested Blind Rams, Pipe Rams, Regan B.O.P. and Manifold, each unit tested to 800 psi for 15 minutes.
3-26-71	1360'	Waiting on repairs. Drilled to 1360' tripped in hole with core barrel.
3-27-71	1410'	Circulating to drill after coring. Cut Core No. 1: 1360' to 1410'. Recovered 50'. Mud wt. 9.2 Vis. 45
3-28-71	1705'	Drilling 6-1/4" hole. Mud wt. 8.7 lb./gal. Vis. 37.
3-29-71	1945'	Drilling 6-1/4" hole. Mud wt. 8.9 lb./gal. Vis. 37.
3-30-71	2053'	Waiting on orders. Drilled 6-1/4" hole to 2053'. Logged, Induction Electric 2053' - 204' BHCSGRC 2053' - 204'
3-31-71	2053'	Abandoned. Ran DST No. 1: 1725' - 1795'. Dual straddle. Times: 5 minutes, 60 minutes, 60 minutes, 60 minutes. Pressure: I.H.S. 824 psi In. Flow 23 psi I.S.I. 783 psi Flow 48 psi Final Flow 48 psi Final S.I. 718 psi Final H.S. 820 psi

Recovered 55 feet of drilling mud.

SUMMARY OF DAILY DRILLING OPERATIONS (Continued)

Horn R Decalta Tenn et al Rabbitskin I-08

Date	Depth	Operation
3-31-71	2053'	Ran Plug No. 1: 2053' to 1500', 90 sacks plus 4% Gei. Plug down 2:00 a.m. Plug No. 2: 255' to surface, 40 sacks plus 4% Gel. Cut off casing 3' below ground. Welded on plate and markers. Rig Released March 31, 1971.

SUMMARY OF MUD ADDITIVES

Horn R Decalta Tenn et al Rabbitskin I-08

Hydra-gel	196 sacks
Caustic	4 sacks
Rapidril	1 sack
DV-68	19 gal.

SURVEY RECORD

Horn R Decalta Tenn et al Rabbitskin I-08

Depth, Feet	Deviation, Degrees
Surface Hole	
92	$\frac{1}{4}$
207	$\frac{3}{4}$
Main Hole	
970	$1\frac{1}{2}$
1360	$\frac{1}{2}$
1705	$1\frac{1}{4}$
2053	$1\frac{1}{2}$

BIT RECORD

WELL: Horn R Decalta Tenn et al Rabbitskin I-08

BIT NO.	SIZE & SER. NO.	DEPTH OUT, Feet	FOOTAGE, Feet	HOURS	WEIGHT, M Pounds	R.P.M.	PUMP PRESSURE, Psi
<u>SURFACE HOLE</u>							
<u>1A</u>	<u>9-7/8</u>	<u>42</u>	<u>42</u>	<u>4 1/4</u>	<u>Total</u>	<u>180</u>	<u>100</u>
<u>2A</u>	<u>9-7/8</u>	<u>203</u>	<u>203</u>	<u>4 1/4</u>	<u>Total</u>	<u>180</u>	<u>100</u>
<u>MAIN HOLE</u>							
<u>1</u>	<u>6-1/4-D5578</u>	<u>1360</u>	<u>1156</u>	<u>16</u>	<u>20</u>	<u>100</u>	<u>300</u>
<u>Core</u>	<u>6-3/16-EC9916</u>	<u>1410</u>	<u>50</u>	<u>7 1/4</u>	<u>12</u>	<u>85</u>	
<u>2</u>	<u>6-1/4-GE343</u>	<u>1705</u>	<u>345</u>	<u>15 1/2</u>	<u>20</u>	<u>100</u>	<u>350</u>
<u>3</u>	<u>6-1/4-DV782</u>	<u>1882</u>	<u>122</u>	<u>13 1/4</u>	<u>20</u>	<u>100</u>	<u>150</u>
<u>4</u>	<u>6-1/4-17448</u>	<u>1952</u>	<u>125</u>	<u>13</u>	<u>20</u>	<u>75</u>	<u>350</u>
<u>5</u>	<u>6-1/4-17904</u>	<u>2053</u>	<u>101</u>	<u>6 3/4</u>	<u>20</u>	<u>75</u>	<u>350</u>
<u>TALLY CORRECTION</u>			<u>91</u>				

SUMMARY

Surface Hole 203 of 9-7/8 " 9 hours on bottom.
 Main Hole 1849 of 6-1/4 " 64-1/2 hours on bottom.
 Core Hole 50 of 6-3/16 " 7-3/4 hours on bottom.

DRILL STEM TEST REPORT

WELL: Horn R Decalta Tenn et al Rabbitskin I-08

DATE: March 30, 1971 TEST NO. 1
 INTERVAL TESTED: 1725' - 1795' FORMATION: Chinchaga
 TOTAL DEPTH DRILLER: 2053' LOGS: Induction and BHCSGRC
 HOLE SIZE: 6-1/4 RAT HOLE SIZE: -
 TESTING COMPANY: Lynes United OPERATOR: Lewchuk

<u>MUD</u>	<u>DRILL PIPE</u>	<u>TEST TOOL</u>
Type <u>Gel Chemical</u>	Type <u>IF</u>	Size Rubber <u>5-1/2"</u>
Wt. <u>8.9</u>	Size <u>3-1/2"</u>	Type <u>-</u>
Visc. <u>35</u>	Size T.J. <u>4-3/16"</u>	Tool Type <u>-</u>
W.L. <u>30</u>	Collars <u>3-1/2 I.F.</u>	Size Choke <u>3/4"</u>
pH <u>-</u>	Jars <u>-</u>	Wt. to Set <u>-</u>
F.C. <u>2/32</u>	Safety Joint <u>-</u>	Pull Loose <u>-</u>
Conditions <u>Fair</u>	Pumpout Sub. <u>-</u>	Fluid Cushion <u>-</u>

Bit off Bottom <u>7:30 p.m. 3/29/71</u>	Preflow <u>5</u> min.	B.H. Temp. <u>-</u> °F.
Start Tester in <u>1:00 p.m. 3/30/71</u>	I.S.I. <u>60</u> min.	Gauge Depths <u>1745</u> K.B.
Tester on Bottom <u>2:45 p.m.</u>	Tool Open <u>60</u> min.	<u>1750</u> K.B.
Tool Open <u>3:00 p.m.</u>	F.S.I. <u>60</u> min.	<u>1900</u>
Tool Closed <u>3:05 p.m.</u>	<u>Upper Gauge</u>	<u>Lower Gauge</u>
Tool Open <u>4:05 p.m.</u>	I.H.S. <u>824</u> psig	I.H.S. <u>831</u> psig
Tool Closed <u>5:05 p.m.</u>	Preflow <u>23</u> psig	Preflow <u>25</u> psig
Tool Loose <u>6:15 p.m.</u>	I.S.I. <u>783</u> psig	I.S.I. <u>783</u> psig
Tool Out <u>7:30 p.m.</u>	Initial Flow <u>48</u> psig	Initial Flow <u>40</u> psig
Rubber Condition <u>Good</u>	Final Flow <u>48</u> psig	Final Flow <u>40</u> psig
Test O.K. <u>Yes</u>	Final S.I. <u>718</u> psig	Final S.I. <u>717</u> psig
	F.H.S. <u>820</u> psig	F.H.S. <u>823</u> psig

BLOW: Weak

RECOVERY: 55 drilling mud.

SURFACE CASING REPORT

Horn R Decalta Tenn et al Rabbitskin I-08

Date: March 24, 1971

Ran 5 joints of 7", Used, J-55, 20 lb./ft., Range 3, 8RD thread casing.

Total Length:	193.44'
Davis Guide Shoe:	1.00'
Landed at:	204.00' K.B.

Cemented to surface with 110 sacks of construction cement with 3% calcium chloride. Slurry weight was 15.8 lb./gal.

ABANDONMENT REPORT

Plug No. 1: Total Depth to 1500' with 90 sacks of construction cement and 4% Gel. Slurry weight was 15.4 lb./ft.

Plug No. 2: 255' to Surface with 40 sacks of construction cement and 4% Gel. Slurry weight was 15.4 lb./gal.

Cut off surface casing, welded on cap and well marker.

Section 4

WELL LOG DATA

Horn R Decalta Tenn et al Rabbitskin 1-08

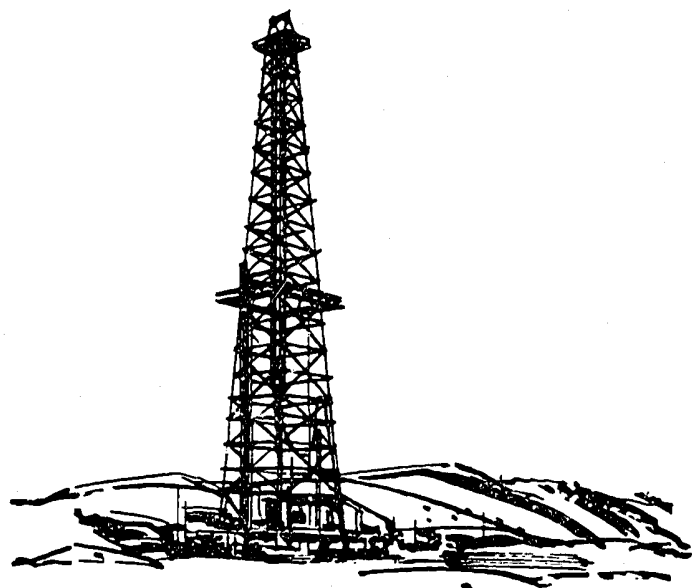
Log	Scale	Interval
Induction Electric	2" & 5"/100'	2053' to 204'
Borehole Compensated Sonic Gamma-Ray Caliper	2" & 5"/100'	2053' to 204'

Section 5

LYNES

BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools



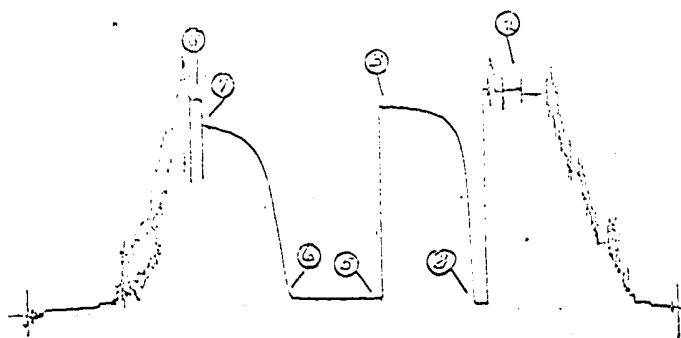
DRILL STEAM TEST

TECHNICAL SERVICE REPORT

HORN RIVER DELTA TENN C&G RABBIT SKIN

I-08 61° 31' 32.00 119° 30' 17.00

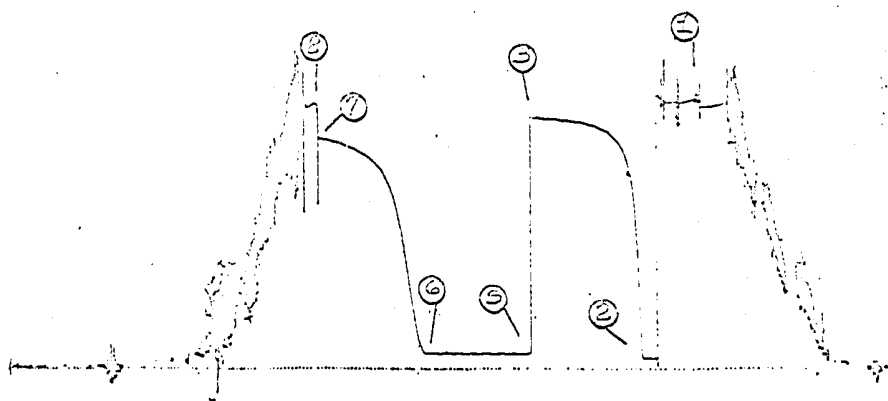
901-1



HORN RIVER DELTA TENN C&G RABBIT SKIN

I-08 61° 31' 32.00 119° 30' 17.00

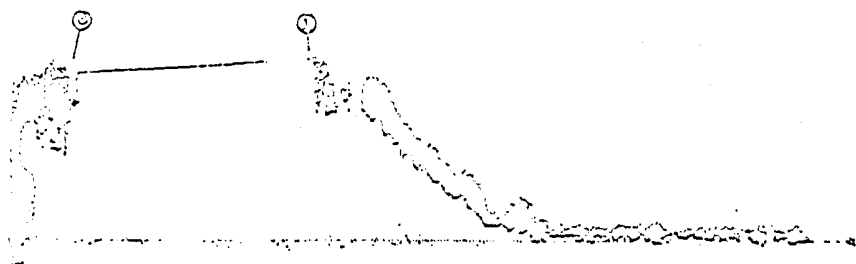
902-1



HORN RIVER DELTA TENN C&G RABBIT SKIN

I-08 61° 31' 32.00 119° 30' 17.00

1135-1 Below Serradella

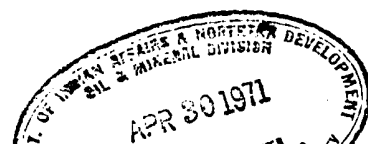


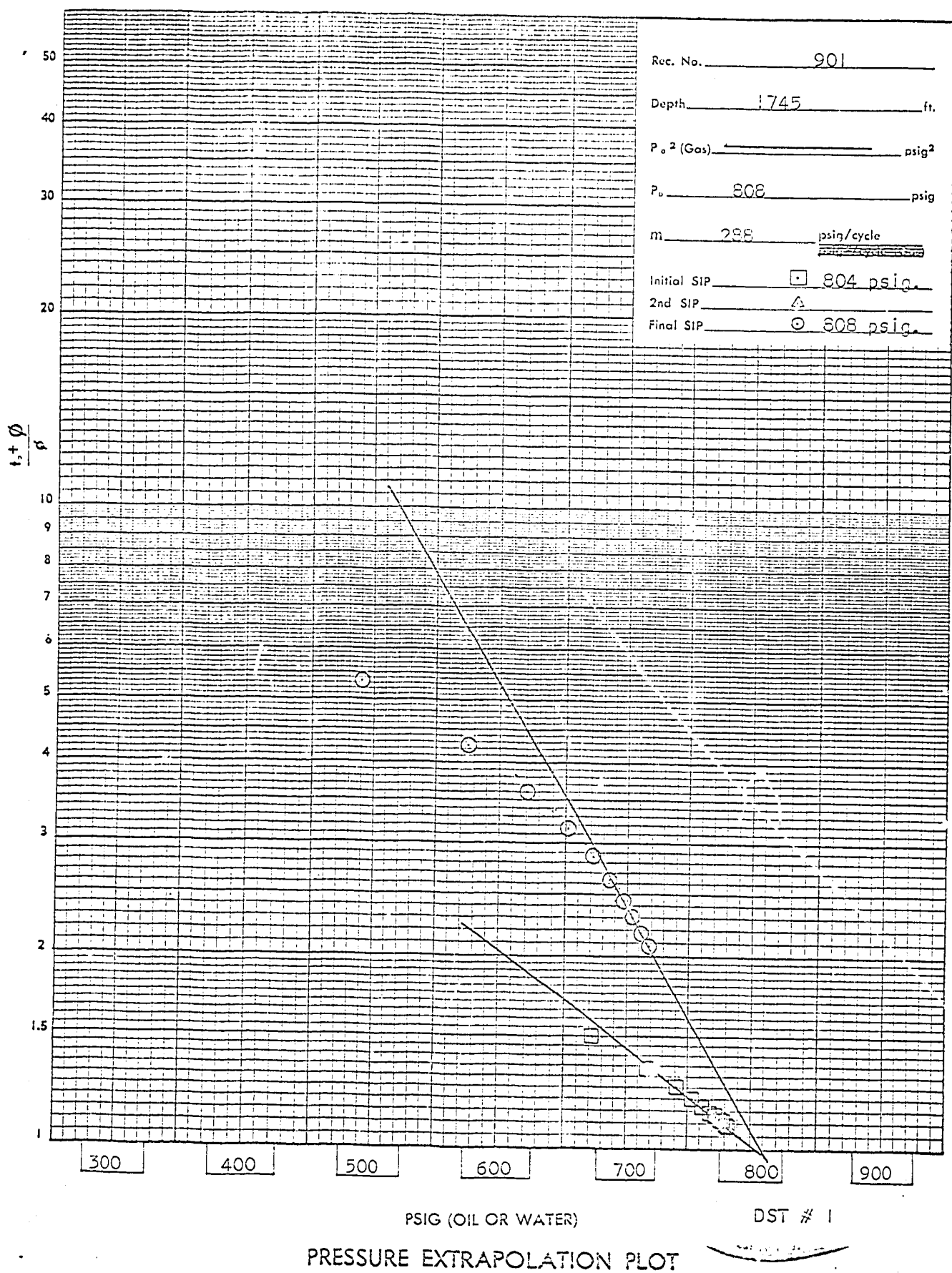
Kenting Oilwell Drilling
Horn River Decalta Tenn et al Rabbitskin 1-08
61° 37' 32.00 119° 30' 17.00 DST # 1
NOMENCLATURE (Definition of Symbols)

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 (psig ² /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
$\bar{z}$	= 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





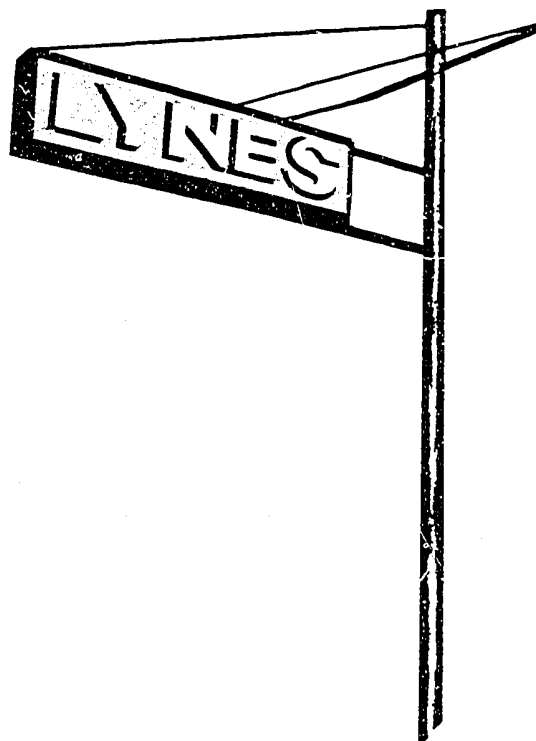
LYNES UNITED SERVICES LTD.

TEST DATA				GENERAL INFORMATION			
Formation	Chinchanga		T.D.	2053		Company	Kenting Oilwell Drilling
Interval Tested	1725	Ft. to	1795	Ft.	Address		
Feet of Net Pay Tested	70		Ft.				
Type of Test	Dual Straddle Conv.						
Cushion	nil	Amount	Ft.		Well Name	Horn River Decalta Tenn et al	
Started in Hole at	1:00	Hrs.	Tool Open at	3:00	Hrs.	Well Number	Rabbitsskin 1-08 610 37' 32.00
Pre-Flow	5	Mins.	Initial Shut-in	60	Mins.	K.B. Elevation	1190 30' 17.00
2nd Flow		Mins.	Second Shut-in		Mins.	Area	Rabbitsskin Lake Province N.W.T.
Final Flow	60	Mins.	Final Shut-in	60	Mins.	Company Rep.	D. Comm
Remarks:	Tester G. Lewchuk Contractor Big Indian Ticket No. 3027 Date March 30/71 Service Reports To: 5 - above address						
Blow: Open with very weak air blow. Dead in 5 minutes.							
GAS BLOW MEASUREMENTS				MUD AND HOLE DATA			
Measured with				Mud Type Gel Chem			
				Weight 9.2 Viscosity 56 Water Loss			
				Filter Cake 2/32" Bottom Hole Temperature			
Time	Surface Choke	Reading Inches	Cubic Feet/Day	Drill Pipe Size 3 1/2" Weight 13.30			
				Drill Collars 3 1/2" IF I.D. 2" Feet Run 440			
				Main Hole or Casing Size 6 1/4"			
				Rathole or Liner Size No. of Feet			
				Bottom Hole Choke Size 3/4"			
				Surface Choke Size 1"			
				Packer Rubber Size 5 1/2"			
				REMARKS Shut-in pressures suggest relatively low permeability within the interval tested.			
RECOVERY							
TOTAL FLUID RECOVERED 55 Ft. Consisting of:							
55 Ft. of drilling mud							
Ft. of							
Ft. of							
Ft. of							
Test was/was not Reverse Circulated							
Oil Recovery A.P.I. Water Specific Gravity							
Salinity							
PRESSURE READINGS							
Inside _____ Outside <u>X</u>		Inside _____ Outside <u>X</u>		Inside _____ Outside <u>X</u>		Inside _____ Outside _____	
Recorder No. 901		Recorder No. 902		Recorder No. 1135		Recorder No. _____	
Capacity 3400		Capacity 3300		Capacity 4500		Capacity _____	
Depth 1745		Depth 1750		Depth 1900		Depth _____	
NUMBER KEY:							
1 - INITIAL HYDROSTATIC		824		831		1107	
2 - PRE-FLOW		23		25			
3 - INITIAL SHUT-IN		783		783			
4a - 2nd INITIAL FLOW							
4b - 2nd FINAL FLOW							
4c - 2nd SHUT-IN							
5 - 3rd INITIAL FLOW		48		40			
6 - FINAL FLOW		48		40			
7 - FINAL SHUT-IN		718		717		1014	
8 - FINAL HYDROSTATIC		820		823		1029	

Kenting Oilwell Drilling Company

Horn River Decalta Tenn et al Rabbitsskin 1-08 #1

March 30/71 Date of Test



LYNES UNITED SERVICES LTD. 262-4501 CALGARY, ALBERTA

MID

TOUR 1	MIDN.	T.O.	8 A.M.	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
				AF:	AT:												
				% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	FEAMED	HRS.	FORM	% LEFT	COND.
BIT RECORD																	
MUD				12 M.N.	2 A.M.	4 A.M.	6 A.M.	PUMP		PUMP		SURVEY					
WT.				GEL		VISC.		PRESS		RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH
W.L.				F.C.		P.H.		DRILL		MOTOR HOURS		FUEL GALS.		NEXT OIL CHANGE AT		WEATHER	
ADDITIVES: WATER				GALS.		W. TRUCK		MOB. PUMP		GENERAL		TEMPERATURE:		WIND VELOCITY:		RAIN, SNOW, FOG, ETC.	
CREW TIME SUMMARY				DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS			
DRILLER				HELPER		HELPER		TOTAL									
INJURIES AND REMARKS:																	
TOUR 2	8 A.M.	T.O.	4 P.M.	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
				AF:	AT:												
				% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	FEAMED	HRS.	FORM	% LEFT	COND.
BIT RECORD																	
MUD				8 A.M.	10 A.M.	12 N.H.	2 P.M.	PUMP		PUMP		SURVEY					
WT.				GEL		VISC.		PRESS		RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH
W.L.				F.C.		P.H.		DRILL		MOTOR HOURS		FUEL GALS.		NEXT OIL CHANGE AT		WEATHER	
ADDITIVES: WATER				GALS.		W. TRUCK		MOB. PUMP		GENERAL		TEMPERATURE:		WIND VELOCITY:		RAIN, SNOW, FOG, ETC.	
CREW TIME SUMMARY				DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS			
DRILLER				HELPER		HELPER		TOTAL									
INJURIES AND REMARKS:																	
TOUR 3	4 P.M.	T.O.	MIDN.	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
				AF:	AT:												
				% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	FEAMED	HRS.	FORM	% LEFT	COND.
BIT RECORD																	
MUD				4 P.M.	6 P.M.	8 P.M.	10 P.M.	PUMP		PUMP		SURVEY					
WT.				GEL		VISC.		PRESS		RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH
W.L.				F.C.		P.H.		DRILL		MOTOR HOURS		FUEL GALS.		NEXT OIL CHANGE AT		WEATHER	
ADDITIVES: WATER				GALS.		W. TRUCK		MOB. PUMP		GENERAL		TEMPERATURE:		WIND VELOCITY:		RAIN, SNOW, FOG, ETC.	
CREW TIME SUMMARY				DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS			
DRILLER				HELPER		HELPER		TOTAL									
INJURIES AND REMARKS:																	

TOUR 1	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG	PUMP TEST	CLASS	REMARKS	TIME				
	AF:	AT:		1700	1705								FROM	TO	RAIF IN 16PM	DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL	
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.							
			2	6 1/4	DAT	CE315	20	100	345		15					Water Cut			12	12:30	30
			3	6 1/4	V2	D0782	20	100	55		43					75.00			12:30	1:30	1
	MUD	12 M.N.	2A.M.	4 A.M.	6 A.M.	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP
	WT.	8.7	8.7	8.7	8.7	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH							
	VISC.	37	37	37	37	150	50	1730													
	GEL.																				
	W.L.	F.C.	P.H.																		
TOUR 2	ADDITIVES: WATER																				
	1. Gel	6.5																			
	2. DUB	1.0																			
	3.																				
	CREW TIME SUMMARY																				
	DRILLER	AL WHEELDON																			
	HELPER	BY HIGGINS																			
	HELPER	V HIGGINS																			
	HELPER	H TURNER																			
	TOTAL																				
TOUR 3	INJURIES AND REMARKS:	Shut Cut 40' Hoist Line																			
	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG	PUMP TEST	CLASS	REMARKS	TIME				
	AF:	AT:		1760	1822								FROM	TO	RAIF IN 16PM	DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL	
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.							
			3	6 1/4	V2	D0782	20	100	62		12 1/2										
	MUD	8 A.M.	10 A.M.	12 N.M.	2 P.M.	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP
	WT.	8.7	8.7	8.6	8.6	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH							
	VISC.	37	33	35	38	180	50	1890													
	GEL.																				
	W.L.	F.C.	P.H.																		
TOUR 4	ADDITIVES: WATER																				
	1. 25000 gal																				
	2. 3 gal	0068																			
	3.																				
	CREW TIME SUMMARY																				
	DRILLER	G. Jacobson																			
	HELPER	L. Barossa																			
	HELPER	F. McLeod																			
	TOTAL																				
	INJURIES AND REMARKS:																				
TOUR 5	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG	PUMP TEST	CLASS	REMARKS	TIME				
	AF:	AT:		1822	1870								FROM	TO	RAIF IN 16PM	DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL	
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.							
			3	6 1/4	V2	D0782	20	100	95		122										
			4	6 1/4	OWU	17449	20	100	43		4 1/2										
	MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP
	WT.	8.8	8.8	8.8	8.8	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH							
	VISC.	35	35	38	40																
	GEL.																				
	W.L.	F.C.	P.H.																		
TOUR 6	ADDITIVES: WATER																				
	1. Bag Cement																				
	2. 1. Gotten D.V. 68																				
	3. 10 Sacs Gel																				
	CREW TIME SUMMARY																				
	DRILLER	Chuck Hutchison																			
	HELPER	Jim Ottenbreit																			
	HELPER	Sam Smith																			
	HELPER	Frank Turner																			
	TOTAL																				
INJURIES AND REMARKS:																					
TOUR 7	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG	PUMP TEST	CLASS	REMARKS	TIME				
	AF:	AT:											FROM	TO	RAIF IN 16PM	DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL	
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.							
	MUD																				
	WT.																				
	VISC.																				
	GEL.																				
	W.L.	F.C.	P.H.																		
	ADDITIVES: WATER																				
1. Bag Cement																					
2. 1. Gotten D.V. 68																					
3. 10 Sacs Gel																					
CREW TIME SUMMARY																					
DRILLER	Chuck Hutchison																				
HELPER	Jim Ottenbreit																				
HELPER	Sam Smith																				
HELPER	Frank Turner																				
TOTAL																					
INJURIES AND REMARKS:																					
TOUR 8	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG	PUMP TEST	CLASS	REMARKS	TIME				
	AF:	AT:											FROM	TO	RAIF IN 16PM	DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL	
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.							
	MUD																				
	WT.																				
	VISC.																				
	GEL.																				
	W.L.	F.C.	P.H.																		
	ADDITIVES: WATER																				
1. Bag Cement																					
2. 1. Gotten D.V. 68																					
3. 10 Sacs Gel																					
CREW TIME SUMMARY																					
DRILLER	Chuck Hutchison																				
HELPER	Jim Ottenbreit																				
HELPER	Sam Smith																				
HELPER	Frank Turner																				
TOTAL																					
INJURIES AND REMARKS:																					
TOUR 9	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG	PUMP TEST	CLASS	REMARKS	TIME				
	AF:	AT:											FROM	TO	RAIF IN 16PM	DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL	
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.							
	MUD																				
	WT.																				
	VISC.																				
	GEL.																				
	W.L.	F.C.	P.H.																		
	ADDITIVES: WATER																				
1. Bag Cement																					
2. 1. Gotten D.V. 68																					
3. 10 Sacs Gel																					
CREW TIME SUMMARY																					
DRILLER	Chuck Hutchison																				
HELPER	Jim Ottenbreit																				
HELPER	Sam Smith																				
HELPER	Frank Turner																				
TOTAL																					
INJURIES AND REMARKS:																					
TOUR 10	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG	PUMP TEST	CLASS	REMARKS	TIME				
	AF:	AT:											FROM	TO	RAIF IN 16PM	DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL	
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.							

INJURIES AND REMARKS:						COMPANY TIME		CONT'N TIME							
						TOTAL CONTRACT TIME _____ HRS.		TOOL/PUSHER OR DRILLER i/c _____							

TOUR 1	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			
	AF:	AT:													
	% LEFT	COND.	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.	
	BIT RECORD														
	MUD	12MN.	2A.M.	4A.M.	6A.M.	PUMP	PUMP	SURVEY							
	WT.					PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH	
	VISC.														
	GEL.														
	W.L.	F.C.	P.H.			DRILL	130			50	TEMPERATURE:				
	ADDITIVES: WATER					W. TRUCK	44				WEATHER	MIDN.	4A.M.		
TOUR 2	1.					MOB. PUMP	164				RAIN, SNOW, FOG, ETC.				
	2.					GENERAL	238								
	3.														
	CREW TIME SUMMARY					DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS				
	DRILLER	Chuck Hutchinson									5 1/2				
	HELPER	Jim Ottenbreit									5				
	HELPER														
	TOTAL														
	INJURIES AND REMARKS:														
	TOUR 3	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
AF:		AT:													
% LEFT		COND.	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.	
BIT RECORD															
MUD		8A.M.	10A.M.	12N.H.	2P.M.	PUMP	PUMP	SURVEY							
WT.						PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH	
VISC.															
GEL.															
W.L.		F.C.	P.H.			DRILL	134			250	TEMPERATURE:	8A.M.	NOON		
ADDITIVES: WATER						W. TRUCK	52				WEATHER	8A.M.	NOON		
TOUR 4	1.					MOB. PUMP	172				RAIN, SNOW, FOG, ETC.				
	2.					GENERAL	246								
	3.														
	CREW TIME SUMMARY					DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS				
	DRILLER	HL WHEELDON									8 1/2				
	HELPER	HY HIGGINS									8				
	HELPER	HY HIGGINS									8				
	HELPER	H TURNER									8				
	TOTAL														
	INJURIES AND REMARKS:														
TOUR 5	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			
	AF:	AT:													
	% LEFT	COND.	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.	
	BIT RECORD														
	MUD	4P.M.	6P.M.	8P.M.	10P.M.	PUMP	PUMP	SURVEY							
	WT.					PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH	
	VISC.														
	GEL.														
	W.L.	F.C.	P.H.			DRILL	142			250	TEMPERATURE:	4P.M.	8A.M.		
	ADDITIVES: WATER					W. TRUCK	60				WEATHER	4P.M.	8A.M.		
TOUR 6	1.					MOB. PUMP	180				RAIN, SNOW, FOG, ETC.				
	2.					GENERAL	254								
	3.														
	CREW TIME SUMMARY					DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTEN							

TOUR 1	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
	AF:	AT:		874	1337									
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
	BIT RECORD													
MIDN.	MUD	12MN.	2A.M.	4A.M.	6A.M.									
	WT.	8.6	8.6	8.7	8.8									
	VISC.	29	34	33	44									
	GEL.													
TOUR 2	W.L.	F.C.	P.H.											
	ADDITIVES: WATER	Water												
	1.	2.9 Sags Gel												
	2.	1 Bag Rapidril												
TOUR 3	3.	2.5 Gals DV 68												
	CREW TIME SUMMARY													
	DRILLER	Chuck Hutchinson												
	HELPER	Jim Otterbeil												
TOUR 4	HELPER	Sam Smith												
	HELPER	Frank Turner												
	TOTAL													
	INJURIES AND REMARKS:													
TOUR 5	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
	AF:	AT:		1337	1360									
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
	BIT RECORD													
TOUR 6	MUD	8 A.M.	10A.M.	12 N.H.	2 P.M.									
	WT.	8.9			9.0									
	VISC.	40			48									
	GEL.													
TOUR 7	W.L.	F.C.	P.H.											
	ADDITIVES: WATER													
	1.	1.5 Sags Gel												
	2.	1.5 Gals DV 68												
TOUR 8	3.													
	CREW TIME SUMMARY													
	DRILLER	H. WHEELDON												
	HELPER	H. HIGGINS												
TOUR 9	HELPER	H. HIGGINS												
	HELPER	H. TURNER												
	TOTAL													
	INJURIES AND REMARKS:													
TOUR 10	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
	AF:	AT:												
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
	BIT RECORD													
TOUR 11	MUD	4 P.M.	6 P.M.	8 P.M.	10P.M.									
	WT.													
	VISC.													
	GEL.													
TOUR 12	W.L.	F.C.	P.H.											
	ADDITIVES: WATER													
	1.													
	2.													
TOUR 13	3.													
	CREW TIME SUMMARY													
	DRILLER	G. JACOBSON												
	HELPER	L. BOURDASSA												
TOUR 14	HELPER	M. MECHAN												
	HELPER	F. MACLEOD												
	TOTAL													
	INJURIES AND REMARKS:													
TOUR 15	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE			

[illegible]

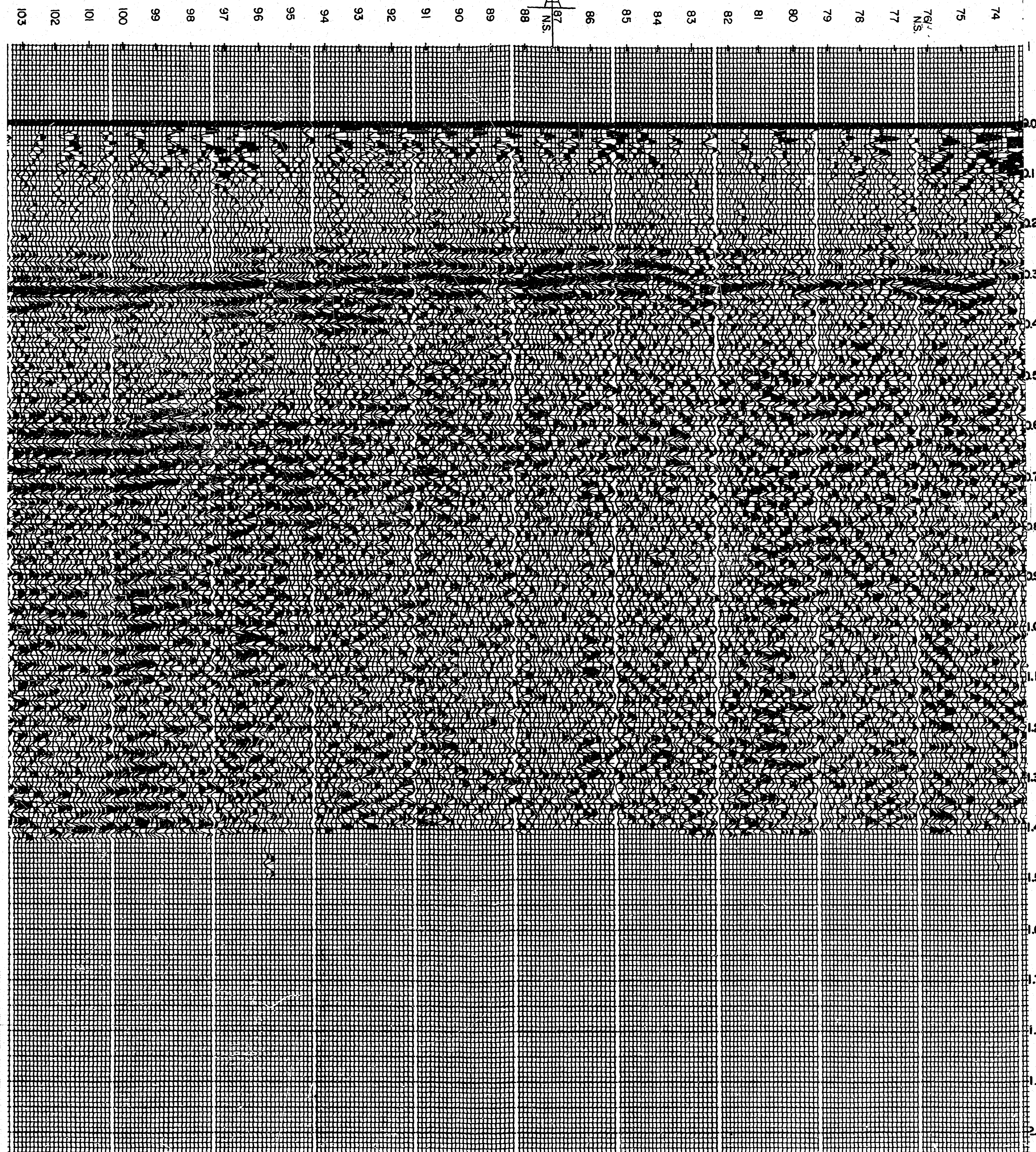
PROJECT NO...

DATE 11/15/23/22

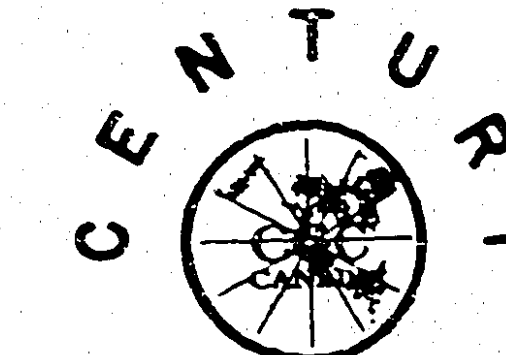
[illegible]

GULF OIL CANADA LIMITED
 Northern Division
 9th FLOOR GULF BLDG
 707 - 7th AVE. S.W.
 CALGARY, ALBERTA

Horn River
 Decalta-Tenneco et al
 Rabbitskin 1-08



CENDAC



GEOPHYSICAL CORPORATION
 of
 CANADA

TROUT RIVER

PROSPECT

GULF OIL CANADA LTD.

CLIENT

LINE NO. 16

DIRECTION N/S

RAW		SPREAD LENGTH	1595
NMO		GR INTERVAL	110
STACKED ISOCHRON		SP INTERVAL	440
STACKED STRUCTURAL	X	RECORD LENGTH	2000
100% ISOCHRON		SAMPLE INT.	2ms
100% STRUCTURAL		FOLD	300%
TRACE GATHER			

RECORDING INSTRUMENTS	DIGITAL	ANALOG
TAPE	☒ 3 TRACK ☒ 21 TRACK FORMAT	☐ TECHNO ☐ SE - AM ☐ SE - FM
GAIN	☒ PGC ☒ AGC ☐ BINARY	☐ PGC ☐ AGC ☐ ST. GAIN
FILTER	HI LOW	HI LOW

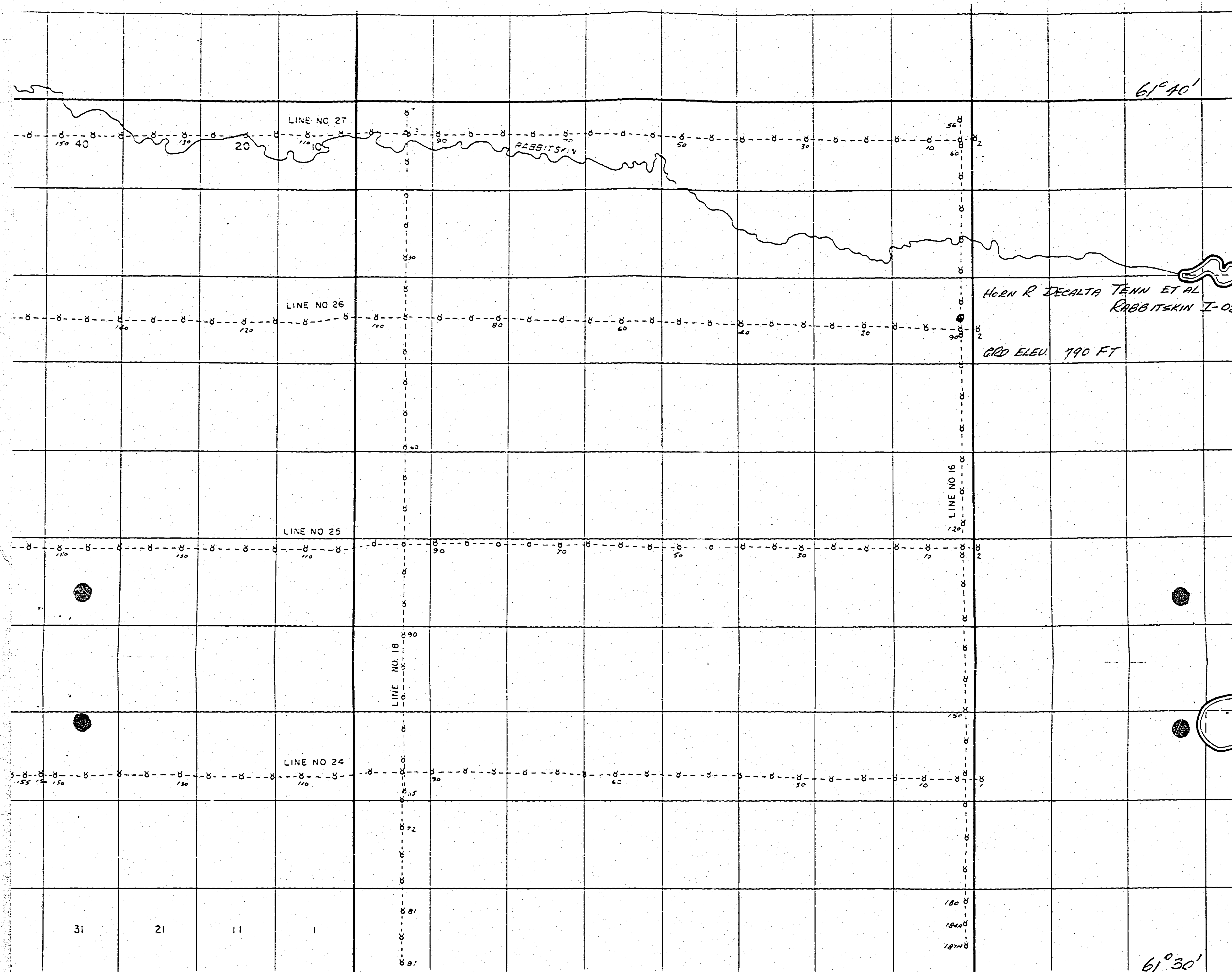
DIGITAL PROCESSING

PROCESS	SEC	TYPE	OPERATION LENGTH	WINDOW
PREPROCESSOR	1			
NMO	2			
AUTO RESIDUAL NMO				
STATICS	6			
RE STATIC	10			
DIGITAL FILTER (Conv.)	3	3	100ms	23-52cps
DIGITAL FILTER (M.G.)				
DIGITAL FILTER (Rec.)				
VELOCITY FILTER				
DECONVOLUTION				
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
TRACE SCALE				
STACK	7			
EQUALIZE	4,8	AVM	2500	350-800
DISPLAY PAPER	5,9			
DISPLAY FILM	11			
VELOCITY ANALYSIS				
MEDIAN FREQUENCY ANALYSIS				
DIGITAL MIX				
TRACE GATHER				

DATE: APRIL 21/69

DATUM:

CORR VELOCITY:



NOTE: SURVEY INFORMATION & TOPOGRAPHIC FEATURES
ARE TAKEN FROM NAT. TOPOGRAPHIC SERIES
1: 250,000

119°30'
(MATCH 85-E-S-W)
NORTHWEST TERRITORIES

HORIZONS