GOBLES ET AT CELIBETA

D-66

Drilling Authority No. 404

Date Issued 20 January 1970

WELL NAME Cobles et al Caliboga D-66

FIELD

LOCATION: Unit D Area

Section 66 Grid 60-30-122-15

Latitude 60-25-7.5 Longitude 122-27-55

U.W.L.R. 60.41875 — 122.46727

U.W.I. 300D6660301222150

Rig Release Date:

Status

Information Release Date

CHANGE OF NAME

DATE RECEIVED	INDEX
20-1-70	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
26-1-70	Application to Amend a Drilling Authority.
	Application to change a Well Name.
15-6-70	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well History Supplement.
12-3-70	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.....

IAND 5290 (3-69)

File No.
Drilling Authority No. 406

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
Resource Management Division

JUN 1 1970

Application to Abandon a Well or Suspend Drilling

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

Name and number of well Gobles et al Colibeca D-56

Location: Unit D Section 56 Grid 60°30'N 122°15'W

Latitude 60°25'1.5" Longitude 122°27'55"

From Established Reference Marker Not Surveyed

Universal Well Location Reference 60.41875° N Long. 122.4652° W

Permit No. 2695 Lease No. -

Gobles Oil & Gas, Dome Petroleum, Canada Southern Pet.
(Permittee, Licensee, Lessee)

Date of commencement of proposed program 17-3-70

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at Nil

Gas at 7800-8095'. (DST #1 - GTS in 2 mins.)

Water at 230 - 245' @ 200 barrels /hr.

Total Depth 8332' Date of last operations 18-3-70

Present condition of well Plugged and Abandoned

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At	Sacks of Cement and Additives	Amount Pulled
1. 23"	Conductor	-	25'		
2. 18"	Liner	-	47'	325	
3. 13-3/8"	54.5#	945	918	960 w/ 2% $CaCl_2$	
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
		Pre-Devonian		
1	8332' - 8020'	Quartzite - Sulphur Point	160	Neat Cement
2	1300' - 850	Mississippian Debolt	610	plus 2% $CaCl_2$ added. Top of plug #2 found @ 470'
3	Surface Plug	- 5-sack cement plug, weld on plate and erect riser with identification marker.		

The following logs have been run DIL, BHC Sonic G.R. Caliper, Sidewall Neutron Por., Synergetic System
Other operations proposed Velocity Survey

Operations to be carried out by Cascade Drilling Co. Ltd Contractor Licence No. A2636
Address P.O. Box 5320 Station A Calgary 9, Alta. Address
Responsible Agent in field Mr. A.C. Anderson
Dated at Calgary, Alberta, this 11 Day of June 1970
Signed by A. Beziale Company Gobles Oil and Gas Limited
Title Production Foreman Operator's Exploratory Licence No. 1341

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

(For RESOURCE MANAGEMENT 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. Hine on the 12th March 1970.

Dated 15th June, 19 70

Oil Conservation Engineer

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

IAND 52-90 (5) (3-67)

Drilling Authority No. 404
Date Issued 20-1-70

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, reworking, abandonment, recompletion or suspension of every well.

Well name and number: Goblas et al Calibera 0-66

Permit No. 3695
Home Petroleum Ltd., Goblas Oil & Gas Ltd. Lease No.
Canada Southern Petroleums
(Permittee, Licensee, Lessee) Exploratory Licence No. 1270, 1279

Goblas Oil & Gas Limited
(Operator) Exploratory Licence No. 1341

Location Unit B Section 66 Grid 60° 30' N 122° 15' W
Latitude 60° 25' 7.5" Longitude W 122° 27' 55"
Unique well identifier 2000666030122150
Universal Well Location Reference 60.41875° N Long. 122.46727° W

	DATE	DEPTH
Spudded	30-2-70	
Suspended		
Resumed Operations		
Finished Drilling	11-3-70	
Deepened		
Complete (gas/oil)		
Abandoned	17-3-70	5552
Rig released	18-3-70	

Pool(s)
Interval(s) open to production

Elevation: Gr. 1406 K.B. 1423
Rig No. 215
Drilling Contractor Cascade Drilling Co. Ltd.
Contractor's Business Licence No. A2636

CASING RECORD

Casing Size (inches)	Grade	Weight	Amount	Set at	Sacks of Cement and Additives
1. 13-3/8"	K-55	54.5#	948	918	960 w/ 2% $CaCl_2$
2.					
3. 20" Conductor Pipe				24'	
4. 10" Liner to stop flow of water.				47'	w/ 225 sacks cement.
5.					
6.					

GEOLOGICAL TOPS	ELEVATION	
	Depths	Sub-Sea
Pekisko	1801	(-378)
Banff	2042	(-619)
Exshaw	3540	(-2117)
Ketcho	3840	(-2417)
Tetcho	4752	(-3329)
Trout River	4994	(-3521)
Kakisa	5270	(-3847)
Red Knife	5323	(-3900)
Fort Simpson	5875	(-4453)
Muskwa Equiv.	7459	(-6036)
Slave Point	7474	(-6051)
Watt Mountain	7852	(-6429)
Sulphur Point	7855	(-6432)
Elk Point	8030	(-6607)
Keg River	8077	(-6654)
Chinchaga Equiv.	8450	(-7027)
Pre. Dev. Quartz	8499	(-7076)

CORE RECORD

From	To	Rec.	From	To	Rec.
N/A					

LOG RECORD

Run No.	Type of Log	From	To
1	DILL	8552'	918'
1	BHC Sonic G.R. Caliper	8552'	918'
1	Sidewall Neutron Por.	8551'	7300'
		1700'	1870'
1	Formation Density	8551'	7290'
		2100'	1200'
1	Synergetic System	8551'	7450'
1	Seismic Reference Service	8551'	918'

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
17-1-70	8552	8020'	360 sacks neat cement.
17-1-70	1300	850'	810 sacks + 2% $CaCl_2$. Felt @ 470'.
18-1-70	Cut casing off 3' below ground level, cemented top of casing with 5 sacks cement. Welded on cover plate to casing. Then welded a 5' length of 2" pipe to casing as a permanent marker protruding 2' above ground level.		

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks

SERVICING RECORD (Acidizing, Fracing, etc.)

Date	From	To	Remarks

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	14-3-70	Elk Point	7880	8095										
2	15-3-70	Keg River	8185	8404	30	30	30	2834	2150	336	336	4172	4018	Klotum. GTS in 2 mins.
3	16-3-70	Sulphur Pt.	7980	8125	45	30	45	676	647	323	500	4038	3984	Rec. 450' of drilling mud Rec. 60' of drilling mud

Pressures reported are field figures.

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
F70-1734	Water	7980	8195	D.S.T. #3	Both of these water analyses determined on brown colored water extracted from mud. Organic matter was detected in total solids.
F70-1733	Water	7880	8095	D.S.T. #1	

PRESENT STATUS OF WELL

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

Company: Goblas Oil and Gas Limited

Signed by: A. Daniels

Title: Production Foreman

Date: 12-3-70

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

File No.

Drilling Authority No. 404

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

RESOURCE MANAGEMENT DIVISION

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. 404, concerning Gobles et al Colibeta B-76

(Name and Number of Well)

The following amendments are required:

CHANGE OF WELL NAME: From: Gobles et al Colibeta B-76
To: Gobles et al Colibeta B-66

CHANGE OF LOCATION: From: 60° 25' 15" N. Lat., 122° 28' 38" W. Long.
To: 60° 25' 7.5" N. Lat., 122° 27' 55" W. Long.

From: Unit B, Section 76, Grid 60°30'; 122°15'
To: Unit B, Section 66, Grid 60°30'; 122°15'

CHANGE OF UNIVERSAL WELL LOCATION REFERENCE: From: Lat. 60.41886° N., Long. 122.47167° W.
To: Lat. 60.41875° N., Long. 122.46727° W.

CHANGE OF UNIQUE WELL IDENTIFIER: From: 300H660W122150
To: 300G660W122150

Reasons for the amendments:

Error in calculation of location.

Dated at Calgary, Alberta, this 25th day of January, 1970

Signed by [signature]

Title District Exploitation Engineer

Company Gobles et al Limited

(For Resource Management Division use only)

APPROVED

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

Date 26th January, 1970

[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 (3-67)

DEPT. OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT OIL & MINERAL DIVISION
JAN 29 1970
CALGARY 21, ALBERTA
OIL CONSERVATION ENGINEER
Northwest Territories & Yukon Territory

Drilling Authority No. 406

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 Cobles et al Caldwell B-76

Location: Unit J Section 76 Grid 60°-30' E 122°-15' J

Latitude N 60° 25' 15" Longitude W 122° 22' 18"

Unique Well Identifier 300J276022122180

Universal Well Location Reference Lat. 60.42084° N., Lat. 122.47167° W.

Elevation: Ground 1430' ASL. K.B. 1454' est. feet above sea-level.

Well is expected to produce from Slave Point formation at a depth of about 7800 feet. Expected total final depth 8330'

Area assigned to well

(For Oil Conservation Engineer's use only)

Permit No. 2695 Lease No. - Acreage 83,212

Permittee, licensee, or lessee Cobles Oil & Gas Ltd., Dome Petroleum Ltd., Canada Southern Pet. Ltd.

Exploratory Licence No. 1341 1270 1279

Surface owned by Crown or Crown

Petroleum and natural gas rights owned by Crown (Give full name and address of owner and occupant.)

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

Casing Size O.D. (Inches)	Weight (Lbs./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1. 13-3/8"	48	H - 40 STaC	New	900'	850
2. 10-3/4"	40.5	J - 55 STaC	New	2500'	600
3. 7"	23#	N - 80 LTaC	New	0-5460'	
4.	26#	N-80 LTaC	New	5460-7700'	1900
5.		Two joints 26# at the top			
6. 4½"	11.6#	J - 55 STaC	New Liner	8330'	85

Expected water, gas, and oil horizons and type of control equipment
Slave Point controlled with intermediate string BOP's, Hydril, & 9.7# mud.

Well will be drilled with Rotary Rig No. 216 by Cascade Drilling Co. Ltd.
(Drilling Contractor or company)

P.O. Box 5520 Stn. A, Calgary, Alberta

Responsible agent of applicant:—
At well To be Selected
Address Wellsite Camp

Contractor's business Licence No. A2636
At registered office To be Supplied
Address 240 - 4th Avenue S.W. Calgary 1, Alta.

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

Dated at Calgary this 22nd day of January 19 70

Signed by
Title District Superintendent

Company Cobles Oil & Gas Ltd.
Operator's Licence No. 1341

(For Oil and Mineral Division use only)

APPROVED

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

1. The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.
2. During well drilling and testing operations, every effort shall be made to ensure

Dated 20th January 19 70

Oil Conservation Engineer

(over)

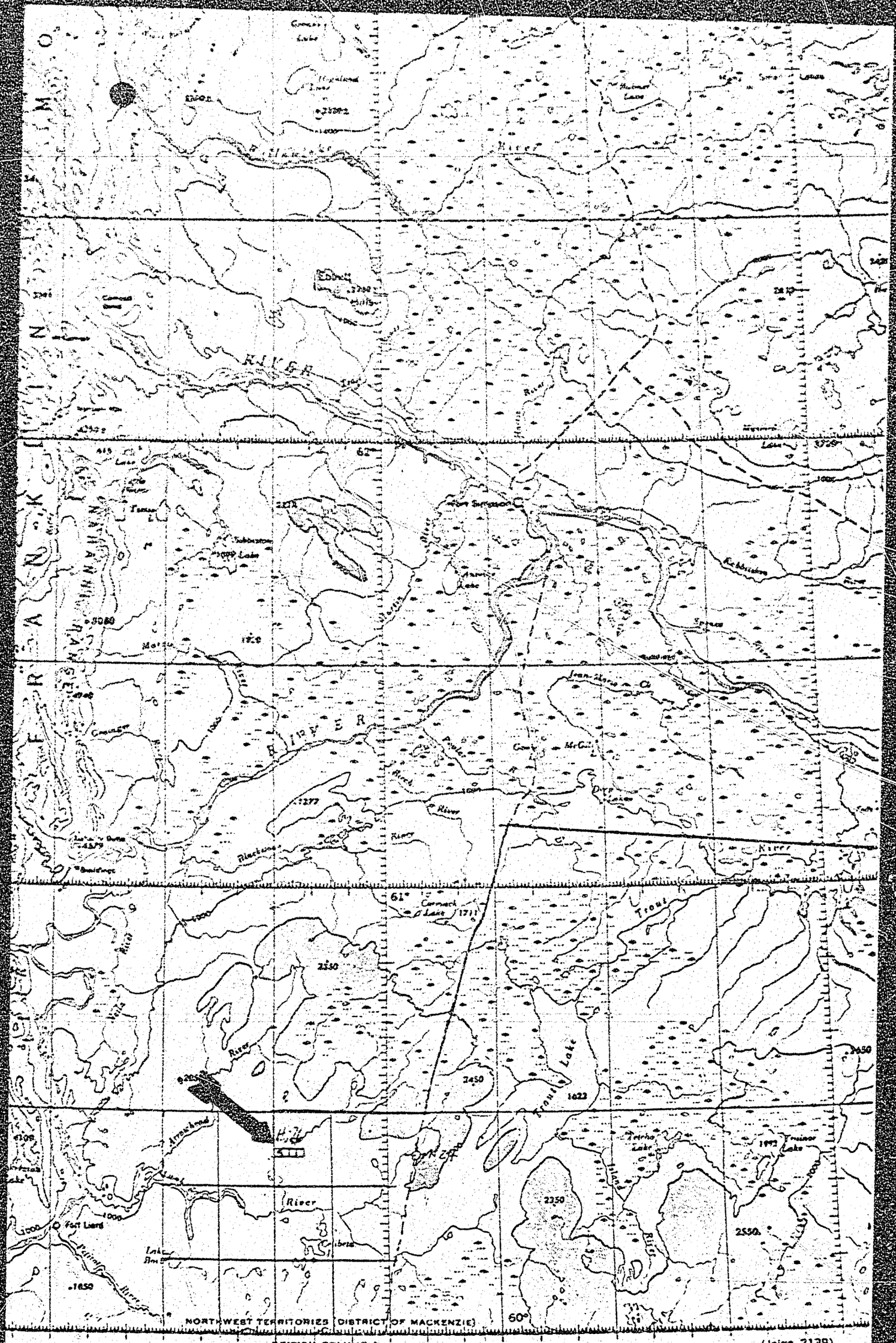
Forms to be submitted to Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.

IAND 52-90-1 (3-69)

that drilling fluids, chemicals and wastes shall be disposed of or contained in such a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.

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

B.E.J. Thomas, Oil Conservation Engineer



ELEVATIONS IN FEET

REDSTONE

GOBLES CELIBETA D-66

GEOLOGICAL REPORT

GOBLES OIL & GAS LTD.

SANDOLOGY

GOBLES CELIBETA D-66

60° 25' 7 1/2" N 122° 27' 55" W

DEPT. OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT
OIL & MINERAL DIVISION
APR 13 1970
CALGARY 21, ALBERTA
OIL CONSERVATION BRANCH

GOBLES CELIBETA D-66

SANDOLOGY

Jan. 24/70	Moving in and rigging up rig and camp.
Jan. 25/70	Moving in and rigging up.
Jan. 26/70	Rigging up
Jan. 27/70	Rigging up
Jan. 28/70	Rigging up
Jan. 29/70	Rigging up
Jan. 30/70	Rigging up
Jan. 31/70	Drilling 17 1/2" surface hole @ 297'. Surveys: 129' - 3/4° 215' - 0° Drilled to 230' and hit zone of pea gravel w/water flow estimated at 200 bbls/hour. Drilled thru gravel zone 230'-245' and drilled ahead to 297' w/well flowing water at 200 bbls per hour. Difficult to make connections due to gravel caving. Conductor pipe washed out and returns coming out around conductor pipe.
Feb. 1/70	Drilled ahead w/water flow to 327'. Conductor pipe completely washed out and gravel caving in on bit. Pulled out of hole and mixed mud.
Feb.2/70	Depth 327'. Mix 8000# Gel, 150# Lime and 36,500# wt. material to mud wt. of 10.7#. Ran in to 130' and displaced to mud. Well flow reduced to lazy 2" stream.
Feb. 3/70	Depth 327'. Mud wt. 12.2#/gal. mixing wt. material. Ran 19" conductor liner to 47' and cemented w/325 sax of 15.4# slurry. Held for 5 minutes after slurry displaced then well started flowing water around conductor pipe at rate of approx. 150 BPH. Mixing mud and W.O. cement and wt. material.

Gobles Celibeta D-66

Feb. 4/70

Preparing to drill out cement in conductor bbl. at 8 a.m. Depth 327'.

Weighted mud to 14.7#/gal and added 60 sax sawdust.

Ran in to top of bridge at 145'. Displaced hole to mud and water flow killed. Cemented conductor pipe w/14.5# slurry using 188 sax common cement and 4% $CaCl_2$. Did not displace cement out of conductor. W.O.C. mixing additional mud volume to 8 a.m. Ran in and found top of cement in conductor pipe at 35'.

Feb. 5/70

Drilling @ 510' @ 8 a.m.
Surveys: 355' - 1/8°
449' - 1/4°

Mud wt. 11.9, vis. 120. Drilled out cement and fill to original depth of 327'. Lost approximately 120 bbls. of mud to formation before gravel zone healed. Drilling ahead.

Feb. 6/70

Tripping @ 810' for new bit.
Surveys: 542' - 1/2°
634' - 3/4°
726' - 1/2°
Mud wt. 11.9 Vis. 83.

Feb. 7/70

Circulating and mixing weight material at surface casing T.D. of 918'.

Drilled to surface casing T.D. of 918'. Circulated 10 minutes and made dummy trip. Circulated for 45 minutes and pulled pipe. Rigged to run surface casing. Well started flowing back. Reran bit to 245' and started mixing wt. material.
Initial mud wt. 10.4#/gal.
Mud wt. @ 8 a.m. 11.0#/gal.
Vis. 90 secs.

Feb. 8/70

Preparing to cement 13 3/8" casing at 918', at 8 a.m.

Ran bit to surface csg. T.D. of 918'. Circulated and cleaned hole. Pulled out and ran casing. With 13 jts in hole casing hit

Gobles Celiberta D-66

Feb. 8/70 (continued)

bridge and pumps unable to pick up dirty mud in suction tank. Cleaned tanks and mixed additional mud volume. Filled casing and broke thru bridge. Ran remainder of casing. Landed 30 jts. 54.5# K 13 3/8" 8rd. ST&C casing at 918'. Circulating prior to cementing at 8 a.m.

Feb. 9/70

W.O.C. at 8 a.m.

Cemented 30 jts of 13 3/8" casing at 918' w/960 sax + 2% $CaCl_2$. Displaced w/water and cement circulated. Started mixing @ 10:20 a.m. Feb. 8/70. Plug down @ 12:40 p.m. 2-8-70.

Feb. 10/70

W.O.C. @ 8 a.m.

Cut off casing @ 12:30 a.m. 2-9-70. Weld on bowl and rig up BOP's, flue line and bloocy line. Rig to test blind rams.

Feb. 11/70

Rigging rotating head @ 8 a.m.

Pressure tested blind rams and Hydril to 1000 psi. Ran 12 1/4" bit and drilled out plugs, shoe and cement. Drilled mouse hole. Ran in w/8 3/4" bit and blowing water.

Feb. 12/70

Tripping out w/8 3/4" bit at 8 a.m. at 1351' at 8 a.m.

Drilled 8 3/4" hole w/air to 1351'. Water came into air hole while running survey at 1351'. Required 800 psi pressure to break air circulation. Pulled bit and bit and collars wet and muddy. Tearing out air drilling equipment. Mix mud and filled hole and tanks.
Mud wt. 8.7 vis. 45.
Surveys: 1351' - 1/4°

Feb. 13/70

Drilling 12 1/4" hole at 1395' @ 8 a.m.
Mud wt. 9.0, vis. 60.

Reamed 8 3/4" hole to 12 1/4" hole to 1351' and drilled ahead w/12 1/4" bit.

Feb. 14/70

Drilling 12 1/4" hole @ 1735' @ 8 a.m.
Mud wt. 9.1, vis. 39.
Surveys: 1507' - 1/2°
1598' - 1/2°

Goblea Celibeta D-66

Feb. 15/70

Drilling 8 3/4" hole @ 2184' @ 8 a.m.
Mud wt. 9.1, vis. 41
Surveys: 1813' - 1/4°
1998' - 1/4°
2153' - 1/4°
Drilled 12 1/4" hole to 1890'. Ran 8 3/4" bit @ 1890' to drill ahead.

Feb. 16/70

Drilling 8 3/4" hole @ 3050' @ 8 a.m.
Mud wt. 8.9, vis. 40
Surveys: 2300' - 1/4°
2550' - 1/4°
2830' - 3/4°

Feb. 17/70

Drilling 8 3/4" hole @ 3356' @ 8 a.m.
Mud wt. 9.0, vis. 38
Surveys: 3140' - 4 3/4°
3190' - 6°
3202 - 5 1/4°
3263 - 5°
3299 - 4 3/4°
3325 - 4 1/2°
3356 - 4 1/2°

Feb. 18/70

Drilling 8 3/4" hole @ 3751' @ 8 a.m.
Mud wt. 9.0, vis. 35, W.L. 13.8, pH 9.0, F.C. 2
Surveys: 3387' - 4° 3530' - 3°
3417' - 4° 3571' - 2 1/2°
3445' - 3 1/2° 3631' - 2°
3479' - 3 1/4° 3688' - 1 3/4°

Feb. 19/70

Drilling 8 3/4" hole @ 4000' @ 8 a.m.
Mud wt. 9.1, vis. 38, W.L. 13.6, pH 9.5, F.C. 2
Surveys: 3750' - 2 1/2°
3813' - 2°
3905' - 2 1/4°
3915' - 1 1/4°

Feb. 20/70

Drilling 8 3/4" hole @ 4427' @ 8 a.m.
Mud wt. 8.9, vis. 45, W.L. 13.4 pH 9.0, F.C. 2/32
Surveys: 4028 - 1°
4090 - 1°
4182' - 3/4°
4274' - 1 1/8°
4335' - 1°

Cobles Celibeta D-66

Feb. 21/70
Drilling 8 3/4" hole @ 4800' @ 8 a.m.
Mud wt. 9.0, vis. 48, W.L. 14.4, pH 9.5, F.C. 2
Surveys: 4459' - 3/4°
4640' - 3/4°
4734' - 3/4°

Feb. 22/70
Drilling 8 3/4" hole @ 5194' @ 8 a.m.
Mud wt. 9.0, vis. 51, W.L. 10.6, pH 9.5, F.C. 2
Surveys: 4918' - 1/16°
5133' - 1 1/2°
5194' - 3/4°

Feb. 23/70
Drilling 8 w/e" hole @ 5352' @ 8 a.m.
Mud wt. 9.1, vis. 48, W.L. 10.6, pH 9.5, F.C. 2
Surveys: 5287' - 1/2°

Feb. 24/70
Drilling 8 3/4" hole @ 5540' @ 8 a.m.
Mud wt. 9.1, vis. 45, W.L. 9.6, pH 9.0, F.C. 2
Surveys: 5534' - 1°

Feb. 25/70
Drilling 8 3/4" hole @ 5965 @ 8 a.m.
Mud wt. 9.1, vis. 45, W.L. 10.4, pH 9.5, F.C. 2
Survey: 5900' - 1/2°

Feb. 26/70
Drilling 8 3/4" hole @ 6310' @ 8 a.m.
Mud wt. 9.2, vis. 53, W.L. 7.4, pH 9.5, F.C. 2
Survey: 6087 - 3/4°

Feb. 27/70
Drilling 8 3/4" hole @ 6810' @ 8 a.m.
Mud wt. 9.1, vis. 68, W.L. 7.4, pH 9.5, F.C. 2
Surveys: 6287' - 1/2°
6449' - 1°
6541' - 3/4°

Feb. 28/70
Drilling 8 3/4" hole @ 6925' @ 8 a.m.
Mud wt. 9.3, vis. 75, W.L. 7.6, pH 9.5, F.C. 2
Surveys: 6725' - 2° 6880' - 2 1/2°
6810' - 2 1/2° 6910' - 2°
6849' - 3°

March 1/70
Circulating prior to tripping @ 7222' @ 8 a.m.
Mud wt. 9.3, vis. 68, W.L. 7.2, pH 9.0, F.C. 2
Surveys: 6971' - 1/2°
7013' - 3/4°
7187' - 2 1/2°
7217' - 2°

Gobles Celibeta D-66

March 2/70
Drilling 8 3/4" hole @ 7279' @ 6 a.m.
Mud wt. 9.3, vis. 110, W.L. 6.2, pH 9.5, F.C. 2
Surveys: None

March 3/70
Tripping bit @ 7433' @ 8 a.m.
Mud wt. 9.3, vis. 94, W.L. 6.4, pH 9.5
Surveys: 7310' - 3 1/8°
7433' - 2°

March 4/70
Tripping @ 7525' @ 8 a.m.
Mud wt. 9.4, vis. 210, W.L. 8.0, pH 9.0, F.C. 2
Surveys: None

March 5/70
Drilling 8 3/4" hole @ 7656' @ 8 a.m.
Mud wt. 9.5, vis. 213, W.L. 7.1, pH 9.5, F.C. 2
Surveys: 7525' - 1°

March 6/70
Drilling 8 3/4" hole @ 7895'
Mud wt. 9.5, vis. 165, W.L. 6.0, pH 9.5, F.C. 2
Surveys: None

March 7/70
Tripping bit @ 8062' @ 8 a.m.
Mud wt. 9.5, vis. 223, W.L. 6.6, pH 9.0, F.C. 2
Survey: 8062' - 3°

March 8/70
Drilling 8 3/4" hole @ 8199' @ 8 a.m.
Mud wt. 9.5, vis. 210, W.L. 6.4, pH 9.5, F.C. 2
Surveys: None

March 9/70
Drilling 8 3/4" hole @ 8302' @ 8 a.m.
Mud wt. 9.5, vis. 205, W.L. 7.4, pH 9.5, F.C. 2
Survey: 8240' - 5°

March 10/70
Drilling 8 3/4" hole @ 8457' @ 8 a.m.
Mud wt. 9.6, vis. 170, W.L. 7.2, pH 9.5, F.C. 2
Surveys: None

March 11/70
Circulating hole at T.D. of 8552' prior to logging.
Reached T.D. of 8552' @ 12:15 a.m. 3-11-70.
Circulated hole for 1 1/2 hours. Made two 30 stand dummy trips. Twenty feet of fill after first trip and 22' of fill after second trip.
Mud wt. 9.6, vis. 220, W.L. 6.4, pH 9.5, FC 2/32.

Gobles Celibeta D-66

March 12/70 — Running velocity survey at 8 a.m. after running DILL, Integrated BHC Sonic G R Caliper, & SNP logs.
Started logging 3 p.m. 3-11-70

March 13/70 — W.O.O. and circulating @ 2500' @ 8 a.m.
Finished logging @ 6:45 p.m. March 12/70.
Mud wt. 9.6, vis. 210, W.L. 6.6. pH 9.5 FC 2/32

Logs Run:

DILL

2" scale	T.D.	8552' - 918'
5" scale		8552' - 7250'
		1875' - 1690'

Integrated BHC Sonic GR Caliper

2" scale	T.D.	8552' - 918'
5" scale		8552' - 7290'
		1875' - 1750'

Sidewall Neutron Porosity

5" scale	8551' - 7300'
	870' - 1700'

Formation Density

5" scale	8551' - 7290'
	2100' - 1200'

Synergetic Log System

5" scale	8551' - 7450'

Cobles Celibeta D-66

Log Tops K.B. Elev. Datum - 1424'

Mississippian	1265	+159
Banff	2050	-626
Exshaw	3537	-2113
Dev. Kotcho	3592	-2168
Tetcho	4740	-3316
Trout River	4775	-3571
Kakisa	5270	-3846
Red Knife	5365	-3941
Jean Marie	Not developed	-
Ft. Simpson	6010	-4586
Muskwa	7460	-5036
Slave Pt.	7474	-6050
Watt Mtn.	7828	-6404
Keg R./Sulphur Pt.	?	?
Chinchaga	8464	-7040
T. D.	8552	-7128

March 14/70 Landing test tools for DST #1 @ 8 a.m.
Ran pipe from 2500 to T.D. of 8552' and circulated and condition mud for DST #1.
Mud wt. 9.6, vis. 280, W.L. 6.7, pH 9.5 FC 2/32
Pulled pipe, made up test to and ran in.

March 15/70 Pulling pipe to run DST #2 @ 8 a.m.

DST #1 Interval 7880-8095 Misrun

Packer seat failed. Show of gas on preflow that reached surface after tool opened second time.

Pulling pipe to run DST #2. After DST#1 ran in to T.D. could not break circulation. Pulled to 6600 and broke circulation. Ran back to bottom and circulated and conditioned mud for 3 1/2 hours.
Mud wt. 9.6, vis. 195, W.L. 6.2, pH 9.5, FC 2/32

March 16/70 Making up Lynes tool for DST #3 @ 8 a.m.

DST #2 Interval 8185 - 8404 Keg River.

Dual 7" packers, safety jt., jars, pump out sub. Preflo 10 min., ISI 30 min., TO 30 min.,

Gobles Celibeta D-66

March 16/70

FSI 30 min., GIP on preflo. Good air blow decreasing TO w/good air blow decreasing and dead in 6 mins. NGTS. IHP 4172, Preflo 336, ISIP 2834, FP 336, FSIP 2150, FHP 4018. Pipe recovery 450 drilling mud (very viscous). BHT 244° F.

Ran in to 8250 and condition hole for DST #3.

March 17/70

Circulating w/open end pipe prior to running plugs at 8 a.m.

DST #3 Interval 7180-8195 Slave Pt.

Lynes 7 7/8" inflatable packers, pump out sub, safety jt and jars.

Preflo 6 mins. ISI 30 mins. TO 45 mins., FSI 45 mins. Preflo GIP fair air blow decreasing to weak in 6 mins. TO Fair air blow decreasing to dead in 10 mins. NGTS.
IHP 4083, Preflo 205, ISIP 676, IFP 323, FFP 500 FSIP 647, FHP 3964.

Pipe recovery 95' viscous drilling mud. Laid down test tools and drill collars. Run in open end.

March 18/70

Laying down drill pipe @ 8 a.m.

Ran Plug #1 from 8552 to 8020 w/360 sax normal cement. Pulled 8 stands and laid down drill pipe to 1300'. Plug down 3:20 p.m. 3-17-70.

Ran Plug #2 from 1300 to 850, w/610 sax normal cement + 2% $CaCl_2$. Plug down @ 11:30 p.m. 3-17-70. Pulled 6 stands and laid down remainder of drill pipe. Ran in and found Plug #2 @ 470' @ 7:30 a.m. March 18, 1970.

March 19/70

Rig released 4:00 p.m. March 17, 1970.

Laid down drill pipe and tore out BOP's. Cut off casing 3' below ground level and set 5 sacks cement plug in stub. Welded on cover plate and welded permanent identify marker on surface pipe.

GEOLOGICAL REPORT

COBLES et al CELIBETA D-66

OPERATOR: Cobles Oil & Gas Ltd.

LOCATION: 60° 25' 7.5" N Lat.
122° 27' 55" W Long.

ELEVATION: Ground 1408'; K.B. 1423'

SPUD DATE: 11:30 A.M. January 30, 1970

RIG RELEASE: 4:00 P.M. March 18, 1970

STATUS: Plugged and abandoned

CONTRACTOR: Cascade Drilling Co. Ltd. Rig No. 21E

FORMATION TOPS: (From Electric Logs)

1237	(+186)	DETRITAL
1266	(+157)	MISSISSIPPIAN - DEBOLT
1345	(+78)	SHUNDA
1801	(-378)	PEKISKO
2042	(-619)	BANFF
3540	(-2117)	EXSHAW
3590	(-2167)	DEVONIAN KOTCHO SHALE
3840	(-2417)	KOTCHO LIMESTONE
4752	(-3329)	TETCHO
4994	(-3521)	TROUT RIVER
5270	(-3847)	KAKISA
5323	(-3900)	RED KNIFE
5866	(-4443)	JEAN MARIE EQUIVALENT
5875	(-4452)	FORT SIMPSON
7459	(-6036)	MUSKWA EQUIVALENT
7474	(-6051)	SLAVE POINT
7852	(-6429)	WATT MOUNTAIN (?) SHALE
7855	(-6432)	SULPHUR POINT
8030	(-6607)	ELK POINT
8077	(-6654)	KEG RIVER DOLOMITE
8328	(-6905)	GREEN SHALE
8450	(-7027)	CHINCHAGA EQUIVALENT
8499	(-7076)	PRE DEVONIAN QUARTZITE
8552	(-7129)	TOTAL DEPTH

SAMPLE DESCRIPTION: Samples were lagged and caught at 10' intervals from 1080 to 7400 feet and 5' intervals from 7400 feet to T.D. Sample quality good.

1080 - 1190 Sh, md-dk gr, non calc.
1190 - 1200 AA w/brn vf argil SS; & oil stng & cuts w/CCl4.
1200 - 1220 Sh aa.
1220 - 1230 Sh aa; w/tr glauc; s/coal.
1230 - 1237 Sh aa; w/tr pyr.

DETRITAL 1237

1237 - 1250 Coal; w/Sh aa; tr/pyr & cht.
1250 - 1266 Sh, dk gr, sub-blk, s/lt gr Cht. (Water Zone)

MISSISSIPPIAN DEBOLT 1266

1266 - 1280 Ls, brn & brn gr, argil, micro xln, dns; s/lt gr Cht; cut w/CCl4.
1280 - 1300 Ls, brn, argil, vf xln, dns (samples very powdery).
1300 - 1330 Ls aa; s/p fluor & cuts w/CCl4.
1230 - 1345 Ls, gr, argil, micro xln, dns.

SHUNDA 1345

1345 - 1360 Ls, gr, argil, vf xln, dns, sly/foss.
1360 - 1370 Ls, bf-lt brn, argil, micro xln & gran, dns, sly/foss; tr/bit.
1370 - 1380 Ls, gr & lt bf gr, argil, vf xln & erthy, sctd pp vugs, dns, sly/foss.
1380 - 1390 Ls, gr-md gr, argil, micro xln & gran, dns, crins.
1390 - 1400 Ls, gr & md gr, argil, micro gran & xln, s/chlky, dns, foss; tr/blk Sh.
1400 - 1410 Ls aa; w/s md xln fragmtl foss bf Ls; abd crins.
1410 - 1420 Ls, gr-md gr, argil, vf-micro gran, s/foss, s/bit; tr/poros.
1420 - 1430 Ls, md gr, v argil, micro gran & erthy (~~frtr~~) s/pyr, sly/foss, dns.
1430 - 1440 AA; s/dk gr calc Sh & abd/crins.
1440 - 1450 Ls, gr, foss-frgmtl, md-cse xln; abd crins, brachs & bryozoa; s/blk Sh.
1450 - 1470 Ls aa & Ls, md gr, v argil, micro xln, dns; s/pyr.
1470 - 1480 Ls, bf & gr, sly/argil, micro xln, dns, foss - brachs & crins; s/Sh.
1480 - 1490 Ls, gr & md gr, argil, micro xln & chlky, dns, sly/foss; s/dk gr-blk Sh.
1490 - 1500 Ls md gr, argil, micro gran & xln, dns, sly/foss.
1500 - 1510 Ls, lt bf gr, frag xln & md xln, foss (crins, brachs ost), dns.
1510 - 1520 Ls, md gr, v argil, erthy & chlky, sly/foss, dns.
1520 - 1540 AA w/foss frag bf xln Ls; tr/cht.
1540 - 1550 Ls, md gr, v argil, vf sdy, hd, dns.
1550 - 1570 AA r/crin, silty.
1570 - 1580 Ls, md gr, v argil, silty, micro xln, dns, r/foss.
1580 - 1600 Ls, gr-md gr, argil, micro xln, dns.
1600 - 1610 Ls, md gr, v argil, erthy & chlky, dns, r/foss (ost).
1610 - 1630 Ls, md-dk gr, v argil, micro xln & erthy, dns, foss; s/dk gr calc foss Sh.
1630 - 1640 Ls, md-dk gr, argil, in/pt silty, micro xln, dns; s/blk platy Sh.
1640 - 1660 Ls, md-dk gr, v argil, micro xln, dns; r/pyr & foss; s/Sh aa.
1660 - 1730 Ls, md-dk gr, v argil, chlky & erthy, dns.
1730 - 1740 AA w/s md-dk gr calc Sh, abd dk crins; s/pyr.
1740 - 1750 Sh, dk gr, calc, abd crins & bryozoa; tr/pyr.
1750 - 1760 Sh aa & Ls, md-dk gr, v argil, erthy, dns; abd crin frgs.
1760 - 1780 Sh, dk gr, calc, foss (crins & brachs).
1780 - 1790 Ls, lt crm gr & gr, vf-micro xln, dns, s/blk pellets or ools.
1790 - 1801 Ls, md-dk gr, v argil, erthy w/dk gr calc Sh; abd/crins; tr/pyr.

PERRIN 1801

1801 - 1820	Ls, gr & crm, vf-micro xln, in/pt fragmtl-foss, in/pt argil, dns, crins, brachs & ost; tr/pyr.
1820 - 1830	Ls, brn, foss-frgmtl & cse xln, abd well preserved crins, brachs & ost f poros, f flvor & cuts w/CCl4, s/brn stng - flushed.
1830 - 1840	Ls, md gr & bf, vf-micro gran, argil, dns.
1840 - 1850	Ls, bf & lt gr, foss-frag, micro gran & chlky, dns & Sh, dk gr. sly/calc, plty.
1850 - 1860	Ls, crm, vf gran & xln, sly/foss, brachs, dns.
1860 - 1870	Sh, dk gr, sly/calc, plty.
1870 - 1880	Sh aa w/md-dk brn gr chlky v argil Ls: s/frag xln foss lt brn Ls w/p oil stn.
1880 - 1910	Sh, dk gr-blk, plty; s/pyr.
1910 - 1930	Sh aa; w/crins & ost.
1930 - 1950	Ls, lt gr, sly/sdy, foss-frag, md xln, dns, crins & ost; s/pyr & sh.
1950 - 1960	Ls, crm & lt gr & lt bl gr, md xln, pyletoid & ool, crins.
1960 - 1970	Ls, lt gr & lt bl gr, in/pt silty, sly/argil, frgmtl, crins; s/dk gr Sh.
1970 - 1990	Ls, lt bf & lt bl gr, foss/frag (brachs & crins) md xln, f/int xln poros, s/p stng & cuts w/CCl4; s/dk gr Sh.
1990 - 2000	Sh, dk grn gr, calc, blky & dk gr-blk, plty.
2000 - 2020	Ls, bf & lt gr, md xln, foss-frag, abd crins & Sh aa.
2020 - 2042	Ls, lt gr & lt bf gr, foss-frag, md xln, f poros, m/Sh aa; s/grn calc Sh.

BANFF 2042

2042 - 2050	Ls, crm & lt brn, s/vf sd & silt gns, vf-md xln, in/pt foss frag, (num/ost) s/glauc & pyr; w/a grn gr & dk gr Sh.
2050 - 2060	Sh, grn gr & md gr, sly/calc, plty & blky.
2060 - 2070	Sh, grn gr, sly/calc, plty & blky.
2070 - 2080	AA w/tr bf & gr frag Ls.
2080 - 2090	Sh, grn gr, sly/calc, blky.
2090 - 2100	Sh grn gr, sly/calc, plty.
2100 - 2130	Sh aa; s/blky; tr/pyr.
2130 - 2150	Sh, grn gr & grn, sly/calc, plty; s/crins.
2150 - 2160	Sh aa; w/olive & brn grn sly/calc plty Sh.
2160 - 2170	Sh, grn & grn gr, sly/calc, plty & flky, s/crins.
2170 - 2180	AA w/tr chlky grn gr argil Ls.
2180 - 2190	Sh, md gr to dk gr & grn gr, sly/calc, splintery.
2190 - 2210	AA w/m dk gr Sh; tr/crin & pyr.
2210 - 2220	AA w/s lt gr chlky sly/silty frag-foss Ls.
2220 - 2230	Sh, dk gr, sly/calc, plty & Ls aa; s/crins.
2230 - 2250	Sh, md-dk gr & grn gr, sly/calc, plty.
2250 - 2260	Ls, lt gr argil, sdy, erthy & frag foss, dns & Sh aa.
2260 - 2270	Sh, dk gr & dk grn gr, sly/calc, plty, foss & Ls, lt grn gr, micro xln dns.
2270 - 2290	Ls, lt gr & grn gr, silty, foss-frag, f xln, abd crins, s/brachs & Sh aa.
2290 - 2300	Ls, lt gr, argil, foss-frag, abd ost s/crins & Sh aa.
2300 - 2310	Sh, md-dk gr & grn gr, non calc, plty.
2310 - 2320	Sh aa w/lt gr chlky foss-frag Ls.
2320 - 2330	Sh, md gr & grn gr, in/pt calc, flky & plty, s/crins; tr/chlky Ls.
2330 - 2340	Sh, md-dk gr & grn gr, v/sly calc, flky.
2340 - 2370	Sh aa w/s argil v sdy frag Ls; s/crins.
2370 - 2400	Ls, gr-md gr, argil, erthy & chlky, foss (brachs) & Sh aa.
2400 - 2420	Ls, md gr, v argil, chlky, foss & Sh, dk gr & md gr, sly/calc.
2420 - 2430	Sh, md-dk gr, sly/calc, plty.
2430 - 2450	Sh, md gr, sly/calc, foss (brachs) blky & plty.

2450 - 2460 AA w/tr brn calc plty Sh.
2460 - 2470 Sh as 2430-50.
2470 - 2480 Sh, md gr, v calc, blky; s/chlky argil ls.
2480 - 2500 Sh, md gr & grn gr, sly/calc, plty.
2500 - 2530 Sh as 2450-70.
2530 - 2540 Sh aa; w/s brn gr argil sly/calc siltstn.
2540 - 2550 Sh, brn plty, waxy & AA, mod crins; s/pyr.
2550 - 2590 Sh, md gr, calc, blky & plty.
2590 - 2610 Sh, gr & grn gr, sly/calc, plty; s/crins.
2610 - 2620 Sh, grn gr & md gr, calc, plty & blky.
2620 - 2630 Sh, red-brn, brn-gr & grn gr, sly/calc, plty & flky.
2630 - 2690 Sh, md-dk gr & grn gr, sly calc, plty & blky, r/foss (brachs & crins)
2690 - 2700 Sh, md gr-grn gr, v/sly calc, s/pyr, plty & blky.
2700 - 2770 Sh, grn gr & gr, sly calc, flky & plty; s/lt gr marl at top.
2770 - 2780 Sh, brn gr, sly calc, plty & aa.
2780 - 2790 Sh as 2710-70.
2790 - 2800 Sh, brn & md gr, sly calc & mica, plty; tr/irnstn.
2800 - 2810 Sh, md gr, grn gr & s/brn gr, sly calc, blky & plty; r/foss.
2810 - 2870 Sh, grn gr & md gr, sly calc, plty; s/pyr.
2870 - 2880 Sh, md gr & grn gr, calc, blky & plty; tr/marl.
2880 - 2890 Sh, md gr & grn gr, sly calc, plty, s/crins & pyr.
2890 - 2900 Sh aa; no pyr or foss.
2900 - 2920 Siltstn, md brn gr, v argil, pyrc, sly/mica & Sh, brn gr & md gr, sly/mica & calc, plty.
2920 - 2930 Sh, grn gr and md gr, plty, sly foss; tr/silt stn aa.
2930 - 2940 Sh aa but flky.
2940 - 2980 Siltstn, md gr, v argil, calc; s/pyr.
2980 - 2990 AA w/Sh as 2930-40.
2990 - 3010 Sh, md gr & grn gr & brn gr, v/sly calc, splntry.
3010 - 3020 Sh aa w/s pyr & md gr calc mica blky sh.
3020 - 3050 Sh, brn gr, grn gr & md gr, sly calc, plty.
3050 - 3060 Sh, md gr & grn, sly calc, plty; s/md gr mica v argil micro xln dns ls.
3060 - 3070 Sh as w/s blk sly/calc splntry Sh.
3070 - 3080 Sh, olive gr, md gr, brn gr & blk, sly/calc, plty; tr/crin.
3080 - 3100 Sh, grn gr & md gr to blk, sly calc, plty, s/pyr, r/foss.
3100 - 3130 Sh aa; w/pyr, crins & brachs.
3130 - 3150 Sh, md gr & grn gr, sly calc, plty & blky, s/crins & pyr.
3150 - 3160 Sh, md gr, grn gr & brn gr, in/pt sly mica, sly calc, crins.
3160 - 3170 Sh, brn gr, md gr & grn gr, plty, sly calc, m/pyr.
3170 - 3180 Sh aa; m/pyr & crins.
3180 - 3200 Sh, md gr & grn gr, sly calc, plty; s/crins.
3200 - 3210 Sh, md gr & grn gr, sly calc, plty & blky.
3210 - 3220 AA w/tr crin.
3220 - 3230 Sh, md gr, grn gr, brn gr & dk gr, sly calc, plty; s/crin.
3230 - 3250 Sh, md gr & grn gr, sly calc, plty.
3250 - 3260 Sh aa w/s dk gr - non calc.
3260 - 3270 Sh, dk brn gr, non calc, blky & md gr flky sly/calc Sh.
3270 - 3280 Sh, md gr, grn gr & lt brn, sly calc, plty.
3280 - 3290 Sh, md gr & grn gr, sly calc, plty, s/pyr.
3290 - 3300 AA s/olive gr.
3300 - 3310 Sh aa; s/blk plty Sh.
3310 - 3340 Sh, md gr, grn gr & lt brn gr, sly calc, plty.
3340 - 3350 Sh, md gr & grn gr, v/sly calc, blky & plty; tr/crin & pyr.
3350 - 3360 Sh, md-dk gr, v/sly calc & mica, plty, in/pt marley.
3360 - 3370 Sh, md gr, md brn gr, calc, blky, foss - brachs & crins.
3370 - 3380 Sh, md gr, brn gr & grn gr, sly calc & mica, sly/foss, plty.
3380 - 3390 Sh, md gr & brn gr, sly calc & mica, plty.
3390 - 3400 Sh, md-dk gr, in/pt sly calc, plty; r/crin.

3400 - 3420 Sh, md gr - grn gr, sly calc & mica, plty-flky, s/carbs & branchs.
3420 - 3430 Sh, md & dk gr, v sly calc, splntry.
3430 - 3440 Sh, md gr, sly/calc, v/slv mica, splntry, s/bflky.
3440 - 3460 [illegible] aa; s/foss & brh, sly calc, splntry Sh.
3460 - 3470 Sh as 3420-30.
3470 - 3480 Sh, dk gr, bflky & plty.
3480 - 3490 Sh, md & dk gr, bflky & plty, in/pt sly mica.
3490 - 3500 Sh, md gr, non calc, bflky.
3500 - 3510 Sh, md-dk gr, non calc, in/pt mica, plty & bflky.
3510 - 3520 Sh, md-dk gr, non calc, plty & bflky.
3520 - 3530 Sh, dk gr, dk brn gr, non calc, bflky & plty; r/foss & pyr.
3530 - 3540 Sh, dk gr-md gr & dk brn gr, in/pt calc, flky & bflky; s/pyr.

BASAL 3540

3540 - 3550 Sh,-dk brn gr & dk gr, sub-bit, bflky, tough.
3550 - 3560 Sh aa; tr/pyr.
3560 - 3570 Sh, dk brn gr, bit, sly/mica, non calc, tough.
3570 - 3580 Sh, dk brn gr & v dk gr, sly/calc, pyrc, bit, bflky, v/hd, tough.
3580 - 3590 Siltstn, dk brn gr, argil, calc, bit; w/Sh aa; m/pyr.

KOTCHO 3590

3590 - 3600 Siltstn, gr & brn gr, v/calc, argil, s/bit, tite; w/dk brn gr bflky Sh; m/pyr.
3600 - 3610 Sh, md gr & grn gr, sly calc, plty & aa.
3610 - 3630 Siltstn, brn gr, argil, calc, s/bit, s/pyr & Sh aa.
3630 - 3640 Sh, md gr, in/pt sly mica & calc, plty.
3640 - 3650 AA w/s grn gr v/argil chlky Ls.
3650 - 3660 Siltstn, grn gr, v/argil, calc, tite & Sh, grn gr-gr; tr/brn, v/sly calc, plty.
3660 - 3670 Sh, grn gr & dk gr, in/pt sly calc, plty & grn gr v argil marl.
3670 - 3680 Ls, grn gr, argil, in/pt silty, micro xln, dns; tr/foss; w/Sh aa; s/pyr.
3680 - 3690 Siltstn, grn gr, argil, calc, tite & Sh, grn gr & gr, sly/argil, plty.
3690 - 3700 Ls, grn gr, argil, sly/silty, crthy, dns, foss (brachs) & Sh aa.
3700 - 3710 Sh, brn md & grn gr, v/sly calc, splntry.
3710 - 3720 Sh, md gr & grn gr, v/sly calc, splntry.
3720 - 3730 Sh as 3700-3710.
3730 - 3740 Sh, md gr, sly/calc, plty.
3740 - 3750 Sh, md gr & brn gr, v/sly calc, splntry.
3750 - 3760 AA w/less brn gr.
3760 - 3770 AA w/tr red-brn Sh; r/foss.
3770 - 3780 Sh as 3750 - 60.
3780 - 3800 Sh, brn gr & grn gr, v/sly calc, splntry.
3800 - 3810 Siltstn, lt gr & lt grn gr, argil, calc, tite & Sh aa.
3810 - 3820 Sh, md gr & olive gr, v/sly calc, plty.
3820 - 3830 Sh, md gr & dk gr, v/sly calc, bflky & plty, m/pyr; s/lt gr calc tite siltstn.
3830 - 3840 Sh, md gr & grn gr, sly calc & mica, plty.
3840 - 3850 Sh, md gr, calc, bflky & Siltstn as 3820-30.
3850 - 3860 Sh, md gr and grn gr, sly calc, bflky & plty, abd/pyr.
3860 - 3870 Ls, gr-lt gr, argil, micro xln, dns, sly/foss.
3870 - 3880 Ls aa; s/pyr.
3880 - 3910 Ls, gr-md gr, v argil, micro xln, crthy, dns; s/pyr & v/r foss.
3910 - 3920 Dol, gr-md gr, calc, argil, micro xln & gran, dns; s/pyr.
3920 - 3930 AA w/s bf gr foss frag-xln Ls.
3930 - 3940 Dol aa.
3940 - 3950 AA w/s lt gr dolc micro xln dns Ls.

3950 - 3960 Dol aa; w/s bf gr vf xln dns foss (brachs) Ls; s/dk gr Sh.
3960 - 3970 Dol, md gr, v argil, micro gran, dns; w/s lt gr & bf gr micro xln & erthy dns foss Ls; s/pyr.
3970 - 3980 Poor Samples - generally aa.
3980 - 3990 Ls & Dol, md gr, v argil, micro xln & gran, dns; tr/foss & pyr.
3990 - 4000 AA; s/crlns & brachs.
4000 - 4010 Sh, md gr; tr/brn, calc, blky & plty & Ls aa.
4010 - 4020 Ls, gr-md gr, argil, dolic, micro gran & xln, foss (brachs), dns.
4020 - 4030 Sh, dk gr, non calc, ploy & Dol, grn gr, v argil, micro gran, dns.
4030 - 4040 Sh, md gr & grn gr, sly calc, plty.
4040 - 4050 Sh aa w/m dk gr Sh; w/tr lt gr micro gran argil Dol.
4050 - 4060 Sh aa.
4060 - 4070 AA w/a brn gr crypto xln argil foss dns Ls.
4070 - 4080 Ls, gr-lt gr, argil, silty, calc, micro xln & gran, dns; r/foss.
4080 - 4100 Sh, md gr & dk gr, plty & Ls aa.
4100 - 4160 Sh aa, sly/mica.
4160 - 4170 Sh, md gr, v calc, blky & Ls, mtld lt & md gr, v argil, micro xln & chlky, dns, sly/foss; s/pyr.
4170 - 4180 Sh, md gr, sly calc, plty & s/lt gr foss chlky Ls.
4180 - 4190 As 4160-70.
4190 - 4210 Sh, md gr, calc, blky.
4210 - 4240 Sh, md & dk gr, sly calc, fn/pt mica, blky & plty.
4240 - 4250 Sh, md gr, calc, plty & flky; r/foss.
4250 - 4320 Sh, md gr, v calc, blky; r/pyr & foss.
4320 - 4330 Sh, md gr, calc, blky & plty & Siltstn, md gr, v argil & calc.
4330 - 4340 Sh, md gr, v/calc, blky.
4340 - 4350 Sh, md-dk gr, calc, plty & Silt as 4320-30.
4350 - 4400 Sh md gr, calc, blky & plty.
4400 - 4410 Sh, red-brn, brn & gr brn, plty & blky, sly calc; w/s brn v/argil sly/calc mica Siltstn; v/r gyp.
4410 - 4430 Sh, md gr, v calc, blky.
4430 - 4460 Ls, md gr, v argil, micro xln; s/chlky, dns & Sh aa.
4460 - 4480 Sh, md gr, calc, sly/mica, plty & blky.
4480 - 4490 AA w/tr bf gr xln dns Ls.
4490 - 4510 Sh, md gr, calc, flky & plty.
4510 - 4520 Sh, md gr, calc, blky & in/pt plty.
4520 - 4550 Sh, md gr, v calc, blky, sly/foss.
4550 - 4610 Sh, md gr, sly/mica & calc, plty & flky.
4610 - 4640 Sh, md gr, calc, blky; w/s pyr.
4640 - 4660 Sh, md gr, sly/mica & calc, plty.
4660 - 4670 Sh, brn gr & md gr, calc, sly/mica, blky.
4670 - 4690 Sh, md gr, calc, blky; s/pyr upper half.
4690 - 4700 Sh, dk gr, calc, sly/mica, plty & blky, tr/foss; m/pyr.
4700 - 4740 Sh, dk gr & dk brn gr, v calc, in/pt sub-bit, sly/mica, plty & blky; s/pyr.
4740 - 4752 Sh, dk gr & dk brn gr, bit, calc, blky & plty; m/pyr.

TECHO 4752

4752 - 4760 Ls, bf & lt brn, argil, silty, bit, micro gran & erthy; tr/poros, foss (ost & brachs); s/pyr.
4760 - 4770 Ls, bf, argil, erthy, foss (brachs) tr/poros; s/dk brn crypto xln dns argil.
4770 - 4780 Ls, bf & lt gr, chlky & brn dns Ls aa; s/dk grn & gr grn Sh & silt.
4780 - 4790 Ls, bf, argil, chlky & dk brn Ls aa.
4790 - 4800 Ls, dk brn crypto xln, dns & s/chlky Ls aa.

4960 - 4970 Ls, gy & brn, micro-cryptocrn xln, dns; s/argil chlky ls; tr/pyr & s/brchs & sly/calc & pyrt ls; s/foss ls at base.
4970 - 4980 Ls, md gy & brn gr; sly calc, micro & pyr.
4980 - 4990 Ls, grnsh brn & gy, cryptocrn & micrly, dns, sly/foss.
4990 - 4996 Ls, lt gr, sly argil, chlky, foss & grn gr sly/calc Sh.
4996 - 5010 Siltstn, md gy, v argil, calc & ls aa.
5010 - 5040 Ls, lt gr & brn, argil, micro xln & chlky, dns, foss; w/s grn & lt Siltstn aa.
5040 - 5060 Sh, md-dk gr, sly calc & mica, silty & plty.
5060 - 5070 Sh, brn & gr, sly calc, plty; s/pyr s/chlky foss lt gr Ls.
5070 - 5080 Dol, md gr & grn gr, argil, calc, micro xln, dns.
5080 - 5094 Sh, grn gr & gr, calc, blky & plty & aa.

THOSE RIVER 5094

5094 - 5000 Sh, md-dk gr, sly calc, plty & Siltstn, grn gr & md gr, v calc & argil.
5000 - 5010 Sh, md gr & grn gr, calc, blky & plty.
5010 - 5020 Dol, lt gr & grn gr, argil, calc, sly/silty, micro gran & xln, dns.
5020 - 5030 AA; w/s dk-md gr calc Sh.
5030 - 5040 Sh, md gy & red gr, calc, in/pt silty, flky & plty.
5040 - 5060 Siltstn, grn gr & gr, calc, argil; s/pyr & Sh aa.
5060 - 5070 Sh, md gr, grn gr & brn gr, sly calc & mica, plty.
5070 - 5080 Siltstn, grn gr, argil, sly/calc, tite & Sh aa.
5080 - 5110 Sh, md gr & grn gr, sly calc, plty.
5110 - 5120 Sh, md gr & brn gr, sly calc & mica, plty; tr/grn argil siltstn.
5120 - 5140 Sh, grn gr & md gr, calc, plty & blky; tr/siltstn.
5140 - 5150 Siltstn, md grn, argil, calc & Sh, grn-grn gr, calc, blky; s/pyr.
5150 - 5170 Sh, md gr, sly calc, mica, plty & Siltstn aa.
5170 - 5180 Sh aa w/s grn gr Sh.
5180 - 5190 Sh, brn, sly calc, flky & gr & grn gr calc Sh.
5190 - 5200 Sh, md-dk gr, sly calc & mica, plty; w/s gr sly calc argil siltstn.
5200 - 5210 Sh, md gr & grn gr, sly calc & mica, plty.
5210 - 5220 Sh, dk gr, sly calc & mica, blky & plty.
5220 - 5230 Sh, md-dk gr, v calc, sly/silty, s/brchs & brachs & Sh aa.
5230 - 5250 Sh, md-dk gr, sly calc & mica, plty & Ls, lt-md gr, argil, sly/silty micro gran, dns; tr/foss (brachs).
5250 - 5270 Sh aa.

KARTSA 5270

5270 - 5275 Siltstn, lt gr, calc & silic, pearly lustre, v hd.
5275 - 5280 Siltstn, lt-md gr, calc, v hd w/s md-dk gr calc Sh; s/pyr.
5280 - 5290 Sh, md gr, sly calc & mica, plty & blky; s/md gr calc siltstn; tr/irnstn.
5290 - 5300 Ls, lt-md gr, tr/dk brn gr, sly/silty, in/pt pelletoidal, micro xln, dns, foss (brachs, c/crin).
5300 - 5310 Ls, lt-md gr, v silic & silty, vf xln, dns, m/pyr, s/brachs.
5310 - 5323 Ls aa w/s chlky argil sly/foss Ls; tr/pelletoidal Ls.

RED KNIFE 5323

5323 - 5330 Sh, md-dk gr, sly calc & mica, plty.
5330 - 5340 Ls, lt-md gr, chlky-erthy, argil, in/pt silty; r/foss.
5340 - 5350 Siltstn, md gr, v calc, v argil, tite.
5350 - 5360 AA w/s dk grn gr; Sh, dk gr, calc, plty & blky.
5360 - 5380 Sh aa; w/m pyr.
5380 - 5390 Sh, md-dk gr & grn gr; tr/brn gr, sly calc & silty, plty & blky.
5390 - 5420 Sh, dk gr & grn gr, sly calc, plty & blky.

5420 - 5470 Sh, grn gr, brn gr & md gr, sly calc & mica, plty; tr/silt.
5470 - 5480 Sh as 5420-70; w/blky & v/sly gr ss & Sltst.
5480 - 5490 Sh, md-dk gr, v argil, blky, r/foss; s/pyr.
5490 - 5500 Siltstn grn gr, v argil, calc, ss; tr/purp gr ss, sly/wxcy.
5500 - 5510 Sh, purp gr & grn gr, in/pt wxcy, sly calc, plty & blky; s/pyr.
5510 - 5520 No Sample.
5520 - 5530 Sh, md gr, sly mica; nc.
5530 - 5540 Sh, md-dk gr, sly calc, blky, s/pyr.
5540 - 5560 Sh, purp gr, grn gr & md gr, sly calc, plty & blky.
5560 - 5570 As; w/tr grn gr calc argil siltstn.
5570 - 5580 Sh, md gr & grn gr, v/sly calc, blky; tr/pyr.
5580 - 5600 Sh, md gr & grn gr, v/sly calc, blky, m/pyr.
5600 - 5610 Sh, dk gr, sly calc, plty.
5610 - 5620 Siltstn, md gr & brn gr, argil & ls, gr-grn gr, silty, argil, vf xln, dns, ssz.
5620 - 5650 Sh, grn gr & md-dk gr, calc, plty & blky, in/pt mica.
5650 - 5675 Sh as; w/tr purp gr Sh.
5675 - 5680 Sh as; w/s lt gr calc vfg ss.
5680 - 5690 Sh as; w/s grn gr & md gr calc argil Siltstn.
5690 - 5700 Sh, brn, grn gr & gr, sly calc, plty & grn gr argil calc vfg ss.
5700 - 5720 Sh, grn gr, sly calc, plty; tr/pyr.
5720 - 5730 SS, lt gr, calc, argil, vfg, tite & Sh as.
5730 - 5740 Sh as; w/s lt gr & md gr ss as.
5740 - 5760 Sh, brn gr & grn gr & md gr, sly calc, plty; w/s silt.
5760 - 5770 No Sample.
5770 - 5780 Sh, purp gr, grn gr, md gr, sly calc, plty.
5780 - 5790 SS, md gr & grn gr, argil, calc, vfg, tite; w/s sh as; tr/crin.
5790 - 5800 As w/s siltstn & Sh as.
5800 - 5810 Sh as 5770-80.
5810 - 5820 Sh, grn gr, calc, blky & plty & Siltstn, grn gr argil, calc, hd.
5820 - 5830 Sh, md gr, sly calc & mica, blky; w/s md gr argil siltstn; r/pyr.
5830 - 5840 Sh, md gr & grn gr, sly calc & mica, plty.
5840 - 5850 SS, lt gr, v calc, in/pt argil, f-vf gnd, tite; r/pyr.
5850 - 5866 Sh, purp gr, brn gr & grn gr, v calc, plty.

JEAN MARIE EQUIVALENT 5866

5866 - 5875 SS, lt-md gr, v calc, vf-f gnd; tr/poros.

FORT SIMPSON 5875

5875 - 5890 Sh, md gr & grn gr, sly calc, plty; s/crins.
5890 - 5910 Sh as, in/pt blky; tr/silt.
5910 - 5920 Sh, md gr, sly calc, blky.
5920 - 5930 Sh as; w/s lt gr calc siltstn; r/pyr.
5930 - 5940 Sh, md gr & grn gr, blky & plty; r/pyr.
5940 - 5950 No Description.
5950 - 5960 Ls, bf gr, v argil, erthy & s/bf xln foss Ls.
5960 - 5970 Sh as 5930-40 r/crin; no pyr.
5970 - 5980 Sh, md gr & grn gr, plty, r/pyr & crin.
5980 - 6000 Sh, md & dk gr & grn gr, plty.
6000 - 6015 Siltstn, md gr, v argil, mica, non calc; w/s md gr mica flky Sh.
6015 - 6030 Sh, md gr, mica, flky.
6030 - 6070 Sh, md gr & grn gr, plty, r/crin & pyr.
6070 - 6080 Sh, md-dk gr, in/pt sly mica, plty & blky; s/pyr.
6080 - 6110 Sh as; w/s grn gr, mainly platy.
6110 - 6140 Sh, md-dk gr, in/pt mica, flky.

6240 - 6250 Sh, grn gr, md gr & r/brn gr, blky mica, plty; r/lmst at base.
6250 - 6270 Sh, md-dk gr, plty & blky.
6270 - 6280 Sh, brn gr & buff gr, plty, flky, s/pyr.
6280 - 6290 AA w/s grn gr sh (cavings possibly caved/ous).
6290 - 6370 Sh, brn gr & dk gr, in/pt mica, plty.
6370 - 6380 Sh, md gr, sly calc & mica & ss.
6380 - 6390 Sh, brn gr & md gr, v/sly mica, plty.
6390 - 6400 Sh, md-dk gr, v/sly calc, flky; s/pyr.
6400 - 6420 Sh as; s/plty; v/c lams & sly/mica.
6420 - 6430 Sh, md gr, v/sly mica, flky & plty.
6430 - 6440 Sh, brn, in/pt mica, sly plty & md gr mica blky sh.
6440 - 6450 Sh, red gr & grn gr, in/pt mica, plty.
6450 - 6460 Sh, md-dk gr & grn gr, blky & plty.
6460 - 6480 Sh, md gr, brn gr & grn gr, sly mica, blky & plty.
6480 - 6490 Sh, brn, sly mica, plty & blky; tr/silt.
6490 - 6510 Sh as, mainly plty; tr/red brn sh.
6510 - 6520 Sh, md-dk gr, in/pt mica, blky & plty.
6520 - 6530 Sh aa; w/md gr sly/calc blky silty Sh; r/crin.
6530 - 6540 Sh, dk gr, in/pt mica, plty; tr/md gr argil calc Siltstn.
6540 - 6550 Sh, dk gr, plty; r/lmst.
6550 - 6560 Sh, md-dk gr, in/pt sly mica, plty.
6560 - 6590 AA w/tr calc md gr siltstn.
6590 - 6600 Sh, dk grn plty; w/tr dk gr sly/calc silty Sh.
6600 - 6620 Sh, dk brn gr, sly calc & silty, blky.
6620 - 6630 Sh, md gr, sly calc & silty, blky.
6630 - 6640 Sh, md-dk gr, blky & plty.
6640 - 6690 Sh, md-dk gr, in/pt sly mica, flky; s/pyr.
6690 - 6700 Sh, dk gr, plty & blky.
6700 - 6720 Sh, brn gr, sly mica, plty.
6720 - 6730 Sh, brn gr, md gr & grn gr, plty & blky.
6730 - 6740 Sh, md gr & grn gr; tr/brn, flky & pity.
6740 - 6750 Sh, md gr & grn gr, plty.
6750 - 6780 Sh, grn gr & brn gr, plty.
6780 - 6790 Sh, md gr, in/pt sly mica, plty & blky.
6790 - 6810 Sh aa w/lt gr calc silty hd strks.
6810 - 6820 Sh, md gr, w/s gr calc hd siltstn strks; r/crin.
6820 - 6830 Sh, md gr, plty & blky.
6830 - 6840 Sh, md gr, tr/brn gr, sly/mica, plty & flky.
6840 - 6860 Sh, md-dk gr, sly/mica, flky & plty; r/pyr.
6860 - 6870 Sh aa; w/s lt gr calc silt strks.
6870 - 6880 SS grading to Siltstn, lt-md gr, v argil, calc, vfg, tite; s/pyr.
6880 - 6890 Sh, md gr & brn gr, in/pt mica, plty & blky; s/silt lenses.
6890 - 6900 Sh, md gr (poor samples).
6900 - 6910 Sh, md-dk gr, v/sly silty, flky & blky.
6910 - 6920 Sh, md gr, blky; w/hair line lt gr calc silt strks.
6920 - 6930 Sh, md-dk gr, in/pt mica, flky & plty.
6930 - 6940 Sh, dk gr, blky.
6940 - 6970 Sh, md-dk gr, plty & blky.
6970 - 7000 Sh, md-dk gr, sly/mica, flky.
7000 - 7010 Sh as 6910-20.
7010 - 7020 Sh aa; w/tr md gr sly calc mica Siltstn; s/pyr.
7020 - 7030 Sh, md-dk gr, sly/silty, blky.
7030 - 7070 Sh, md gr, sly/mica, plty & blky.
7070 - 7090 Sh, md gr, tr/dk grn gr, plty.
7090 - 7100 Sh, dk gr, v/sly calc & mica, plty & blky.

7160 - 7170 Sh, md-dk gr, sly/mica.
7170 - 7180 Sh, dk gr, v/sly calc & silty, blky; tr/pyr at base.
7180 - 7190 Sh, md-dk gr, micac, blky.
7190 - 7195 Sh, md gr, micac, fissl, tr/pt v/sly silty.
7195 - 7198 Sh aa; w/s md gr argil siltstn.
7198 - 7200 Sh, dk gr, calc & silty, blky.
7200 - 7210 Sh, dk gr, plty & blky.
7210 - 7220 Sh, md-dk gr, sly/micac, fissl & plty.
7220 - 7230 Sh, dk gr, blky & plty, r/calc frgs.
7230 - 7240 Sh, md gr, blky; w/tr wht ostg.
7240 - 7250 Ls, mtld dk brn gr, dk gr & lt gr, v argil, micro xln, dns.
7250 - 7260 AA w/s md gr argil calc siltstn, tr/bit and blk plty sh.
7260 - 7270 Sh, dk gr, mainly silty, s/plty.
7270 - 7280 Sh aa; w/s wht calc frgs; r/erin.
7280 - 7290 Sh, dk gr, s/blk, plty & blky; tr/wht nl anhyd.
7290 - 7310 Sh, md gr, sly/micac, s/anhyd aa.
7310 - 7320 Sh, dk gr, blky; w/s anhyd.
7320 - 7330 AA w/tr dk brn gr argil siltstn; r/erin.
7330 - 7340 Siltstn, md brn gr, argil, calc, sly/micac, tite; p/oil stn & cut (?); w/s dk gr Sh.
7340 - 7350 Sh, md gr, brn gr, sly/micac, plty & blky; w/tr silt.
7350 - 7360 Sh, md gr, sly/micac, silty.
7360 - 7370 Sh, md-dk gr, blky; w/tr brn argil Siltstn; tr/p oil stn.
7370 - 7390 Sh aa w/r erin & pyr at base.
7390 - 7395 Siltstn, md gr, argil, v/sly calc & Sh aa.
7395 - 7430 Sh, md-dk gr, plty & blky, s/scty crins.
7430 - 7440 Sh, dk gr, in/pt sly/micac, plty & blky.
7440 - 7445 Sh, dk gr, in/pt waxey, plty, r/erin.
7445 - 7450 Sh aa; w/s md gr argil sly/calc siltstn strks.
7450 - 7459 Sh, dk gr, marly, blky, s/plty; s/wht calc.

MIDDLE 7459

7459 - 7465 Sh, dk gr, v/sly calc & silty, blky.
7465 - 7474 Sh, blk, dk brn gr, sub-bit, blky.

SLAVE POINT 7474

7474 - 7480 Ls, mtld lt & dk gr, argil, bit, silty, micro xln, dns; abd clear qtz frgs and wht dol rhmbs.
7480 - 7485 Siltstn, dk gr, v argil, calc, bit, tite; abd/dol & calc rhombs; s/dk gr sly/calc sub-bit Sh.
7485 - 7490 Ls, mtld aa; tr/pyr; abd/dol rhmbs & qtz frgs; s/blk bit Sh.
7490 - 7495 Ls, drty gr, argil, erthy-chlky, in/pt silty; abd dol & calc rhmbs.
7495 - 7500 Ls, mtld md & dk gr, v argil, bit, erthy-micro xln, dns; s/calc & qtz.
7500 - 7505 Ls aa; w/abd dol and calc rhmbs, m/qtz; s/blk bit Sh.
7505 - 7520 Ls, mtld lt & dk gr, argil, silty, micro xln, dns; abd/bit; abd/wht dol rhmbs & qtz; s/md gnd sd gns at top.
7520 - 7525 Ls, mtld gr & dk gr & brn gr, v argil, bit, micro xln, s/foss; m/calc.
7525 - 7530 Sh, blk, bit.
7530 - 7535 AA & Ls, mtld gr & dk gr, argil, bit, micro xln, dns, foss(stroms & amph
7535 - 7540 Ls, md gr, argil, bit, vf xln, dns, foss (stroms).
7540 - 7545 Sh, blk, bit & Ls as 7520-25.
7545 - 7560 Ls, mtld gr & dk gr, argil, bit, vf-micro xln, dns, foss (stroms); w/blk bit Sh.
7560 - 7565 Ls, mtld lt & dk gr, v argil, m/bit, micro xln, dns; s/foss (stroms & Brachs) m/blk bit Sh; s/calc.

7[illegible] - 7[illegible] Ls, [illegible] gr, v argil, bit, micro xln, dns, s/strom.
7[illegible] - 7[illegible] Ls aa [illegible] pyr [illegible].
7[illegible] - 7[illegible] Ls, GR CK, argil, micro xln, [illegible] & mtld gr vfly argil dns Ls; w/strom, bit [illegible] bit Sh, r/pyr.
7[illegible] - 7[illegible] Ls, mtld gr & dk gr, v argil, micro xln, dns, foss betrom), bit & w/blk bit Sh.
7605 - 7610 Ls, mtld gr & dk gr, v/bit & argil, micro xln, dns, foss; s/calc.
7610 - 7615 Ls, mtld dk gr & blk, v/arg & bit, foss, dns; w/blk bit Sh.
7615 - 7625 Ls, m/foss.
7625 - 7630 Ls, dk gr, micro xln, dns, foss; s/bit & Sh.
7630 - 7640 Ls, mk-dk brn gr, v argil & erthy, micro xln, dns, foss; s/Sh; tr/bit.
7640 - 7675 Ls, mtld gr & v dk gr, argil, bit, foss, micro xln, dns, w/s dk gr-blk bit Sh.
7675 - 7690 Ls, mtld lt-dk gr & brn gr, argil, bit, micro xln, dns, abd/foss, (strom) s/pyr & Sh aa.
7690 - 7705 Ls, dk brn & dk gr, argil, micro-crypto xln, dns; w/lt gr & bf gr vf xln & erthy foss Ls (30-50%).
7705 - 7715 Ls, dk brn & dk brn gr, v argil, crypto xln, dns; tr/pyr; w/foss Ls aa s/bit & calc.
7715 - 7730 Ls, mtld lt & dk gr, argil, micro-crypto xln, bit; s/asphalt, dns, foss; w/tr brn-bf vf xln dolc Ls w/tr poros.
7730 - 7740 Ls, mtld dk gr & v dk brn gr, argil, bit, micro-crypto xln, dns, v/foss; m/asphalt & s/bit Sh.
7740 - 7745 Ls, brn, vf xln, argil, bit, plty, tr/p poros, foss & Ls aa.
7745 - 7750 Ls, mtld dk brn, brn & gr, argil, vf-crypto xln, dns; s/bit; v/foss.
7750 - 7755 Ls, dk brn gr-blk, argil, crypto xln, dns, bit; w/s dolc brn vf xln argil Ls & s/chlky foss Ls; s/asph & bit Sh.
7755 - 7760 AA w/tr dolc Ls w/tr p poros.
7760 - 7765 Ls, lt bf gr, sly/dolc, vf xln, v/foss, m/bit; tr/p poros (4%).
7765 - 7775 Ls, dk brn gr, brn & gr, sly/dolc, argil, crypto xln & vf xln, foss; s/bit; r/pyr.
7775 - 7795 Ls as 7750-55.
7795 - 7805 Ls, mtld dk gr brn & blk, v argil, micro xln, dns & chlky foss Ls;m/bit.
7805 - 7815 Ls as becoming m/marly; w/m dk gr Sh.
7815 - 7835 Ls, dk brn gr, v argil, crypto xln, dns; w/gr sly/dolc micro xln & chlky sly/foss argil Ls.
7835 - 7855 Dol, lt brn, crypto xln, dns, plty; w/m lt gr chlky foss Ls.

SHUMAKER POINT 7855

7855 - 7860 Ls, mtld lt & md gr, in/pt sly dolc, argil, s/chlky, vf-crypto xln, dns, foss.
7860 - 7865 Ls, lt gr, chlky & aa.
7865 - 7880 Ls, mtld lt gr & bl gr, dolc, argil, micro xln & chlky, dns, sly/foss.
7880 - 7885 Ls, wht, chlky, foss.
7885 - 7925 Ls, mtld brn & lt gr, crypto xln, dns; tr/pelletoid & chlky Ls aa.
7925 - 7930 AA w/tr clr qtz.
7930 - 7945 Ls, mtld lt & dk gr brn, vf xln, v/foss, s/bit, qtz & calc; w/s dk gr-blk bit Sh.
7945 - 7950 Ls, bf, argil, sly/dolc, vf xln, dns, v/foss; s/bit & asph, qtz & pyr.
7950 - 7955 Ls, mtld bf-gr, brn & lt gr, vf xln & chlky, m/bit; r/foss, s/qtz.
7955 - 7965 Ls, lt & md gr, argil, micro xln & erthy, dns, v/foss; tr/pyr & bit.
7965 - 7980 Ls, lt bf gr, argil, sly/dolc, micro xln, dns; s/chlky foss Ls; tr/qtz & asph; s/dk gr-blk bit Sh at base.
7980 - 7985 Ls, md brn gr, argil, vf xln, dns, r/foss; s/bit.
7985 - 8000 Ls, lt bf gr, sly/argil & dolc, vf xln, dns; sly/foss, r/bit & qtz, r/crins s/spicules.

8000 - 8030 Dol, lt gr, f-md, calc, vf xln & clear gran; s/bit; tr/vf poros (tr/crinoid & brachs).
8030 - 8050 Ls, bf, calc, argil, micro gran, foss aa; s/dk-gr & blk bit Sh; m/bit.

CAT GULCH MBR (?)

8050 - 8065 Ls, dk brn gr, argil, crypto xln, dns; w/lt aa.
8065 - 8080 Ls, dk gr, argil, vf xln, dns & Ls, bf, sly/dolc, micro xln & gran, argil, foss (crins); s/qtz.
8080 - 8077 Dol, md gr, f gran, m/bit; w/tr int-gran poros & Dol, mtld lt & dk gr, calc argil, f-micro xln, dns; tr/qtz; w/s cse wht dol rhmbs at base.
8077 - 8085 Dol, lt gr & brn, f-csc rhmbs, silic, s/qtz; m/bit; r/pyr w/s dk gr bit Sh.
8085 - 8095 Dol, mtld lt-dk gr & dk brn, argil, silic, csc xln; abd/clear qtz.
8095 - 8100 Dol, dk brn & gr, csc xln, abd qtz frgs & lge wht dol rhmbs; s/pyr.
8100 - 8120 AA; s/bit & s/dk gr bit Sh.
8120 - 8125 Dol aa; w/s qtz & bit & Sh, brn-gr to gr & tr/brn, plty.
8125 - 8140 Dol, dk brn & gr, md-csc xln, argil, silic, abd/csc wht dol rhmbs & clear qtz, s/bit, tr pyr & dk gr Sh.
8140 - 8150 AA w/tr brn vf xln dns Ls.
8150 - 8160 Dol, brn-dk brn, md-csc xln, dns; abd/csc wht dol rhmbs and qtz.
8160 - 8165 AA; qtz & dol rhmbs m/abd.
8165 - 8185 Dol, md gr & brn gr, argil, silic, md xln, dns; w/abd qtz; tr/pyr, s/wht dol rhmbs; s/dk gr Sh; w/s blk bit Sh & spicules at 8180.
8185 - 8190 Dol, dk brn, argil, silic, f-csc xln, dns; abd/qtz, s/pyr; tr/foss frgs (crins), m/wht dol rhmbs.
8190 - 8215 Dol, dk gr & brn, md-csc xln, dns; abd/qtz; tr/bit; m/wht dol rhmbs.
8215 - 8240 Dol, brn & dk gr, argil micro xln s/wht csc dol rhmbs; r/tr qtz & bit; w/tr brn dolc dns Ls at base.
8240 - 8260 Dol, md brn & dk gr, md xln, dns, argil; s/bit tr/qtz; w/s dk gr sh at base.
8260 - 8285 Dol, mtld brn & dk brn gr, argil, md xln; s/csc wht dol, rhmbs, m/bit & blk bit Sh; s/qtz.
8285 - 8295 Dol, mtld lt-dk gr & dk brn, argil, csc xln, dns; m/bit & qtz.
8295 - 8300 AA w/qtz up to 40%.
8300 - 8305 AA w/abd lge wht dol rhmbs.
8305 - 8310 Dol aa; m/bit & dk gr-blk bit Sh; r/pyr.
8310 - 8315 Qtz, wht & clear, massive & xln; w/tr pyr, bit & s/dk brn Dol.
8315 - 8320 AA w/brn crypto xln dns argil Ls & bf argil erthy dolc sly/foss Ls.
8320 - 8328 AA, erthy Ls is sly/silty.

GREEN SHALE 8328

8328 - 8330 Sh, grn, waxey, calc, pyrc, w/s vf sd gns; w/s dol & qtz aa.
8330 - 8340 Sh aa; w/bf erthy sly/foss Ls & dk brn crypto xln v/argil dns Dol.
8340 - 8345 AA w/s lt gr & grn gr calc siltstn.
8345 - 8350 Dol, lt gr, f-md xln, dns; s/qtz.
8350 - 8360 Dol, lt gr, md-csc xln; s/brn md xln dns Dol; s/qtz & grn waxey sh; tr/poros.
8360 - 8380 AA w/abd qtz.
8380 - 8385 Dol, lt-md gr, f gran; tr/int gran & f vuggy poros; w/Dol, mtld lt gr & brn, csly xln, dns; r/pyr.
8385 - 8390 Dol, lt gr, cal, f xln, dns & Ls, bf-erthy; tr pk color, argil, sly/silty, vf xln, dns; s/grn gr & lt gr calc siltstn; m/clear qtz.
8390 - 8395 Dol aa; tr/pk erthy Ls; s/pyr & qtz.
8395 - 8400 Dol aa w/s dk gr bit Sh; s/bit.

8400 - 8410 Dol, gy; s/a ls, crsly oly/bent ls & s/a/gr crypto xln silic dns ss; w/s mosaic-like pyr xln.
8410 - 8420 Dol, lt gy & lt brn & dr gy, vf-sac xln, dns; tr/pyr; s/stk xln.
8420 - 8430 Dol, lt gy & lt brn & gy, argillac, vf-micro xln, dns.
8430 - 8440 AA w/a bcc angul crypto xln and pellecory Dol.
8440 - 8450 Dol, lt brn & lt gy, crypto xln, dns, earthy, w/s pa-bf chky argil oly/bent ls.
8450 - 8460 SS, clr gr & Dol fr.

CINCINNATI 8460

8460 - 8470 Dol, bf, earthy argil, f sucr, f poros; s/acid pyr dns, oly/silty.
8470 - 8480 Dol, gr, bf & lt brn, argil, oly/silty, crypto xln & earthy, dns.
8480 - 8490 Dol, bf gr, argil, crypto xln & earthy.
8490 - 8496 Dol, lt gr & lt bf, argil, silty, crypto xln, dns; w/s vf clear sd SnS; acid pyr.

ORDOVICIAN SANDS 8499

8499 - 8515 SS, lt gr, silic, f-vf gnd; w/s gr crypto xln dns Dol.
8515 - 8520 Dol, lt brn gr & md gr, oly/argil, crypto xln, dns, angular, breccia-like appearance; w/qtz ss aa; s/dk Sh.
8520 - 8525 Dol, bf gr & md gr, v argil, earthy & micro xln, dns; tr/anhyd & pyr.
8525 - 8530 SS, lt gr, silic, vf gnd, clear qtz, w/scd; w/s Dol as 8515-20; tr/pyr blt & blk Sh.
8530 - 8535 AA, brecciated appearance.
8535 - 8545 AA r/pk md gns; w/pyr and w/blt.
8545 - 8552 SS, lt gr-wht, v/silic, bd, vf-md gnd, tite; tr/blk Sh.

TOTAL DEPTH 8552

BIT RECORD:

No.	Size	Type	Interval	Feet	Hours	
1A	17 1/2	T1AJ	0-327	327	11	
2A	17 1/2	OSC3	327-810	483	24 1/2	
3A	17 1/2	OSC3	810-918	108	5 3/4	
1B	12 1/4	OSC3J	Drill out cement			
2B	8 3/4	X3A	918-1351	433	9	(Air Drilled)
RR1B	12 1/4	OSC3J	918-1313	395	9 1/4	(Reaming)
3B	12 1/4	STIAGJ	1313-1351	38	2 3/4	(Reaming)
			1351-1598	247	17 1/2	
4B	12 1/4	STIAGJ	1598-1890	292	12	
5	8 3/4	X1GJ	1890-3202	1312	36 1/4	
6	8 3/4	X1GJ	3202-3840	638	33 3/4	
7	8 3/4	ST1AGJ	3840-4551	711	36 1/4	
8	8 3/4	SDGH	4551-5226	675	30 1/4	
9	8 3/4	SDGH	5226-5440	214	20 1/2	
10	8 3/4	XIG	5440-5965	525	27 1/2	
11	8 3/4	XIG	5965-6810	845	32 1/2	
12	8 3/4	XIG	6810-7222	412	30 1/2	
13	8 3/4	XV	7222-7433	211	21	
14	8 3/4	XV	7433-7525	92	15 1/2	
15	8 3/4	X55R	7525-8062	537	58 1/2	
16	8 3/4	SC5GJ	8062-8242	180	25 3/4	
17	8 3/4	X55R	8242-8552	310	42 3/4	

DEVIATION SURVEY:

127	3/4	3150	1 1/4	4221	2 1/4	[illegible]	3/4	6450	2
215	3/4	3250	1/4	4331	2	4818	1/4	6530	2 1/2
335	1/2	3370	3/4	4398	1 3/4	5103	Missrun	6830	2
460	1/4	3494	3 1/2	4431	2 1/2	5227	1 1/2	6913	1/2
542	1/4	3569	4 3/4	4523	2	5393	3/4	6983	3/4
634	3/4	3661	0	4580	2 1/4	5527	1/2	7107	2 1/2
755	1/2	3782	5 1/4	4699	1 1/4	5640	1/4	7217	2
882	1/4	3909	5	4803	1	5934	1	7309	3 1/2
918	1 1/2	3954	4 3/4	4898	1	6219	3/4	7403	Misrun
1195	1/4	4025	4 1/2	4972	3/4	6400	1/2	7423	2
1324	1/4	4056	4 1/2	4974	1 1/2	6552	3/4	7525	1
1367	1/2	4167	4	5335	1	6567	1/2	8062	3
1398	1/2	4217	4	4427	Misrun	6749	1	8240	3 1/2
1615	1/4	4448	3 1/2	4459	3/4	6941	1/2	8552	3 1/2
1998	1/4	4479	3 1/4	4551	3/4	6925	2		
2153	1/2	4510	3	4640	3/4	6810	2 1/2		

CORING RECORD: No Cores Cut.

DRILLSTEM TESTS:

DST No. 1 7880 - 8095 (Dual Packer Straddle Test) Misrun. 5 minute preflow with packers leaking. Initial shut in 30'; opened tool with moderate air blow, packers leaking. GTS w/2' flare. Tool plugged after 10'. Recovered 561' drilling mud. Pressures unreliable.

DST No. 2 8185 - 8404 (Dual Straddle By-Pass) ISI 30', VO 30' FSI 30'. GIP, weak air blow, died after 6'. (Lost some mud on preflow). Recovered 450' drilling mud.

IHH	4172#	IF	336#	ISI	2834#
FHH	4018#	FF	336#	FSI	2150#

DST No. 3 7980 - 8185 ISI 30', VO 45', FSI 45'. GIP decreasing to weak in 6'; Weak air blow, died after 10'; Recovered 60' mud.

IHH	4038#	IF	323#	ISI	676#
FHH	3964#	FF	500#	FSI	647#

ELECTRICAL SURVEYS:

Schlumberger: Dual Induction Laterolog 2" - 100' from 918 to 8552
5" - 100' from 1760-1870 & 7250 to TD

Borehole Compensated Sonic Gamma Ray
2" - 100' from 918 to 8551
5" - 100' from 1750-1870 & 7250 to TD

Formation Density Caliper Log
5" - 100' from 1200 to 2100 & 7250 to TD

Sidewall Neutron Porosity Log
5" - 100' from 1700 - 1870 & 7250 to TD

VELOCITY SURVEY: Ran survey March 12, 1970.

ABANDONMENT PLANS:

Plug No. 1 1962 - 7960 w/300 sx common short cement.

Plug No. 2 1000 - 470 w/210 sx common short cement plus 10 sacks.

Prescott L. Brown
Prescott L. Brown
Reliable Geologist
March 31, 1970

Submission to the Department of Indian Affairs and Northern Development on a

WELL HISTORY REPORT
COBLES ET AL CELIBETA D-07

Submitted by: COBLES OIL AND GAS LTD.

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OIL & GAS OPERATIONS UNIT
Oil and Mineral Division
AUG 10 1970
OTTAWA, CANADA
Dept. of Indian Affairs & Northern Development

WELL HISTORY REPORT

Prepared for the Department of Indian Affairs and Northern Development, Government of the Northwest Territories Oil Conservation, Calgary Alberta

SECTION 1 - Summary of Well Data

(a) Well Name and Number
Cobles et al Colibris D-66

(b) Permittee, Licensee or Lessee
Cobles Oil and Gas Limited, Dome Petroleum Ltd., Canada Southern Petroleum Ltd.

(c) Name of Operator
Cobles Oil and Gas Limited
240 - 4th Avenue S.W. Calgary 1, Alberta

(d) Location
Unit D Section 66 Grid. 60° 30' 122° 15'
Latitude N 60° 25' 7.5" Longitude W 122° 27' 55"
Lat. 60.41875° N., Long. 122.46727° W
Unique Well Identifier 300D666030122150

(e) Co-ordinates
Well Abandoned

(f) Permit or Lease Number
Permit Number - 2695

(g) Drilling Contractor
Cascade Drilling Co. Ltd. Rig Field Unit

(h) Drilling Authority
Number 404 Date: 20-1-70

(i) Classification
New field wildcat

(j) Elevations
Ground - 1408' - K.B. 1423'

(k) Spudded
11:30 a.m. 30-1-70

(l) Completed drilling
12:15 a.m. 11-3-70

(m) Total Depth
8552'

(a) Well Status
Plugged and Abandoned

(c) Rig Released Date
16-1-70

(p) Hole Sizes to Total Depth
17½" 0' - 918', 12¼" 918' - 1890', 8-3/4" 1890' - 8552'

(q) Casing
13-3/8" O.D. 54.5#, K-55, R&M. 2, 8 Rd. ST/C, Rng. 55
Condition A Cag. 918'.
Conductor Pipe: 23" Pipe set @ 24'.
Liner: 10" Liner set @ 47' w/325 sacks cement, to stop the flow of water.

SECTION II - Geological Summary

(a) Formation Tops

	From Electric Logs	From Sample Tops
Mississippian Debolt	1266	-
Shunda	1345	1260
Pekisko	1801	-
Banff	2042	2050
Exshaw	3540	3565
Dev. Ketcho Shale	3590	3630
Ketcho Limestone	3	-
Tetcho	4752	4749
Trout River	4994	4994
Kakisa	5270	5268
Red Knife	5323	5382
Jean Marie Equivalent	5866	5942
Fort Simpson	5875	6015
Muskwa Equivalent	7439	7468
Slave Point	7474	7520
Watt Mountain	7852	7822
Sulphur Point	7855	7846
Elk Point	8030	8030
Keg River Dolomite	8077	-
Green Shale	8328	8328
Chinchaga Equivalent	8450	8450
Pre Devonian Quartzite	8499	8499
Total Depth	8552	8552

(b) Cored Intervals
No cores taken

(c) Core Description
No cores taken

(d) Sample Description

[illegible]: [illegible] cuttings at 10' intervals from 1000 to 7100 feet and 5' intervals from 7100 feet to T.D. Sample quality good.

[illegible] - 1150 Sh, md-dk gr, non calc.
1150 - 1200 Sh w/occ vf argil Sh, [illegible].
1200 - 1220 Sh aa.
1220 - 1230 Sh aa; w/tr glauc; s/calc.
1230 - 1237 Sh aa; w/tr pyr.

[illegible]

1237 - 1250 Coal; w/Sh aa; tr/pyr & chc.
1250 - 1260 Sh, dk gr, sub-blk, s/lt gr Chc. (Water Zone)

MISSISSIPPIAN SERIES

1260 - 1280 Ls, brn & crm gr, argil, micro xln, dns; s/lt gr Chc; cut w/CCl4.
1280 - 1300 Ls, brn, argil, vf xln, dns (samples very powdery).
1300 - 1330 Ls aa; s/p fluor & cuts w/CCl4.
1330 - 1345 Ls, gr, argil, micro xln, dns.

KINDERHOOK 1345

1345 - 1360 Ls, gr, argil, vf xln, dns, sly/foss.
1360 - 1370 Ls, vf-lt brn, argil, micro xln & gran, dns, sly/foss; tr/blt.
1370 - 1380 Ls, gr & lt bf gr, argil, vf xln & earthy, scttd pp vugs, dns, sly/foss.
1380 - 1390 Ls, gr-md gr, argil, micro xln & gran, dns, crins.
1390 - 1400 Ls, gr & md gr, argil, micro gran & xln, s/chiky, dns, foss; tr/blk Sh.
1400 - 1410 Ls aa; w/s md xln fragmt foss bf Ls; abd crins.
1410 - 1420 Ls, gr-md gr, argil, vf-micro gran, s/foss, s/blt; tr/poros.
1420 - 1430 Ls, md gr, v argil, micro gran & earthy (dirty) s/pyr, sly/foss, dns.
1430 - 1440 AA; s/dk gr calc Sh & abd/crins.
1440 - 1450 Ls, gr, foss-fragmtl, md-coe xln; abd crins, bracns & bryozoa; s/blk Sh.
1450 - 1470 Ls aa & Ls, md gr, v argil, micro xln, dns; s/pyr.
1470 - 1480 Ls, bf & gr, sly/argil, micro xln, dns, foss - bracns & crins; s/Sh.
1480 - 1490 Ls, gr & md gr, argil, micro xln & chiky, dns, sly/foss; s/dk gr-blk Sh.
1490 - 1500 Ls md gr, argil, micro gran & xln, dns, sly/foss.
1500 - 1510 Ls, lt bf gr, frag xln & md xln, foss (crins, bracns ost), dns.
1510 - 1520 Ls, md gr, v argil, earthy & chiky, sly/foss, dns.
1520 - 1540 AA w/foss frag bf xln Ls; tr/chc.
1540 - 1550 Ls, md gr, v argil, vf sdy, hd, dns.
1550 - 1570 AA r/crin, silty.
1570 - 1580 Ls, md gr, v argil, silty, micro xln, dns, r/foss.
1580 - 1600 Ls, gr-md gr, argil, micro xln, dns.
1600 - 1610 Ls, md gr, v argil, earthy & chiky, dns, r/foss (ost).
1610 - 1630 Ls, md-dk gr, v argil, micro xln & earthy, dns, foss; s/dk gr calc foss Sh.
1630 - 1640 Ls, md-dk gr, argil, in/pt silty, micro xln, dns; s/blk platy Sh.
1640 - 1660 Ls, md-dk gr, v argil, micro xln, dns; r/pyr & foss; s/Sh aa.
1660 - 1730 Ls, md-dk gr, v argil, chiky & earthy, dns.
1730 - 1740 AA w/s md-dk gr calc Sh, abd dk crins; s/pyr.
1740 - 1750 Sh, dk gr, calc, abd crins & bryozoa; tr/pyr.
1750 - 1760 Sh aa & Ls, md-dk gr, v argil, earthy, dns; abd crin frgs.
1760 - 1780 Sh, dk gr, calc foss (crins & bracns).
1780 - 1790 Ls, lt crm gr & gr, vf-micro xln, dns, s/blk pellets or ools.
1790 - 1801 Ls, md-dk gr, v argil, earthy w/dk gr calc Sh; abd/crins; tr/pyr.

[illegible]

1[illegible] - 1910 Ls, gr & crm, [illegible] xln, sl/pt frag-foss, sm/pt argil, occ. crins, brachs & ost, tr/pyr.

1910 - 1930 Ls, crm, foss-frag, & ool xln, occ well preserved crins, brachs & ost & poros, f/stnd & occ v/stnd, s/occ stng = flushed.

1930 - 1960 Ls, crm, gr & lt gr, v[illegible] grnd, argil, dns.

1960 - 1980 Ls, lt & lt gr, foss-frag, micro grnd & chlky, dns & Sh, dk gr, sdy/calc, plty.

1980 - 1990 Ls, crm, vf grnd & xln, sly/foss, brachs, dns.

1990 - 1970 Sh, dk gr, sly/calc, plty.

1970 - 1980 Sh aa w/med-dk brn gr chlky v argil Ls; s/frag xln foss lt brn Ls w/p stn xln.

1980 - 1910 Sh, dk gr-blk, plty; s/pyr.

1910 - 1930 Sh aa; w/crins & ost.

1930 - 1950 Ls, lt gr, sly/sdy, foss-frag, md xln, dns, crins & ost; s/pyr & aa.

1950 - 1960 Ls, crm & lt gr & lt bl gr, md xln, p[illegible]cesld & ool, crins.

1960 - 1970 Ls, lt gr & lt bl gr, sl/pt slity, sly/argil, frgmtl, crins; s/dk gr Sh.

1970 - 1990 Ls, lt bl & lt bl gr, foss/frag (brachs & crins) md xln, f/int xln poros, s/p stng & cuts w/CO[illegible]; s/dk gr Sh.

1990 - 2000 Sh, dk grn gr, calc, blky & dk gr-blk, plty.

2000 - 2020 Ls, bl & lt gr, md xln, foss-frag, abd crins & Sh aa.

2020 - 2042 Ls, lt gr & lt bl gr, foss-frag, md xln, f poros, m/Sh aa; s/grn calc Sh.

DAKOTA 2042

2042 - 2050 Ls, crm & lt brn, s/vf sd & silt gns, vf-md xln, sl/pt foss frag, (mns/ost) s/glauc & pyr; w/s grn gr & dk gr Sh.

2050 - 2060 Sh, grn gr & md gr, sly/calc, plty & blky.

2060 - 2070 Sh, grn gr, sly/calc, plty & blky.

2070 - 2080 Ls w/sr Lt & gr frag Ls.

2080 - 2090 Sh, grn gr, sly/calc, blky.

2090 - 2100 Sh grn gr, sly/calc, plty.

2100 - 2130 Sh aa, s/blky; tr/pyr.

2130 - 2150 Sh, grn gr & grn, sly/calc, plty; s/crins.

2150 - 2160 Sh aa; w/olive & brn grn sly/calc plty Sh.

2160 - 2170 Sh, grn & grn gr, sly/calc, plty & flky, s/crins.

2170 - 2180 Ls w/sr chlky grn gr argil Ls.

2180 - 2190 Sh, md gr to dk gr & grn gr, sly/calc, splintery.

2190 - 2210 Ls w/m dk gr Sh; tr/crin & pyr.

2210 - 2220 Ls w/s lt gr chlky sly/calcy frag-foss Ls.

2220 - 2230 Sh, dk gr, sly/calc, plty & Ls aa; s/crins.

2230 - 2250 Sh, md-dk gr & grn gr, sly/calc, plty.

2250 - 2260 Ls, lt gr argil, sdy, erthy & frag foss, dns & Sh aa.

2260 - 2270 Sh, dk gr & dk grn gr, sly/calc, plty, foss & Ls, lt grn gr, micro xln dns.

2270 - 2290 Ls, lt gr & grn gr, slity, foss-frag, f xln, abd crins;s/brachs & Sh aa.

2290 - 2300 Ls, lt gr, argil, foss-frag, abd ost s/crins & Sh aa.

2300 - 2310 Sh, md-dk gr & grn gr, non calc, plty.

2310 - 2320 Sh aa w/lt gr chlky foss-frag Ls.

2320 - 2330 Sh, md gr & grn gr, sl/pt calc, flky & plty, s/crins; tr/chlky Ls.

2330 - 2340 Sh, md-dk gr & grn gr, v/sly calc, flky.

2340 - 2370 Sh aa w/s argil v sdy frag Ls; s/crins.

2370 - 2400 Ls, gr-md gr, argil, erthy & chlky, foss (brachs) & Sh aa.

2400 - 2420 Ls, md gr, v argil, chlky, foss & Sh, dk gr & md gr, sly/calc.

2420 - 2430 Sh, md-dk gr, sly/calc, plty.

2430 - 2450 Ls, md gr, sly/calc, foss (brachs) blky & plty.

[illegible] - [illegible] Ls w/ss brn calc plty Sh.
[illegible] - [illegible] Sh as 2630-40.
[illegible] - [illegible] Sh, md gr, v calc, blky; s/calky argil Ls.
[illegible] - [illegible] Sh, md gr & grn gr, sly/calc, plty.
[illegible] - [illegible] Sh as 2600-70.
[illegible] - [illegible] Sh as; w/s brn gr argil sly/calc siltstn.
[illegible] - [illegible] Sh, brn plty, waxy & Ls, hvy crins; s/pyr.
2880 - 2890 Sh, md gr, calc, blky & plty.
2890 - 2910 Sh, gr & grn gr, sly/calc, plty; s/crins.
2910 - 2920 Sh, grn gr & md gr, calc, ply & slky.
2920 - 2930 Sh, red-brn, brn-gr & grn gr, sly/calc, plty & flky.
2930 - 2950 Sh, md-dk gr & grn gr, sly calc, plty & blky, r/foss (brachs & crins)
2950 - 2700 Sh, md gr-grn gr, v/sly calc, s/pyr, plty & blky.
2700 - 2770 Sh, grn gr & gr, sly calc, flky & plty; s/lt gr marl at top.
2770 - 2780 Sh, brn gr, sly calc, plty & ss.
2780 - 2790 Sh as 2710-70.
2790 - 2800 Sh, brn & md gr, sly calc & mica, plty; tr/lrnstn.
2800 - 2810 Sh, md gr, grn gr & s/brn gr, sly calc, blky & plty; r/foss.
2810 - 2830 Sh, grn gr & md gr, sly calc, plty; s/pyr.
2830 - 2850 Sh, md gr & grn gr, calc, blky & plty; tr/marl.
2850 - 2890 Sh, md gr & grn gr, sly calc, plty, s/crins & pyr.
2890 - 2900 Sh as; no pyr or foss.
2900 - 2920 Siltstn, md brn gr, v argil, pyrc, sly/mica & Sh, brn gr & md gr, sly/mica & calc, plty.
2920 - 2930 Sh, grn gr and md gr, plty, sly foss; tr/siltstn as.
2930 - 2940 Sh as but flky.
2940 - 2980 Siltstn, md gr, v argil, calc; s/pyr.
2980 - 2990 Ls w/Sh as 2930-40.
2990 - 3010 Sh, md gr & grn gr & brn gr, v/sly calc, splntry.
3010 - 3020 Sh as w/s pyr & md gr calc mica blky sh.
3020 - 3050 Sh, brn gr, grn gr & md gr, sly calc, plty.
3050 - 3060 Sh, md gr & grn, sly calc, plty; s/md gr mica v argil micro xln cns Ls.
3060 - 3070 Sh as w/s blk sly/calc splntry Sh.
3070 - 3080 Sh, olive gr, md gr, brn gr & blk, sly/calc, plty; tr/crin.
3080 - 3100 Sh, grn gr & md gr to blk, sly calc, plty, s/pyr, r/foss.
3100 - 3130 Sh as; w/pyr, crins & brachs.
3130 - 3150 Sh, md gr & grn gr, sly calc, plty & blky, s/crins & pyr.
3150 - 3160 Sh, md gr, grn gr & brn gr, in/pt sly mica, sly calc, crins.
3160 - 3170 Sh, brn gr, md gr & grn gr, plty, sly calc, m/pyr.
3170 - 3180 Sh as; m/pyr & crins.
3180 - 3200 Sh, md gr & grn gr, sly calc, plty; s/crins.
3200 - 3210 Sh, md gr & grn gr, sly calc, plty & blky.
3210 - 3220 Ls w/tr crin.
3220 - 3230 Sh, md gr, grn gr, brn gr & dk gr, sly calc, plty; s/crin.
3230 - 3250 Sh, md gr & grn gr, sly calc, plty.
3250 - 3260 Sh as w/s dk gr - non calc.
3260 - 3270 Sh, dk brn gr, non calc, blky & md gr flky sly/calc Sh.
3270 - 3280 Sh, md gr, grn gr & lt brn, sly calc, plty.
3280 - 3290 Sh, md gr & grn gr, sly calc, plty, s/pyr.
3290 - 3300 Ls s/olive gr.
3300 - 3310 Sh as; s/blk plty Sh.
3310 - 3340 Sh, md gr, grn gr & lt brn gr, sly calc, plty.
3340 - 3350 Sh, md gr & grn gr, v/sly calc, blky & plty; tr/crin & pyr.
3350 - 3360 Sh, md-dk gr, v/sly calc & mica, plty, in/pt marley.
3360 - 3370 Sh, md gr, md brn gr, calc, blky, foss - brachs & crins.
3370 - 3380 Sh, md gr, brn gr & grn gr, sly calc & mica, sly/foss, plty.
3380 - 3390 Sh, md gr & brn gr, sly calc & mica, plty.
3390 - 3400 Sh, md-dk gr, in/pt sly calc, plty; r/crin.

[illegible] - [illegible] Sh, [illegible] gr & gr, sly calc & micac, plty-flky, s/coalsh & brnsds.
[illegible] - [illegible] Sh, md & dk gr, v sly calc, splntry.
[illegible] - [illegible] Sh, md gr, sly/calc, v/sly micac, splntry, s/blky.
[illegible] - [illegible] Sh as [illegible]; s/fine & med, wky calc, splntry sh.
[illegible] - 3420 Sh as 3410-30.
[illegible] - [illegible] Sh, dk gr, wky & plty.
[illegible] - [illegible] Sh, dk & dk gr, blky & plty, in/pt sly mica.
3440 - 3450 Sh, md gr, non calc, blky.
3450 - 3510 Sh, md-dk gr, non calc, in/pt micac, plty & blky.
3510 - 3530 Sh, md-dk gr, non calc, plty & blky.
3530 - 3550 Sh, dk gr, dk brn gr, non calc, blky & plty; r/foss & pyr.
3550 - 3560 Sh, dk gr-md gr & dk brn gr, in/pt calc, flky & blky; s/pyr.

3560 - 3640

3640 - 3650 Sh, dk brn gr & dk gr, sub-blc, blky, tough.
3650 - 3660 Sh aa; tr/pyr.
3660 - 3670 Sh, dk brn gr, blc, sly/micac, non calc, tough.
3670 - 3680 Sh, dk brn gr & v dk gr, sly/calc, pyrc, blc, blky, v/hd, tough.
3680 - 3690 Siltstn, dk brn gr, argil, calc, blc; w/Sh aa; m/pyr.

3690 - 3700

3690 - 3700 Siltstn, gr & brn gr, v/calc, argil, s/blc, tite; w/dk brn gr blky Sh; m/pyr.
3700 - 3710 Sh, md gr & grn gr, sly calc, plty & aa.
3710 - 3730 Siltstn, brn gr, argil, calc, s/blc, s/pyr & Sh aa.
3730 - 3740 Sh, md gr, in/pt sly micac & calc, plty.
3740 - 3750 AA w/s grn gr v/argil chlky Ls.
3750 - 3760 Siltstn, grn gr, v/argil, calc, tite & Sh, grn gr-gr; tr/brn, v/sly calc, plty.
3760 - 3770 Sh, grn gr & dk gr, in/pt sly calc, plty & grn gr v argil marl.
3770 - 3780 Ls, grn gr, argil, in/pt silty, micro xln, dns; tr/foss; w/Sh aa; s/pyr.
3780 - 3790 Siltstn, grn gr, argil, calc, tite & Sh, grn gr & gr, sly/argil, plty.
3790 - 3700 Ls, grn gr, argil, sly/silty, crthy, dns, foss (brachs) & Sh aa.
3700 - 3710 Sh, brn md & grn gr, v/sly calc, splntry.
3710 - 3720 Sh, md gr & grn gr, v/sly calc, splntry.
3720 - 3730 Sh as 3700-3710.
3730 - 3740 Sh, md gr, sly/calc, plty.
3740 - 3750 Sh, md gr & brn gr, v/sly calc, splntry.
3750 - 3760 AA w/less brn gr.
3760 - 3770 AA w/tr red-brn Sh; r/foss.
3770 - 3780 Sh as 3750 - 60.
3780 - 3800 Sh, brn gr & grn gr, v/sly calc, splntry.
3800 - 3810 Siltstn, lt gr & lt grn gr, argil, calc, tite & Sh aa.
3810 - 3820 Sh, md gr & olive gr, v/sly calc, plty.
3820 - 3830 Sh, md gr & dk gr, v/sly calc, blky & plty, m/pyr; s/lt gr calc tite siltstn.
3830 - 3840 Sh, md gr & grn gr, sly calc & mica, plty.
3840 - 3850 Sh, md gr, calc, blky & Siltstn as 3820-30.
3850 - 3860 Sh, md gr and grn gr, sly calc, blky & plty, abd/pyr.
3860 - 3870 Ls, gr-lt gr, argil, micro xln, dns, sly/foss.
3870 - 3880 Ls aa; s/pyr.
3880 - 3910 Ls, gr-md gr, v argil, micro xln, crthy, dns; s/pyr & v/r foss.
3910 - 3920 Dol, gr-md gr, calc, argil, micro xln & gran, dns; s/pyr.
3920 - 3930 AA w/s bf gr foss frag-xln Ls.
3930 - 3940 Dol aa.
3940 - 3950 AA w/s lt gr dolc micro xln dns Ls.

[illegible] - [illegible] [illegible] w/a bf gr v. fxln calc foss (brachs) Ls; s/dk gr Sh.
[illegible] - [illegible] [illegible], md gr, v argil, micro gran, dns, w/a lt gr & bf gr micro xln & sdy/ slty foss Ls; s/pyr.
[illegible] - [illegible] Poor samples - generally Sh.
[illegible] - [illegible] Sh & Ls, md gr, v argil, micro xln & gran, dns; tr/foss & pyr.
[illegible] - [illegible] Sh, s/dk gry & brn/m.
[illegible] - [illegible] Sh, v dk gr; tr/brn, calc, blky & plty & Ls aa.
4610 - 4630 Ls, dk-md gr, argil, calc, micro gran & xln, foss (brachs), dns.
[illegible] - [illegible] Sh, blk gy, non calc, plty & blk, grn gr, v argil, micro gran, dns.
[illegible] - [illegible] Sh, md gr & grn gr, sly calc, plty.
4840 - 4850 Sh aa w/a dk gr Sh; w/tr lt gr micro gran argil Dol.
4850 - 4860 Sh aa.
4860 - 4870 Sh w/a brn gr crypto xln argil foss dns Ls.
4870 - 4880 Ls, dk-lt gr, argil, silty, calc, micro xln & gran, [illegible] r/foss.
4880 - 4890 Sh, md gr & dk gr, plty & Ls aa.
4890 - 4900 Sh aa, sly/mica.
4900 - 4910 Sh, md gr, v calc, blky & Ls, mdd lt & md gr, v argil, micro xln & chlky, dns, sly/foss; s/pyr.
4910 - 4920 Sh, md gr, sly calc, plty & s/lt gr foss chlky Ls.
4920 - 4930 As 4900-10.
4930 - 4940 Sh, md gr, calc, blky.
4940 - 4950 Sh, md & dk gr, sly calc, fn/pt mica, blky & plty.
4950 - 4960 Sh, md gr, calc, plty & flky; s/foss.
4960 - 4970 Sh, md gr, v calc, blky; tr/pyr & foss.
4970 - 4980 Sh, md gr, calc, blky & plty & Siltstn, md gr, v argil & calc.
4980 - 4990 Sh, md gr, v/calc, blky.
4990 - 5000 Sh, md-dk gr, calc, plty & Slit as 4920-30.
5000 - 5010 Sh md gr, calc, blky & plty.
5010 - 5020 Sh, red-brn, brn & gr brn, plty & blky, sly calc; w/a brn v/argil sly/calc mica Siltstn; v/t wp.
5020 - 5030 Sh, md gr, v calc, blky.
5030 - 5040 Ls, md gr, v argil, micro xln; s/chlky, dns & Sh aa.
5040 - 5050 Sh, md gr, calc, sly/mica, plty & blky.
5050 - 5060 Ls, w/tr bf gr xln dns Ls.
5060 - 5110 Sh, md gr, calc, flky & plty.
5110 - 5120 Sh, md gr, calc, blky & fn/pt plty.
5120 - 5550 Sh, md gr, v calc, blky, sly/foss.
5550 - 5610 Sh, md gr, sly/mica & calc, plty & flky.
5610 - 5640 Sh, md gr, calc, blky; w/a pyr.
5640 - 5660 Sh, md gr, sly/mica & calc, plty.
5660 - 5670 Sh, brn gr & md gr, calc, sly/mica, blky.
5670 - 5690 Sh, md gr, calc, blky; s/pyr upper half.
5690 - 5700 Sh, dk gr, calc, sly/mica, plty & blky, tr/foss; m/pyr.
5700 - 5740 Sh, dk gr & dk brn gr, v calc, fn/pt sub-blk, sly/mica, plty & blky; s/pyr.
5740 - 5752 Sh, dk gr & dk brn gr, blk, calc, blky & plty; m/pyr.

TWROO 5752

5752 - 5760 Ls, bf & lt brn, argil, silty, blk, micro gran & erthy; tr/poros, foss (ost & brachs); s/pyr.
5760 - 5770 Ls, bf, argil, erthy, foss (brachs) tr/poros; s/dk brn crypto xln dns argil.
5770 - 5780 Ls, bf & lt gr, chlky & brn dns Ls aa; s/dk grn & gr grn Sh & silt.
5780 - 5790 Ls, bf, argil, chlky & dk brn Ls aa.
5790 - 5800 Ls, dk brn crypto xln, dns & s/chlky Ls aa.

4820 - 4830 Ls, lt & brn, microcrystalline, v hd; s/argil, chiky Ls; tr/pyr & s/grn gr sly/calc & pyr Sh; s/fossils as above.
4830 - 4840 Sh, md gr & grn gr, sly calc, mica & pyr.
4840 - 4850 Ls, mod brn & gr, cryptocrn & marly, dns, s.y/foss.
4850 - 4900 Ls, lt gr, sly argil, chiky, foss & grn gr sly/calc Sh.
4900 - 4910 Siltstn, md gr, v argil, calc & Ls aa.
4910 - 4940 Ls, lt gr & brn, argil, micro xln & chiky, dns, foss; w/s grn & md Siltstn aa.
4940 - 4960 Sh, md-dk gr, sly calc & mica, flky & pty.
4960 - 4970 Sh, brn & gr, sly calc, pty; s/pyr; s/chiky foss lt gr Ls.
4970 - 4980 Dol, md gr & grn gr, argil, calc, micro xln, dns.
4980 - 4990 Sh, grn gr & gr, calc, blky & pty & aa.

MAIN PAYZONE 4990

4990 - 5000 Sh, md-dk gr, sly calc, pty & Siltstn, grn gr & md gr, v calc & argil.
5000 - 5010 Sh, md gr & grn gr, calc, blky & pty.
5010 - 5020 Dol, lt gr & grn gr, argil, calc, sly/silty, micro gran & xln, dns.
5020 - 5030 Alt; w/m dk-md gr calc Sh.
5030 - 5040 Sh, md gr & grn gr, calc, in/pt silty, flky & pty.
5040 - 5060 Siltstn, grn gr & gr, calc, argil; s/pyr & Sh aa.
5060 - 5070 Sh, md gr, grn gr & brn gr, sly calc & mica, pty.
5070 - 5080 Siltstn, grn gr, argil, sly/calc, tite & Sh aa.
5080 - 5110 Sh, md gr & grn gr, sly calc, pty.
5110 - 5120 Sh, md gr & brn gr, sly calc & mica, pty; tr/grn argil siltstn.
5120 - 5140 Sh, grn gr & md gr, calc, pty & blky; tr/siltstn.
5140 - 5150 Siltstn, md grn, argil, calc & Sh, grn-grn gr, calc, blky; s/pyr.
5150 - 5170 Sh, md gr, sly calc, mica, pty & Siltstn aa.
5170 - 5180 Sh aa w/s grn gr Sh.
5180 - 5190 Sh, brn, sly calc, flky & gr & grn gr calc Sh.
5190 - 5200 Sh, md-dk gr, sly calc & mica, pty; w/s gr sly calc argil siltstn.
5200 - 5210 Sh, md gr & grn gr, sly calc & mica, pty.
5210 - 5220 Sh, dk gr, sly calc & mica, blky & pty.
5220 - 5230 Sh, md-dk gr, v calc, sly/silty, s/crins & brachs & Sh aa.
5230 - 5250 Sh, md-dk gr, sly calc & mica, pty & Ls, lt-md gr, argil, sly/silty micro gran, dns; tr/foss (brachs).
5250 - 5270 Sh aa.

KUKPUK 5270

5270 - 5275 Siltstn, lt gr, calc & silic, pearly lustre, v hd.
5275 - 5280 Siltstn, lt-md gr, calc, v hd w/s md-dk gr calc Sh; s/pyr.
5280 - 5290 Sh, md gr, sly calc & mica, pty & blky; s/md gr calc siltstn; tr/lrnstn.
5290 - 5300 Ls, lt-md gr, tr/dk brn gr, sly/s. ty, in/pt pelletoidal, micro xln, dns; foss (brachs, r/crin).
5300 - 5310 Ls, lt-md gr, v silic & silty, vf xln, dns, m/pyr, s/brachs.
5310 - 5323 Ls aa w/s chiky argil sly/foss Ls; tr/pelletoidal Ls.

RED KRTPA 5323

5323 - 5330 Sh, md-dk gr, sly calc & mica, pty.
5330 - 5340 Ls, lt-md gr, chiky-crchy, argil, in/pt silty; r/foss.
5340 - 5350 Siltstn, md gr, v calc, v argil, tite.
5350 - 5360 Alt w/s dk grn gr; Sh, dk gr, calc, pty & blky.
5360 - 5380 Sh aa; w/m pyr.
5380 - 5390 Sh, md-dk gr & grn gr; tr/brn gr, sly calc & silty, pty & blky.
5390 - 5420 Sh, dk gr & grn gr, sly calc, pty & blky.

[illegible] - [illegible] Sh, [illegible] gr - md gr, sly calc & micc, plty; tr/calc.
[illegible] - [illegible] Sh aa; s/blky & m/laml. [illegible] micc.
[illegible] - [illegible] Sh, mdcm gr, v calc, plty, s/laml; s/pyr.
[illegible] - [illegible] Siltstn grn gr, v argill, calc, hd, tr/purp gr sh, sly/blocky.
[illegible] - [illegible] Sh, purp gr & brn gr, lm/pt wavy, sly calc, plty & blky; s/pyr.
[illegible] - [illegible] No sample.
[illegible] - [illegible] Sh, dk gr, sly calc, hd.
[illegible] - [illegible] Sh, mdcm gr, sly calc, blky, s/pyr.
[illegible] - [illegible] Sh, purp gr, grn gr & md gr, sly calc, plty & blky.
[illegible] - [illegible] Sh; w/tr grn gr calc argil siltstn.
[illegible] - [illegible] Sh, md gr & grn gr, w/sly calc, blky; tr/pyr.
[illegible] - [illegible] Sh, md gr & grn gr, w/sly calc, blky, s/pyr.
[illegible] - [illegible] Sh, dk gr, sly calc, plty.
5810 - 5820 Siltstn, md gr & brn gr, argil & Ls, gr-grn gr, silty, argil, vf xln, calc, occ.
5820 - 5830 Sh, grn gr & md-dk gr, calc, plty & blky, lm/pt micc,
5830 - 5870 Sh aa; w/tr purp gr sh.
5870 - 5880 Sh aa; w/s lt gr calc vfg SS.
5880 - 5890 Sh aa; w/s grn gr & md gr calc argil siltstn.
5890 - 5700 Sh, brn, grn gr & gr, sly calc, plty & grn gr argil calc vfg SS.
5700 - 5720 Sh, grn gr, sly calc, plty; tr/pyr.
5720 - 5730 SS, lt gr, calc, silic, vfg, tite & Sh aa.
5730 - 5740 Sh aa; w/s lt gr & md gr as aa.
5740 - 5760 Sh, brn gr & grn gr & md gr, sly calc, plty; w/s silt.
5760 - 5770 No Sample.
5770 - 5780 Sh, purp gr, grn gr, md gr, sly calc, plty.
5780 - 5790 SS, md gr & grn gr, argil, calc, vfg, tite; w/s sh aa; tr/crin.
5790 - 5800 AA w/s siltstn & Sh aa.
5800 - 5810 Sh as 5770-90.
5810 - 5820 Sh, grn gr, calc, blky & plty & siltstn, grn gr argil, calc, hd.
5820 - 5830 Sh, md gr, sly calc & micc, blky; w/s md gr argil siltstn; tr/pyr.
5830 - 5840 Sh, md gr & grn gr, sly calc & micc, plty.
5840 - 5850 SS, lt gr, v calc, lm/pt argil, f-vf gnd, tite; tr/pyr.
5850 - 5866 Sh, purp gr, brn gr & grn gr, v calc, plty.

JOHN MARIS EQUIVALENT 5866

5866 - 5875 SS, lt-md gr, v calc, vf-f gnd; tr/poros.

FORT STANTON 5875

5875 - 5890 Sh, md gr & grn gr, sly calc, plty; s/crins.
5890 - 5910 Sh aa, lm/pt blky; tr/calc.
5910 - 5920 Sh, md gr, sly calc, blky.
5920 - 5930 Sh aa; w/s lt gr calc siltstn; tr/pyr.
5930 - 5940 Sh, md gr & grn gr, blky & plty; tr/pyr.
5940 - 5950 No Description.
5950 - 5960 Ls, bf gr, v argil, earthy & s/bf xln foss Ls.
5960 - 5970 Sh as 5930-40 tr/crin; no pyr.
5970 - 5980 Sh, md gr & grn gr, plty, tr/pyr & crin.
5980 - 6000 Sh, md & dk gr & grn gr, plty.
6000 - 6015 Siltstn, md gr, v argil, micc, non calc; w/s md gr micc flky Sh.
6015 - 6030 Sh, md gr, micc, flky.
6030 - 6070 Sh, md gr & grn gr, plty, tr/crin & pyr.
6070 - 6080 Sh, md-dk gr, lm/pt sly micc, plty & blky; s/pyr.
6080 - 6110 Sh aa; w/s grn gr, mainly platy.
6110 - 6240 Sh, md-dk gr, lm/pt micc, flky.

[illegible] - [illegible] Ss, brn gr, md gr & v/grn gr, sly micd, plty; r/lcse at base.
[illegible] - [illegible] Sh, md-brn gr, plty & blky.
[illegible] - [illegible] Sh, dk gr & brn gr, plty, fssy, s/pyr.
[illegible] - [illegible] Ss w/a grn gr Sh (cmbles partly micaceous).
[illegible] - [illegible] Sh, brn gr & dk gr, in/pt micd, plty.
[illegible] - [illegible] Sh, md gr, sly calc & micd & Sh.
[illegible] - [illegible] Sh, brn gr & md gr, v/sly micd, plty.
[illegible] - [illegible] Sh, md-dk gr, v/sly calc, blky; s/pyr.
[illegible] - [illegible] Sh aa, s/plty; v/c lo & sly/micd.
[illegible] - [illegible] Sh, md gr, v/sly micd, slky & plty.
6340 - 6360 Sh, brn, in/pt micd, sly plty & md gr micd blky sh.
[illegible] - [illegible] Sh, md gr & grn gr, in/pt micd, plty.
6350 - 6360 Sh, md-dk gr & grn gr, blky & plty.
[illegible] - [illegible] Sh, md gr, brn gr & grn gr, sly micd, blky & plty.
6360 - 6400 Sh, brn, sly micd, plty & blky; tr/silt.
6400 - 6470 Sh aa, mainly plty; tr/red brn sh.
6470 - 6480 Sh, md-dk gr, in/pt micd, blky & plty.
6480 - 6490 Sh aa; w/md gr sly/calc blky silty Sh; r/crin.
6490 - 6510 Sh, dk gr, in/pt micd, plty; tr/md gr argil calc Siltstn.
6510 - 6530 Sh, dk gr, plty; r/fssl.
6530 - 6538 Sh, md-dk gr, in/pt sly micd, plty.
6538 - 6540 Lst w/tr calc md gr siltstn.
6540 - 6550 Sh, dk grn plty; w/tr dk gr sly/calc silty Sh.
6550 - 6580 Sh, dk brn gr, sly calc & silty, blky.
6580 - 6590 Sh, md gr, sly calc & silty, blky.
6590 - 6630 Sh, md-dk gr, blky & plty.
6630 - 6638 Sh, md-dk gr, in/pt sly micd, flky; s/pyr.
6638 - 6650 Sh, dk gr, plty & blky.
6650 - 6660 Sh, brn gr, sly micd, plty.
6660 - 6690 Sh, brn gr; md gr & grn gr, plty & blky.
6690 - 6700 Sh, md gr & grn gr; tr/brn, flky & plty.
6700 - 6720 Sh, md gr & grn gr, plty.
6720 - 6730 Sh, md gr, grn gr, sly/micd, plty & flky.
6730 - 6740 Sh, md-dk gr, plty & blky.
6740 - 6750 Sh, grn gr & brn gr, plty.
6750 - 6780 Sh, md gr, in/pt sly micd, plty & blky.
6780 - 6790 Sh aa w/lt gr calc silty hd strks.
6790 - 6810 Sh, md gr, w/o gr calc hd siltstn strks; r/crin.
6810 - 6820 Sh, md gr, plty & blky.
6820 - 6830 Sh, md gr, tr/brn gr, sly/micd, plty & flky.
6830 - 6840 Sh, md-dk gr, sly/micd, flky & plty; r/pyr.
6840 - 6860 Sh aa; w/s lt gr calc silt strks.
6860 - 6870 SS grading to Siltstn, lt-md gr, v argil, calc, vfg, tite; s/pyr.
6870 - 6880 Sh, md gr & brn gr, in/pt micd, plty & blky; s/silt lenses.
6880 - 6890 Sh, md gr (poor samples).
6890 - 6910 Sh, md-dk gr, v/sly silty, flky & blky.
6910 - 6920 Sh, md gr, blky; w/hair line lt gr calc silt strks.
6920 - 6930 Sh, md-dk grn, in/pt micd, flky & plty.
6930 - 6940 Sh, dk gr, blky.
6940 - 6970 Sh, md-dk gr, plty & blky.
6970 - 7000 Sh, md-dk gr, sly/micd, flky.
7000 - 7010 Sh as 6910-20.
7010 - 7020 Sh aa; w/tr md gr sly calc micd Siltstn; s/pyr.
7020 - 7030 Sh, md-dk gr, sly/silty, blky.
7030 - 7070 Sh, md gr, sly/micd, plty & blky.
7070 - 7090 Sh, md gr, tr/dk grn gr, plty.
7090 - 7100 Sh, dk gr, v/sly calc & micd, plty & blky.

7[illegible] - 7[illegible] Sh, [illegible] gr, sly/[illegible].
7[illegible] - 7[illegible] Sh/ [illegible] gr, sly/[illegible], [illegible]; tr/pyr at base.
7[illegible] - 7[illegible] [illegible], md-dk gr, [illegible], fiky.
7[illegible] - 7[illegible] Sh, [illegible] gr, [illegible], fiky, [illegible] w/sly silty.
7480 - 7485 Sh aa; w/s md gr argil, siltstn.
7485 - 7500 Sh, dk gr, calc & silty, blky.
7500 - 7510 Sh, dk gr, plty & blky.
7510 - 7520 Sh, [illegible]-dk gr, sly/[illegible], fiky & plty.
7520 - 7535 Sh, dk gr, blky & plty, r/calc frgs.
7535 - 7540 Sh, md gr, blky; w/tr wht ppp.
7540 - 7550 Sh, [illegible] vk brn gr, dk gr & lt gr, v argil, micro xln, dns.
7550 - 7560 AA w/s md gr argil calc siltstn, tr/bit and blk plty sh.
7560 - 7570 Sh, dk gr, [illegible] blky, s/plty.
7570 - 7580 Sh aa; w/s wht calc frgs; r/cstln.
7580 - 7590 Sh, dk gr, s/blk, plty & blky, tr/wht xl anhyd.
7590 - 7610 Sh, [illegible] gr, sly/[illegible]; s/anhyd sh.
7610 - 7625 Sh, dk gr, blky; w/s anhyd.
7625 - 7650 AA w/sc dk brn gr argil siltstn; r/cstln.
7650 - 7660 Siltstn, md brn gr, argil, calc, sly/micA, tite; p/oil stn & cut (?); w/s dk gr Sh.
7660 - 7680 Sh, md gr, brn gr, sly/micA, plty & blky; w/tr silt.
7680 - 7690 Sh, md gr, sly/micA, fiky.
7690 - 7710 Sh, md-dk gr, blky; w/tr brn argil Siltstn; tr/p oil stn.
7710 - 7730 Sh aa w/r cstln & pyr at base.
7730 - 7735 Siltstn, md gr, argil, v/sly calc & Sh aa.
7735 - 7750 Sh, md-dk gr, plty & blky, s/scte cstln.
7750 - 7760 Sh, dk gr, ln/pt sly/micA, plty & blky.
7760 - 7765 Sh, dk gr, ln/pt waxy, plty, r/cstln.
7765 - 7770 Sh aa; w/s md gr argil sly/calc siltstn strks.
7770 - 7779 Sh, dk gr, [illegible] blky, s/plty; s/wht calc.

[illegible] 7779

7779 - 7785 Sh, dk gr, v/sly calc & silty, blky.
7785 - 7794 Sh, blk, dk brn gr, sub-blt, blky.

SLAVE POINT 7794

7794 - 7800 Ls, mcld lt & dk gr, argil, blt, silty, micro xln, dns; abd clear qtz frgs and wht dol rhmbs.
7800 - 7805 Siltstn, dk gr, v argil, calc, blt, tite; abd/dol & calc rhombs; s/dk gr sly/calc sub-blt Sh.
7805 - 7810 Ls, mcld aa; tr/pyr; abd/dol rhmbs & qtz frgs; s/blk blt Sh.
7810 - 7815 Ls, drty gr, argil, crthy-chlky, ln/pt silty; abd dol & calc rhmbs.
7815 - 7820 Ls, mcld md & dk gr, v argil, blt, crthy-micro xln, dns; s/calc & qtz.
7820 - 7825 Ls aa; w/abd dol and calc rhmbs, m/qtz; s/blk blt Sh.
7825 - 7840 Ls, mcld lt & dk gr, argil, silty, micro xln, dns; abd/blt; abd/wht dol rhmbs & qtz; s/md gnd sd grs at top.
7840 - 7845 Ls, mcld gr & dk gr & brn gr, v argil, blt, micro xln, s/foss; m/calc.
7845 - 7850 Sh, blk, blt.
7850 - 7855 AA & Ls, mcld gr & dk gr, argil, blt, micro xln, dns, foss(stroms & amph)
7855 - 7860 Ls, md gr, argil, blt, vf xln, dns, foss (stroms).
7860 - 7865 Sh, blk, blt & Ls as 7840-45.
7865 - 7880 Ls, mcld gr & dk gr, argil, blt, vf-micro xln, dns, foss (stroms); w/blk blt Sh.
7880 - 7885 Ls, mcld lt & dk gr, v argil, m/blt, micro xln, dns; s/foss (stroms & Brachs) m/blk blt Sh; s/calc.

7870 - 7875 Ls, mdld dk & lt gr, v argil, blk, micro xln, dns; s/chroma.
7875 - 7878 Ls as 7850-55.
7878 - 7885 Ls, dk gr, argil, micro xln, dns & s/lt gr earthy argil dns Ls; s/chroma, blk mdd brn blk Sh; s/pyr.
7885 - 7895 Ls, mdly gr & dk gr, v argil, micro xln, dns, foss (chroma), blk & s/blk blk Sh.
7895 - 7910 Ls, mdld gr & dk gr, v/blk & argil, micro xln, dns, foss; s/calc.
7910 - 7918 Ls, mdld dk gr & blk, v/arg & blk, foss, dns; w/blk blk Sh.
7918 - 7925 All, s/foss.
7925 - 7935 Ls, dk gr, micro xln, dns, foss; s/blk & Sh.
7935 - 7940 Ls, chalk brn gr, v argil & earthy, micro grnn, dns, foss; r/Sh; tr/blk.
7940 - 7975 Ls, mdld lt & v dk gr, argil, b , foss, micro xln, dns; w/s dk gr-blk mdd Sh.
7975 - 7990 Ls, mdld lt-dk gr & brn gr, argil, blk, micro xln, dns; abd/foss, (chroma) s/pyr & Sh aa.
7990 - 7995 Ls, dk brn & dk gr, argil, micro-crypto xln, dns; w/lt gr & bf gr vf xln & earthy foss Ls (50-50).
7995 - 8015 Ls, dk brn & dk brn gr, v argil, crypto xln, dns; tr/pyr; w/foss Ls as s/blk & calc.
8015 - 8030 Ls, mdld lt & dk gr, argil, micro-crypto xln, blk; s/asphalt, dns, foss; w/tr brn-bf vf xln dolc Ls w/tr poros.
8030 - 8040 Ls, mdld dk gr & v dk brn gr, argil, blk, micro-crypto xln, dns, v/foss; m/asphalt & s/blk Sh.
8040 - 8045 Ls, brn, vf xln, argil, blk, pby, tr/p poros, foss & Ls aa.
8045 - 8050 Ls, mdld dk brn, brn & gr, argil, vf-crypto xln, dns; m/blk; v/foss.
8050 - 8055 Ls, dk brn gr-blk, argil, crypto xln, dns, blk; w/s dolc brn vf xln argil Ls & s/chiky foss Ls; s/asph & blk Sh.
8055 - 8060 All w/tr dolc Ls w/tr p poros.
8060 - 8065 Ls, lt bf gr, sly/dolc, vf xln, v/foss, m/blk; tr/p poros (47).
8065 - 8075 Ls, dk brn gr, brn & gr, sly/dolc, argil, crypto xln & vf xln, foss; s/blk; s/pyr.
8075 - 8095 Ls as 8050-55.
8095 - 8105 Ls, mdld dk gr brn & blk, v argil, micro xln, dns & chiky foss Ls; m/blk.
8105 - 8115 Ls as becoming m/marly; w/m dk gr Sh.
8115 - 8135 Ls, dk brn gr, v argil, crypto xln, dns; w/gr sly/dolc micro xln & chiky sly/foss argil Ls.
8135 - 8155 Dol, lt brn, crypto xln, dns, pby; w/m lt gr chiky foss Ls.

SWANSON POINT 8155

8155 - 8160 Ls, mdld lt & md gr, fn/pc sly dolc, argil, s/chiky, vf-crypto xln, dns, foss.
8160 - 8165 Ls, lt gr, chiky & an.
8165 - 8180 Ls, mdld lt gr & bf gr, dolc, argil, micro xln & chiky, dns, sly/foss.
8180 - 8185 Ls, wht, chiky, foss.
8185 - 8225 Ls, mdld brn & lt gr, crypto xln, dns; tr/pelletoid & chiky Ls aa.
8225 - 8230 All w/tr clr qtz.
8230 - 8245 Ls, mdld lt & dk gr brn, vf xln, v/foss, s/blk, qtz & calc; w/s dk gr-blk blk Sh.
8245 - 8250 Ls, bf, argil, sly/dolc, vf xln, dns, v/foss; s/blk & asph, qtz & pyr.
8250 - 8255 Ls, mdld bf-gr, brn & lt gr, vf xln & chiky, m/blk; r/foss, s/qtz.
8255 - 8265 Ls, lt & md gr, argil, micro xln & earthy, dns, v/foss; tr/pyr & blk.
8265 - 8280 Ls, lt bf gr, argil, sly/dolc, micro xln, dns; s/chiky foss Ls; tr/qtz & asph; s/dk gr-blk blk Sh at base.
8280 - 8285 Ls, md brn gr, argil, vf xln, dns, r/foss; s/blk.
8285 - 8300 Ls, lt bf gr, sly/argil & dolc, vf xln, dns; sly/foss, r/blk & qtz, r/exins s/spicules.

8000 - 8030 Dol, lt gr-gr, calc, vf xln & micro grns; s/blk; tr/vp poros (fr/grns & brecha).
8030 - 8035 Ls, bf, dolc, argil, micro grns, foss ss; w/dk-gr & blk bit Sh; s/bit.

UPPER MORROW (?)

8035 - 8045 Ls, dk brn-gy, argil, crypto xln, dns; w/ls as.
8045 - 8060 Ls, dk gr, argil, vf xln, dns & Ls, bf, sly/dolc, micro xln & grns, argil, fans (erins); s/qtz.
8060 - 8077 Dol, md gr, f grns, s/blk; w/lt int-grn poros & Dol, mxld lt & dk gr, calc argil, f-micro xln, dns; tr/qtz; w/s ese wht dol rhmbs at base.
8077 - 8085 Dol, lt gr & brn, f-ese rhmbs, s/blc; s/qtz; m/blcy; s/pyr w/s dk gr bit Sh.
8085 - 8095 Dol, mxld lt-dk gr & [illegible], argil, sltic, ese xln; abd/scat qtz.
8095 - 8100 Dol, dk brn & gr, ese xln, abd qtz frgs & lge wht dol rhmbs; s/pyr.
8100 - 8120 Ss; w/ss/blc & s/dk gr bit Sh.
8120 - 8125 Dol as; w/m qtz & ss & Sh, drk-gr to gr & tr/brn, platy.
8125 - 8140 Dol, dk gr & brn, md-ese xln, argil, sltic, abd/ese wht dol rhmbs & clear qtz, s/pyr; tr pyr & dk gr Sh.
8140 - 8150 Ss w/tr brn vf xln dns Ls.
8150 - 8180 Dol, brn-dk brn, md-ese xln, dns; abd/ese wht dol rhmbs and qtz.
8180 - 8185 Ss; qtz & dol rhmbs s/abd.
8185 - 8195 Dol, md gr & brn gr, argil, sltic, md xln, dns; w/abd qtz; tr/pyr, s/wht dol rhmbs; s/dk gr Sh; w/s blk bit Sh & spicules at 8180.
8195 - 8215 Dol, dk brn, argil, sltic, f-ese xln, dns; abd/qtz, s/pyr; tr/foss frgs (ferins), m/wht dol rhmbs.
8215 - 8240 Dol, dk gr & brn, md-ese xln, dns; abd/qtz; tr/blc; m/wht dol rhmbs. Dol, brn & dk gr, argil micro xln s/wht ese dol rhmbs; r/tr qtz & blc; w/tr brn dolc dns Ls at base.
8240 - 8260 Dol, md brn & dk gr, md xln, dns, argil; s/blc tr/qtz; w/m dk gr sh at base.
8260 - 8285 Dol, mxld brn & dk brn gr, argil, md xln; s/ese wht dol, rhmbs, m/blc & blc blk Sh; s/qtz.
8285 - 8295 Dol, mxld lt-dk gr & dk brn, argil, ese xln, dns; m/blc & qtz.
8295 - 8300 As w/qtz up to 40%.
8300 - 8305 As w/abd lge wht dol rhmbs.
8305 - 8310 Dol as; m/blc & dk gr-blk bit Sh; r/pyr.
8310 - 8315 Qtz, wht & clear, massive & xln; w/tr pyr, blc & s/dk brn Dol.
8315 - 8320 As w/brn crypto xln dns argil Ls & bf argil erthy dolc sly/foss Ls.
8320 - 8328 Ss, erthy Ls to sly/silcy.

GREEN SHALE 8328

8328 - 8330 Sh, grn, waxey, calc, pyrc, w/s vf sd grns; w/s dol & qtz as.
8330 - 8340 Sh as; w/bf erthy sly/foss Ls & dk brn crypto xln v/argil dns Dol.
8340 - 8345 As w/s lt gr & grn gr calc siltstn.
8345 - 8350 Dol, lt gr, f-md xln, dns; s/qtz.
8350 - 8360 Dol, lt gr, md-ese xln; s/brn md xln dns Dol; s/qtz & grn waxey sh; tr/poros.
8360 - 8380 As w/abd qtz.
8380 - 8385 Dol, lt-md gr, [illegible] grnn; tr/int gran & f vuggy poros; w/Dol, mxld lt gr & brn, calcy xln, dns; r/pyr.
8385 - 8390 Dol, lt gr, cal, f xln, dns & Ls, bf-erthy; tr pk color, argil, sly/silcy, vf xln, dns; s/grn gr & lt gr calc siltstn; m/clear qtz.
8390 - 8395 Dol as; tr/pk erthy Ls; s/pyr & qtz.
8395 - 8400 Dol as w/s dk gr blc Sh; s/blc.

8500 - 8510 Dol, gy/bf w/a lt gy/bf argill lam & crystal crypto xln grnst lam; w/a mottled-like qtz xln.

8510 - 8520 Dol, lt gy & lt bf, vf-gr, vitreous xln, dns; tr/pyr; s/qtz x.n.

8520 - 8530 Dol, lt gy & lt bf gr, sly/argill, vfxlnline xln, dns.

8530 - 8535 Lst w/vf dsm argill crypto xln dns splintery bot.

8535 - 8540 Dol, lt brn & lt gr, crypto xln, dns, splintery, w/s pa-bf earthy argill sly/lams ls.

8540 - 8550 SS, lt gr & bf/lam.

Cretaceous Rocks

Navarro - 8560 SS, bf, earthy argill, f sndy, s porous; s/scat pyr gns, sly/earthy.

8560 - 8570 Dol, gr, bf & lt brn, argill, sly/earthy, crypto xln & earthy, dns.

8570 - 8580 Dol, bf gr, argill, crypto xln & earthy.

8580 - 8590 Dol, lt gr & lt bf, argill, earthy, crypto xln, dns; w/s vf clear sd subgl qtz pyr.

Taylor Formation 8590

8590 - 8515 SS, lt gr, silic, f-vf gnd, w/s gr crypto xln dns bot.

8515 - 8520 Dol, lt brn gr & md gr, sly/argill, crypto xln, dns, angular, breccia-like appearance; w/qtz ss ss, s/dk Sh.

8520 - 8525 Dol, bf gr & md gr, v argill, earthy & micro xln, dns; tr/anhyd & pyr.

8525 - 8530 SS, lt gr, silic, vf gnd, clear qtz, w/scd; w/s Dol as 8515-20; tr/pyr brn & blk Sh.

8530 - 8535 As, brecciated appearance.

8535 - 8545 As s/pk sd gns; m/pyr and m/blt.

8545 - 8552 SS, lt gr-wht, v/silic, hd, vf-md gnd, tite; tr/blk Sh.

TOTAL DEPTH 8552

(a) Drill-stem test information
None

SECTION II - Geological history

(a) Report of Drill Stem Tests Prepared report for Delta area fields
D.S.T. No. 1 7950' - 8045' (Dual Packer Test)
Misrun, 5 minute preflow with packers leaking. Initial shut in 30 minutes. Opened tool with weak air blow, packers leaking G.T.S. with 2" flare. Tool plugged after 10 minutes. Recovered 561' drilling mud. Pressures unreliable.

D.S.T. No. 2 8135' - 8404' (Dual Straddle Test)
ISI - 30 min. VO - 30 min. FSI - 30 min. GIP, weak air blow, died after 6 minutes. Lost some mud on preflow. Recovered 450' drilling mud.
IHP - 4172 IF - 336 ISI - 2834
FHP - 4018 FF - 336 FSI - 2150

D.S.T. No. 3 7950' - 8195' ISI - 30 min. VO - 45 min. FSI - 45 min. G.I.P. decreasing to weak in 5 min. Weak air blow, died after 10 min. Recovered 60' of mud.
IHP - 4003 IF - 342 ISI - 3075
FHP - 3964 FF - 500 FSI - 847

(b) Casing Record
13-3/8" O.D. 54.5# K-55 Rge 2 8 Rd. ST/C Reg. 55 Condition A Casing set at 918' cemented with 960 bags common construction cement with 2% $CaCl_2$ added. Pumped plug to 883' cement circulated. Plug down at 12:40 p.m. 8-2-70.

(c) Bit Record

No.	Size	Make	Type	Depth Out	Feet	Hours
1A	17½	Reed	ST1AJ	327	327	11
2A	17½	HW	OSC-3	810	483	24½
3A	17½	HW	OSC-3	918	108	5-3/4
1	12¼	[illegible]X	OSC3-J	918	Drill Cement & Shoe	
2	8-3/4		X3A	1351	433	9
3	12¼		OSC3-J	1313	395	9½
4	12¼	[illegible]	ST1AG	1599	247	17½
5	12¼	Reed	ST1AG	1890	292	12
6	8-3/4	HW	X1G	3202	1312	36½
7	8-3/4	HW	X1G	3840	637	33-3/4
8	8-3/4	Reed	ST1AG	4551	711	36½

* CONDUCTOR PIPE: 20" conductor pipe was set at 25'.

LINER: 10" liner was set @ 47' with 325 sacks cement to stop the flow of water.

No.	Size	Mesh	Type	Depth Out	Feet	Recov.
9	8-3/4	SM	SDGC	5220	527	30%
10	8-3/4	SM	SDGC	5440	214	20%
11	8-3/4	RM	RIG	5965	525	45%
12	8-3/4	RM	RIG	6210	245	12%
13	8-3/4	RM	RIG	7222	412	30%
14	8-3/4	RM	RY	7433	211	11%
15	8-3/4	RM	RY	7525	92	15%
16	8-3/4	RM	RSTC	8062	537	56%
17	8-3/4	Reed	HCSCJ	8242	180	25-3/4
18	8-3/4	RM	RSTC	8552	310	42%

(c) Mud Report

Gel Chemical

Visc.	Wt.	WL	Ph
98	9.5	-	-
140	14.7	-	-
55	10.7	-	-
80	11.3	-	-
45	10.5	-	-
Air	-	-	-
45	8.7	-	-
60	9.0	-	-
39	9.1	-	-
41	9.1	-	-
40	8.9	-	-
35	9.3	-	-
35	9.0	13.8	9.5
36	9.1	13.6	9.5
40	9.0	13.4	9.5
48	9.0	14.4	9.5
40	9.1	10.6	9.5
42	9.0	10.8	9.6
43	9.1	10.4	9.1
45	9.1	10.6	9.5
52	9.2	8.4	9.5
68	9.2	9.4	9.5
80	9.3	7.2	9.0
68	9.3	7.2	9.0
110	9.3	6.2	9.5
94	9.3	6.4	9.5
210	9.4	6.0	9.0
213	9.5	7.1	9.5
165	9.5	6.0	9.5
223	9.5	6.6	9.0
210	9.5	6.4	9.5
265	9.5	7.4	9.5
170	9.6	7.2	9.5
220	9.6	6.4	9.5

Deviation Record

Depth	Degrees
279	3/4
279	0
355	1/8
449	1
542	1
634	3/4
726	1
818	3/4
918	1-1/8
1165	1
1357	1
1507	1
1598	1
1813	1
1998	1
2153	1
2308	1
2550	1
2800	3/4
3140	4-3/4
3190	5
3232	5½
3265	5
3294	4-3/4
3325	4½
3356	4½
3387	4
3417	4
3448	3½
3479	2½
3510	3
3571	2½
3631	2
3688	1-3/4
3751	2½
3813	2
3905	2½
3965	1½
4026	1
4088	1
4152	3/4
4274	1-1/8
4335	1
4428	M.R.
4459	3/4
4640	3/4
4734	3/4
4918	1/16
5102	M.R.
5130	1
5194	3/4
5287	1
5440	1
5534	1
5719	3/4
5900	½
6087	3/4
6267	½
6449	1
6541	3/4
6725	2
6810	2½
6849	3
6880	2½
6910	2
697.	2
7063	3/4
7187	2½
7217	2
7309	3-1/8
7403	M.R.
7433	2
7525	1
8062	3
8240	5½
8552	5

(f) Abandonment Plugs
Plug #1 8552' - 8020' Cemented with 360 sacks common construction cement. Plug in place at 3:20 p.m. 17-3-70.
Plug #2 (340' - 890' cemented with 670 sacks common construction cement plus 2% $CaCl_2$. Plug in place at 11:20 p.m. 17-3-70.
Found top of plug #2 at 470' at 7:30 a.m. 18-3-70. Cut surface casing 3' below ground level, cemented top of casing with 5 sacks cement. Weld on cover plate to casing. Then welded a 5' length of 2" pipe to casing as a permanent marker protruding 2' above ground level.

SECTION IV - L

DIL Log: 8551' - 918'.

DIL Log:		
2" scale	8552' - 918'	
5" scale	8552' - 7250'	1875' - 1690'

Lat. Mic Sonic G.R. Caliper Log		
2" scale	8552' - 918'	
5" scale	8552' - 7290'	1875' - 1750'

Sidewall Neutron Porosity Log		
5" scale	8551' - 7300'	1700' - 870'

Formation Density Log		
5" scale	8551' - 7290'	2100' - 2200'

Synergetic Log System	
5" scale	8551' - 7450'

The above logs were run on 12-3-70.

SECTION V - Analysis

(a) Core Analysis
Nil

(b) Water Analysis
Analyses enclosed

(c) Gas Analysis
Nil

(d) Oil Analysis
Nil

LOST CIRCULATION ZONES: 230 - 245' lost 120 bbls, mud to fill gravel formation.

WATER ZONE: Encountered flow of water from 230 - 245', estimated @ 200 barrels/hour.

SECTION VI - Completion Summary
N.I. - Dry and Abandoned

A. Daniels
A. Daniels

CHEMICAL LABORATORIES LTD. WATER ANALYSIS

1970 Reported Nov. 30, 1970 Well Location Cabin Creek Area Lease No. 66 69 36 13W-1S

AND GAS LIMITED Field or Area (Wildcat)

Zone/Formation

D.S.T. #1 Sampled from Top Sampled at

GEOLOGICAL DATA Recovered 500'.

(Oilfield)

	Na	K	Ca	Mg					SO_4	Cl			CO_3	
Mg/L	1329		32	7					877	700			132	
Meq/L	57.82		1.60	0.58					18.24	19.77			2.64	
Meq. %	48.18		1.33	0.48					15.20	16.48			2.20	

Total Solids Mg/L By Evaporation 6,930 Fe Present Specific Gravity 1.004 @ 60°F

Calculated 4,063 After Ignition 3,630 H_2S Refractive Index 1.3346 @ 25°C Resistivity

Pattern Unit Meq/L

Na

Ca

Fe

Cl

HCO_3

SO_4

CO_3

Remarks and Conclusions

Analysis

CHEMICAL GEOLOGICAL LABORATORIES LTD. WATER ANALYSIS

Received Mar. 23, 1970 Reported Mar. 30, 1970 Well [illegible] Coles Coleman No. 66 [illegible] 32 [illegible]

Operator COLES OIL AND GAS LIMITED Field or Area (Pool)

Elev. K.B. 1424' Grd. Zone/formation Log Depth Sampled From [illegible]

Method of Production D.S.T. #3 Sampled from Top of Tool Sampled By [illegible] Type Pulled [illegible]

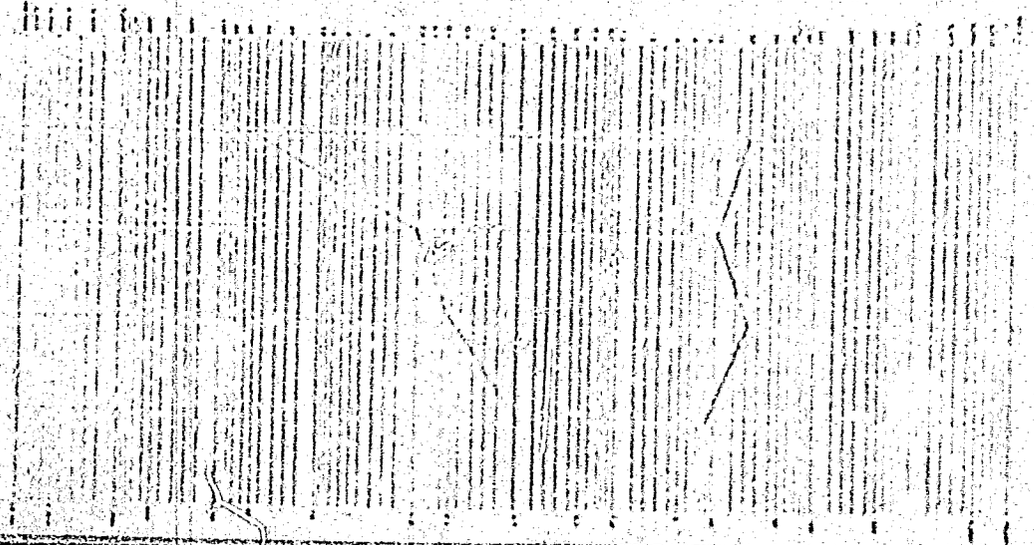
OTHER PERTINENT DATA Recovered 60', Sample Rec'd. [illegible] Date [illegible]

	Na	K	Ca	Mg					SO4	Cl				
Mg/L	1359		22	6					1324	691				
Meq/L	58.13		1.10	0.49					21.51	19.20				
Meq. %	73.26		0.91	0.41					17.96	15.56				

Total Solids Mg/L By Evaporation 6,456 Fe Precip. Specific Gravity 1.035 @ [illegible] °C

Calculated 6,048 After Ignition 3,716 H_2S [illegible] Refract. Index 1.33[illegible] @ [illegible] °C Resistivity 1.[illegible]

Pattern Unit Meq/L



Remarks and Conclusions

Analysis of [illegible] extracted from [illegible] Cl [illegible] in mg/L solids.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS Lab No. 170-173

Received: Mar. 23, 1970 Reported: Mar. 30, 1970 Well: Location: Gobles Cel1bata Lakes D-66 60-30N 122-15

Operator: GOBLES OIL AND GAS LIMITED Field or Area: (Wildcat)

Elev.: K.B. 1424' Grd. Zone/Formation: Sample Interval: 7880' - 8095'

Method of Production: D.S.T. #1 Sampled from: Top Sampled by: Johnston Testers Date: ---

OTHER PERTINENT DATA Recovered 560'.

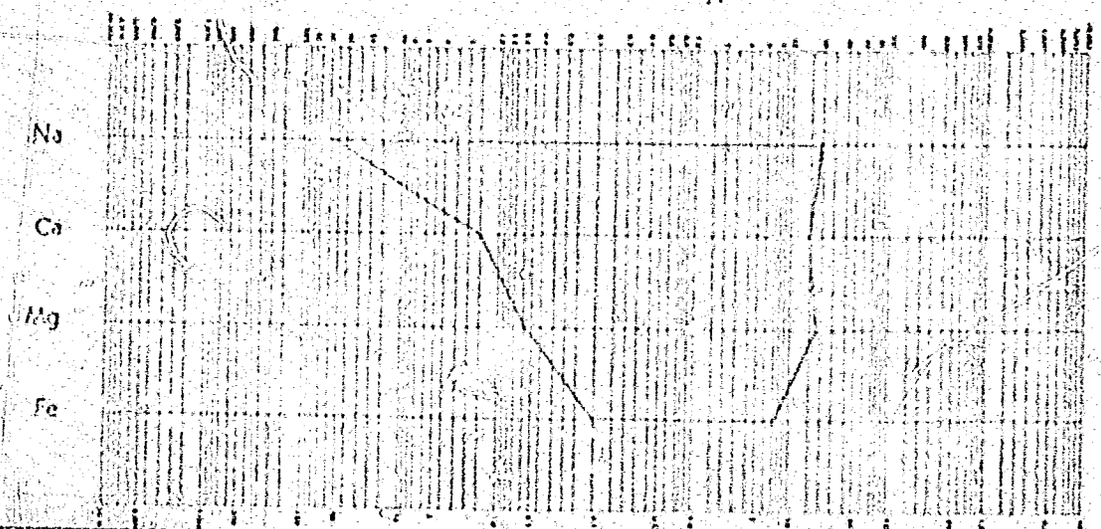
(Signed)

	Na	K	Ca	Mg					SO_4	Cl			CO_3	HCO_3		
Mg./L	1329		32	7					877	701			217	000		
Meq./L	57.82		1.60	0.58					18.24	19.77			7.23	16.76		
Meq. %	48.18		1.33	0.48					15.20	16.48			6.03	12.30		

Total Solids Mg/L: By Evaporation 6,930 Fe Present Specific Gravity 1.004 @60°F Observed pH 9.0 @ 73 °F

Calculated 4,063 After Ignition 3,680 H_2S -- Refractive Index 1.3344 @25°C Resistivity 1.36 ohm-meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

Analysis determined on brown colored water extracted from mud. Organic matter was detected in total solids.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No 770-1734

Received: Mar. 23, 1970 Reported: Mar. 30, 1970 Well Location: Gobles Colibeta Lake 0-66 60-30N 122-15

Operator: GOBLES OIL AND GAS LIMITED Field or Area: (Wildcat)

Elev.: K.B. 1424' Grd. Zone/Formation: Keg River Sample Interval 7980' - 8125'

Method of Production: D.S.T. #3 Sampled from: Top of Tool Sampled by: Lynes Gulfed Services Ltd. Date: Mar. 16, 1970

OTHER PERTINENT DATA Recovered 60'.

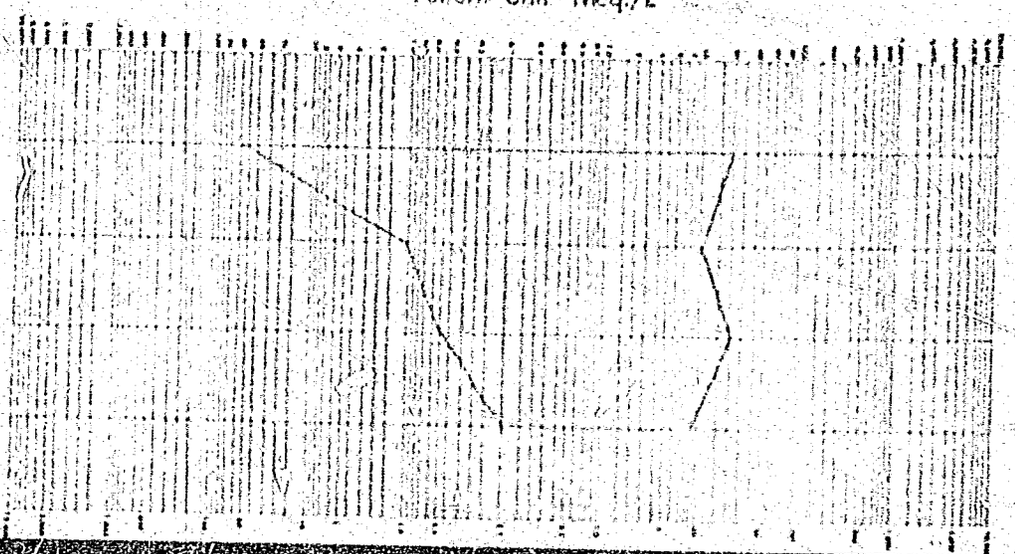
(Signed)

	Na	K	Ca	Mg					SO_4	Cl			CO_3	HCO_3			
Mg./L	1359		22	6					1034	681			266	680			
Meq./L	58.13		1.10	0.49					21.51	19.20			8.86	11.15			
Meq. %	48.26		0.91	0.41					17.86	15.94			7.36	9.26			

Total Solids Mg/L: By Evaporation 6,456 Fe Present Specific Gravity 1.004 @60°F Observed pH 9.0 @ 73 °F

Calculated 4,048 After Ignition 3,716 0.5 --- Refractive Index 1.3344 @25°C Resistivity 1.37 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

Analysis determined on brown colored water extracted from mud. Organic matter was detected in total solids.

TECHNICAL REPORT

JOHNSTON

JOHNSTON TESTERS

TEST DATA

Formation	SLAVE POINT	Zone Tested			
Interval	7880 ft. to	8095 ft.	Total Depth	8552 ft.	
Type of Test	OPEN HOLE, STRADDLE, BYPASS.				
Time Started to Move	0500 hrs.	Time Set On Bottom	0820 hrs.		
First Flow	10 Min.	Initial Shut-In	35 Min.		
Second Flow	45 Min.	Second Shut-In	45 Min.		
Third Flow	5 Min.	Final Shut-In	5 Min.		
Packer Used in	1102 ins.	Time Off Bottom	1500 hrs.		
Wt. Set on Packers	40,000 lbs.	Packer Fluid	40,000 Mud		

Description of Blow During Test: GOOD INITIAL PUFF, DROPPED SLOWLY ON PREFLOW. GAS TO SURFACE IN 2 MINUTES ON SECOND OPENING. MUD DROPPED SLOWLY FOR 10 MINUTES, THEN STOPPED.

FLUID RECOVERY

Mud Type Reverse Circulated Yes ☒ No ☐

Total Fluid Recovered 540

Description of Fluid Recovered

540' HEAVY, DRILLING FLUID

GAS BLOW MEASUREMENT

Measured With

Type of Instrument ID in.

Time	Size Choke	Pressure or Orifice	M. Cubic Feet Gas
	2" FLARE		

REMARKS: MISRUN. PLUGGED TOOL.
MUD TOO HEAVY (DEHYDRATED)
TOOL WAS CHASED 4 FEET DURING TEST PERIOD.

RESISTIVITY		CHLORIDE CONTENT	
Recovery Water	@ °F	ppm	
Mud Pit sample filtrate	@ °F	ppm	(Appm.)

TOOL SEQUENCE

	Length	O.D.
P.O. Sub	.75	
D.P. Sub	.75	
M/E Tool	9.12	
Bypass Tool	3.00	
Recorder	4.40	
Jars	7.90	
H. Sub	.84	
Safety Joint	1.75	
S.S. & Packer	9.20	7 1/2"
T.C. & Packer	5.75	7 3/4"
Total	43.46	
Stub.	1.45	
Perf.	5.00	
R. Sub	.84	
Recorder	4.40	
Sub	.67	
Drill Collars	198.39	
Sub	.82	
T.C. & Stub.	3.60	
Total Interval	215.17	
Packer	2.60	7 1/2"
T.C. & Packer	7.20	7 3/4"
Perf.	12.00	
Sub	.65	
Drill Pipe	432.01	
Sub	.65	
B.N. & Perf.	1.90	
Total Below Intv.	457.01	
TOTAL LENGTH	715.64	

Elevation: NOT REPORTED.
Bottom Hole Choke Size: 1/2"
Fluid Cushion Type: NIL Amt.

MUD AND HOLE DATA

Mud Type	GEL	W.L.	7.2
Filter Cake	2/32	Vis. 300 Wt.	9.6
Time Taken	MARCH 13, 1970		
Contractor	CASCADE DRLG.	Rig No.	21E
Drill Pipe Size	4 1/2 IF		
Drill Collar Size	2 7/8 ID	Length	402'
Main Hole Size	8 3/4		
Rat Hole Size			

District: FORT ST. JOHN Ticket No. D 04607 Date: MARCH 14, 1970 Test No. 1 J.T. No. 1

Company: GOBLES OIL & GAS LTD. Address: 240 - 4TH AVENUE S.W.

Well Name: GOBLES ET AL CELTBETA D-66 CALGARY 1, ALBERTA

Number: 60° 25' 07"N 122° 27' 55"W Field: WILDCAT Province: NORTH WEST TERRITORIES

Formation and Interval: SLAVE POINT 7880 - 8095 DST#1 Co. Rep.: A. ANDERSON Technician: R. THOMAS

Distribution of Reports:

5 - CALGARY, CANKEE GAS COMPANY.

JOHNSTON TESTERS

D 04607

PRESSURE DATA

INSTRUMENT No.		AK1-1978	AK1-2114
CAPACITY (psig)		7500	7500
INSTRUMENT DEPTH FT		7851	7868
INSTRUMENT OPENING		INSIDE	OUTSIDE
PRESSURE GRADIENT psi/FT.			
WELL TEMP. °F			
INITIAL HYDROSTATIC	A	4122#	4157#
FIRST FLOW	B	69#	435#
	B-1	32#	920#
INITIAL SHUT-IN	C	2203#	2351#
SECOND FLOW	D		386#
	D-1	CLOCK	2089#
SECOND SHUT-IN	E	STOPPED	2852#
THIRD FLOW	F		625#
	F-1		1651#
FINAL SHUT-IN	G		1921#
FINAL HYDROSTATIC	H		3730#

REMARKS:

FLUID SAMPLE REPORT

Sample No.:

Type:

Depth: FT

Volume:

Sample Pressure:

psig @ Surface

Gravity: API @ °F

Gas/Oil Ratio: Cu.Ft./Bbl.

Recovery:

Cu. Ft. Gas

cc. Oil

cc. Water

cc. Mud

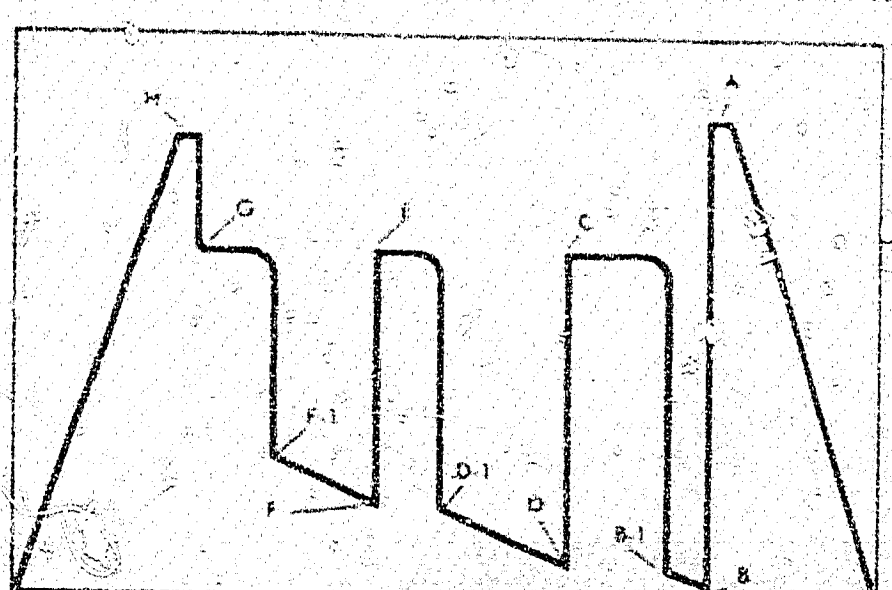
Total Liquid cc

PRESSURE INCREMENTS

POINT MINUTES	PRESSURE	$\frac{T+\Delta T}{\Delta T}$	POINT MINUTES	PRESSURE	$\frac{T+\Delta T}{\Delta T}$	POINT MINUTES	PRESSURE	$\frac{T+\Delta T}{\Delta T}$

JOHNSTON TESTERS

GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



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

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

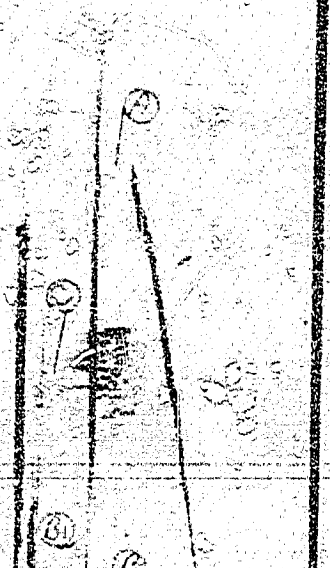
A-1, A-2, A-3, etc. Initial Hyd. Pressures
B, B-1, Initial Flow Pressures
C, Initial Shut-In
D-1, D-2, D-3, etc. Second Flow Pressures
E, Second Shut-In
F, F-1, F-2, Third Flow Pressures
G, Final Shut-In
H, Final Hyd. Pressures
Z — Special pressure points such as pumping pressures recorded for formation breakdown

JOHNSTON TESTERS

FIELD REPORT NO.	RECORDER NO.	CAPACITY	GAUGES REQUESTED
D 04607	AK1-1878	7500	15

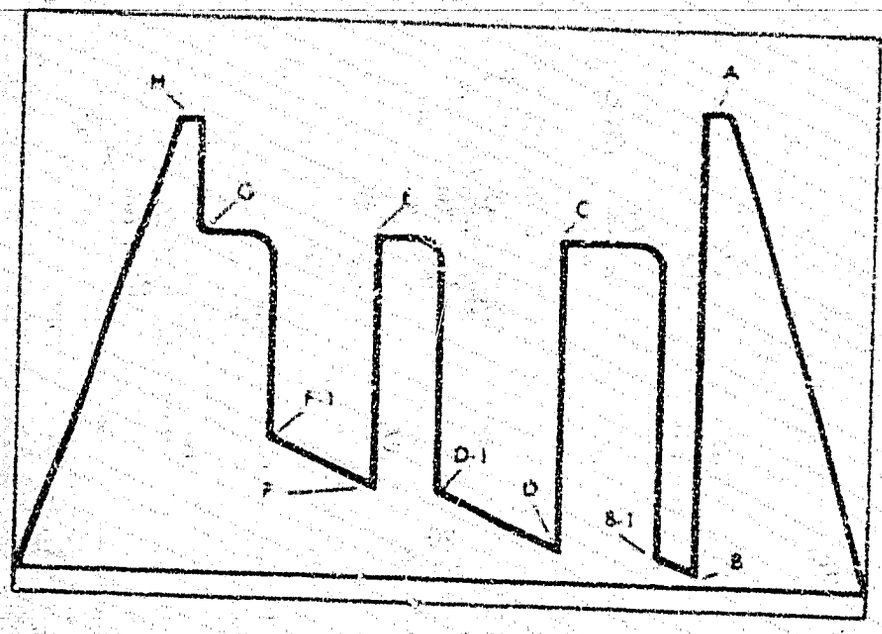
D-04607 AK1-1878

Clark Stabbed



JOHNSTON TESTERS

GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



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B. First Flow
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E. Second Shut-In
F. Third Flow
G. Final Shut-In
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The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

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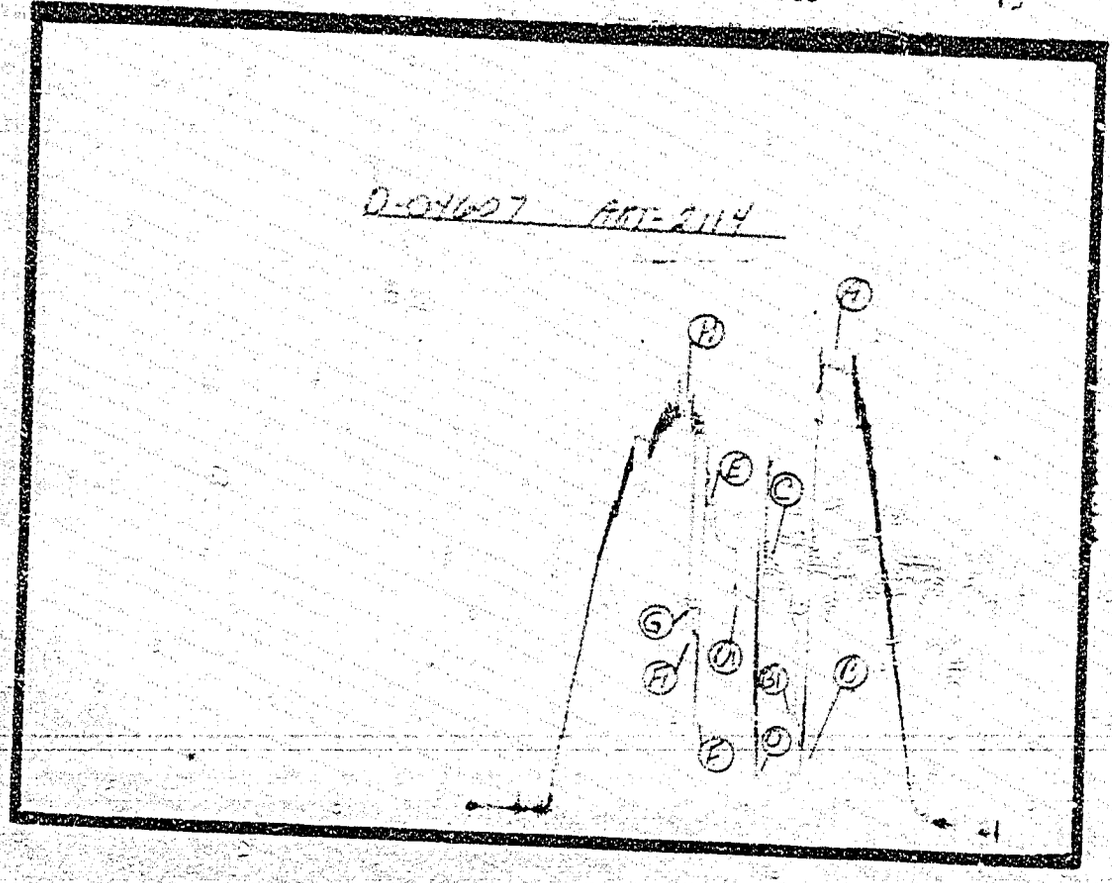
B, B-1, Initial Flow Pressures
C, Initial Shut-In
D-1, D-2, D-3, etc. Second Flow Pressures
E, Second Shut-In
F, F-1, F-2, Third Flow Pressures
G, Final Shut-In
H, Final Hyd. Pressures
Z — Special pressure points such as pumping pressures recorded for formation breakdown.

JOHNSTON TESTERS

FIELD REPORT NO	RECORDER NO	CAPACITY	REPORTS REQUESTED
D 04607	AK1-2114	7300	15

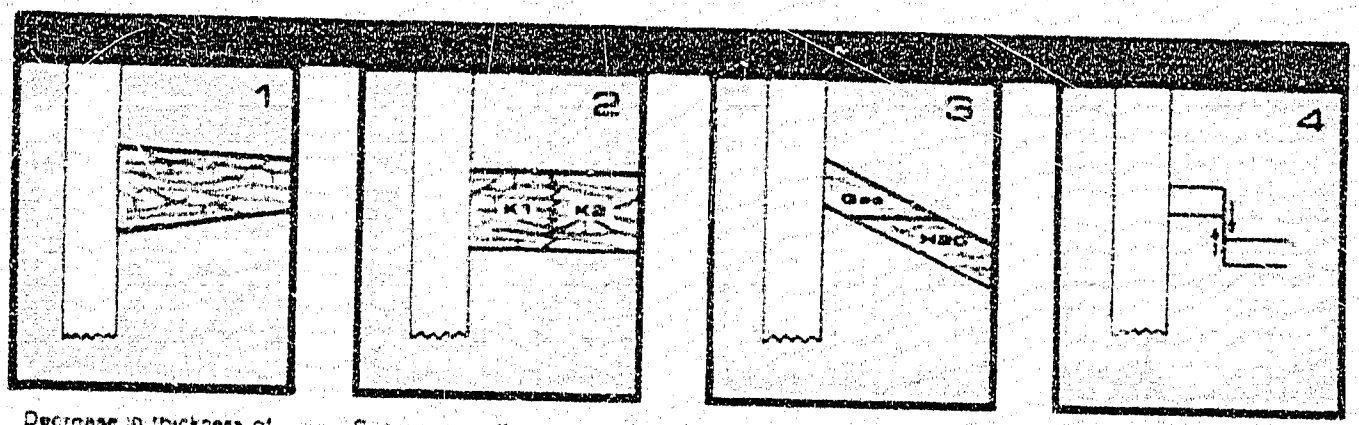
D-04607 AK1-2114



TECHNICAL REPORT

JOHNSTON

GEOLOGICAL INTERPRETATION GUIDE*

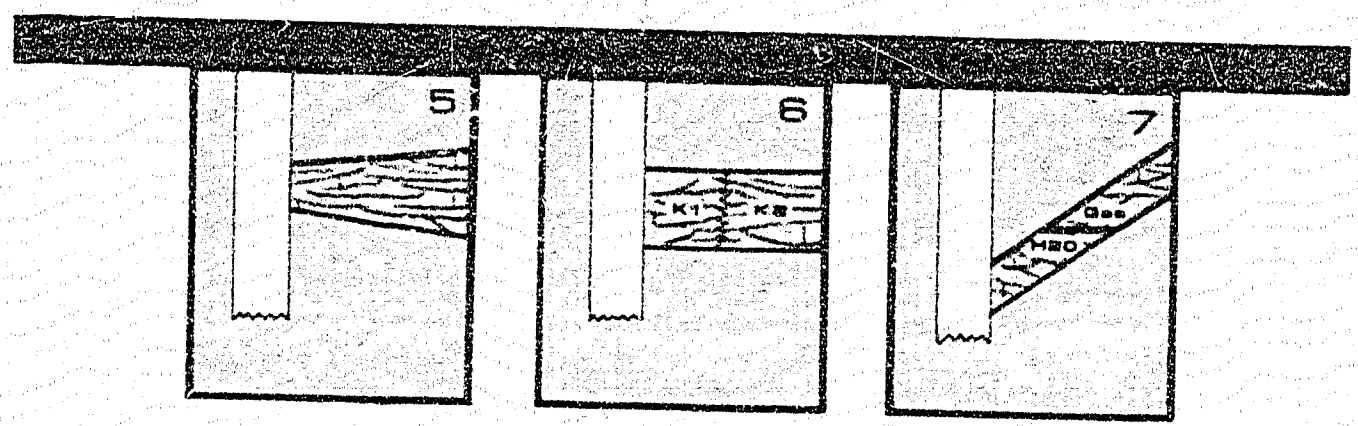


Decrease in thickness of pay zone away from well bore

Decrease in effective permeability away from well bore (facies change) $K_1 < K_2$

Increase in fluid viscosities away from the well bore (gas-water contact, gas-oil contact)

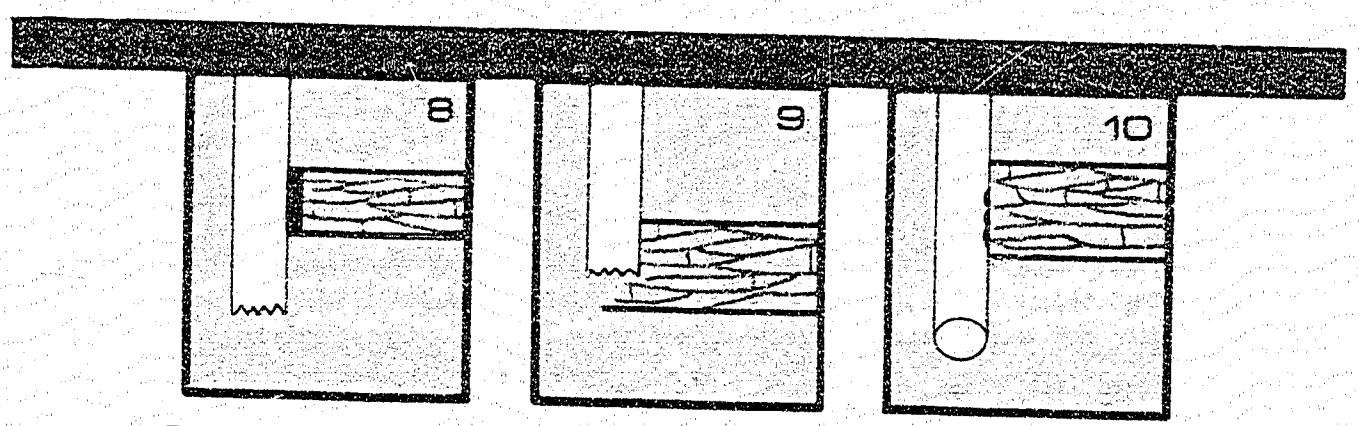
Sealing barrier (fault)



Increase in thickness of pay zone away from well bore

Increase in effective permeability away from well bore $K_1 < K_2$

Decrease in fluid viscosities away from well bore



True Skin Damage - (Caused by: filtrate invasion, bit damage, drilling solids invasion, etc.)

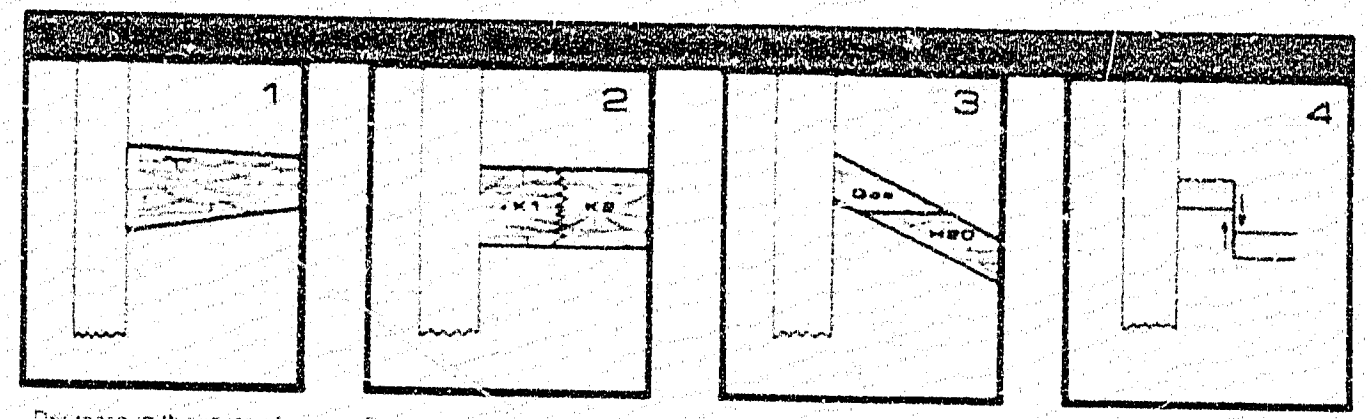
Pseudo Damage - Incomplete penetration of porous zone

Pseudo Damage - Choking effect of perforations (cased hole)

*Illustrated causes of anomalies detected through pressure build-up analysis with Johnston "Special Data Analysis"

JOHNSTON

GEOLOGICAL INTERPRETATION GUIDE*

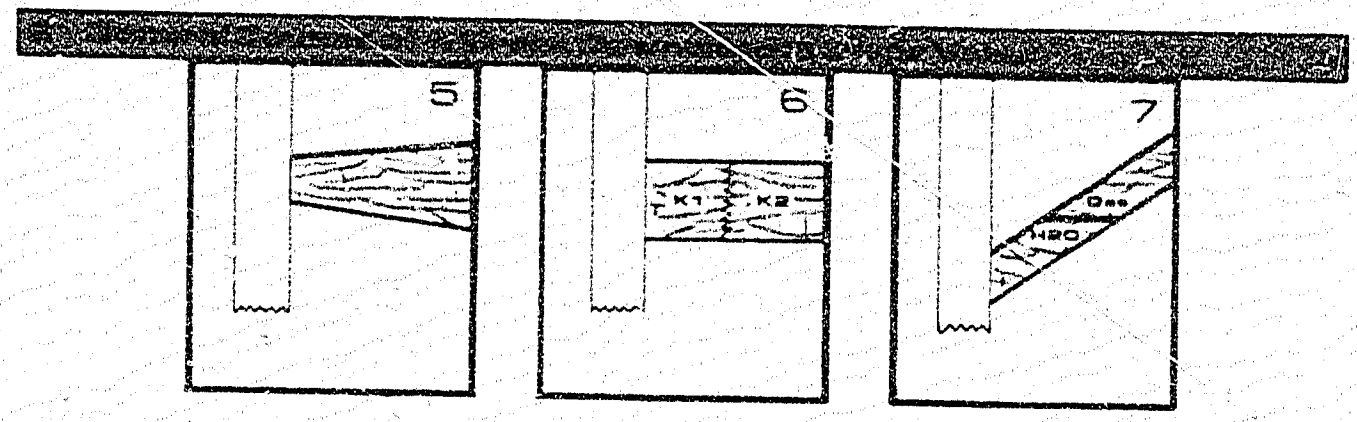


Decrease in thickness of pay zone away from well bore

Decrease in effective permeability away from well bore (facies change) K₂ < K₁

Increase in fluid viscosities away from the well bore (gas-water contact, gas-oil contact)

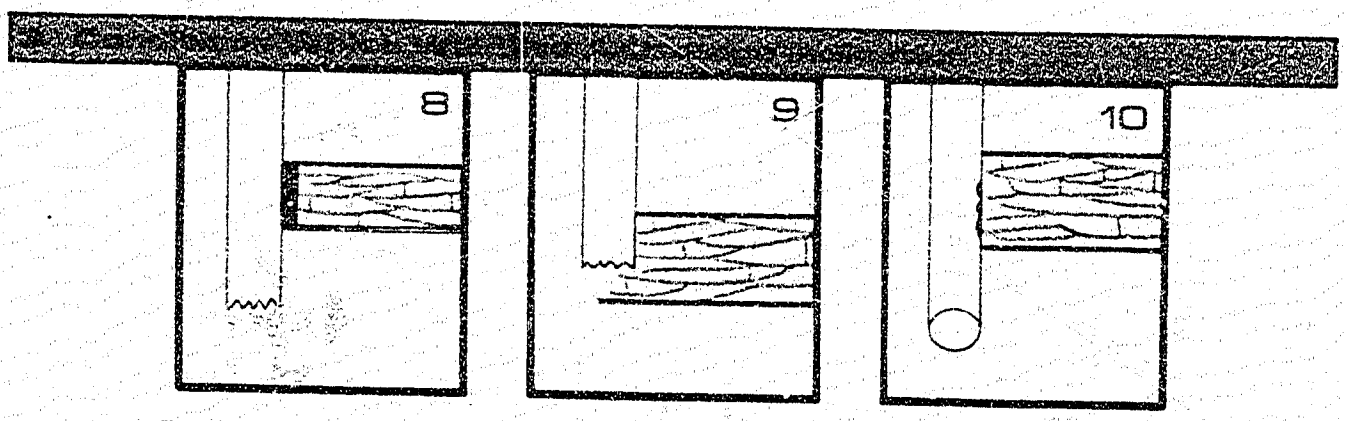
Sealing barrier (fault)



Increase in thickness of pay zone away from well bore

Increase in effective permeability away from well bore $K_2 > K_1$

Decrease in fluid viscosities away from well bore



True Skin Damage - (Caused by: filtrate invasion, bit damage, drilling solids invasion, etc.)

Pseudo Damage - Incomplete penetration of porous zone

Pseudo Damage - Choking effect of perforations (cased hole)

*Illustrated causes of anomalies detected through pressure build-up analysis with Johnston "Special Data Analysis"

CANADIAN FLOW TESTERS

TEST DATA

Formation	SLAVE POINT	Zone Tested			
Interval	8185 ft. to 8404	T.D.	3552	ft.	
Type of Test	OPEN HOLE, STRADDLE, BYPASS				
Time Started in Hole	1230 hrs.	Time Opened	1515	hrs.	
First Flow	2 Min.	Initial Shut-in	5	Min.	
Second Flow	5 Min.	Second Shut-in	20	Min.	
Third Flow	10 Min.	Final Shut-in	30	Min.	
Pulled Loose at	1655 hrs.	Out of Hole		hrs.	
Wt. Set on Packer	40,000 #	Pulled Loose Wt.	50,000	#	
Description of Blow During Test					

NO BLOW AT SURFACE.

TOOL SEQUENCE

	Length	OD
P.O. Sub	.75	
D.P. Sub	.75	
M.F. Tool	9.12	
Bypass Tool	3.00	
Jars	7.90	
H. Sub	.84	
Safety Joint	1.75	
S.T. & Packer	9.20	7 1/2"
T.C. & Packer	5.75	7 3/4"
Total	39.06	
Stub.	1.45	
Perf.	7.00	
R. Sub	.84	
Recorder	4.40	
Recorder	4.40	
Sub	.67	
Drill Collars	195.05	
Sub	.82	
T.C. & Stub.	3.60	
Total Interval	218.23	
Packer	2.60	7 1/2"
T.C. & Packer	7.20	7 3/4"
Perf.	10.00	
Sub	.65	
Drill Pipe	125.37	
Sub	.65	
B.H. & Perf.	1.90	
Total Below Intv.	148.37	
TOTAL LENGTH	405.66	

FLUID RECOVERY

Was Test Reversed Circulated Yes No X

Total Fluid Recovered 450

Description of Fluid Recovered

450' HEAVY, DRILLING FLUID.

GAS BLOW MEASUREMENT

Measured With ID Riser

Type of Instrument

Time	Size Choke	Reading Pressure	M Cubic Feet Day
		NIL	

REMARKS TEST SATISFACTORY.
MUD DROPPED 12' ON TOOL OPENING.
TOOL WAS CHASED 5 FEET DURING TEST PERIOD.

Elevation NOT REPORTED.

Bottom Hole Choke Size 1/2"

Fluid Cushion Type NIL Amt.

MUD AND HOLE DATA

Mud Type	GEL	W.L.	5.2
Filter Cake	2/32	Visc. 200 Wt.	9.6
Time Taken	MARCH 15, 1970		
Contractor	CASCADE DRLG.	Rig No.	21E
Drill Pipe Size	4 1/2 IF		
Drill Collar Size	2 7/8 ID	Length	405'
Main Hole Size	8 3/4"		
Rat Hole Size			

RESISTIVITY	@	°F.	CHLORIDE CONTENT
Recovery Water			ppm.
Mud Pit sample filtrate	@	°F	ppm.

District FORT ST. JOHN Ticket No. D 04608 Date MARCH 15, 1970 Test No. 2 J.T. No. 2

Company GOBLES OIL & GAS LTD. Address 240 - 4TH AVENUE S.W.

Well Name GOBLES ET AL CELIESETA D-66 CALGARY 1, ALBERTA

Number 60° 25' 07"N 122° 27' 55"W Field WILDCAT Province NORTH WEST TERRITORIES

Formation SLAVE POINT Co. Rep. A. ANDERSON

and Interval 8185 - 8404 DST#2 Technician R. THOMAS

Distribution of Reports

15 - CALGARY, CANKEE GAS COMPANY.

JOHNSTON TESTERS

327 - 36th AVENUE S.E. CALGARY 14, ALBERTA PH. 243-6121
A DIVISION OF NEW YORK HELICOPTER CANADA LIMITED

D 04608

PRESSURE DATA

		AK1-2114	AK1-2107
INSTRUMENT No.			
CAPACITY psig		7500	4500
INSTRUMENT DEPTH FT		8195	8199
INSTRUMENT OPENING		OUTSIDE	OUTSIDE
PRESSURE GRADIENT psi/FT			
WELL TEMP °F	242		
INITIAL HYDROSTATIC	A	4166#	4190#
FIRST FLOW	B	111#	64#
	B-1	198#	175#
INITIAL SHUT-IN	C	3587#	3405#
SECOND FLOW	D	254#	257#
	D-1	315#	322#
SECOND SHUT-IN	E	2832#	2869#
THIRD FLOW	F	287#	298#
	F-1	329#	329#
FINAL SHUT-IN	G	2141#	2171#
FINAL HYDROSTATIC	H	4019#	4045#

REMARKS

FLUID SAMPLE REPORT

Sample No.
Type
Origin
Volume

Sample Pressure
psig at Surface
Gravity API @ °F
Gas Oil Ratio Cu Ft/bbl

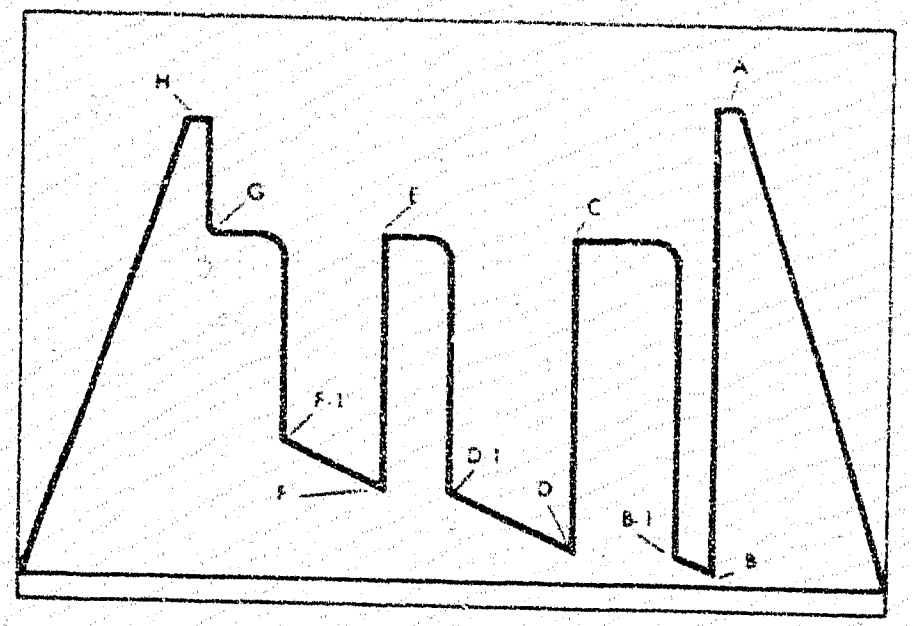
Recovery
Cu Ft Gas
cc Oil
cc Water
cc Mud
Total Liquid cc

PRESSURE INCREMENTS

POINT MINUTES	PRESSURE	$\frac{T + \Delta T}{\Delta T}$	POINT MINUTES	PRESSURE	$\frac{T + \Delta T}{\Delta T}$	POINT MINUTES	PRESSURE	$\frac{T + \Delta T}{\Delta T}$

JOHNSTON TESTERS

GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



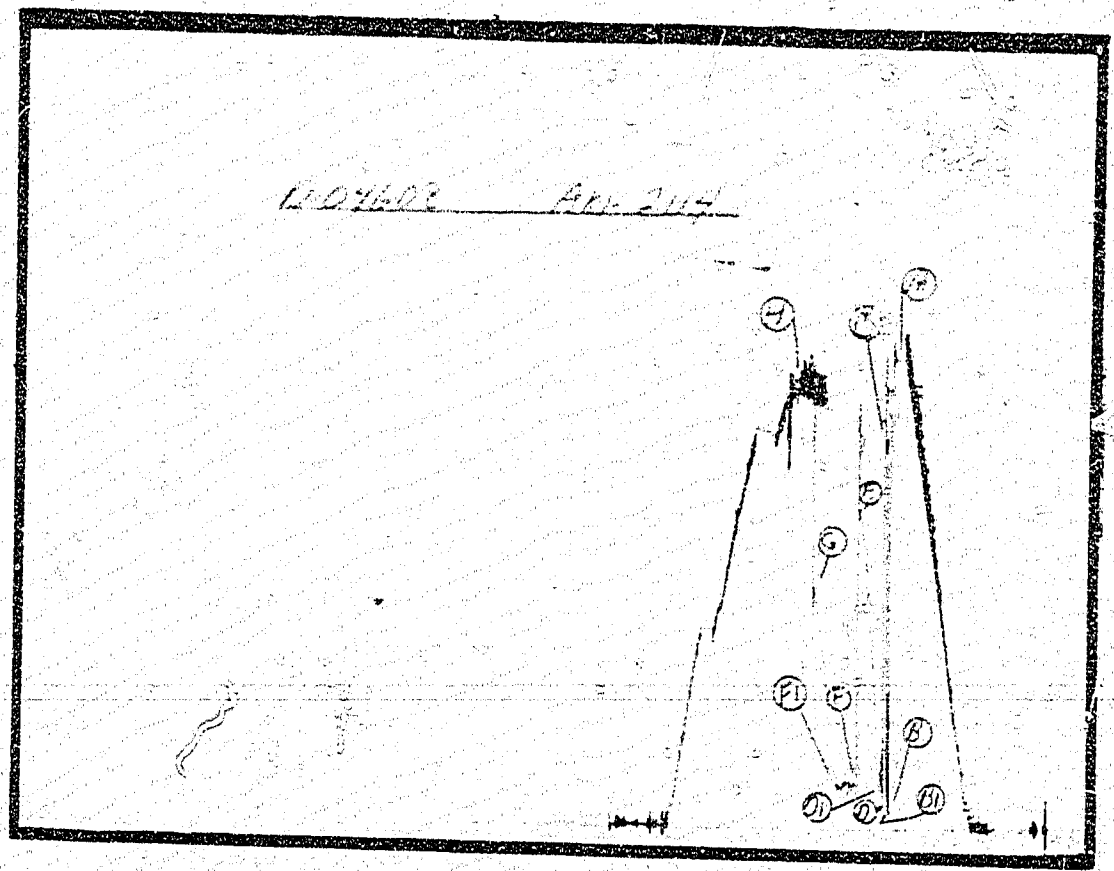
A. Initial Hyd. Mud
B. First Flow
C. Initial Shut-In
D. Second Flow
E. Second Shut-In
F. Third Flow
G. Final Shut In
H. Final Hyd. Mud

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

A-1, A-2, A-3, etc. Initial Hyd. Pressures
B, B-1, Initial Flow Pressures
C, Initial Shut-In
D-1, D-2, D-3, etc. Second Flow Pressures
E, Second Shut-In
F, F-1, F-2, Third Flow Pressures
G, Final Shut-In
H, Final Hyd. Pressures
Z — Special pressure points such as pumping pressures recorded for formation breakdown

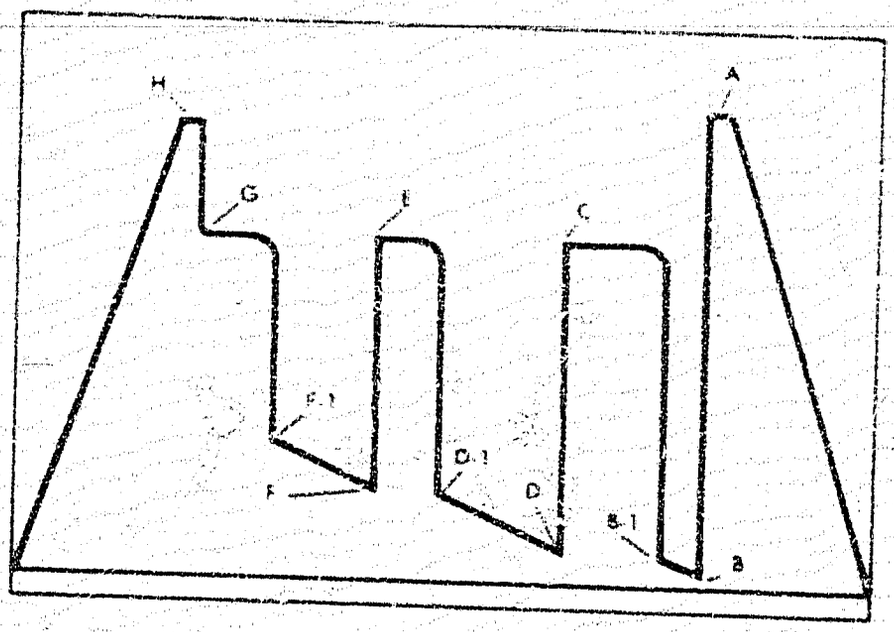
JOHNSTON TESTERS

FIELD REPORT NO.	RECORDER NO	CAPACITY	REPORTS REQUESTED
D 04608	AK1-2114	7300	15



JOHNSTON TESTERS

GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



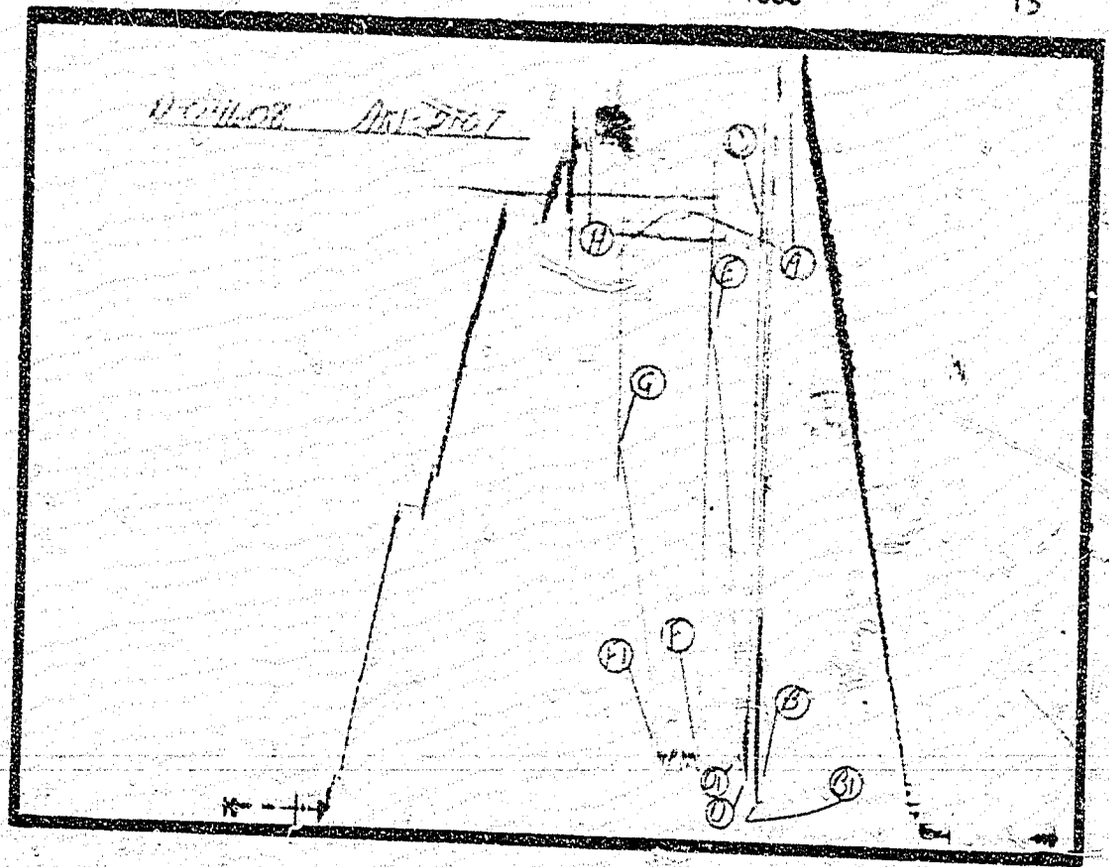
A. Initial Hyd. Mud
B. First Flow
C. Initial Shut-In
D. Second Flow
E. Second Shut-In
F. Third Flow
G. Final Shut-In
H. Final Hyd. Mud

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

A-1, A-2, A-3, etc. Initial Hyd. Pressures
B, B-1, Initial Flow Pressures
C, Initial Shut-In
D-1, D-2, D-3, etc. Second Flow Pressures
E, Second Shut-In
F, F-1, F-2, Third Flow Pressures
G, Final Shut-In
H, Final Hyd. Pressures
Z — Special pressure points such as pumping pressures recorded for formation breakdown

JOHNSTON TESTERS

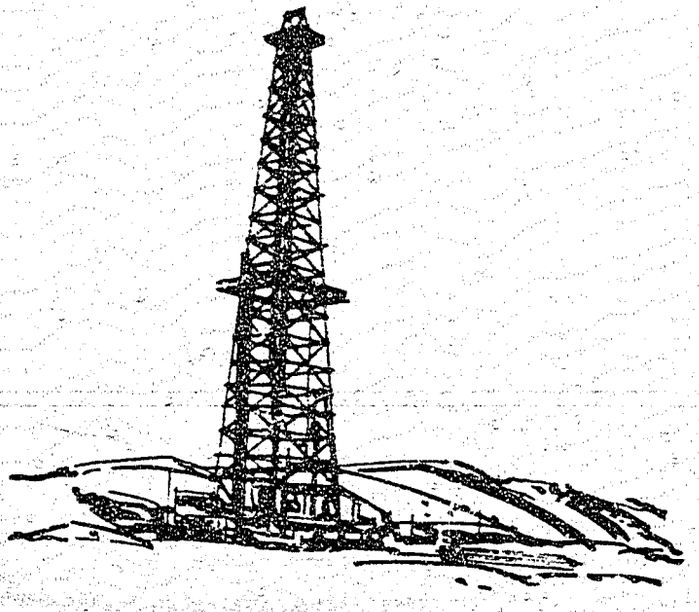
FIELD REPORT NO.	RECORDER NO.	CAPACITY	REPORTS REQUESTED
D 04608	AK1-2107	4600	15



LYNES

BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools



DRILL STEM TEST

TECHNICAL SERVICE REPORT

Gables et al Celibeta 60° 25' 122° 27'

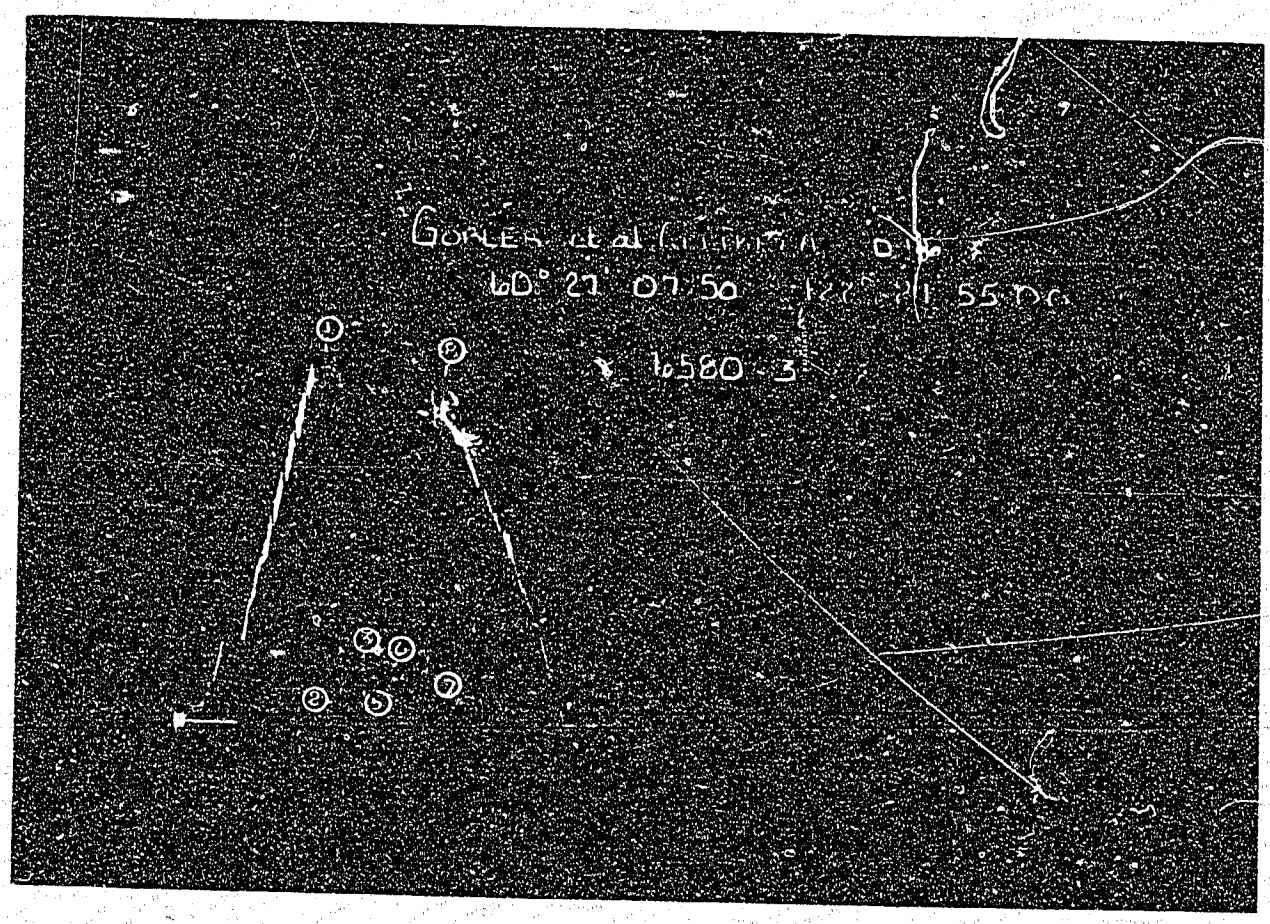
Well Name and Description

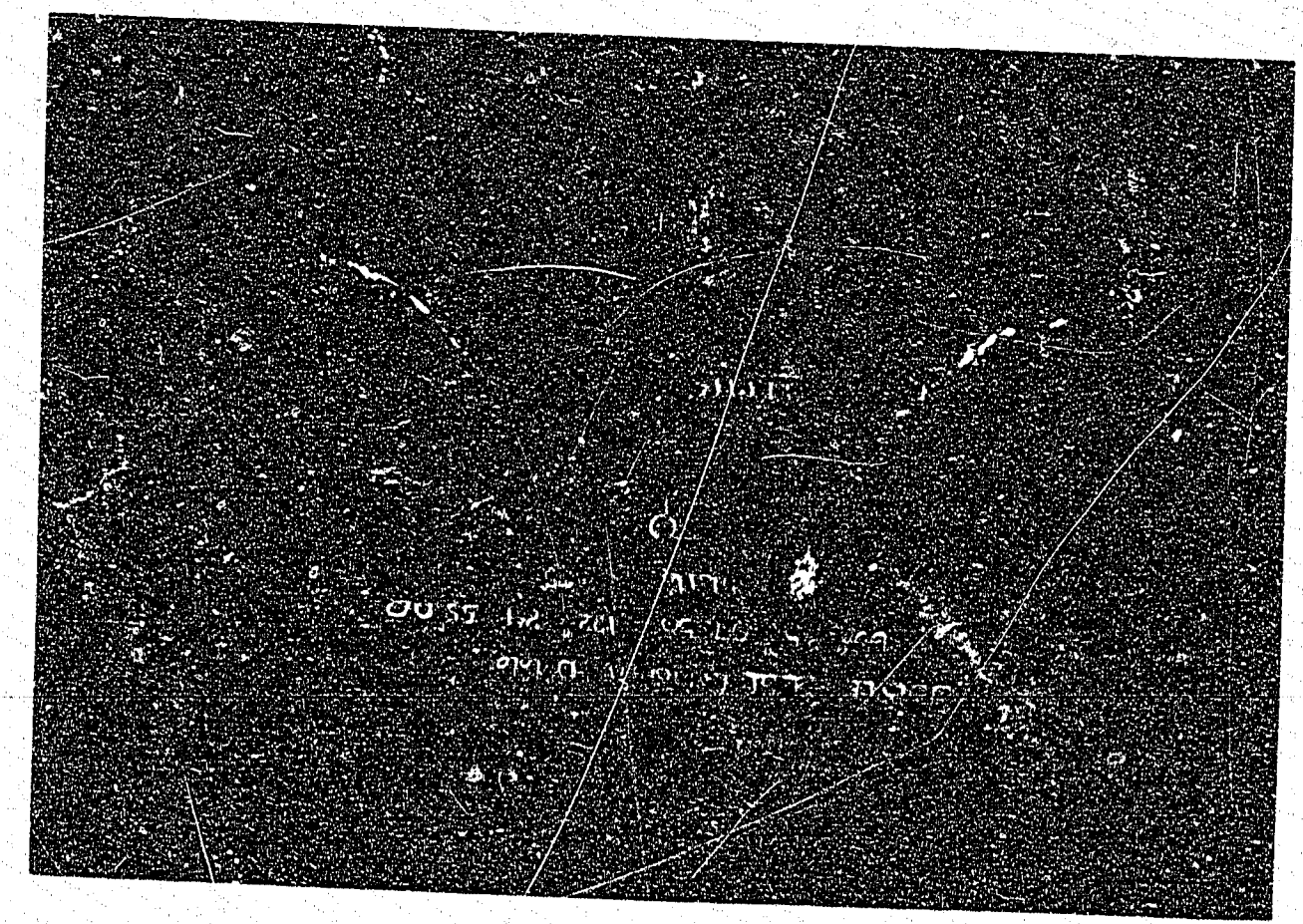
3

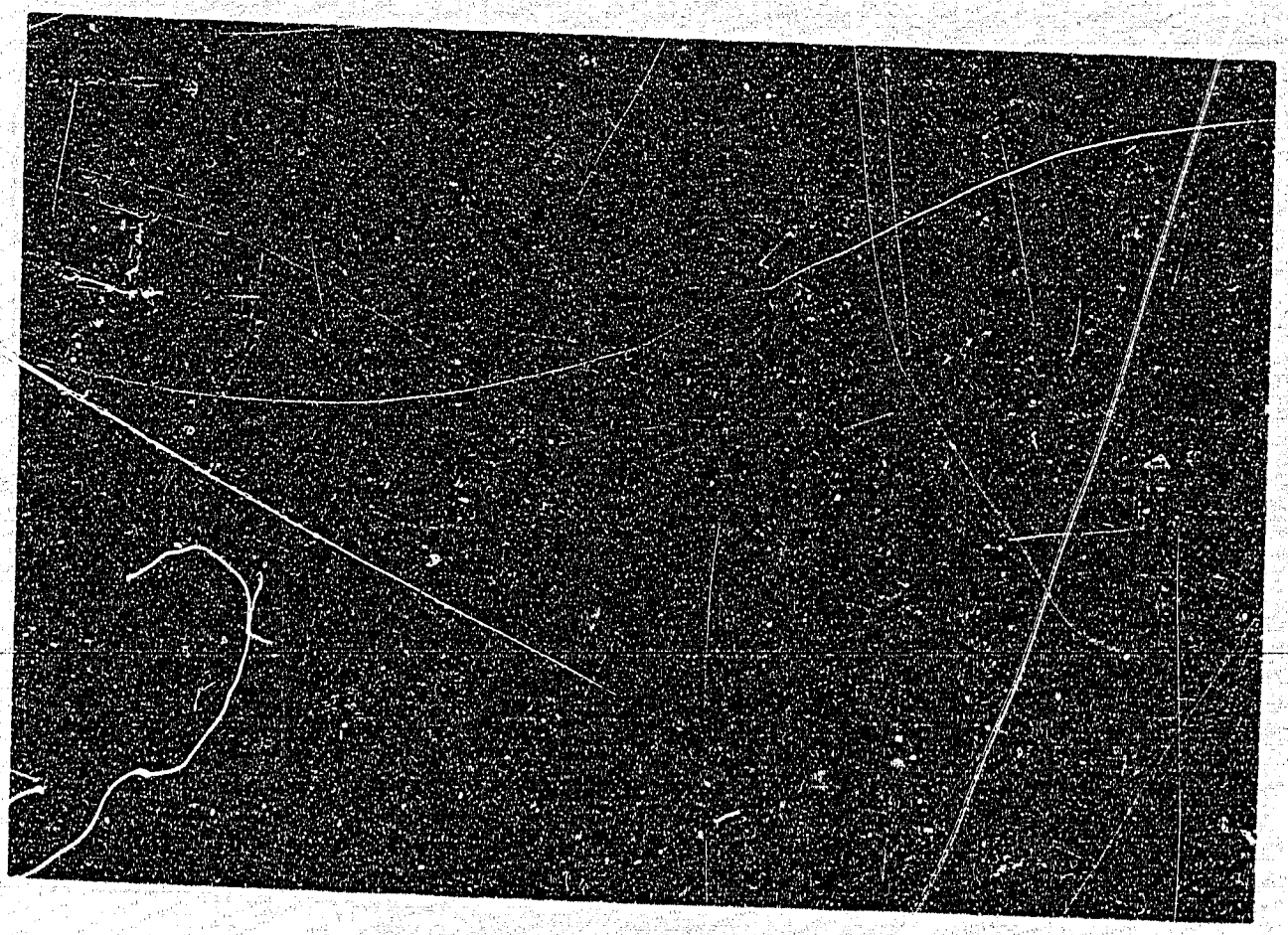
Test No.

March 16, 1970

Date of Test


GORLER et al. (UNPUB.)
60° 27' 07.50" -122° 21' 55.0"
16580-3





LYNES TED SERVICES LTD.

Blow: Initial flow - weak air blow
Final flow - weak air blow dying
to nil in 11 minutes.

GAS FLOW MEASUREMENTS

Measured with: No gas to surface.

Time	Surface Choke	Reading Inches	Cubic Feet/Day

MUD AND HOLE DATA

Mud Type: Gel Chem
Weight: 10.5 Viscosity: 34 Water Loss: 7.8
Filter Cake: Bottom Hole Temperature: 121°
Drill Pipe Size: 4 1/2" H Weight: 13.3
Drill Collars: 4 1/2" IF 2 7/8" Feet Run: 400
Main Hole or Casing Size: 5 3/4"
Rathole or Liner Size: No. of Feet:
Bottom Hole Choke Size:
Surface Choke Size:
Packer Rubber Size: 7 3/8 x 4.5"

REMARKS

Very slight plugging occurred during the flow period. Shut-in pressures suggest virtually no permeability within the interval tested.

RECOVERY

TOTAL FLUID RECOVERED 60 Ft. Consisting of:
60 Ft. of Drilling mud
Ft. of
Ft. of
Ft. of

Test was/was not Reversed Circulated: WAS NOT
Oil Recovery A.P.I.: Water Specific Gravity:
Salinity:

PRESSURE READINGS

	Inside / Outside X	Inside / Outside X	Inside / Outside X	Inside / Outside
Recorder No.	3119	6580	5616	
Capacity	7000	7500	13 - 297	
Depth	7986	7986	7986	

NUMBER KEY:

1 - INITIAL HYDROSTATIC	4238	4048		
2 - PRE-FLOW	212	212	219°	
3 - INITIAL SHUT-IN	694	537		
4a - 2nd INITIAL FLOW				
4b - 2nd FINAL FLOW				
4c - 2nd SHUT-IN				
5 - 3rd INITIAL FLOW	309	309		
6 - FINAL FLOW	588	524		
7 - FINAL SHUT-IN	685	514		
8 - FINAL HYDROSTATIC	4185	4000		

Gas et al Celtic 60° 25' 122° 27'

Well Name and Description

3

Test No.

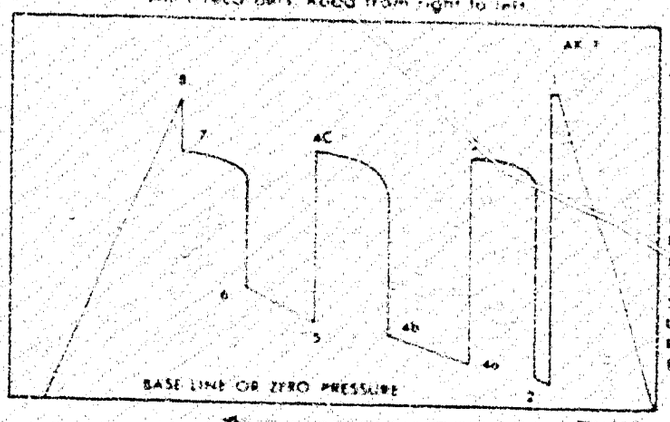
March 16, 1970

Date of Test

LYNES

GUIDE TO INTERPRETATION AND IDENTIFICATION OF LYNES DRILL STEM TEST PRESSURE CHARTS

AK 1 recorders. Read from right to left

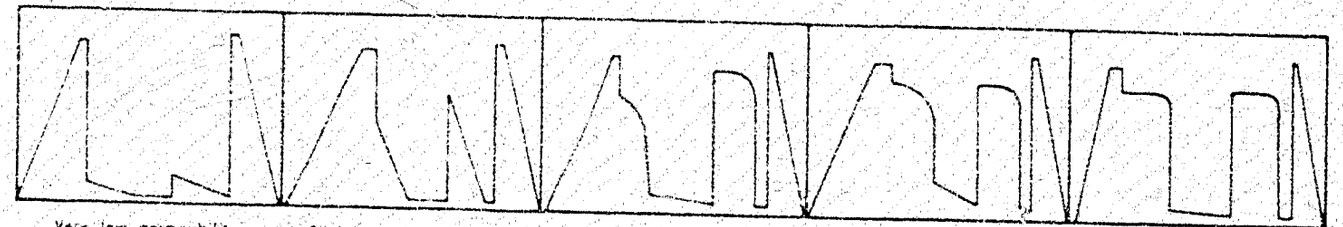


K 3 recorders. Read from left to right

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

N.B. When only two shut-in and flow periods are run, 4a, 4b and 4c are omitted.

Typical charts for visual field analysis ranging from very low to high permeability



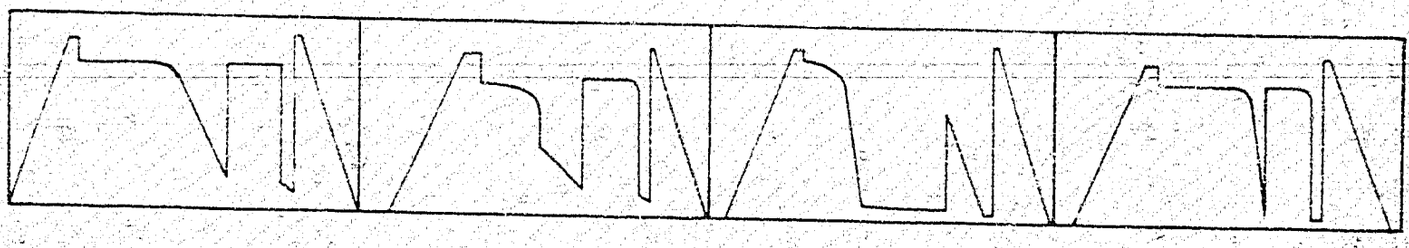
Very low permeability. Usually only mud recovered from interval tested. Virtually no permeability.

Slightly higher permeability. Again usually mud recovered.

Slightly higher permeability. Small recovery, less than 200' est.

Average permeability. Final and initial shut-ins differ by 50 psi.

Average permeability. Strong damage effect. High shut-in pressure, low flow pressure.



Excellent permeability where final flow, final shut-in pressure.

High permeability where ISIP and FSIP are within 10 psi.

Deep well bore invasion or damage. Final shut-in higher than the initial shut-in.

Tight hole chamber tester. Permeability very difficult to interpret unless the recovery is less than chamber length. Flow pressure builds up rapidly if recovery is large, similar to a shut-in.

Hobbs E.T. A.L. Celebs

D-66

GOBLES ET AL CELIBETA D-66

D.A. 404 - Tour Reports

[redacted]

Gobles et al Exhibit D-66

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 21 E 55 COMPANY Cabot Corp & Cdn Jupiter LOCATION Cabot Pine River D-11 DATE MAR 18 1970

THIS IS #2 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Dennis Mourre	
DERRICK Walter Cooney	8
MOTOR Larry Lapointe	8
FLOOR Donald Lapointe	8
FLOOR Tom Burke	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm Cowell	8
DERRICK Dennis Smith	8
MOTOR Jay Wilson	8
FLOOR [illegible]	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Norm Collins	8
DERRICK Mike Hill	8
MOTOR Ed Schmidt	8
FLOOR Jim Richard	4
FLOOR Jim Duker	4
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D	I.D	WGT.	FUEL GALS.	BOILER HRS	DRILL PIPE SIZE
											5"

BITS NO	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5

NEXT OIL CHANGE

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.	BOILER HRS.	DRILL PIPE SIZE

BITS NO	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS	DEPTH OUT	CONDITION

MUD	8 A.M	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5

NEXT OIL CHANGE

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.	BOILER HRS	DRILL PIPE SIZE

BITS NO	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5

NEXT OIL CHANGE

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	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Lay Down Drill Pipe	12:00		
Pull Bit #2		7:00	7
Pick up Bit #2 Run to Bottom			
Wash & Ream 45' to Btm	7:00	13:00	6
Drill 45'	13:00	14:00	1
Lay Down DP			
Pull Bit #2 Out of Hole	14:00	17:00	3
Pick up Bit #3 Run in Hole	17:00	19:00	2
Wash & Ream 45' to Btm	19:00		
TEAR OUT BOP'S AND DRILL	12:00	19:00	1
DIG CELLAR 3' DEEP	12:00		3
CUT CSG BOWL OFF			
Pull Top Joint of Casing	3:00		3
Weld Plate on Surface	3:00		
Cut Top of Casing			
Weld Name on Steel Plate	4:00		1
TEAR OUT PITS	4:00	12:00	2

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 Leo Schauerte

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 117 DAY ON THIS WELL

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

RIG No. ~~[illegible]~~ COMPANY Gables [illegible] LOCATION Gables [illegible] DATE March 19 74

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked		HRS.
DRILLER	Dennis [illegible]	
DERRICK	Wayne [illegible]	5
MOTOR	[illegible]	5
FLOOR	[illegible]	5
FLOOR	Tim Dwyer	5
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
												50

BITS	NO.	SIZE	TYPE	JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

SINGLES 1 · D. COLLARS · OTHER FT. · C.B. FT. · SUBS. FT. · FT. UP ON KELLY · TOTAL

MUD	12 MN.	2 A.M.	4	6
WEIGHT				
VISCOSITY				
GEL				

PUMPS: NO. 1 MODEL [illegible] 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

[illegible] subs [illegible]

W.L. F.C. pH.

REMARKS	START	STOP	INTERVAL
Finish [illegible] Check	12:00		
Blow [illegible]		1:15	1¼
Run Drill Collars in	1:15		
& Lay down [illegible]		3:15	3½
[illegible]	3:15	[illegible]	3
Pull up 15 sgls	[illegible]	7:15	[illegible]
Circ w/ pipe [illegible]	7:15	8:00	¾

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked		HRS
DRILLER	[illegible]	[illegible]
DERRICK	Dennis Smith	[illegible]
MOTOR	[illegible]	[illegible]
FLOOR	[illegible]	[illegible]
FLOOR	Jesse Lane	[illegible]
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
											[illegible]	

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

SINGLES · D. COLLARS · OTHER FT. · C.B. FT. · SUBS. FT. · FT. UP ON KELLY · TOTAL

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
[illegible]							

GENERAL

W.L. F.C. pH.

REMARKS	START	STOP	INTERVAL
[illegible] Hole	8:00	[illegible]	5
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked		HRS.
DRILLER	Harry Collins	8
DERRICK	Mike Collins	8
MOTOR	[illegible]	8
FLOOR	[illegible]	4
FLOOR	Jesse Lane	4
FLOOR	Tim Dwyer	4
FIREMAN	Don [illegible]	4
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS	DEPTH OUT	CONDITION

SINGLES · D. COLLARS · OTHER FT. · C.B. FT. · SUBS. FT. · FT. UP ON KELLY · TOTAL

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

W.L. F.C. pH.

Remarks (continued from day tour):

[illegible] Plug #[illegible] [illegible] 7552 to 7135
[illegible] with [illegible] sax [illegible]
Plug down @ 3.15 P.M.

REMARKS	START	STOP	INTERVAL
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible] Plug #2	[illegible]	[illegible]	½
[illegible] Plug #2	[illegible]	[illegible]	1
[illegible]			
[illegible]		[illegible]	[illegible]

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 [signature]

TOTAL COMPANY TIME ______ HRS. APPROVED BY [signature]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 116 DAY ON THIS WELL

RIG No. 216-32 COMPANY Gozzes Et Al LOCATION Gozzes Coleta Del DATE April 11 19 71

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Dennis Laurick	8
DERRICK Wayne Gilbert	8
MOTOR Fritz Lumpkin	8
FLOOR Donald Sanderlin	8
FLOOR Jim Bunyard	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Lee Ft	8
DERRICK Jim Tu	8
MOTOR Tony Lloyd	8
FLOOR Guy Pritchett	8
FLOOR Jesse Lopez	8
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Monty Cullum	8
DERRICK Mike Cullum	8
MOTOR Stu Scheeler	8
FLOOR Orville Stark	8
FLOOR Troy McClanahan	8
FLOOR Jim Bunyard	8
FIREMAN Dick Shepherd	8
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	HRS.	BOILER	DRILL PIPE SIZE	STANDS / SINGLES / D. COLLARS / OTHER FT. / C.B. FT. / SUBS. FT. / FT. UP ON KELLY / TOTAL
12552					21	6½	2¼				5	5	81 / 91-600.19 / Log

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
4	8¾	STG	10-11	175788		1				DST #3	

MUD	12 MN.	3 A.M.	6 A.M.	9 A.M.	ADDITIVES
WEIGHT		9.1			
VISCOSITY		39	40		
GEL					

PUMPS			
NO. 1	MODEL	S.P.M.	LINER SIZE / PRESSURE
NO. 2	MODEL	S.P.M.	LINER SIZE / PRESSURE

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.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	HRS.	BOILER	DRILL PIPE SIZE	STANDS / SINGLES / D. COLLARS / OTHER FT. / C.B. FT. / SUBS. FT. / FT. UP ON KELLY / TOTAL
12552													

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD	6 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS			
NO. 1	MODEL	S.P.M.	LINER SIZE / PRESSURE
NO. 2	MODEL	S.P.M.	LINER SIZE / PRESSURE

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.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	HRS.	BOILER 2	DRILL PIPE SIZE	STANDS / SINGLES / D. COLLARS Log 19 / OTHER FT. / C.B. FT. / SUBS. FT. / FT. UP ON KELLY / TOTAL
					21	6½	2¼					5	

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS			
NO. 1	MODEL	S.P.M.	LINER SIZE / PRESSURE
NO. 2	MODEL	S.P.M.	LINER SIZE / PRESSURE

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.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Finish Running in To	1200		
Log + Short Trip		1:15	1¼
Trip in Hole To 8300	1:15	2:15	1
Circulate Condition Hole	2:15		
Pull Stds DST #3		4:30	2¼
Lost Time DST #3.	4:30	9:45	5¼
Take up Pull to Run Tools	7:45	8:00	¼
Rig up Schlumberger	8:00	11:00	3
Run Tools	11:00	3:30	4½
Wait	3:30	4:00	½
Test	4:00	5:00	1
Pull Stds + Tools	5:00	5:15	¼
Rig up Test Tools	5:15	5:45	½
Test DST #3	5:45	10:45	5
Break Down Test Tools	10:45		
Trip in Hole Out			
Same			

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 Leo Johnson

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 3/E 35 COMPANY Eagles Oil & Gas Ltd. LOCATION Eagles Gilbert Dev. DATE August 15 19 76

THIS IS 45 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Denis Arsenault	8
DERRICK Wayne Sweeney	8
MOTOR Fritz Gourlie	8
FLOOR Donald Sweetnam	8
FLOOR Tim Dwyer	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS
DRILLER Neil Gillett	8
DERRICK Dave Smith	8
MOTOR Terry Lepine	8
FLOOR Tim Hollis	8
FLOOR Jesse Gride	8
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Norm Carlson	8
DERRICK Mike Collins	8
MOTOR Stu Schuler	8
FLOOR Dennis Smith	4
FLOOR Arsenault	4
FLOOR Tim Dwyer	4
FIREMAN Don Stoppelhaar	2
EXTRA	

INJURIES:

FIRES:

Bit / Mud / Pumps

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
8552	—	—	—	180	21	6 1/2	2 7/8			8	5"	86

SINGLES — D. COLLARS 21 — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY 40 — TOTAL 8552 ± 0

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
9887		STG-J	URED	CLEANOUT			4/057.				

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY		66	72	71
GEL				19/25

ADDITIVES: [illegible]

AT SURVEYS DEGREE

MOTOR HOURS: 1 11½ — 2 Dowell — 3 Dri — 4 Dri — 5 Unit 2

NEXT OIL CHANGE

PUMPS

NO. 1	PRESSURE		700
	MODEL		
	S.P.M.		60
	LINER SIZE	4 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: Water + Sweep.

W.L. — F.C. 1/2 — pH. 10

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS

SINGLES — D. COLLARS — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY — TOTAL

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES:

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		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL:

W.L. — F.C. — pH.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
					21	6 1/2	3			8	4	

SINGLES — D. COLLARS 6 1/2 — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY — TOTAL

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES:

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		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL:

W.L. — F.C. — pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Complete & Cond Mud.	1200		
@ 6Loc.		1345	1 3/4
Service Rig & Check Hoist	1345		
Run in 10 STDS & Break Line @ 7600	2000	2330	3 1/2
Wash to Btm. Cond.	2330	300	1/2
Circ Condition Mud & Hole Flost #2.	300	630	3 1/2
Hoist To Run DST #2	630	900	2 1/2
Finish Hoisting	900	1000	1 1/2
Lay Swing Tool	1000	1200	2
Finish Out DST #2	1200	1245	3/4
Trip In	1245	1345	1
Drop Tool, Pull Swing			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
Testing	2000	2345	3
Pull Packer Loose	2345	0500	5
Hoist	0500	0900	4
Break Down Testing Tools + Load out Same	0900	1100	2
Rig Down + Lay Out For Clean Out Trip	1100	1200	1

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 Gus Johnson

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS [illegible] DAY ON THIS WELL

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

RIG No. [illegible] COMPANY [illegible] LOCATION [illegible] DATE [illegible] 19 70

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER [illegible]	5
DERRICK [illegible]	
MOTOR [illegible]	5
FLOOR [illegible]	5
FLOOR [illegible]	5
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
8552			—		21	[illegible]	[illegible]			8	[illegible]	85

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | DEPTH IN | HRS. | DEPTH OUT | CONDITION

MUD: 12 MN. | 2 A.M. | 4 A.M. | 6 A.M. | ADDITIVES — WEIGHT, VISCOSITY [illegible], 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.

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	[illegible]	
2	[illegible]	
3	[illegible]	[illegible]
4	[illegible]	
5	[illegible]	[illegible]

SINGLES [illegible] · D. COLLARS [illegible] · OTHER FT. · C.B. FT. Tester · SUBS. FT. [illegible] · FT. UP ON KELLY · TOTAL

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

REMARKS	START	STOP	INTERVAL
[illegible]	12.00	1.00	1
Service [illegible]	1.00	1.15	1/4
[illegible]	1.15		
Make up [illegible]			
[illegible]		5.00	3 3/4
[illegible]	5	7	2
Make up Testing [illegible]	7	8	1

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER [illegible]	5
DERRICK [illegible]	8
MOTOR [illegible]	
FLOOR [illegible]	8
FLOOR Jessie Lane	6
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
8552					21	[illegible]	[illegible]			[illegible]	[illegible]	

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | DEPTH IN | HRS. | DEPTH OUT | CONDITION

MUD: 8 A.M. | 10 A.M. | 12 NOON | 2 P.M. | ADDITIVES — 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.

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	22	
2	[illegible]	[illegible]
3	[illegible]	[illegible]
4	[illegible]	
5	[illegible]	[illegible]

STANDS · SINGLES · D. COLLARS [illegible] · 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 [illegible]

REMARKS	START	STOP	INTERVAL
Test #1	[illegible]	11	[illegible]
[illegible]	11	[illegible]	[illegible]
[illegible] Testing Tool	[illegible]	4.00	1

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER [illegible]	8
DERRICK Wayne [illegible]	4
MOTOR Sid Scheoler	8
FLOOR [illegible]	4
FLOOR [illegible]	4
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
8552 T.D.			—	180	21	[illegible]	[illegible]			8	[illegible]	66

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
[illegible]	[illegible]	[illegible]	[illegible]	57395							

MUD: 4 P.M. | 6 P.M. | 8 P.M. | 10 P.M. | ADDITIVES — WEIGHT, VISCOSITY, GEL

PUMPS: NO. 1 MODEL [illegible] (PRESSURE, S.P.M., LINER SIZE); NO. 2 MODEL [illegible] (PRESSURE, S.P.M., LINER SIZE)

W.L. F.C. pH.

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	[illegible]	
2	[illegible]	
3		
4		
5	[illegible]	

SINGLES · D. COLLARS 21 - [illegible] · OTHER FT. · C.B. FT. · SUBS. FT. · FT. UP ON KELLY [illegible] · TOTAL [illegible]

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

REMARKS	START	STOP	INTERVAL
Finish Laying Tester	4		
[illegible]		5	1 1/4
Rig [illegible]	5	5	1/4
Slip Line	5	5	1/4
[illegible]	5	9.00	3 1/4
Started [illegible] Circ. -	9.00		
Unable to [illegible] -		10.00	1
Pull 5 Stands - Unable to Circ.	10.00	10.45	3/4
Pull [illegible] Stands & Break Circ.	10.45	11.45	1
Circ [illegible] @ [illegible]	11.45	12.00	1/4

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 [signature]

TOTAL COMPANY TIME ____ HRS. APPROVED BY [signature]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 2E COMPANY Eagle Oil & Gas LOCATION Eagles Creek D-16 DATE March 1970

THIS IS 43 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Norm Gallagher	8
DERRICK Mike Collins	8
MOTOR Ed Snodden	8
FLOOR Jim Preston	8
FLOOR Al Pelletier	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Denis Kennedy	8
DERRICK Wayne Gurney	8
MOTOR Fitz VanDeen	8
FLOOR Dennis Sedlacek	8
FLOOR — Dawson	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Earl Garnett	
DERRICK Dennis Smith	
MOTOR Terry Wilson	
FLOOR Jim Archibald	
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
				95	11	6	2¼			2	5"	20		21-600 ft					

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	86	91	94		Gel 150
VISCOSITY	200	210	210		
GEL					

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 Idle	
	2 44	118
	3 144	
	4 142	
	5 73	210

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. Phalo Oil Filter in = 1 qt

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
6221	TD			120	11	6½	2¼			5	5"	121		31-600 ft					

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
1	8¾	STC J22	3-13	455208						6221	

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT				96	
VISCOSITY				200	
GEL					

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 2	
	2 44	
	3 150	
	4 121	
	5 60	210

PUMPS			
NO. 1	PRESSURE		1500
	MODEL		1500
	S.P.M.		
	LINER SIZE	6½ 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.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
6221				120	11	6½	2¼				5"	81		31-600 ft					

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
1RR	8¾	STC J22	3-13	455208		Cone					

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 16	
	2 73	
	3 [illegible]	160
	4 124	
	5 [illegible]	210

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
1¼								

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
W.O.C. Cut off Pipe and Nipple @ 7540'	1:30	4:30	3
Circ. & Cond. Mud for Cement Job	4:30	6:30	2
Cement w/ 200 sx Class "G" + 2% CaCl + .6% HR-4 + 10# Gilsonite/sx. Displaced w/ 2% KCl water. Bumped plug w/ 1500 psi. Float held OK. Plug down @ 10:30 PM.	6:30	10:30	4
Circ. Cement Up 2" Annulus	10:30	12:30	2
N.U. B.O.P.	12:30	1:30	1
Circ. Cement Up 2" Annulus	1:30	2:30	1
N.U. B.O.P.	2:30	6:30	4

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 [illegible]

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 24-E-F COMPANY Cabot Oil & Gas LOCATION E. Blue Creek Field DATE Dec 12 19 76

THIS IS 42 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Jim Collins	8
DERRICK Mike Collins	8
MOTOR Ted Sellers	8
FLOOR Don Perry	8
FLOOR Al Collins	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES	
FIRES	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Dean Newell	8
DERRICK Wayne Gray	8
MOTOR Fritz Roether	8
FLOOR Donald Sizemore	8
FLOOR Tim Draper	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES	
FIRES	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS
DRILLER Herb Crockett	8
DERRICK Dennis Smith	8
MOTOR Terry Mason	8
FLOOR Fred Litchfield	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES	
FIRES	

Report 1

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
4552											

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

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.

AT SURVEYS DEGREE

	MOTOR HOURS	NEXT OIL CHANGE
1	144	
2	76	
3	101	
4	104	
5	76	

STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Lay up Schlumberger	12:00	5:00	5
Wireline Survey	5:00	8:00	3

Report 2

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
4552											

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD

	9 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

PUMPS

NO. 1	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	7 x 15
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 Clogged Nozzle & Lines on Gyro

W.L. F.C. pH.

AT SURVEYS DEGREE

	MOTOR HOURS	NEXT OIL CHANGE
1	144	
2	21	
3	121	
4	124	
5	44	

STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Wireline Surveys	8:00	10:00	2
Run DirectY Log	10:00	2:00	4
Run Directy Log	2:00	4:00	2
Total Wireline Services			8
7 Blind Runs			

Report 3

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
4552				92	21	6 1/2	2 1/4				5"

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
1	7 7/8	STRATA	3-16's	CP6487			11'				

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

PUMPS

NO. 1	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
	MODEL	7 x 14
	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
12		0						

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE

	MOTOR HOURS	NEXT OIL CHANGE
1	144	
2	45	
3	131	5/16
4	134	
5	44	7/16

STANDS | SINGLES | D. COLLARS 31-4 1/2 19 | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Lay down Schlumberger Tools	4:45	6:30	1 3/4
Run in Hole w/ Bit #1	6:30	8:00	1 1/2
Circ. & Condition Hole	8:00	12:30	4
Circ. & Condition Hole			

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 Ed Montgomery

TOTAL COMPANY TIME _____ HRS. APPROVED BY A.C. Anderson

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 41 DAY ON THIS WELL

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

RIG No. 21-6-32 COMPANY ~~Cities Oil & Gas~~ LOCATION ~~Cities Edison 9-11~~ DATE Mar 11 1970

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked		HRS.
DRILLER	Harry Collins	8
DERRICK	Mike Collins	8
MOTOR	Sid Schoeler	8
FLOOR	Jim Pierson	8
FLOOR	Al Pelletier	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
9550	2	9552	¼	185	21	13	2¾			8	5"

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
17	8¾	XSSL	3-10	26200	25	6	310	9242	47¾	9552	

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	96	96	96	
VISCOSITY	175	180	220	
GEL				

PUMPS: NO. 1 MODEL G 900 — PRESSURE 1200; S.P.M. 68; LINER SIZE 6½ x 14. NO. 2 — PRESSURE; MODEL; S.P.M.; LINER SIZE.

W.L. 6.4 F.C. 2/32 pH 9.5

ADDITIVES:

AT SURVEYS DEGREE:

MOTOR HOURS		NEXT OIL CHANGE
1	132	
2	52	118
3	12	118
4	48	
5	41	344

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL:

STANDS 91; SINGLES; D. COLLARS 6019; OTHER FT.; C.B. FT.; SUBS. FT.; FT. UP ON KELLY 14'; TOTAL 8557'

REMARKS	START	STOP	INTERVAL
Drill	12:00	12:15	¼
Circ for well sample	12:15	1:45	1½
Rig serv & BOPs	1:45	2:00	¼
Dummy trip 30 stds	2:00		
20' fill		4:00	2
Circ	4:00	6:00	2
Dummy trip 30 stds	6:00	8:00	2

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked		HRS.
DRILLER	Dennis Hanwick	8
DERRICK	Wayne Gregory	8
MOTOR	Fritz Romeder	8
FLOOR	Donald Speedwick	8
FLOOR	Tim Dwyer	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
9552	Nil		Nil	185	21	13/4	1¾			8	5"

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
17	8¾	XSSL	3-10	26200			310	9242	47¾	9552	8-4-I

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	96	96		
VISCOSITY	215	235		
GEL				

PUMPS: NO. 1 MODEL G 900 — PRESSURE 1200; S.P.M. 68; LINER SIZE 6½ x 14. NO. 2 MODEL C 350 — PRESSURE; S.P.M.; LINER SIZE.

W.L. 7.4 F.C. 2/32 pH 10

ADDITIVES:

AT SURVEYS DEGREE: 9552 — 3½

MOTOR HOURS		NEXT OIL CHANGE
1	140	
2	58	148
3	128	
4	176	
5	49	300

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL:

STANDS 61; SINGLES; D. COLLARS 21-6¼-19; OTHER FT.; C.B. FT.; SUBS. FT.; FT. UP ON KELLY 1140; TOTAL 8552

REMARKS	START	STOP	INTERVAL
Clean to bottom 20'	5:00	8:45	3¾
Circulate condition hole	8:45		
to log.		10:45	2
Drop survey	10:45	11:00	¼
Hoist to log - work	11:00		
tight hole 3650-3000		2:30	3½
Rig up Schlumberger	2:30	3:00	½
Logging	3:00	4:00	1
(Check blind rams)			

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked		HRS.
DRILLER	Hal Connell	8
DERRICK	Dennis Smith	8
MOTOR	Terry Wilson	8
FLOOR	Jim Archibald	8
FLOOR		
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
9552											5"

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

PUMPS: NO. 1 — PRESSURE; MODEL; S.P.M.; LINER SIZE. NO. 2 — PRESSURE; MODEL; S.P.M.; LINER SIZE.

W.L. F.C. pH.

ADDITIVES:

AT SURVEYS DEGREE:

MOTOR HOURS		NEXT OIL CHANGE
1	14	
2	21	
3	[illegible]	[illegible]
4	194	
5	[illegible]	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL:

STANDS; SINGLES; D. COLLARS 21-6¼-19; OTHER FT.; C.B. FT.; SUBS. FT.; FT. UP ON KELLY 1140; TOTAL 8552

REMARKS	START	STOP	INTERVAL
Logging w/Schlumberger	4:00	12:00	8

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 [signature]

TOTAL COMPANY TIME ______ HRS. APPROVED BY [signature]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 40 DAY ON THIS WELL

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

RIG No. 71-4 COMPANY Cascade Oil & Gas LOCATION Coles Canyon 4-11 DATE Nov 4 19 74

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Hank Collins	8
DERRICK Mac Collins	8
MOTOR Sid Sepeda	8
FLOOR Jay Polson	8
FLOOR Al Pollitt	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
8402	56	8457	7 3/4	170	21	6 1/2	2 1/2	

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
17	8 3/4	x55A	3-20	20800	21	60	215	8242	27 1/2		

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	9.5	9.6	9.6	9.6
VISCOSITY	40	150	170	170
GEL				

ADDITIVES: Soda Ash 1400#, Gel 2 Sx, Caustic 50#

PUMPS		12 MN.	3 P.M.	4 A.M.
NO. 1	PRESSURE	900		900
MODEL P	S.P.M.	70		70
	LINER SIZE	6 1/2 x 14		
NO. 2	PRESSURE			
MODEL G	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. 70 F.C. 50 pH 9.5

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 120	
	2 118	118
	3 90	
	4 92	
	5 17	200

BOILER	DRILL PIPE	STANDS	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
GALS 8 HRS 5	SIZE	76 SINGLES	1 @ 17				12	8457

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Serv + BOPs	4:00	4:15	1/4
Drill	4:15	8:00	7 3/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Dennis Mauldin	8
DERRICK Wm Gardner	8
MOTOR Louis Lemmon	8
FLOOR Donald Swafford	8
FLOOR Tom Dwiggins	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES: [illegible]

FIRES: [illegible]

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
8457	50	8507	9 3/4	180	21	6 1/2	2 1/2	

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
17	8 3/4	x55A	3-20	20800	35	60	265	8242	25		DULL

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9.6	9.6	9.6	9.6
VISCOSITY	42	42	42	42
GEL				

ADDITIVES:

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	1250	1250	1250	1250
MODEL G	S.P.M.	68	68	68	68
	LINER SIZE	6 1/2 x 14			
NO. 2	PRESSURE				
MODEL G	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

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 116	
	2 [illegible]	116
	3 120	
	4 [illegible]	
	5 [illegible]	21

BOILER	DRILL PIPE	STANDS	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
GALS HRS	SIZE	65 SINGLES	21 @ 619				29.0	8507

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drilling	Sca	10:15	2 1/4
Service Rig. Circ.	12:45	10:30	1/2
Sur + Kelly Cock			
Drilling	10:30	Acc	5 1/2

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER W. L. Cornett	8
DERRICK Glenn Smith	8
MOTOR Terry Wilson	8
FLOOR Jim Archibald	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
8507	43'	8550	7 1/4	185	21	6 1/2	2 1/2	

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
17	8 3/4	x55R	3-20	20800	35	60	305	8242	33		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9.6	9.6		
VISCOSITY	196	183		
GEL				

ADDITIVES: Gel -

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	1250	1250	1250	
MODEL G	S.P.M.	68	68	68	
	LINER SIZE	6 1/2 x 14			
NO. 2	PRESSURE				
MODEL G 150	S.P.M.				
	LINER SIZE	Gardners			

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1		0					

GENERAL

W.L. F.C. pH

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 [illegible]	
	2 [illegible]	
	3 [illegible]	11
	4 [illegible]	
	5 [illegible]	

BOILER	DRILL PIPE	STANDS	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
GALS 8 HRS	SIZE	86 SINGLES	21-600:19				12.00	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drill	4:00	4:45	3/4
Rig Serv + BOPs Check Pumps	4:45	5:15	1/2
Drill	5:15	12:00	6 3/4

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

B.O.P. Test-Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOOLPUSHER Leo St. Laurent

TOTAL COMPANY TIME HRS. APPROVED BY A.O. Hardisty

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 21-E-38 COMPANY Gulf Oil & Gas LOCATION Cooks Canyon D-11 DATE May 9 19 70

THIS IS 37 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Harry Whitton	8
DERRICK Mike Collins	8
MOTOR Sig Schaub	8
FLOOR Jim Pilcon	8
FLOOR Al Pelletier	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Dennis Nunnenkamp	8
DERRICK Wayne Gibson	8
MOTOR Fritz Kaufeld	8
FLOOR Donald Sweetland	8
FLOOR Tim Dwyer	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Hi Cornell	8
DERRICK Dave Cox	8
MOTOR Ferd Wilson	8
FLOOR Tom Ladd	8
FLOOR Lyle Eldridge	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	BOILER HRS	DRILL PIPE SIZE	STANDS
4000	6	7302	63¼	102	21	7¾	2¼			7	5"	83

SINGLES

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
17	8¾	X-32	3-20	2-40-	3	90	60	7241	62¼		

6 COLLARS 180.10

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY 17'

TOTAL 7242

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	95	95	95	95	Gyp-Lig 150 sx
VISCOSITY	240	238	230	205	Redtex 5 sx
GEL					Lignite 5 sx

PUMPS													
NO. 1	PRESSURE	1200		1200									
	MODEL	7¼											
	S.P.M.	84											
	LINER SIZE	6½	7¼										
NO. 2	PRESSURE												
	MODEL												
	S.P.M.												
	LINER SIZE												

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 84	
	2 14	
	3 72	178
	4 74	
	5 301	0

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 9.4 F.C. 9.5/32 pH. 9.5

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	BOILER HRS	DRILL PIPE SIZE	STANDS
7302	43	7345	73¼	104	21	7¾	2¼			8	5"	83

SINGLES 2

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
17	8¾	X-32	2-20	208Pc	30	110	103	7242	111¼		Drlg

D. COLLARS 31

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY 5.66

TOTAL 8215

MUD	6 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	9.6				Lig 150 sx
VISCOSITY	46				Gel 5 sx
GEL					Lime 5 sx

PUMPS													
NO. 1	PRESSURE	1200											
	MODEL	7¼											
	S.P.M.	84											
	LINER SIZE	6½											
NO. 2	PRESSURE	1150											
	MODEL	6½											
	S.P.M.	115											
	LINER SIZE	6											

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 92	
	2 112	
	3 86	
	4 76	
	5 1	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	BOILER HRS	DRILL PIPE SIZE	STANDS
7345												

SINGLES

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS													
NO. 1	PRESSURE												
	MODEL												
	S.P.M.												
	LINER SIZE												
NO. 2	PRESSURE												
	MODEL												
	S.P.M.												
	LINER SIZE												

AT SURVEYS DEGREE	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

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Clean To Btm 25' Fill	11[illegible]		
Circ 2' Hvy Circ Hole	11[illegible]	12[illegible]	½
RC Swvl & Bops	12[illegible]	12[illegible]	½
Drill	12[illegible]	2[illegible]	1¾
Pump Maintenance	2[illegible]	3[illegible]	½
Drill	3[illegible]	8[illegible]	5
Drill	8[illegible]	11[illegible]	3
Service Rig - Check	11[illegible]	11 15	¼
Bop & Kelly Cock			
Drilling	11 15	1[illegible]	4¾
Drill	4[illegible]	4[illegible]	½
[illegible]			
[illegible]			1½
Drill			
[illegible]			1½
[illegible]			1

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

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

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER Ken Schaupeter

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT — CONSERVATION BOARD — DAY WORK RECORD

THIS IS 3K DAY ON THIS WELL

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

RIG No. 21-E32 COMPANY Cobles Oil + Gas LOCATION Cobles Cembeta Oil DATE Mar 8 1972

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked		HRS.
DRILLER	Herm Callahan	7
DERRICK	Mike Callahan	7
MOTOR	Sid Schaefer	17
FLOOR	Jim Pricai	16
FLOOR	Albert Pelletier	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
8148	51	8199	7¾	170	21	[illegible]	3			7	5

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
11	8¾	SC6-T	3-2[illegible]	[illegible]	[illegible]	42	137	8062	17¾		

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	95	95	95	95	Gel 100
VISCOSITY	220	225	215	210	[illegible]
GEL					[illegible] 50

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1 MODEL 6	PRESSURE	1100		1100	2
	S.P.M.	64		64	[illegible]
	LINER SIZE	6		6	
NO. 2 MODEL 6	PRESSURE				
	S.P.M.				
	LINER SIZE				

W.L. 6.4 F.C. 2/32 pH 9.5

AT SURVEYS DEGREE:

MOTOR HOURS		NEXT OIL CHANGE
1	[illegible]	
2	[illegible]	118
3	[illegible]	118
4	[illegible]	
5	[illegible]	7[illegible]

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL

GENERAL:

STANDS 92 — SINGLES — D. COLLARS 21-600.19 — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY 0 — TOTAL 8199 — NEXT SLIP

REMARKS	START	STOP	INTERVAL
Rig [illegible] Bops	12:00	12:15	¼
Drill	12:15	8:00	7¾

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked		HRS.
DRILLER	Dennis [illegible]chuk	8
DERRICK	Wayne Bigaury	8
MOTOR	Fritz Hombeek	8
FLOOR	Dennis Stadnuk	8
FLOOR	T. Dwyer	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
8199	41	8240	7¾	170	21	6¼	1¾			8	5

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
11	8¾	SC6T	3-20	712700	35	40	17[illegible]	8[illegible]	25		Dull

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	-	[illegible]	[illegible]		[illegible]
VISCOSITY	-	[illegible]	[illegible]		[illegible]
GEL					[illegible]

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1 MODEL	PRESSURE	1100	[illegible]	[illegible]	
	S.P.M.	[illegible]	[illegible]	[illegible]	
	LINER SIZE		[illegible]		
NO. 2 MODEL	PRESSURE				
	S.P.M.				
	LINER SIZE				

W.L. F.C. pH

AT SURVEYS DEGREE:

MOTOR HOURS		NEXT OIL CHANGE
1	12	
2	full	
3	51	
4	51	
5	190	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL

GENERAL:

STANDS 92 — SINGLES 1 — D. COLLARS 21-600.19 — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY 19.00 — TOTAL 8240 — NEXT SLIP

REMARKS	START	STOP	INTERVAL
Drilling	8:00	1:15	5¼
Service Rig Check Bopd	1:15		
Pipe [illegible] Kelly [illegible]		1:30	¼
Drilling	1:30	4:00	2½

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked		HRS.
DRILLER	[illegible]	8
DERRICK	[illegible]	8
MOTOR	[illegible]	8
FLOOR	[illegible]	1
FLOOR	[illegible]	4
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
8240	2	8242	¼	170	21	[illegible]	[illegible]			8	5

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
11	8¾	SC6T	3-20	712700	35	40	180	8062	28¼	8242	
17	8¾	X5R	3-20					8242			

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	9.7				
VISCOSITY	210				
GEL					

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1 MODEL	PRESSURE				
	S.P.M.				
	LINER SIZE				
NO. 2 MODEL	PRESSURE				
	S.P.M.				
	LINER SIZE				

W.L. F.C. pH

AT SURVEYS	DEGREE
8240	5½°

MOTOR HOURS		NEXT OIL CHANGE
1	[illegible]	
2	[illegible]	
3	[illegible]	1[illegible]
4	[illegible]	
5	[illegible]	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1⅛		8					

GENERAL:

STANDS 92 — SINGLES 2 — D. COLLARS 21-600.09 — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY 19.10 — TOTAL 8242 — NEXT SLIP

REMARKS	START	STOP	INTERVAL
Drill	4:00	4:45	¾
Circ [illegible]	4:45	5:15	½
Hoist [illegible] x Drop Survey	[illegible]	8:15	3
[illegible] pit	8:15	[illegible]	¼
Rig [illegible]	[illegible]	[illegible]	¼
[illegible]	8:45	11:30	2¾
[illegible]	11:30	12:00	½

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 [signature]

TOTAL COMPANY TIME ______ HRS. APPROVED BY [signature]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 21-E-25 COMPANY Cooks Bros Oil LOCATION Cooks Gilbert Oil DATE 7-7 19 71

THIS IS 37 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Harry Gallinger	8
DERRICK Mike Gallinger	8
MOTOR 2nd Scissor A	8
FLOOR Jim Pigeon	8
FLOOR Albert Pilatich	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Dennis Hinchliffe	8
DERRICK Wayne Gibney	8
MOTOR Fritz Rupke	8
FLOOR Donald Sidelnik	8
FLOOR Tim Dinnes	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES: Tim Dinnes	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Norm Hillier	4
DERRICK Dennis Smith	4
MOTOR Jim Cross	4
FLOOR Lyle Arnold	4
FLOOR Orv Krachun	4
FLOOR Russ Pelton	4
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - Midnight - 8 a.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
7033	32	7065	4	110	21	8	2½	

FUEL GALS. 0 — BOILER HRS. 0 — DRILL PIPE SIZE 5"

STANDS 30 — SINGLES 2 — D. COLLARS 1-1-14 — OTHER FT. — C.D. FT. — SUBS. FT. — FT. UP ON KELLY 15' — TOTAL 4.67 — NEXT SLIP

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
15	8¾	x-55A	20/32	24946	30	40	527	7315	54	7842	1-1-I

MUD

	12 MID.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	95	95		
VISCOSITY	220	220		
GEL				

ADDITIVES

PUMPS

	NO. 1	NO. 2
PRESSURE	1200	
MODEL	G	
S.P.M.	60	
LINER SIZE	6½	x 14

AT SURVEYS DEGREE 2 — 3

	MOTOR HOURS	NEXT OIL CHANGE
1	21	
2	142	116
3	4	
4	24	
5	174	142

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

Tour - 8 a.m. - 4 p.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
8062	15	8077	13½	110	21	13⅜	2 7/16	

FUEL GALS. 0 — BOILER HRS. 0 — DRILL PIPE SIZE 5"

STANDS 20 — SINGLES 2 — D. COLLARS 21-1-1-19 — OTHER FT. — C.D. FT. — SUBS. FT. — FT. UP ON KELLY — TOTAL 20.77 — NEXT SLIP

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
11	8¾	SCSGJ	3-20	762700	30	40	15	8062	13½		D-16

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

PUMPS

	NO. 1	NO. 2
PRESSURE		
MODEL		
S.P.M.		
LINER SIZE		

AT SURVEYS DEGREE

	MOTOR HOURS	NEXT OIL CHANGE
1	141	
2	120	110
3	116	
4	116	
5	40	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

Tour - 4 p.m. - Midnight

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
8077	71	8148	7½	120	21	12	2	

FUEL GALS. 4 — BOILER HRS. — DRILL PIPE SIZE 5"

STANDS 21 — SINGLES 2 — D. COLLARS 1-1-1-14 — OTHER FT. — C.D. FT. — SUBS. FT. — FT. UP ON KELLY 21 — TOTAL 41.41 — NEXT SLIP

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
11	8¾	SCSGJ	3-20	762700	30	40	71	8077	19½		

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT			95	95
VISCOSITY			220	220
GEL				

ADDITIVES

PUMPS

	NO. 1	NO. 2
PRESSURE		
MODEL		
S.P.M.		
LINER SIZE		

AT SURVEYS DEGREE

	MOTOR HOURS	NEXT OIL CHANGE
1	54	
2	126	116
3	116	
4	116	
5	70	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
R.C. Service & B.P.	12:00	1:00	1
Drill	1:00	4:15	3¼
Circ Hole Clean For Trip + Survey	4:15	5:30	1¼
Haul	5:30	7:00	1½
Service R.C. & B.P.	8:00	9:15	1¼
Install Trip Nipple	9:15	10:00	¾
Change B.H.A. + Check Blind Rams		9:15	1¼
Slip Line	9:15	9:30	¼
Trip in w/ Bit #16	9:30	11:30	2
Ream Bridges @ 8000'	11:30	2:15	2¾
Trip - 7956			
7956 - 7960			
C.C. - T.D.			
Drilling -	2:15	Hrs	13¼
Service R.C. & B.P.	Hrs	1:15	¼
Drilling	1:15	1:00	23¾

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 Leo Lukowetz

TOTAL COMPANY TIME ____ HRS. APPROVED BY E. Gradwick

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 71-E-35 COMPANY Gable's Gas & Oil LOCATION Gable's Calibert 5-66 DATE July 4 1970

THIS IS 36 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Glen Wilson	8
DERRICK Dennis Smith	8
MOTOR Jimmy Wilson	8
FLOOR Floyd Arnold	8
FLOOR Orest Tkachuk	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES: N.I.	
FIRES: N.I.	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Harry Gallinger	8
DERRICK Mike Gallinger	8
MOTOR Sid Semenko	8
FLOOR Jim Pilon	8
FLOOR Walter Tise	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Doug Jurock	8
DERRICK Wm Gilroy	8
MOTOR Ernie Kempf	8
FLOOR Dan Dunford	8
FLOOR Tim Davis	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7815	80	7895	17-4	160M	21	6 3/4	2 7/8	42		8	5"

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
15	7 7/8	J55D	20-20-20	308916	20	40	390	7525	21 1/4		1-1

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	95			
VISCOSITY	210			
GEL				

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	1150			1150
MODEL	S.P.M.	68			
	LINER SIZE	6 1/2 x 14			
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	14	
2	92	168
3	16	
4	14	
5	350	700

STANDS 74 SINGLES 1 D. COLLARS 6 OF 19 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY 41.10 TOTAL 7895.00

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
14		8					

GENERAL

W.L. 60 F.C. 3/4 pH. 9.5

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7895	13	7954	7	118	21	6 3/4	2 7/8			8	5"

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
14	7 7/8	X55C	20 16	20196	30	47	433	7525	41 1/4		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	95	95	96	94
VISCOSITY	160	140	100	95
GEL				

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	1200			
MODEL	S.P.M.	76			
	LINER SIZE	6 1/2 x 14			
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

ADDITIVES Gel 2520 lbs, Caustic 5 lbs, Lignite 25 lbs, CMC 1 lb

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	2	
2	94	
3	76	44
4	92	
5	358	

STANDS SINGLES D. COLLARS 6 OF 19 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY 28' TOTAL 7954

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 60 F.C. 3/4 pH. 9.0

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7954	76	8030	7 3/4	116	21	6 3/4	2 7/8			8	5"

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
10	7 7/8	X55C	16 16 16	20491	30	40	505	7525	12 3/4		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				43
GEL				

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	16	
2	100	116
3	24	
4		
5	16	700

STANDS SINGLES 1 D. COLLARS 6 OF 19 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY 1700 TOTAL 8030

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 60 F.C. 3/4 pH. 9

REMARKS	TIME START	STOP	INTERVAL
Service Rig Lubricate Rig & Kelly Cock	12:00	12:15	1/4
Drilling 5.0 Hours	12:15	5:00	7 3/4
R & C Serv + Rope	5:00	5:15	1/4
Drill	5:15	7:30	5 1/4
Clean Shale Tank & Jack up Sand	7:30	7:45	1/4
Drill	7:45	7:00	1 3/4
Drill	7:00	12:00	5

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 Ray Hyndman

TOTAL COMPANY TIME _____ HRS. APPROVED BY A. C. Gable

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 2 COMPANY [illegible] LOCATION [illegible] DATE 1-4- 19 80

THIS IS 35 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Chris Jackson	8
DERRICK Wayne Smith	8
MOTOR Tony Jason	8
FLOOR Joe Amond	8
FLOOR Scott Frank	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES: Nil

FIRES: Nil

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Norm Collins	8
DERRICK Mike Collins	8
MOTOR Sid Schmidt	8
FLOOR Jim Pierce	8
FLOOR Don Sheffelin	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Dennis Edwards	8
DERRICK Wayne Gabouy	8
MOTOR Fritz Reuter	8
FLOOR Donald Shoffelin	8
FLOOR Tim Dwire	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM 7397 FOOTAGE 139 TO 7536 HRS. ON BOTTOM 7½ WT. DRILL STRING (1000 LBS.) 116 DRILL COLLARS NO. 6 O.D. 6¼ I.D. 2½ WGT. 42 FUEL GALS. 3 BOILER HRS. 24 DRILL PIPE SIZE 4½ STANDS DOUBLES 20 SINGLES 22

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	15	8¾	X43A	20-16	20896	30	40	121	7525	14½		

D. COLLARS 600.17 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL 11 44.00

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES: GEL 15 00#, CMC [illegible] 50#, DELTA 50 #, CAUSTIC 50#

AT SURVEYS DEGREE

MOTOR HOURS: 1 144, 2 [illegible], 3 94, 4 N/A, 5 [illegible] 700

NEXT OIL CHANGE (400)

PUMPS					
NO. 1	PRESSURE			1200	1400
	MODEL	700	S.P.M.	68	68	12	12
			LINER SIZE			6½	6½
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
14		3						

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Rig Inspect Rig	1400	1700	1½
Drilling from 7397 to 7536	1700	0000	7½

FROM 7536 FOOTAGE 201 TO 7737 HRS. ON BOTTOM 7¾ WT. DRILL STRING (1000 LBS.) 117 DRILL COLLARS NO. 6 O.D. 6¼ I.D. 2½ FUEL GALS. 7 BOILER HRS. 5 DRILL PIPE SIZE 4½ STANDS DOUBLES 22 SINGLES 1

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	15	8¾	X43A	20-16	2-7/16	30	40	212	7525	19½		

D. COLLARS 600.17 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL 7737'

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	94	94	95	95
VISCOSITY	215	205	165	160
GEL				

ADDITIVES: CMC 9 400 #, DELTA 50 #, CAUSTIC 100 #, LIGNITE 25 #

AT SURVEYS DEGREE

MOTOR HOURS: 1 172, 2 [illegible], 3 194, 4 179, 5 201

NEXT OIL CHANGE (400) 206

PUMPS					
NO. 1	PRESSURE	1200			
	MODEL	G	S.P.M.	62	
		700	LINER SIZE	6½	6½ 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. 164 F.C. 2/32 pH 9.11

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Serv Chk Bops	1700		
Kelly Cock		2015	½
Drlg	2015	0400	7½

FROM 7737 FOOTAGE ME TO ME HRS. ON BOTTOM 7¾ WT. DRILL STRING (1000 LBS.) 116 DRILL COLLARS NO. 6 O.D. 6¼ I.D. 2½ FUEL GALS. 5 BOILER HRS. 5 DRILL PIPE SIZE 4½ STANDS DOUBLES 22 SINGLES 1

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	15	8¾	X43A	1-16	2-7/16	30	40	113	7525	23		2 16
				1-16								

D. COLLARS 600.17 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY 1900 TOTAL 9316

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	95	95	95	95
VISCOSITY	135	120	120	120
GEL				

ADDITIVES: CMC [illegible], CAUSTIC 100 #, LIGNITE 25

AT SURVEYS DEGREE

MOTOR HOURS: 1 [illegible], 2 [illegible], 3 [illegible], 4 [illegible], 5 [illegible]

NEXT OIL CHANGE [illegible]

PUMPS					
NO. 1	PRESSURE	1150	1150	1150	1150
	MODEL	G	S.P.M.	62	62	62	62
		700	LINER SIZE	6½ x 14			
NO. 2	PRESSURE				
	MODEL	G-60	S.P.M.		
			LINER SIZE	6½ x 14			

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
		3						

GENERAL [illegible]

W.L. 5 F.C. 2/32 pH. 10

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service & Work BOP	0400	0415	¼
Drilling & Survey @ 7737 ME	0415	1200	7¾

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 [illegible]

TOTAL COMPANY TIME HRS. APPROVED BY [illegible]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 21-E-78 COMPANY Cabin Oil & Gas LOCATION Cabin Creek Unit DATE Mar 4 19 72

THIS IS 34 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Geo Lagan	8
DERRICK Dennis Smith	8
MOTOR Jerry Lucas	8
FLOOR Floyd Arnold	8
FLOOR Chet Thurlow	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Harry Collins	7
DERRICK Mike Collins	7
MOTOR Ted Schuler	7
FLOOR Jim Pincel	7
FLOOR Floyd Arnold	4
FLOOR Fire Ranger	4
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Dennis Smith	8
DERRICK Mike Collins	8
MOTOR Fritz Hoffman	8
FLOOR Donald Sperling	8
FLOOR Jim Dwyer	8
FLOOR Ted Davis South	8
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7498	27	7525	34	160M	21	8"	2¼"	42	8		5" XH

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	44	9⅞	XV		20251	40	25	72	7453	44	7525	

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	64	64	64	64	Cel 200#
VISCOSITY	126	126	116	110	2500#
GEL					Caustic 100#

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	1600	1600	1700	1700
MODEL 9-10	S.P.M.	69			
	LINER SIZE	6½			
NO. 2	PRESSURE				
MODEL 9-10	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OFF	CUT	FEET LEFT ON SPOOL
1⅛		2						

GENERAL Lost cone - 64 cutter

W.L. 4 F.C. 2/32 pH. 9

AT SURVEYS DEGREE: 7525

MOTOR HOURS		NEXT OIL CHANGE
1	146	
2	46	104
3	26	
4	132	
5	206	706

STANDS 75
SINGLES
D. COLLARS 6 DC 19
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY 21.43
TOTAL 2525.00

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7525	5	7530	1	11	21	8"	2¼"	42	8	8	5" XH

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	45	9⅞	HH55AJ	3-20	20496	3	4	5	7525	1		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT				64	
VISCOSITY				122	
GEL					

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE				1200
MODEL 9-10	S.P.M.				70
	LINER SIZE			6½ x 14"	
NO. 2	PRESSURE				
MODEL 9-10	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OFF	CUT	FEET LEFT ON SPOOL
					17			

GENERAL -350

W.L. F.C. pH.

AT SURVEYS DEGREE: 7 · 1°

MOTOR HOURS		NEXT OIL CHANGE
1	142	
2	104	
3	4	184
4	146	
5		

STANDS 75
SINGLES
D. COLLARS 6 DC 19
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY 21'
TOTAL 7521

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7521	41	7591	11.5	11	21	8"	2¼"	42	8	8	5" XH

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	46	9⅞	HCA	3-20	20496	30	50	11	7525	23½		DRLG.

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	64				
VISCOSITY	126				
GEL	4 2 5				

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	1150			1300
MODEL 9-10	S.P.M.	66			
	LINER SIZE	6½ x 14"			
NO. 2	PRESSURE				
MODEL 9-10	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OFF	CUT	FEET LEFT ON SPOOL

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE:

MOTOR HOURS		NEXT OIL CHANGE
1	154	
2	54	154
3	25	
4	154	
5		

STANDS 75
SINGLES
D. COLLARS 6 DC 19
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY 2700
TOTAL 7591

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Trip in w/ bit #21	12:00	12:30	½
Drilling	12:30	5:30	5
Core for Triassic test	5:30	6:45	1¼
Circ	6:45	7:15	½
Lay down	7:15	8:15	1
Rig Serv + Boys	8:00	7:15	½
Drlg	8:15	10:30	2½
Circ + Cond for 2 Cores	10:30	11:45	1¼
Slip Line	11:45	11:00	¼
Run in to 7525'	11:00	1:00	2
Circ on Bottom + Pull	1:00		
Run 20 Std Cores			
Drlg		3:00	2
Drlg	3:00	4:00	1
Drilling 6 3/4" Hole from 7525 to 7591			
Service rig check Tour			
Work Lock	7:15	7:45	½
Drlg	7:45	Mid	16¼

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 _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 11-E-74 COMPANY Gulf + Cascade LOCATION C-41-A Pouce Coupe DATE March 1970

THIS IS 33 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Glen Eastman	8
DERRICK Dennis Smith	8
MOTOR Tony Lipscomb	8
FLOOR Nick Sawa	8
FLOOR 2nd Trucker	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7407	26	7433	21/4	160M	21	6 3/4	2 1/4	92		8	5"

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS	DEPTH OUT	CONDITION
	12	7 7/8	XV	20-20-20	12536	30	120	318	7222	21	7433	2-9-1
	14	6 3/4	XX	20-20-20	102211							

MUD	12 MN.	4 A.M.	8 A.M.	ADDITIVES
WEIGHT				
VISCOSITY				
GEL				

PUMPS		
NO. 1	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
7422	30	1 116	1
		2 116	6
		3 43	5
		4 44	5
		5 179	30

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
12		5			12	146		

GENERAL

STANDS	2
SINGLES	2
D. COLLARS	6 of 9
OTHER FT.	
C.B. FT.	
SUBS. FT.	
FT. UP ON KELLY	8-9
TOTAL	7433.10

REMARKS	TIME START	STOP	INTERVAL
Tri Drilling	12:00	2:00	2
Circulate Trip	2:00	3:30	1 1/2
Survey	3:30	3:45	1/4
Sweep Hole Clean	3:45	4:00	1/4
Trip	4:00	7:30	3 1/2
Function Test BOPs	7:30	8:00	1/2
Change Kelly Saver Sub			

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Norm Cullum	8
DERRICK Mike Cullum	8
MOTOR Sid Scholz	8
FLOOR Jim Pelkan	8
FLOOR 2nd Trucker	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7413	19	7432	2 1/2	160	21	6 1/4	2 1/2			X	5"

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	14	6 3/4	XV	20-20-20	102511	35	75	19	7433	2 1/2		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT			9.4	9.4	Barite 50#
VISCOSITY			175	160	Caustic 50#
GEL					Gel 100#

PUMPS			
NO. 1	PRESSURE	1250	
MODEL C	S.P.M.	70	
	LINER SIZE	6 1/2 x 14"	
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

W.L. 8 F.C. 32 pH 9.5

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
		1 120	
		2 24	168
		3 51	
		4 122	
		5 121	168

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS	14
SINGLES	
D. COLLARS	6 of 9
OTHER FT.	
C.B. FT.	
SUBS. FT.	
FT. UP ON KELLY	1'
TOTAL	7432'

REMARKS	TIME START	STOP	INTERVAL
Rig Repair - Bops	5:00	6:00	1
Run in to 6600	7:00	10:00	2
Ream out 3 Bridges	6:00		
Fr 6600 to 7375 +			
50' Fill		1:00	3 1/2
Drill	1:30	4:00	2 1/2

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Terry Lowe	8
DERRICK Dennis Smith	8
MOTOR E. Tzeachen	8
FLOOR Ted Dyck	8
FLOOR —	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7149	46	7195	7311	112	21	6 1/4	2 1/2			2	4"

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	14	6 3/4	XV	1-20 1-11	102511	45	75	1.5	7433	1/2		DULL

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	9.4	9.4			Barite 50#
VISCOSITY	49	165			Caustic 25#
GEL					Gel 2,000#

PUMPS					
NO. 1	PRESSURE	1175	1150	1150	1175
MODEL C	S.P.M.	65	65	65	65
	LINER SIZE	6 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
		1 132	
		2 30	168
		3 24	
		4 [illegible]	
		5 191	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS	74
SINGLES	
D. COLLARS	21-6-9-19
OTHER FT.	
C.B. FT.	
SUBS. FT.	
FT. UP ON KELLY	37.00
TOTAL	7195

REMARKS	TIME START	STOP	INTERVAL
Drilling - 2500 - 75 RPM	11:00	5:30	1/2
Service Rig + BOPs	5:30		
+ Kelly Cock		5:45	1/4
Drilling - 2500# 75 RPM	5:45	11:15	5 1/2
Drilling - 4000# 75 RPM	11:15	12:00	1/2

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 Lambert Montpetit

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 21-E-24 COMPANY Cascade Coos Co. LOCATION [illegible] DATE [illegible] 19 70

THIS IS 22nd DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Glen Wasson	8
DERRICK Lenus Smith	8 1/2
MOTOR Jerry Wasson	8
FLOOR Floyd Arnold	8
FLOOR Dave Trulen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES: N / L

FIRES: N / L

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Harm Callihan	8
DERRICK Mike Callihan	8
MOTOR Sid Schaulis	8
FLOOR Floyd Arnold	4
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Dennis Cunningham	8
DERRICK [illegible]	[illegible]
MOTOR Ellis Bell	8
FLOOR [illegible] Derrick	8
FLOOR Lee Davel	3 1/2
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
7222	57	7271	5 1/4	160	21	6 3/4	2 1/2	42	8			2 [illegible]

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
13	7 7/8	XV	[illegible]	180326	38	[illegible]	57	7222	7 1/4		[illegible]

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY			47	
GEL				

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	1200	1200	1200	1100
MODEL 5	S.P.M.	68	68	68	68
	LINER SIZE				
NO. 2	PRESSURE	[illegible]			
MODEL	S.P.M.				
	LINER SIZE	5 1/2	6 1/2		

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	72	1
2	Dull	6
3	32	8
4	12	
5	12 1/2	220

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
15/16		5						

GENERAL

W.L. 42 F.C. 7/32 pH.

OTHER PT. 620.19 | C.B. FT. | SUBS. FT. | FT. UP ON KELLY 60.00 | TOTAL 7271.47

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
7271	12	7334	1 3/4	110	21	6 1/2	2 1/2		8	5		22

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
13	7 7/8	XW	2-10-11	180326	35	75	117	7222	11		
					25	70					
					30	120					

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	92	92	92	92
VISCOSITY	92	93	94	90
GEL				

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	1100		1100	
MODEL 9-10	S.P.M.	75		75	
	LINER SIZE	6 1/2 x 14			
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

ADDITIVES

AT SURVEYS DEGREE: 73 1/4

MOTOR HOURS		NEXT OIL CHANGE
1	111	
2	0	114
3	8	
4	108	
5	12 3/4	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
15/16		5						

GENERAL Change Oil - Filter in #2 Mud Pump

W.L. 64 F.C. 5/32 pH 9.5

OTHER PT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY 1 | TOTAL 7347

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
7341	13	7407	3 1/4		11	6 1/2	2 1/2		2			23

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
13	7 7/8	XV	11-11	[illegible]		110	[illegible]	[illegible] 32	12 3/4		DULL

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	93	93		
VISCOSITY	90	88		
GEL				

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	1100			
MODEL Wh	S.P.M.	75			
7½	LINER SIZE	6½ x 14			
NO. 2	PRESSURE				
MODEL 8	S.P.M.				
7½	LINER SIZE				

ADDITIVES: Caustic Soda, Alum, Soda Ash

AT SURVEYS DEGREE: 74 3/4

MOTOR HOURS		NEXT OIL CHANGE
1	106	
2	8	115
3	2	
4	111	
5	170	3rd

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

OTHER PT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY 1 1/2 | TOTAL 7417

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Trouble with Mud Pumps	12:00	12:30	1/2
Unable to Establish Circulation	12:30	1:45	1 1/4
Drilling Ahead	1:45	8:00	5 1/4
Rig Service - Boops	6:00	8:15	1/4
Drill	8:15	4:30	3 1/4
Survey	4:30	4:45	1/4
Drill	4:45	5:45	1
Service Rig & Equip.	5:45	6:15	1/2
Drill & Ream Tight Hole	6:15	11:30	5 1/4
Survey - Misrun	11:30	12:00	1/2
Drill & Ream Tight Hole	12:00	1:30	1 1/2
Drill & Survey	1:30	2:00	1/2

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 L. Stephenson

TOTAL COMPANY TIME _____ HRS. APPROVED BY H. Hartwick

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 21-E-38 COMPANY Cabot's Gas Coil LOCATION Celesta - D-66 DATE March 1-7 19 70

THIS IS 3rd DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Clem Lisson	8
DERRICK Dennis Smith	8
MOTOR Jerry Mason	8
FLOOR Floyd Arnold	8
FLOOR Scot Tkachuk	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Norm Collins	8
DERRICK Mike Collins	8
MOTOR Sid Schisler	8
FLOOR Hal Dwyer	8B
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER D Nicholson	8
DERRICK Joe Phillips	8
MOTOR Fritz Klinger	8
FLOOR Donald Shepherd	8
FLOOR Tim Dwyer	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7145	77	7222	5½	155	21	6¾	2¼	42		2	4½

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
12	9⅞	2¾	10-10-10	12510	42	75	412	6810	5½	7222	

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				73
VISCOSITY				45
GEL				

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	1200			1300
	MODEL				
	S.P.M.	65			68
	LINER SIZE	6½			
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

ADDITIVES

AT SURVEYS DEGREE	
7111	1½
7222	2

MOTOR HOURS	NEXT OIL CHANGE
1 63	
2 110	
3 1	
4 74	
5 149	

STANDS 21 SINGLES 2 D. COLLARS 66.17 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY 22.10 TOTAL 7222.00

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
15/16		5					

GENERAL Board Tally - 7223.28

W.L. 7.4 F.C. 30/1 pH 7.0

REMARKS	TIME START	STOP	INTERVAL
Service Rig and Repair Same	12:00	12:30	½
Drilling	12:30	2:00	1½
Survey	2:00	2:30	½
Drilling	2:30	6:00	3½
Survey	6:00	6:30	½
Circ. and Hole Trip	6:30	7:00	½
Circ. and Hole Trip	7:00	8:30	1½
Circ. for Trip	1:00	1:30	½
R.C. Sand Line Boss	2:30	2:45	¼
Hoist	2:45	11:45	3
Change Rig over to Run Rods	11:45	12:00	¼
Slip 12' Line	12:00	12:30	½
Run 14	12:30	2:30	2
Change out Bailer	2:30		
Fill Stats Test			1½
Service Rig and Repair	8:00	8:30	½
Circulate for Samples	8:30	10:45	2¼
1500 - 1120			
Hole Tight	10:45		
Trip for Bit		5:15	4½
Change Bit	5:15	5:45	½
Trip Rods & Tbg.			
Run Bit & Tbg.			
Fill Hole & Mud Up	7:30		
Circulate Bottoms	7:30	12:00	4½
Rig in Hole Clean out Rock			
Fillers 1122 - 7156		12:00	4

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

ADDITIVES

MOTOR HOURS	NEXT OIL CHANGE
1 71	
2 179	11
3 11	
4 82	
5 151	3½

STANDS 21 SINGLES 2 D. COLLARS 66.17 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY 22 TOTAL 7222

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Board Tally - 7249.18
Strap Tally - 7248.93
No Correction. .25

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
7222	—	—	—	155	21	6¾	2¼				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
13	7⅞	x u	7-16								

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

ADDITIVES

MOTOR HOURS	NEXT OIL CHANGE
1	
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

W.L. F.C. pH.

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 Geo. A. Dwyer

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 30 DAY ON THIS WELL

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

RIG No. 21-C 36 COMPANY [illegible] LOCATION [illegible] DATE Feb 28 19 70

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS
DRILLER Glen Wason	8
DERRICK Dennis Smith	8
MOTOR Jerry Wason	8
FLOOR Floyd Arnold	8
FLOOR Ernest Tkachuk	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL	BOILER GALS.	HRS.	DRILL PIPE SIZE
6861	64	6925	5 3/4	16 [illegible]	21	6 3/4	2 1/4	22		8	5 [illegible]	

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
12	8 3/4	XIC	[illegible]	19810	[illegible]	[illegible]	115	6810	11		[illegible]

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
VISCOSITY		[illegible]	[illegible]	[illegible]	
GEL					[illegible]

AT SURVEYS	DEGREE
6880	1 1/2°
6910	2°

MOTOR HOURS		NEXT OIL CHANGE
1	114	1
2	146	6
3	160	0
4	58	
5	114	300

PUMPS: NO. 1 PRESSURE / MODEL / S.P.M. / LINER SIZE; NO. 2 PRESSURE / MODEL / S.P.M. / LINER SIZE — [illegible]

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/8		8						

GENERAL

W.L. F.C. pH.

STANDS [illegible] SINGLES 1 D. COLLARS [illegible] OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY [illegible] TOTAL [illegible]

REMARKS	START	STOP	INTERVAL
Drilling [illegible]	12 00	2 15	2 1/4
[illegible]	2 15	2 45	1/2
Drilling [illegible]	2 45	5 00	2 1/4
Ran 3 Survey [illegible]	5 00		
#1 [illegible] Time [illegible]			
Heavy mud [illegible] 22			
Mud [illegible]		6 15	1 1/4
Drilling	6 45	8 00	1 1/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Norm Calliou	8
DERRICK Mike Calliou	8
MOTOR Sid Schouer	8
FLOOR Tim Dwyer	12
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL	BOILER GALS.	HRS.	DRILL PIPE SIZE
6925	96	7021	7	112	21	6 3/4	2 7/8			8	5	

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
12	8 3/4	XIC	[illegible]	19810	3 / 35	75	211	6810	18		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	93	9.3	93	93	Gel 9800 [illegible]
VISCOSITY	80	78	70	75	Caustic 100 [illegible]
GEL					[illegible] 50 [illegible]
					Diesel - 5 [illegible]

AT SURVEYS	DEGREE
1991	[illegible]

MOTOR HOURS		NEXT OIL CHANGE
1	52	
2	154	11 [illegible]
3	113	[illegible]
4	57	
5	121	300

PUMPS: NO. 1 PRESSURE [illegible]; MODEL [illegible]; S.P.M. 18, 18; LINER SIZE [illegible]; NO. 2 MODEL [illegible]

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 7.0 F.C. 2/32 pH 9.0

STANDS 19 SINGLES 1 D. COLLARS 1 [illegible] 19 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY 11 TOTAL 7021

REMARKS	START	STOP	INTERVAL
Rig Service [illegible]	8 00	8 30	1/2
Drill	8 15	11 45	3 1/2
Survey	11 45	12 15	1/2
Drill	12 15	4 00	3 1/2

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Dennis Melnychuk	8
DERRICK Ralph Millan	8
MOTOR Fritz Kumpher	8
FLOOR Don Sherman	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL	BOILER GALS.	HRS.	DRILL PIPE SIZE
7021	124	7145	7	164 M	21	1 3/4	2 1/4	4 [illegible]		8	5	

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
12	8 3/4	XIC	[illegible]	19810	[illegible]	75	335	6810	25		[illegible]

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	93	93			Caustic 100 [illegible]
VISCOSITY	80	75			[illegible]
GEL					[illegible]

AT SURVEYS	DEGREE
7112	2 [illegible]

MOTOR HOURS		NEXT OIL CHANGE
1	[illegible]	
2	[illegible]	
3	176	
4	[illegible]	
5	129	300

PUMPS: NO. 1 PRESSURE [illegible]; MODEL [illegible]; S.P.M. 18; LINER SIZE 7 1/2 x 14

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/8		8						

GENERAL

W.L. F.C. pH.

STANDS 220 SINGLES 2 D. COLLARS 1 [illegible] 19 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY 11.13 TOTAL [illegible]

REMARKS	START	STOP	INTERVAL
Rig Service - Boys	4 00	4 15	1/4
Drill	4 15	7 00	2 3/4
Survey	7 00	7 45	3/4
Drill	7 45	12 00	4 1/4

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 [signature]

TOTAL COMPANY TIME ______ HRS. APPROVED BY [signature]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 216-38 COMPANY Gulf Oils Can Ltd LOCATION Gulf Colinette DLL DATE FEB 27 19 70

THIS IS 29 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Dennis Thrasher	8
DERRICK Jim Wilson	8
MOTOR Pete Chapman	8
FLOOR Donald Simmons	8
FLOOR Tim Ouellet	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Glen Wood	8
DERRICK [illegible]	8
MOTOR Tony Ouellet	8
FLOOR [illegible]	8
FLOOR [illegible]	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Norm Gallant	8
DERRICK Mike Gallant	8
MOTOR Jim Schmidt	8
FLOOR Tim Ouellet	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Bits

	FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
	1146	112	6810	113½		11	7¾				5	5

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
11	7⅞	X16	3/16	11111	40	75	8015	1141	33½	6810	

Mud

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	9	9	9	9.2
VISCOSITY	9	9	9	68
GEL				

ADDITIVES

AT SURVEYS	DEGREE
6810	2½

MOTOR HOURS		NEXT OIL CHANGE
1	33	
2		115
3	136	
4	26	
5	4	

STANDS 67 | SINGLES | D. COLLARS 6 - 6½ | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY 40 | TOTAL 1810

Pumps

	NO. 1	NO. 2
PRESSURE	1200	1300
MODEL	7 Gee	
S.P.M.	47	13
LINER SIZE	7½ x 14	15

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. [illegible] F.C. [illegible] pH [illegible]

Bits

	FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
	6810				155M	21	7¾	2¼	42			5½

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
12	7⅞	J 19	3/16	17010				6810			

Mud

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS	DEGREE
6810	2½

MOTOR HOURS		NEXT OIL CHANGE
1	33	
2	136	
3	144	
4	26	
5	40	

STANDS 67 | SINGLES | D. COLLARS 6 - 6½ | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY 40 | TOTAL 6810

Pumps

	NO. 1	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 Trip for Bit #2 Hit Tight Spot

W.L. F.C. pH

Bits

	FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
	6810	51	6861	5¼	155	21	7¾	2¼			8	5½

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
12	7⅞	X14	4/16	19210	40	44	51	6810	5¼		

Mud

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT		9.3	9.2	9.3
VISCOSITY		75	70	65
GEL				

ADDITIVES

AT SURVEYS	DEGREE
6947	2

MOTOR HOURS		NEXT OIL CHANGE
1	55	
2	137	116
3	151	
4	43	
5	100	

STANDS 67 | SINGLES 2 | D. COLLARS 6 - 6½ | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY 18 | TOTAL 1411

Pumps

	NO. 1	NO. 2
PRESSURE	1200	
MODEL	7 Gee	
S.P.M.	78	
LINER SIZE	6½ x 14	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Changed Shale Shaker Screen

W.L. 75 F.C. ½ 2 pH 9.5

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Rig & Pump	12:00	1:15	1¼
Drilling	1:15	1:00	3¼
Survey	1:00	1:30	½
Drilling	1:30	5:30	4
Dred Survey	5:30	5:45	
Hoist for Bit Hole Tight	5:45	6:30	¾
Pick up Kelly	1:30		
Circulate Tight Hole			
Wash & Ream 60' to Bottom		8:00	1½
Trip out for Bit #3	8:00	8:30	½
Hoist Tools	8:30	10:30	2
Pick up Bit & Trip In	10:30		
Cut Drlg. Line		12:30	2
Circ. Hydraulic Jars	12:30		
Drlg.		12:45	¼
Survey	12:45	1:15	½
Drlg. to 1105'	1:15		
Circ. Bottoms Up		3:15	2
Pull 10 Stds.	3:15		
Cut Drlg. Line			¾
Trip In			
Rig Service - Boys	4:00	4:15	¼
Clean Mud Tank	4:15	6:15	2
Drlg. w/ 12 Stds.	6:15	10:00	3¾
Survey	10:00	10:30	½
Drlg. to 1411'	10:30	12:00	1½

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 [illegible]

TOTAL COMPANY TIME _____ HRS. APPROVED BY [illegible]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 28 DAY ON THIS WELL

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

RIG No. 21 & 38 COMPANY Gables Exploration LOCATION Gables-Gulf-Dome DATE Feb 26 19 70

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Dennis Nowak	8
DERRICK Don Hilton	8
MOTOR Fritz Hamilton	8
FLOOR Donald Sumnik	8
FLOOR Tim Dwyer	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Glen Gibson	8
DERRICK Dennis Spitzer	8
MOTOR Stan Gibson	8
FLOOR Hayes Hurd	8
FLOOR Jack Kaulick	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Norm Gilliland	8
DERRICK Mike Gilliland	8
MOTOR Sid Schuckel	8
FLOOR Jim Pigeon	8
FLOOR Jim Stelkia	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
117	193	6310	7¼	150	21	13/4	2¼			8	5"	1	1	21	1			15	6310

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS	DEPTH OUT	CONDITION
	11	8¾	X16	3-11	14LA	42	75	345	5965	13¼		D-16

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT		9			Gel 2400#
VISCOSITY		51			Lig 40 Gals
GEL					

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	1500	1500	1500	1600
Emsco D-375	S.P.M.	72	65	65	
	LINER SIZE	6½ x 14			
NO. 2	PRESSURE				
Emsco C-250	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE
6117	½

MOTOR HOURS		NEXT OIL CHANGE
1	173	113
2	142	
3	140	
4	82	
3	117	210

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		5						

GENERAL: Opened Auction Tank. Opened Mud Tank. Ran 200 Gals Gyp

W.L. 11 F.C. 1 pH. 11

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
6310	195	6505	7¼	150M	21	6¾	2¼	1428		8	5"	63	1	660	6			27	6505

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	11	8¾	X16	3-16	14LA	42	75	540	5705	20½		1

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT				92	440# Gel
VISCOSITY				54	100# Quick
GEL					50# lime
					5 Gal Duo

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE			1400	1800
Emsco D-375	S.P.M.			72	
	LINER SIZE				
NO. 2	PRESSURE				
Emsco C-250	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE
6441	1°

MOTOR HOURS		NEXT OIL CHANGE
1	4	1
2	1	1
3	110	60
4	40	5
5	711	700

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		5						

GENERAL: Ran 5 Gal Duo

W.L. 9 F.C. pH.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
6505	193	6698	7¼	155	21	1¾	2¼			8	5"	62		1	1019				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	11	8¾	X16	3-14	14LA	42	75	735	5965	22		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	91	91	91	92	Gel 4 Sks
VISCOSITY	53	55	54	55	Caust 50#
GEL					Soda 100#
					Soda 50 #

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE				
Emsco D-375	S.P.M.				
	LINER SIZE				
NO. 2	PRESSURE				
Emsco C-250	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE
6541	¾

MOTOR HOURS		NEXT OIL CHANGE
1	17	
2	114	165
3	138	
4	78	
5	47	20

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		5						

GENERAL:

W.L. 9 F.C. 250 pH. 12

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Rig Check Rig Gas Unit Svc.	12:00	12:15	¼
Drilling	12:15	5:30	5¼
Survey 6 Deg ½°	5:30	6:00	½
Drilling	6:00	8:00	2
Service Rig Check Bops	8:00	8:15	¼
Drilling	8:15	10:15	2
Survey at 6441'	10:15	10:30	½
Drilling	10:30	4:00	3¼
Rig Serv - Bops	4:00	4:15	¼
Drill	4:15	5:30	1¼
Survey	5:30	6:00	½
Drill	6:00	12:00	6

Totco Ring on Bit No. _____ D.P. Caliper Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER Leo Hopkins

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY H.C. Anderson

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 31E-3E COMPANY Cables Oil & Gas LOCATION Cables Colubia D-1 DATE Feb 15 1970

THIS IS 27 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked

	HRS.
DRILLER	Dennis Jackman
DERRICK	Baldy Low
MOTOR	Fritz Klopke
FLOOR	Dan Blackhawk
FLOOR	Tom Dwyer
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked

	HRS.
DRILLER	Glen Jason
DERRICK	Dennis Smith
MOTOR	Stan Jason
FLOOR	Tom Dwyer
FLOOR	Ray Arnold
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked

	HRS.
DRILLER	Harry Calihoo
DERRICK	Mike Calihoo
MOTOR	Sid Shooler
FLOOR	Ian Pierce
FLOOR	Tim Stevens
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	BOILER HRS.	DRILL PIPE SIZE
5241	1 11	5945	7 11	140	21	6 1/2	2 1/2			5	5"

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
10	8 3/4	X16	1-20 1-13 1-12	2712	140	95	721	5241	7 1/2		

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	11	11	11	9+
VISCOSITY	1	46	42	40
GEL				

ADDITIVES: Oil 5-600; Lime-Alum; Caustic Soda; Chrome-Lig

PUMPS	NO. 1	NO. 2
PRESSURE	1150	
MODEL	G	
S.P.M.	45	
LINER SIZE	7" x 12"	

SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
5900 1/2°	1 145	110
	2 701	110
	3 [illegible]	
	4 [illegible]	
	5 112	300

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 4 F.C. pH. 11

STANDS 57 | SINGLES 2 | D. COLLARS 21-6cc-9 | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY D | TOTAL 5415

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
5765				140/111	21	6	2 1/2	-2	2		5 1/2"

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
10	8 3/4	X14	2-14	2712	140	94	80'	5240	22	5765	T.C.D.I.
4	9 3/4	X19	2-16	19411							

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES:

PUMPS	NO. 1	NO. 2
PRESSURE		
MODEL		
S.P.M.		
LINER SIZE		

SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 116	1
	2 [illegible]	1
	3 46	5
	4 [illegible]	
	5 40	300

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
11		8			12			

GENERAL

W.L. F.C. pH. 7

STANDS 57 | SINGLES 2 | D. COLLARS 6cc-11 | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY 20 | TOTAL 5785

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
5765	152	6117	6	140	21	7 3/4	2 3/4			4	5"

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
11	8 3/4	X16	3-16	19411	40	75	152	5765	6		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT		90	90	90
VISCOSITY		48	50	55
GEL				

ADDITIVES: Gel 6000; Oil-Co 7 Cans; Caustic 100 #; Caustic 50 #

PUMPS	NO. 1	NO. 2
PRESSURE	1100	
MODEL	G	
S.P.M.	69	
LINER SIZE	7 1/2 x 14	

SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
6087 3°	1 166	
	2 90	11
	3 [illegible]	
	4 171	
	5 [illegible]	300

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 10 F.C. 50 pH. 7.5

STANDS 57 | SINGLES | D. COLLARS 1 DP 19 | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY 1 | TOTAL 6117

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drilling	1200		
Survey @ 5900	1 1/2	1 45	1/4
Drilling	1 45	3 30	1 3/4
Survey @ 5960	3 30	4 00	1/2
Drilling	4 00	400	HP
Circ. Rig for Wire Line	5 00	5 -	1/2
Short Trip 10 Stds	5 -	5 30	1/2
Circ.	5 30	6 -	1/2
Survey	6 -	6 30	1/2
Drill	6 30	7 -	1/2
Survey	7 -	7 30	1/2
Drill	7 30	8 -	1/2
Survey	8 -	8 30	1/2
Drill	8 30	9 -	1/2
Survey	9 -	9 30	1/2
Drill	9 30	10 -	1/2
Survey	10 -	10 30	1/2
Drill	10 30	11 -	1/2
Survey	11 -	11 30	1/2
Drill	11 30	12 MN	1/2
Circ. Rig for Trip	12 MN	1 -	1
Short Trip to 4825'	1 -	2 -	1
Circ.	2 -	3 15	1 1/4
Trip out w/ Bit #11	3 15	4 30	1 1/4
Trip in w/ Bit #12	4 30	5 -	1/2
Wash 90' to Bottom	5 -	5 15	1/4
Circ. & Cond. for Logs	5 15	6 -	3/4
Short Trip to 4825'	6 -	6 30	1/2
Circ.	6 30	7 -	1/2
Trip out for Logs	7 -	8 -	1

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 Leo Lefebvre

TOTAL COMPANY TIME _____ HRS. APPROVED BY H. Henderson

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 11 DAY ON THIS WELL

CONSERVATION BOARD **DAY WORK RECORD**

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

RIG No. 11 COMPANY Gulf LOCATION 6 miles SE of Elkton DATE FEB 24 19 70

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked

		HRS.
DRILLER	Dennis Warnick	8
DERRICK	Glen Hetland	8
MOTOR	Pete Lambert	12
FLOOR	Dennis Sheppard	8
FLOOR	Tom Dwyer	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
5440	100	5540	6	140	21	6¼	2¼	40		2		53

BITS	NO	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	11	6 3/4	X16	3-15	20712	30 35	90	100	5440	2		

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE		1150	1150	1150
MODEL G	S.P.M.		65	"	"
	LINER SIZE		6½	"	"
NO. 2	PRESSURE				
MODEL P	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
5430	1°	1 102	1
		2	6
		3	7
		4	1
		5	2

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

FT. UP ON KELLY 20.00

TOTAL 5440

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Lunch at Elkton	1200	1215	1/4
Service rig & crew	115	130	1/4
Fuel & Check B.O.P.	130		
Go to bottom		215	3/4
Drilling	215	530	3¼
Circ. & Cond. for DST	530	545	1/4
Drilling	545	700	1¼
Survey @ 5540'	700	715	1/4
Drilling	715	800	1/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked

		HRS.
DRILLER	Glen Hetland	7
DERRICK	Dennis Warnick	8
MOTOR	Tony Strand	7
FLOOR	Pete Lambert	7
FLOOR	Tom Dwyer	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
5540	183	5723	7½	140M	21	6¼	2¼	40		2		122

BITS	NO	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	10	6¾	X16	3-15	20712	42	75	283	5440	10½		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					Hydrate Gel
VISCOSITY					Low Fluid
GEL					6% Diesel

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	1150	1150	1150	1150
MODEL G	S.P.M.	70	70	70	70
	LINER SIZE	6½	"	"	"
NO. 2	PRESSURE				
MODEL P	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
5440	1°	1 102	1
5723	2°	2 112	6
		3 122	9
		4 144	
		5 77	500

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

FT. UP ON KELLY 20.00

TOTAL 5723.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Rig & Crew	800	830	½
Drilling	830	1030	2
Survey @ 5723'	1030	1045	¼
Drilling	1045	1200	1¼

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked

		HRS.
DRILLER	Jim Calhoun	8
DERRICK	Pete Sullivan	8
MOTOR	Bud Spencer	8
FLOOR	Ray Reed	8
FLOOR	Pat Lewis	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
5723	121	5844	7¾	140	21	6¼	2¼			2	5	

BITS	NO	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	4	6¾	X16	20-11	20712	42	75	404	5440	10½		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	91	91	91	91	Gel 4500 lbs
VISCOSITY	45	45	53	45	Caustic 100 lbs
GEL					Caustic 50 lbs
					Over 6 mls

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	1500	1500		
MODEL G	S.P.M.	70	70		
	LINER SIZE	6½	6½		
NO. 2	PRESSURE				
MODEL P	S.P.M.				
	LINER SIZE				

W.L. 11 F.C. 2/32 pH. 7.5

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
5723	2°	1 112	
5844	2°	2 122	11
		3 132	
		4 152	
		5 77	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

FT. UP ON KELLY 20'

TOTAL 5844'

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Serv. - Rep.	400	415	¼
Drill	415	1200	7¾

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 Geo. Edmondson

TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT — CONSERVATION BOARD — DAY WORK RECORD

THIS IS 35 DAY ON THIS WELL

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

RIG No. 21E-38 COMPANY [illegible] Oil & Gas LOCATION [illegible] DATE [illegible] 23 19 70

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked		HRS.
DRILLER	Dennis [illegible]	8
DERRICK	[illegible]	8
MOTOR	Fritz [illegible]	8
FLOOR	Donald [illegible]	8
FLOOR	Tim [illegible]	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
5287	65	5352	7 3/4	138	21	6 3/4	2 3/4			5	

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
9	8 3/4	SDGH	3-15	CM[illegible]	40	75	130	5221	[illegible]		[illegible]

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
VISCOSITY	[illegible]	[illegible]	[illegible]	[illegible]	
GEL					

PUMPS						
NO. 1 MODEL [illegible]	PRESSURE	1150	1150	"	"
	S.P.M.	15	"	"	"
	LINER SIZE	[illegible]	[illegible]	[illegible]	[illegible]
NO. 2 MODEL [illegible]	PRESSURE				
	S.P.M.				
	LINER SIZE				

W.L. [illegible] F.C. [illegible] pH. [illegible]

AT SURVEYS DEGREE	MOTOR HOURS		NEXT OIL CHANGE
	1	105	[illegible]
	2	[illegible]	
	3	[illegible]	
	4	[illegible]	
	5	[illegible]	[illegible]

STANDS [illegible] SINGLES 1 D. COLLARS [illegible] OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY [illegible] TOTAL 5352

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR	CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

REMARKS	START	STOP	INTERVAL
Service Rig & B.O.P.	1200	1215	1/4
Drilling 40000 - 75 RPM	1215	800	7 3/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked		HRS.
DRILLER	[illegible]	8
DERRICK	[illegible]	8
MOTOR	[illegible]	8
FLOOR	[illegible]	8
FLOOR	[illegible]	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
5352	86	5438	7 1/2	140	21	6 3/4	2 3/4	40		8	[illegible]

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
9	8 3/4	SDGH	3-15	CM[illegible]	40	75	216	5222	23 1/4		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS						
NO. 1 MODEL	PRESSURE				
	S.P.M.				
	LINER SIZE				
NO. 2 MODEL	PRESSURE				
	S.P.M.				
	LINER SIZE				

W.L. [illegible] F.C. pH.

AT SURVEYS DEGREE	MOTOR HOURS		NEXT OIL CHANGE
	1	103	
	2	[illegible]	
	3	46	
	4	122	
	5	4	200

STANDS 52 SINGLES D. COLLARS [illegible] OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY [illegible] TOTAL 438 NEXT SLIP 54[illegible]

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR	CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL [illegible]

REMARKS	START	STOP	INTERVAL
Drilling	800	1015	2 1/4
[illegible]	1015	1030	1/4
[illegible]	1030	1045	1/4
Drilling	1045	400	5 1/4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked		HRS.
DRILLER	[illegible]	8
DERRICK	[illegible]	8
MOTOR	[illegible]	4
FLOOR	[illegible]	8
FLOOR	[illegible]	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
5438	2	5440	1/4	140	21	6 3/4	2 3/4			2	

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
9	8 3/4	SDGH	3-15	CM[illegible]	40	75	218	5222	[illegible]	5440	1-2-1
10	8 3/4	[illegible]	[illegible]	[illegible]				5440			

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY	[illegible]				
GEL		[illegible]			

PUMPS						
NO. 1 MODEL	PRESSURE				
	S.P.M.				
	LINER SIZE				
NO. 2 MODEL	PRESSURE				
	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS DEGREE	MOTOR HOURS		NEXT OIL CHANGE
5440 [illegible]	1	111	
	2	[illegible]	
	3	[illegible]	
	4	122	
	5	12	

STANDS [illegible] SINGLES D. COLLARS [illegible] OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY 1' TOTAL 5440

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR	CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

REMARKS	START	STOP	INTERVAL
Drill	400	415	1/4
Drop Survey	415	430	1/4
[illegible] - [illegible]	430	445	1/4
Trip For Bit & Slip	445		
[illegible]		930	4 3/4
[illegible] To BTM	930	1000	1/2
[illegible] On Air System	1000		
[illegible] Hoist		1200	2

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 [illegible]

TOTAL COMPANY TIME ______ HRS. APPROVED BY [illegible]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS [illegible] DAY ON THIS WELL

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

RIG No. 21E-38 COMPANY [illegible] LOCATION [illegible] DATE [illegible] 19 72

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked		HRS.
DRILLER	Dennis [illegible]	8
DERRICK	[illegible] Millar	8
MOTOR	Fritz [illegible]	8
FLOOR	Donald [illegible]	8
FLOOR	[illegible] Bever	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
5102	92	5194	6¼	124	21	[illegible]	[illegible]	

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
[illegible]	[illegible]	[illegible]	3-15	N[illegible]	40	75	[illegible]	[illegible]	20		

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	[illegible]	[illegible]	[illegible]	[illegible]
VISCOSITY	[illegible]	[illegible]	[illegible]	[illegible]
GEL				

PUMPS

		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	1150	1150	1150	1150
MODEL [illegible]	S.P.M.	76	75	75	76
	LINER SIZE	[illegible]			
NO. 2	PRESSURE				
MODEL [illegible]	S.P.M.				
	LINER SIZE				

W.L. [illegible] F.C. pH. [illegible]

ADDITIVES: [illegible]

AT SURVEYS	DEGREE
5102	[illegible]
5194	[illegible]

MOTOR HOURS		NEXT OIL CHANGE
1	76	[illegible]
2	2	
3	16	
4	[illegible]	
5	[illegible]	300

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL: [illegible]

STANDS 49; SINGLES; D. COLLARS [illegible] 19; OTHER FT.; C.B. FT.; SUBS. FT.; FT. UP ON KELLY [illegible]; TOTAL 5194

REMARKS	START	STOP	INTERVAL
Service [illegible]	1200	1215	¼
Survey @ 5102 [illegible]	1215	1245	½
Drilling 35[illegible]	1245	230	1¾
Survey @ 5133 [illegible]	230	300	½
Drilling [illegible]	300	715	4¼
Survey 5194	715	745	½
Drilling	745	800	¼

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked		HRS.
DRILLER	[illegible]	8
DERRICK	[illegible]	8
MOTOR	[illegible]	8
FLOOR	[illegible]	8
FLOOR	[illegible]	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
5194	32	5226	2¼	136 [illegible]	21	6¾	2¾	40

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	675	[illegible]			
7	8¾	[illegible]	2-[illegible]	[illegible]					20¼	5226	[illegible]

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT		[illegible]		
VISCOSITY				
GEL				

PUMPS

		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE				
MODEL	S.P.M.	[illegible]			
	LINER SIZE				
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

MOTOR HOURS		NEXT OIL CHANGE
1	[illegible]	[illegible]
2	[illegible]	[illegible]
3	[illegible]	[illegible]
4	[illegible]	
5	[illegible]	[illegible]

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL:

STANDS 49; SINGLES [illegible]; D. COLLARS 600.19; OTHER FT.; C.B. FT.; SUBS. FT.; FT. UP ON KELLY [illegible]; TOTAL [illegible]

REMARKS	START	STOP	INTERVAL
[illegible]	[illegible]	[illegible]	¼
[illegible]	[illegible]	1030	2¼
[illegible] Bit	1030	1245	2¼
[illegible]	1245	115	½
[illegible]	115	215	1
[illegible]	215		
[illegible]		300	¾
[illegible]	300	400	1

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked		HRS.
DRILLER	Norm [illegible]	8
DERRICK	Mike [illegible]	8
MOTOR	[illegible]	8
FLOOR	[illegible]	8
FLOOR	[illegible]	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
5226	65	5291	5	135	21	6¾	2¾	40

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
7	8¾	[illegible]	3-[illegible]	[illegible]	25	75	65	5226	5		[illegible]

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT			[illegible]	[illegible]
VISCOSITY			[illegible]	[illegible]
GEL				

PUMPS

		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE			1150	1150
MODEL G	S.P.M.			65	65
700	LINER SIZE			[illegible]	[illegible]
NO. 2	PRESSURE				
MODEL G	S.P.M.				
750	LINER SIZE				

W.L. [illegible] F.C. [illegible] pH. [illegible]

ADDITIVES: [illegible]

AT SURVEYS	DEGREE
[illegible]	1½

MOTOR HOURS		NEXT OIL CHANGE
1	[illegible]	[illegible]
2	[illegible]	[illegible]
3	[illegible]	[illegible]
4	[illegible]	
5	[illegible]	300

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL:

STANDS 50; SINGLES 1; D. COLLARS 600.19; OTHER FT.; C.B. FT.; SUBS. FT.; FT. UP ON KELLY [illegible]; TOTAL

REMARKS	START	STOP	INTERVAL
[illegible]	400	500	1
[illegible]	500	600	1
[illegible] to Btm	600	630	½
Drilling	630	1130	5
Survey @ 5287	1130	1200	½

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 [illegible signature]

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 21 COMPANY Gerales Colleges Ltd LOCATION Colleen D16 DATE Feb 21 19 70

THIS IS 23 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked

	HRS.
DRILLER Dennis Newman	8
DERRICK Larry Nilsen	8
MOTOR Earl Houser	8
FLOOR Donald Jacobs	8
FLOOR Tim Dwyer	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM 11571 / 11571 — FOOTAGE 1194 — TO 11800 — HRS. ON BOTTOM 13½ — WT. DRILL STRING (1000 LBS.) 120 — DRILL COLLARS NO. 21 O.D. 8¼ I.D. 2¼ WGT. 147

FUEL GALS. — BOILER HRS. 8 — DRILL PIPE SIZE 5" — STANDS 45 — SINGLES 1 — D. COLLARS 21-6¼ 19 — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY 2600 — TOTAL 11800

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
8	6¾	SDGH	3-15	N9930	35 32	45	240	11551	9½		DWG

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	10	9.9	9.9		
VISCOSITY	47	47	47		
GEL	1	1	11		

AT SURVEYS: 11511 3½° DEGREE; 11736 3½°

MOTOR HOURS: 1 — 53; 2 — 156; 3 — 52; 4 — 64; 5 — 216

NEXT OIL CHANGE

PUMPS

	NO. 1	NO. 2
PRESSURE	150	975
MODEL	G	C
S.P.M.	66	66
LINER SIZE	6½	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1¼		8						

GENERAL

W.L. — F.C. — pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service rig & BOP	12:00	12:15	¼
Drilling 35 sec - 75 RPM	12:15	1:45	1½
Survey @ 11511 - 3½°	1:45	2:15	½
Drilling 30 sec 75 RPM	2:15	4:30	2¼
Survey @ 11736 - 3½°	4:30	5:00	½
Drilling	5:00	8:00	3

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked

	HRS.
DRILLER Glen Olson	8
DERRICK Dennis Smith	8
MOTOR Gerry Larson	8
FLOOR Floyd Arnold	8
FLOOR Ed Bodker	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM 11800 — FOOTAGE 165 — TO 11965 — HRS. ON BOTTOM 7 — WT. DRILL STRING (1000 LBS.) 124 M — DRILL COLLARS NO. 21 O.D. 8¼ I.D. 2¼ WGT. 147

FUEL GALS. — BOILER HRS. 2 — DRILL PIPE SIZE 5" FE — STANDS 42 — SINGLES 2 — D. COLLARS 6 Cm 19 — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY 1128 — TOTAL 11965

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
8	6¾	HDGH	3-15	N9930	32 40	55	414	11551	14½		1-1

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

AT SURVEYS: 11736 3½° DEGREE; 11965 4° DEGREE

MOTOR HOURS: 1 — 88; 2 — 88; 3 — 52; 4 — 92; 5 — 216

NEXT OIL CHANGE — 2 — 8

PUMPS

	NO. 1	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 Cut & slip drlg. line #2 unit

W.L. 14 cl F.C. 282 pH. 7

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service rig & BOP	8:00	8:30	½
Drilling	8:30	12:00	3½
Survey @ 11965 - 4°	12:00	12:30	½
Trip out for bit #8	12:30	2:30	2
Lay down stabilizers	2:30	3:00	½
Trip in	3:00	4:00	1

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked

	HRS.
DRILLER Norm Smith	8
DERRICK Mike Smith	8
MOTOR Wayne Pitt	8
FLOOR Ted Ford	8
FLOOR Lee Sadler	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM 11965 — FOOTAGE 1305 — TO 13270 — HRS. ON BOTTOM 7¾ — WT. DRILL STRING (1000 LBS.) 120 — DRILL COLLARS NO. 21 O.D. 8¼ I.D. 2¼ WGT. 147

FUEL GALS. — BOILER HRS. 8 — DRILL PIPE SIZE 5" FE — STANDS 45 — SINGLES 1 — D. COLLARS 6 Cm 19 — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY Swivel — TOTAL 13270

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
8	6¾	HDGH	3-15	N9930	32 40	50	515	11551	31¾		5-5-6

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	12	11	11		
VISCOSITY	47	47	47		
GEL	1	1	11		

AT SURVEYS: 12000 4° DEGREE; 12500 4° DEGREE; 13000 4° DEGREE

MOTOR HOURS: 1 — 115; 2 — 170; 3 — 52; 4 — 64; 5 — 120

NEXT OIL CHANGE — 185

PUMPS

	NO. 1	NO. 2
PRESSURE		
MODEL	600	600
S.P.M.	70	70
LINER SIZE		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 120 F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drilling	4:00	12:00	7¾

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

B.C.P. Test - Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS. TOOLPUSHER Ed Sadler

TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 21-E COMPANY Cooke Oil & Gas LOCATION Cable Creek 10-11 DATE Feb 26 1970

THIS IS 22 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked

	HRS.
DRILLER Norm Gallinger	8
DERRICK Mike Allison	8
MOTOR Elwyn Bone	8
FLOOR Jim Pecan	8
FLOOR Jay Stevens	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked

	HRS.
DRILLER Dennis Hancock	8
DERRICK Lelon Allen	8
MOTOR Floyd Lindner	8
FLOOR David Sieglink	8
FLOOR T. Swift	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked

	HRS.
DRILLER Glen Sloan	8
DERRICK Lewis Smith	8
MOTOR Gary Lucas	8
FLOOR Lyle Ainsley	8
FLOOR Ed Schuller	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
4340	11'	4408	7½	120	21	12	2¾			8	5"

STANDS 41 SINGLES — D. COLLARS 1 @ 19 — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY — TOTAL

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
7	8¾	STC-3		575722	24	90 / 75	540	3700	34		

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	90	93	89	89
VISCOSITY	50	48	48	45
GEL				

ADDITIVES: Gel 400 lbs; Lignite 5 Gals; Caustic 100 lbs; Caustic 50 lbs; Mica 5 Sacks

PUMPS	NO. 1	NO. 2
PRESSURE	1000	1100
MODEL	G	
S.P.M.	70	
LINER SIZE	6½" x 18"	

AT SURVEYS: 4335 DEGREE 1°

MOTOR HOURS: 1 24; 2 33½; 3 23; 4 40; 5 194 — NEXT OIL CHANGE 114 / 116

FT. UP ON KELLY 0

TOTAL 4411 186

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 154 F.C. 250 pH (11)

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
4408	123	4531	15½	121	21	6¼	2¼			8	5"

STANDS 40 SINGLES 1 — D. COLLARS 21 @ 109 — OTHER FT. — C.B. FT. — SUBS. FT. — FT. UP ON KELLY Drum — TOTAL 4531

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
7	8¾	STC-3	4-13 / 4-20	575722	25	75	711	3820	36	4531	

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	89	89	89	
VISCOSITY	50	47	46	
GEL				

ADDITIVES: Gel 400 lbs; Caustic 100 lbs; Lignite 5 Gals; Mica 5 Sacks

PUMPS	NO. 1	NO. 2
PRESSURE	1000	1000
MODEL	G	
S.P.M.	70	70
LINER SIZE	6½" x 18"	

AT SURVEYS: 4408 DEGREE 1° M.M.; 4459 DEGREE 3°

MOTOR HOURS: 1 36; 2 10½; 3 31; 4 45; 5 210 — NEXT OIL CHANGE

TOTAL 4531

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL — Water

W.L. 1.1 F.C. pH. 11

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
4531	30	4571	3¼	110	21	6¼	2¼	40		8	5"

STANDS 20 SINGLES 1 — D. COLLARS 20 @ 109 — OTHER FT. — C.P. FT. — SUBS. FT. — FT. UP ON KELLY 45 1/2 — TOTAL 4576½

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
2	7⅞	OSC-3	3-13	M2550	45	75	40	4531	3½		NEW
		Smith									

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES: Caustic 25 lbs; Lignite 100 lbs.

PUMPS	NO. 1	NO. 2
PRESSURE		225
MODEL		
S.P.M.		44
LINER SIZE		4½

AT SURVEYS: Rig 4560 DEGREE

MOTOR HOURS: 1 44; 2 [illegible]; 3 44; 4 46; 5 210 — NEXT OIL CHANGE 6 / 8

TOTAL 4576½

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL — Slm 45 5822 Trip 45 30 No Correction Mud 9.0 Wt. 3000 12

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drill	1200	1300	1
Rig Svc + Boz	1300	1345	¾
Survey	1345	2000	2¼
Drill	2000	2300	3
Service Rig + Boz	600		
Survey @ 4408 - ¾°	530		½
Drilling 25 sec - 75 RPM	530	1000	4½
Survey @ 4459 - ¾°	1000	1030	½
Drilling 25 sec - 75 RPM	1030	1300	2½
Survey @ 4550	1300	1330	½
Last Ten Std Slow	1330	2300	10
Hole Tight 5 Stands Off Bottom & Work			½
Short Trip 5 Stands			½
Change Tool Joints, K.C.		500	1
Trip for Bit	500	900	4
Run Bit	900	1000	1
Drill	1000	1130	1½
Survey	1130	1200	½
Trip for Bit	1200	1400	2
Run Bit	1400	1500	1
Drill	1500	1700	2
Survey	1700	1730	½
Drill	1730	2000	2½
Circulate	2000	2030	½
Trip for Bit	2030	2300	2½
Run Bit	2300	2400	1
Drill	2400	0300	3
Survey	0300	0330	½
Drill	0330	0500	1½
Circulate	0500	0700	2
Trip for Bit	0700	1000	3
Run Bit	1000	1030	½
Drill	1030	1130	1
Survey	1130	1200	½

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

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT — CONSERVATION BOARD — DAY WORK RECORD

THIS IS 21 DAY ON THIS WELL

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

RIG No. 21-E COMPANY [illegible] LOCATION [illegible] DATE Feb 19 1970

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked		HRS.
DRILLER	[illegible]	8
DERRICK	Mike [illegible]	8
MOTOR	[illegible]	8
FLOOR	[illegible]	8
FLOOR	Tim [illegible]	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
3890	110	4000	7½	127	11	1¾	2¾			8	5

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
7	9⅞	[illegible]	[illegible]	57[illegible]	25	100 / 75	110	3890	9½		

MUD	12 M'N.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	9.7	[illegible]	[illegible]	[illegible]	Gel 3500#
VISCOSITY	48	45	43	[illegible]	[illegible]
GEL					Caustic 100

PUMPS			
NO. 1 MODEL C 700	PRESSURE	1000	
	S.P.M.	70	
	LINER SIZE	6¼ x 14	
NO. 2 MODEL C 250	PRESSURE		
	S.P.M.		
	LINER SIZE		

W.L. F.C. pH.

AT SURVEYS	DEGREE
3900	[illegible]
3985	¾

MOTOR HOURS		NEXT OIL CHANGE
1	0	
2	110	11[illegible]
3	[illegible]	[illegible]
4	[illegible]	
5	170	[illegible]

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL: Changed oil in #2 motor & filters

STANDS 3[illegible] SINGLES 2 D. COLLARS 600.19 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY 22 TOTAL 4000

REMARKS	START	STOP	INTERVAL
Drill	1200	1:00	1
[illegible] BOPs	1:00	1:15	¼
Survey	1:15	1:30	¼
Drill	1:30	5:15	3¾
Survey	5:15	5:30	¼
Drill	5:30	8:00	2½

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked		HRS.
DRILLER	Dennis [illegible]	8
DERRICK	Ralph Dillon	8
MOTOR	Fritz [illegible]	8
FLOOR	Dennis [illegible]	8
FLOOR	Tim Dwyer	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
4000	115	4115	6¾	130	11	1¾	2¾			6	5"

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
7	8¾	ST-[illegible]	2-13 / 1-10	5757[illegible]	25 / 30	75 / 100	225	3890	16	—	Drill

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	[illegible]	[illegible]	[illegible]	[illegible]	Gel [illegible]
VISCOSITY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GEL	[illegible]	[illegible]			[illegible]

PUMPS					
NO. 1 MODEL G 700	PRESSURE	1000	925	925	925
	S.P.M.	70	[illegible]	[illegible]	[illegible]
	LINER SIZE	[illegible]	[illegible]		
NO. 2 MODEL C 250	PRESSURE				
	S.P.M.	[illegible]			
	LINER SIZE				

W.L. 13.1 F.C. 2/32 pH 8.5

AT SURVEYS	DEGREE
4035	1°
4090	1°

MOTOR HOURS		NEXT OIL CHANGE
1	8	
2	118	[illegible]
3	[illegible]	
4	28	
5	178	[illegible]

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

STANDS 35 SINGLES 1 D. COLLARS [illegible] OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL

REMARKS	START	STOP	INTERVAL
Drilling [illegible]	8:00	9:15	1¼
[illegible] checked [illegible] kelly [illegible]	9:15	9:30	¼
Survey - 4030 - 1°	9:30	10:00	½
Drilling [illegible]	10:00	12:30	2½
Survey @ 4090 - 1°	12:30	1:00	½
Drilling	1:00	4:00	3

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked		HRS.
DRILLER	[illegible]	8
DERRICK	[illegible]	8
MOTOR	[illegible]	8
FLOOR	[illegible]	8
FLOOR	[illegible]	8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
4165	145	4310	7	135 M	11	[illegible]	[illegible]	40		7	5 [illegible]

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
7	8¾	[illegible]	[illegible]	57[illegible]	[illegible]	75	420	3890	23¼		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	[illegible]	[illegible]	9.0	90	Gel 8000
VISCOSITY	[illegible]	[illegible]	40	5[illegible]	[illegible]
GEL					Cypan

PUMPS					
NO. 1 MODEL	PRESSURE			925	[illegible]
	S.P.M.		70	70	70
	LINER SIZE				
NO. 2 MODEL	PRESSURE				
	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS	DEGREE
4120	[illegible]
4270	1¼°

MOTOR HOURS		NEXT OIL CHANGE
1	16	1
2	126	6
3	[illegible]	9
4	20	
5	186	[illegible]

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

STANDS 3670.47 SINGLES D. COLLARS 600.19 OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY [illegible] TOTAL 4310.00

REMARKS	START	STOP	INTERVAL
Drilling	4:00	5:00	1
[illegible] BOPs	5:00	5:15	¼
Survey	5:15	5:30	¼
Drilling	5:30	9:30	4
Survey	9:30	10:00	½
Drilling	10:00	12:00	2

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

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

TOTAL CONTRACTOR TIME ______ HRS. TOOLPUSHER [signature]

TOTAL COMPANY TIME ______ HRS. APPROVED BY [signature]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 21-E COMPANY Cabin Oil & Gas LOCATION Cabin Caribou 0-11 DATE Feb 18 1970

THIS IS 20 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Monty Collins	8
DERRICK Mike Collins	8
MOTOR Edmonton Boys	8
FLOOR Tim Pierce	8
FLOOR Jim Stevens	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Dave Kinsman	8
DERRICK Mike Miller	8
MOTOR Ed's Pick Up	8
FLOOR Dennis Kinsman	8
FLOOR Jim Evans	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Clyde Sand	8
DERRICK Ernie Sand	8
MOTOR Jerry Sand	8
FLOOR Ed Pierce	8
FLOOR Ed Stevens	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
3486	145	3631	7	15	21	6½	2¾		8	5	

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	1	9⅞	x16	3-11	1913	25	110	549	3082	29		
						30	75					

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	79	9	87	89	Gel 45 sx
VISCOSITY	54	90	53	50	Caustic 100#
GEL					

PUMPS						
NO. 1	PRESSURE	850		2000		
	MODEL					
	S.P.M.	70		70		
	LINER SIZE	6½ x 14				
NO. 2	PRESSURE					
	MODEL					
	S.P.M.					
	LINER SIZE					

SURVEYS	DEGREE
3711	3°
3788	1°

MOTOR HOURS	
1	141
2	91
3	110
4	141
5	141

NEXT OIL CHANGE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 1-4 F.C. 2/32 pH 9.0

STANDS 55
SINGLES 2
D. COLLARS
OTHER F.T.
C.R. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	C.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
3751	54	3805	11 3/4	16	21	6½	2¾				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	1	9⅞	x16	3-11	19224	35	75	137	3751	22½	3888	
							55					

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	90				Gel 45#
VISCOSITY	52				Caustic 40#
GEL					

PUMPS						
NO. 1	PRESSURE	600	850	850		
	MODEL					
	S.P.M.	60				
	LINER SIZE	6½ x 14				
NO. 2	PRESSURE					
	MODEL					
	S.P.M.					
	LINER SIZE					

SURVEYS	DEGREE
3751	1°
3812	½°

MOTOR HOURS	
1	141
2	94
3	171
4	
5	155

NEXT OIL CHANGE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Circ gel sweep Circ + Cond for trip

W.L. 1-8 F.C. 1/32 pH 7.5

STANDS 34
SINGLES 2
D. COLLARS 6¼ 19
OTHER FT.
C.R. FT.
SUBS. FT.
FT. UP ON KELLY 31½
TOTAL 3816

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
3805	40	3880	2¼	12-14	21	6¼	2¾	40		4	4½ FT

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
	2	7⅞	STRIKE	13-13-13			40	40	3840	2¼		
							(ROUGH)					

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT				9.0	Gel 1700
VISCOSITY				50	Caustic 50
GEL					

PUMPS						
NO. 1	PRESSURE				1100	
	MODEL					
	S.P.M.				70	
	LINER SIZE					
NO. 2	PRESSURE					
	MODEL					
	S.P.M.					
	LINER SIZE					

SURVEYS	DEGREE

MOTOR HOURS	
1	284
2	142
3	134
4	14
5	7

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 23 67
SINGLES 30½
D. COLLARS 6¼ 19
OTHER FT.
C.R. FT.
SUBS. FT.
FT. UP ON KELLY 33
TOTAL 5050

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Repair Electric Co	12		
Oil Pump		12 15	¾
Oil	12 15	1 30	1¼
Pick up Bops	1 45	2 00	¼
Safety	2 00	2 15	¼
Drill	2 15	5 15	3
Service	5 15	5 30	¼
Drill	5 30	8 00	2½
Service rig	8 00	8 15	¼
Survey @ 3751	8 15	8 45	½
Drilling (Coal 3802)	8 45	11 30	2¾
Coal 3813	11 30	12 00	½
Drilling	12 00	2 00	2
Hoist Pipe T.T.	2 00	4 00	2
Hoist	4 00	4 30	½
Survey @ 3880	4 30	5 00	½
Circ + Cond mud for logs	5 00	7 00	2
Rig up Schl	7 00	7 30	½
Log out with Schl	7 30	12 00	4½
Rig down Schl	12 00	1 00	1
Lay down D.P.	1 00	3 00	2

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 Jim Stevens

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 2-E COMPANY Cooley Oil & Gas LOCATION Cooley Gilbert 8-11 DATE Feb 17 1970

THIS IS 17 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked

		HRS.
DRILLER	Norm Ellison	8
DERRICK	Mike Cullum	8
MOTOR	Floyd Bond	8
FLOOR	Jim Pierce	8
FLOOR	Jim Stevens	8
FLOOR		
FIREMAN		
EXTRA		
INJURIES:		
FIRES:		

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
3235	101	3336	16½	100M	21	6½	2¼	90		8	5	29

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
1	8¾	XIC	3-13	[illegible]	100	92	767½	2569	82		

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	9.3	9.3	9.4	9.2	
VISCOSITY	45	45	47	50	
GEL	2	2	2	2	

PUMPS	NO. 1	NO. 2
PRESSURE	800	800
MODEL	G	G
S.P.M.	70	70
LINER SIZE	6½ x 14	6½ x 14

AT SURVEYS	DEGREE	MOTOR HOURS	NEXT OIL CHANGE
2213	¾	104	
2370	¾	146	
3000	¾	144	
3300	¾	112	
	5	112	300

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
29		1 90 19				0	3251

W.L. 15 F.C. 51 pH 7.5

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Up	7:00	1:30	1½
Pressure - BOPs	1:30	1:45	¼
Survey	1:45	2:00	¼
Drill	2:00	3:45	1¾
Survey	3:45	4:00	¼
Drill	4:00	5:45	1¾
Survey	5:45	6:15	½
Drill	6:15	7:45	1½
Survey	7:45	8:00	¼

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked

		HRS.
DRILLER	Dennis Nimchuk	8
DERRICK	[illegible]	8
MOTOR	Fitzgerald Bros.	
FLOOR	Donald Stevens	8
FLOOR	Tom Good	8
FLOOR		
FIREMAN		
EXTRA		
INJURIES:		
FIRES:		

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
3251	217	3468	14½	100M	21	6½	2¼					1

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
1	8¾	HTC	1-11	10336	100	110	217	3251	15½		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	9.2	9.2	9.3	9.3	
VISCOSITY	46	46	46	46	
GEL	2	2	2	2	

PUMPS	NO. 1	NO. 2
PRESSURE	800	800
MODEL	G	G
S.P.M.	70	70
LINER SIZE	6½ x 14	6½ x 14

AT SURVEYS	DEGREE	MOTOR HOURS	NEXT OIL CHANGE
2013	¼	172	
2065	¼	52	116
3070	¼	157	
		171	

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
1		21-6¼ 19				Drum	

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drilling	7:00	9:30	2½
Service rig	9:30	9:45	¼
Survey	9:45	10:00	¼
Drilling	10:00	11:30	1½
Survey	11:30	11:45	¼
Drilling	11:45	1:15	1½
Survey	1:15	1:45	½
Drill	1:45	3:30	1¾
Survey	3:30	3:45	¼

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked

		HRS.
DRILLER	Glen Lucas	8
DERRICK	[illegible]	8
MOTOR	Tony Lucas	8
FLOOR	Gene Bond	8
FLOOR	Ed Lucas	12
FLOOR		
FIREMAN		
EXTRA		
INJURIES:		
FIRES:		

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
3478	130	3608	17½	110M	21	6½	2¼	90				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
6	8¾	XIC	1-13-13	17590	90	110	274	3402	22		
					90						

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	9			9.0	
VISCOSITY				41	
GEL				2	

PUMPS	NO. 1	NO. 2
PRESSURE		
MODEL		
S.P.M.		
LINER SIZE		

AT SURVEYS	DEGREE	MOTOR HOURS	NEXT OIL CHANGE

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

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			

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

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

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER Lyle Hebenstreit

TOTAL COMPANY TIME _____ HRS. APPROVED BY [illegible]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 4 E COMPANY [illegible] LOCATION [illegible] DATE [illegible] 1970

THIS IS 12 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked — HRS.

DRILLER [illegible] 8
DERRICK [illegible] 8
MOTOR [illegible] 8
FLOOR [illegible] 8
FLOOR [illegible] 8
FLOOR
FIREMAN
EXTRA
INJURIES
FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER	DRILL PIPE SIZE
[illegible]	[illegible]	[illegible]	7½	1	[illegible]				[illegible]	[illegible] HRS.	

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
[illegible]											
[illegible]											

MUD

	12 MN.	4 A.M.	8 A.M.	12 NOON	4 P.M.	8 P.M.
WEIGHT	[illegible]	[illegible]	[illegible]			
VISCOSITY	[illegible]	[illegible]	[illegible]			
GEL						

ADDITIVES [illegible]

PUMPS

NO. 1	PRESSURE	[illegible]	[illegible]
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 [illegible]

AT SURVEYS DEGREE [illegible]

MOTOR HOURS		NEXT OIL CHANGE
1	[illegible]	
2	[illegible]	
3	[illegible]	
4	[illegible]	
5	[illegible]	

STANDS [illegible]
SINGLES
D. COLLARS [illegible]
OTHER FT.
C.B. WT.
SUBS. FT.
FT. UP ON KELLY
TOTAL
NEXT SLIP

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
[illegible]	[illegible]	[illegible]	[illegible]

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked — HRS.

DRILLER [illegible] 8
DERRICK [illegible] 8
MOTOR [illegible] 8
FLOOR [illegible] 8
FLOOR [illegible] 8
FLOOR
FIREMAN
EXTRA
INJURIES
FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER	DRILL PIPE SIZE
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible] HRS.	

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
[illegible]											
[illegible]											

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.	4 P.M.	6 P.M.
WEIGHT	[illegible]	[illegible]	[illegible]			
VISCOSITY	[illegible]	[illegible]	[illegible]			
GEL						

ADDITIVES [illegible]

PUMPS

NO. 1	PRESSURE	[illegible]	[illegible]
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 [illegible]

AT SURVEYS DEGREE [illegible]

MOTOR HOURS		NEXT OIL CHANGE
1	[illegible]	
2	[illegible]	165
3	[illegible]	
4	[illegible]	
5	[illegible]	

STANDS [illegible]
SINGLES
D. COLLARS [illegible]
OTHER FT.
C.B. WT.
SUBS. FT.
FT. UP ON KELLY
TOTAL
NEXT SLIP

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
[illegible]	[illegible]	[illegible]	[illegible]

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked — HRS.

DRILLER [illegible] 8
DERRICK [illegible] 8
MOTOR [illegible] 8
FLOOR [illegible] 8
FLOOR [illegible] 8
FLOOR
FIREMAN
EXTRA
INJURIES
FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER	DRILL PIPE SIZE
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible] HRS.	

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
[illegible]											
[illegible]											

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.	12 MN.	2 A.M.
WEIGHT	[illegible]	[illegible]	[illegible]			
VISCOSITY	[illegible]	[illegible]	[illegible]			
GEL						

ADDITIVES [illegible]

PUMPS

NO. 1	PRESSURE	[illegible]	[illegible]
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 [illegible]

AT SURVEYS DEGREE [illegible]

MOTOR HOURS		NEXT OIL CHANGE
1	[illegible]	
2	[illegible]	
3	[illegible]	
4	[illegible]	
5	[illegible]	

STANDS [illegible]
SINGLES
D. COLLARS [illegible]
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL
NEXT SLIP

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
[illegible]	[illegible]	[illegible]	[illegible]

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

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

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER [illegible]

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 1-E COMPANY Cascade Oil Co. LOCATION [illegible] DATE Feb 12 19[illegible]

THIS IS 17 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked

	HRS.
DRILLER	[illegible]
DERRICK	[illegible]
MOTOR	[illegible]
FLOOR	[illegible]
FLOOR	[illegible]
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked

	HRS.
DRILLER	Dennis Schweiger 8
DERRICK	[illegible]
MOTOR	[illegible]
FLOOR	[illegible]
FLOOR	[illegible]
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked

	HRS.
DRILLER	[illegible]
DERRICK	[illegible]
MOTOR	[illegible]
FLOOR	[illegible]
FT. JOR	[illegible]
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO	O.D	I.D	WGT.	FUEL GALS	BOILER HRS.	DRILL PIPE SIZE	STANDS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]		[illegible]

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		

MUD

	12 MN.	4 A.M.	6 A.M.	8 A.M.
WEIGHT	[illegible]	[illegible]	[illegible]	[illegible]
VISCOSITY	[illegible]	[illegible]	[illegible]	[illegible]
GEL	[illegible]	[illegible]	[illegible]	[illegible]

ADDITIVES: [illegible]

AT SURVEYS DEGREE: [illegible]

MOTOR HOURS: 1 [illegible] 2 [illegible] 3 [illegible] 4 [illegible] 5 [illegible]

NEXT OIL CHANGE: [illegible]

PUMPS

	NO. 1	NO. 2
MODEL	[illegible]	[illegible]
PRES. SURE	[illegible]	[illegible]
S.P.M.	[illegible]	[illegible]
LINER SIZE	[illegible]	[illegible]

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET ON	CUT	FEET LEFT ON SPOOL	NEXT SLIP
[illegible]									

GENERAL: [illegible]

W.L. F.C. pH.

STANDS: [illegible]
SINGLES
D. COLLARS
OTHER FT.
C.D. 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	BOILER HRS.	DRILL PIPE SIZE	STANDS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]		[illegible]

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		

MUD

	8 A.M.	10 A.M.	NOON	2 P.M.
WEIGHT	[illegible]	[illegible]	[illegible]	[illegible]
VISCOSITY	[illegible]	[illegible]	[illegible]	[illegible]
GEL	[illegible]	[illegible]	[illegible]	[illegible]

ADDITIVES: [illegible]

AT SURVEYS DEGREE: [illegible]

MOTOR HOURS: 1 [illegible] 2 [illegible] 3 [illegible] 4 [illegible] 5 [illegible]

NEXT OIL CHANGE: [illegible]

PUMPS

	NO. 1	NO. 2
MODEL	[illegible]	[illegible]
PRES. SURE	[illegible]	[illegible]
S.P.M.	[illegible]	[illegible]
LINER SIZE	[illegible]	[illegible]

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET ON	CUT	FEET LEFT ON SPOOL	NEXT SLIP
[illegible]									

GENERAL: [illegible]

W.L. F.C. pH.

STANDS: [illegible]
SINGLES
D. COLLARS
OTHER FT.
C.D. FT.
SUBS FT.
FT. UP ON KELLY
TOTAL

FROM	FOOTAGE	TO	HRS. ON BOTTOM	FT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO	O.D	I.D	WGT.	FUEL GALS	BOILER HRS.	DRILL PIPE SIZE	STANDS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]		[illegible]

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	[illegible]	[illegible]	[illegible]	[illegible]
VISCOSITY	[illegible]	[illegible]	[illegible]	[illegible]
GEL	[illegible]	[illegible]	[illegible]	[illegible]

ADDITIVES: [illegible]

AT SURVEYS DEGREE: [illegible]

MOTOR HOURS: 1 [illegible] 2 [illegible] 3 [illegible] 4 [illegible] 5 [illegible]

NEXT OIL CHANGE: [illegible]

PUMPS

	NO. 1	NO. 2
MODEL	[illegible]	[illegible]
PRES. SURE	[illegible]	[illegible]
S.P.M.	[illegible]	[illegible]
LINER SIZE	[illegible]	[illegible]

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET ON	CUT	FEET LEFT ON SPOOL	NEXT SLIP
[illegible]									

GENERAL: [illegible]

W.L. F.C. pH.

STANDS: [illegible]
SINGLES
D. COLLARS
OTHER FT.
C.D. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

REMARKS	TIME START	TIME STOP	INTERVAL
[illegible]	[illegible]	[illegible]	[illegible]

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pine Rock _____

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

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER [illegible]

TOTAL COMPANY _____ HRS. APPROVED BY [illegible]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 11-E COMPANY Cascade Drlg. Co. LOCATION Gal. Coperhead DATE Feb 15 19 71

THIS IS 17 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked

	HRS.
DRILLER Norm Collins	8
DERRICK Mike Lapp	8
MOTOR Thomas Bird	8
FLOOR Fred Brown	8
FLOOR Jim Stubbs	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS ON BOTTOM	WT DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	BOILER HRS	DRILL PIPE SIZE	STANDS
1461	2132	8	72	85	21	8	3½		1	3		16

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS	DEPTH OUT	CONDITION
	1	12¼	OSC3	20	2201	30	70	532	1470	15		
				15				294				

MUD	12 MID.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	9.1	9.1	9.1	9.1	Gel-Chem
VISCOSITY	53	50	52	51	Caustic & Soda Ash
GEL					

PUMPS																
NO. 1	MODEL	PRES. SURE	S.P.M.	LINER SIZE	12 MID.	2 A.M.	4 A.M.	6 A.M.	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
	F-1000	1000	90	6½													
NO. 2	MODEL	PRES. SURE	S.P.M.	LINER SIZE													

GENERAL:

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
1982	½	1	132	
2132	2	2		44
		3	132	
		4	44	
		5	44	

STANDS 16 | SINGLES | D. COLLARS 6 of 9 | OTHER FT. | C.B. FT. | SUBS FT. | FT. UP ON KELLY | TOTAL 212

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked

	HRS.
DRILLER Dennis Lucier	8
DERRICK Lyle Miller	8
MOTOR Lutz Kuntz	8
FLOOR Donald Hoffman	8
FLOOR Ted Gross	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS ON BOTTOM	WT DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	BOILER HRS	DRILL PIPE SIZE	STANDS
2150	372	2522	7½	65	21	8	3½					16

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS	DEPTH OUT	CONDITION
	2	12¼	HP-GT	20	1431	35	100	370	2152	7½		
				15								

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	9.1	9.1			Gel-Chem
VISCOSITY	49	47			Caustic
GEL					

PUMPS																
NO. 1	MODEL	PRES. SURE	S.P.M.	LINER SIZE	8 A.M.	10 A.M.	12 NOON	2 P.M.	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
	F-1000	500	120	6½													
NO. 2	MODEL	PRES. SURE	S.P.M.	LINER SIZE													

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
2300		1	125	
		2	2	125
		3	125	2
		4	122	
		5	79	122

STANDS 16 | SINGLES 8 | D. COLLARS 6 of 9 | OTHER FT. | C.B. FT. | SUBS FT. | FT. UP ON KELLY 35 | TOTAL 364

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked

	HRS.
DRILLER Clem Wasson	8
DERRICK Dean Smith	8
MOTOR Jim Lowe	8
FLOOR Sid Schauer	8
FLOOR Floyd Arnold	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS ON BOTTOM	WT DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	BOILER HRS	DRILL PIPE SIZE	STANDS
2522	2761	3283	7½	65	21	8	3½					22

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS	DEPTH OUT	CONDITION
	2	12¼	HP-GT	20	1431	35	100	761	2522	7½		
				15								

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	9.1			9.1	Gel-Chem
VISCOSITY	48			49	Caustic & Soda Ash
GEL					

PUMPS																
NO. 1	MODEL	PRES. SURE	S.P.M.	LINER SIZE	4 P.M.	6 P.M.	8 P.M.	10 P.M.	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
	F-1000	1000	90	6½													
NO. 2	MODEL	PRES. SURE	S.P.M.	LINER SIZE													

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
		1	132	
		2	132	132
		3	132	
		4	132	
		5	79	132

STANDS 22 | SINGLES | D. COLLARS 6 of 9 | OTHER FT. | C.B. FT. | SUBS FT. | FT. UP ON KELLY 35 | TOTAL 771

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Service & Bops	0:00	1:00	1
Drill	1:00	2:00	1
Survey	2:00	2:30	½
Drill	2:30	4:30	2
Survey	4:30	5:00	½
Drill	5:00	6:00	1
Drill	6:00	10:30	4½
Rig Service & Bops	10:30	11:00	½
Drill	11:00	12:00	1
Trip	12:00	1:00	1
Drill	1:00	3:00	2
Survey @ 2300	3:00	3:45	¾
Drill	3:45	5:00	1¼
Drill	5:00	5:30	½
Trip	5:30	6:00	½
Drill	6:00	7:00	1
Drill	7:00	11:00	4

Talco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

B.O.P. Test-Operated _____ time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 21-E COMPANY Cabot Oil & Gas LOCATION Kobe Creek 9-11 DATE Feb 14 19 72

THIS IS 11 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked | HRS.

DRILLER Kenny Collins 8
DERRICK Mike Collins 8
MOTOR Elmont Soule 8
FLOOR Jim Pickard 8
FLOOR Jim Stevens 8
FLOOR
FIREMAN
EXTRA

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
1571	137	1708	23	8	3	7				8	

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
4	12¼	Smith F-12	3-11	PJ2934	70	137	1571	62			

MUD	12 MN.	2 A.M.	4 A.M.	8 A.M.
WEIGHT		90	90	
VISCOSITY		55	53	
GEL				

ADDITIVES

PUMPS

	NO. 1	NO. 2
MAKE		
MODEL	30	
PRES. SURE	1400	1400
S.P.M.	60	
LINER SIZE		

W.L. F.C. pH.

AT SURVEYS DEGREE

MOTOR HOURS	
1	96
2	45
3	91
4	91
5	

NEXT OIL CHANGE

STANDS 12
SINGLES 2
D. COLLARS
OTHER FT. 2 @ 24
C.B. FT.
SUBS FT.
FT. UP ON KELLY
TOTAL 1695'

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OFF	CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked | HRS.

DRILLER Dennis Fuller 8
DERRICK Jon Miller 8
MOTOR Lester Pitre 8
FLOOR Donald Fuller 8
FLOOR Leo C. Simoneaux 8
FLOOR
FIREMAN
EXTRA
INJURIES:
FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
1675	96	1771	11	6	3	7	2¼				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
5	12¼	STC-3	3-13	[illegible]		70	96	1675	9	1771	

MUD	8 A.M.	12 NOON	4 P.M.	8 P.M.
WEIGHT	9.2	9.2	9.2	9.2
VISCOSITY	47	48	48	48
GEL	4	4	4	4

ADDITIVES Gel, Soda Ash

PUMPS

	NO. 1	NO. 2
MAKE		
MODEL	5	
PRES. SURE	1500	1400
S.P.M.	60	
LINER SIZE	7"	

W.L. F.C. pH.

AT SURVEYS DEGREE 1 1/2 1 1/2

MOTOR HOURS	
1	96
2	
3	
4	
5	

NEXT OIL CHANGE

STANDS 12
SINGLES 4
D. COLLARS
OTHER FT.
C.B. FT.
SUBS FT.
FT. UP ON KELLY
TOTAL 1695'

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OFF	CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked | HRS.

DRILLER [illegible]
DERRICK [illegible]
MOTOR [illegible]
FLOOR [illegible]
FLOOR [illegible]
FLOOR
FIREMAN
EXTRA
INJURIES:
FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
1771	113	1884	23	45	3	7	2¼			4	5

BITS

NO.	SIZE	TYPE	JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
5	12¼	STC-3	3-13	[illegible]		70	23	1861	23		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				9.2
VISCOSITY				48
GEL				4

ADDITIVES

PUMPS

	NO. 1	NO. 2
MAKE		
MODEL		
PRES. SURE		
S.P.M.		
LINER SIZE		

W.L. F.C. pH:

AT SURVEYS DEGREE

MOTOR HOURS	
1	1 3/4
2	
3	
4	
5	

NEXT OIL CHANGE

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL 1861'

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OFF	CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Serv. Bop	1100	1215	1
Trip for Bit	1215	2115	9
Drill	2115	2400	2¾

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 Lee [illegible]

TOTAL COMPANY TIME _____ HRS. APPROVED BY A.R. Braun

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 2-E COMPANY Gables Exploration LOCATION Gables Imperial D-16 DATE 1-6-1970

THIS IS 15 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Fred Larson	7
DERRICK Dennis Smith	7
MOTOR Jerry Watson	7
FLOOR Clyde Allard	7
FLOOR Bob Erickson	7
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Norm Collins	8
DERRICK Mike Gillis	8
MOTOR Francis Bird	8
FLOOR Jim Pidgeon	8
FLOOR Joe Stiles	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Lloyd Wilson	8
DERRICK Ed Wilson	8
MOTOR Ken Wilson	8
FLOOR Ted Wilson	8
FLOOR Gene Wilson	8
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - Midnight - 8 a.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
1313		13516	21	74M						4		220 3

BITS: NO. 3 | SIZE 12¼ | TYPE HTC | SIZE JETS 3-15 | SERIAL NO. 405[illegible] | WEIGHT | R.P.M. | FT. DRLD. 444 | DEPTH IN [illegible] | HRS. | DEPTH OUT 1357 | CONDITION [illegible]

SINGLES | D. COLLARS 240.34 | OTHER FT | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

PUMPS: NO. 1 — MODEL G — PRESSURE — S.P.M. — LINER SIZE

NO. 2 — MODEL C — PRESSURE — S.P.M. — LINER SIZE

AT SURVEYS DEGREE	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

W.L. F.C. pH.

Tour - 8 a.m. - 4 p.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
1316	197	13513	7¾	72						8		10

BITS: NO. 3 | SIZE 12¼ | TYPE STC F-3 | SIZE JETS [illegible] | SERIAL NO. [illegible] | WEIGHT 30 | R.P.M. 60 | FT. DRLD. 197 | DEPTH IN 1357 | HRS. 15½ | DEPTH OUT | CONDITION

SINGLES | D. COLLARS 5 | OTHER FT | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9.5	9.5	10.0	
VISCOSITY	52	52	52	
GEL	20	20	20	

ADDITIVES Caustic 10 lbs

PUMPS: NO. 1 — MODEL F — PRESSURE 1200 — S.P.M. 52 — LINER SIZE 5½

NO. 2 — MODEL C — PRESSURE — S.P.M. — LINER SIZE

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
1	1	
	2	
	3	
	4	
	5	45

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

Tour - 4 p.m. - Midnight

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
504	813	1317	13½	72								11

BITS: NO. 2 | SIZE 12¼ | TYPE STC F-3 | SIZE JETS [illegible] | SERIAL NO. [illegible] | WEIGHT | R.P.M. | FT. DRLD. 1317 | DEPTH IN [illegible] | HRS. | DEPTH OUT | CONDITION

SINGLES | D. COLLARS | OTHER FT | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES Caustic

PUMPS: NO. 1 — MODEL F — PRESSURE 1200 — S.P.M. 52 — LINER SIZE 5½

NO. 2 — MODEL — PRESSURE — S.P.M. — LINER SIZE

AT SURVEYS DEGREE	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

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Servicing Rig & Eq	12:00	13:00	1
Nipple up BOP & test same	13:00	2:00	1¼
Trip in hole to 1316	2:00	4:30	2½
Drilling	4:30	2:00	3½
Rig service			
Drilling			
Survey			
Drilling			

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 _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. 21 E COMPANY Fish E Anderson LOCATION Lsd 10 Sec 17 Twp 56 Rge 6 THIS IS 14 DAY ON THIS WELL DATE Oct 12 19 70

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Clint Lyon	8
DERRICK Dennis Smith	8
MOTOR Jerry Lyon	8
FLOOR Larry Hinton	8
FLOOR Stu Sedalee	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Norman Miller	8
DERRICK Mike Cahill	8
MOTOR Hunter Bros	8
FLOOR Jim Pascal	8
FLOOR Tony Sedalee	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Dennis Dunwell	8
DERRICK Glen Mellon	8
MOTOR Fitz Hamptel	8
FLOOR Lou D Stevens	8
FLOOR Judge Spence	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

ITEM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	BOILER HRS.	DRILL PIPE SIZE
D	1351	1440	13	60	9	6	2½			8	4½

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				44
GEL				40

ADDITIVES: Gyp, Lignite, Soda

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

AT SURVEYS DEGREE

MOTOR HOURS	
1	
2	
3	
4	
5	

NEXT OIL CHANGE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET ON	CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS
SINGLES
D. COLLARS
OTHER PT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

W.L. F.C. pH.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	BOILER HRS.	DRILL PIPE SIZE
1351	167	1518	3¾	60	9	6	2½			6	4½

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
2	12¼	Reed FP51	3-13	192-	40	120	217	1351	3¾		

MUD	8 A.M.	10 A.M.	1 NOON	2 P.M.
WEIGHT		71	72½	72½
VISCOSITY		47	52	52
GEL		12	12	36

ADDITIVES: Gyp, Lignite, Soda

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

AT SURVEYS DEGREE

MOTOR HOURS	
1	
2	12
3	
4	
5	

NEXT OIL CHANGE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET ON	CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS 1
SINGLES
D. COLLARS 3 30
OTHER PT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY 9 11
TOTAL 11

W.L. F.C. pH.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	BOILER HRS.	DRILL PIPE SIZE
1518	175	1693	16½	60	9	6	2½				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
2	12¼	Reed FP51	3-13	192-	40	120	392	1351	20¼		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	72			72
VISCOSITY				45
GEL				36

ADDITIVES: Gyp, Lignite, Soda

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
7	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
6½	LINER SIZE		

AT SURVEYS DEGREE

MOTOR HOURS	
1	
2	
3	
4	
5	

NEXT OIL CHANGE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET ON	CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS 2
SINGLES
D. COLLARS 3 30
OTHER PT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY 9 11
TOTAL 23

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Down Rotary Hose	6PM		
Trip out of hole		2=	2
Pick up Bit			
Trip in hole			
Wash 90' to Bottom		4½	2
Drill 1351 - 1440	2=	3=	1
Survey @ 1440	3=	4=	1
Trip out of hole	4=	7=	1
Lay down Bit & Stabilizer	7=		
Pick up Bit & Trip in hole		8=	1
Wash 90' to Bottom	8		
Drill 1440 - 1518		9½	1½
Survey @ 1518	9½	10	½
Trip out of hole	10	11½	1½
Lay down Bit & Stabilizer	11½	12	½
Pick up Bit & Trip in hole	12	1=	1
Wash 90' to Bottom	1=		
Drill 1518 - 1693		5½	4½
Service Rig & BOP Test	5½	6½	1
Lock out System & Hang Light Plant	6½	11½	5
Drill 1693 - 1755	11½	5 30	½
Trip out - Lay down 5 DC	5 30		
Pick up Spudder		6=	½
Ream & Clean Hole	6=	11=	5
Trip out	11=		

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

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

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER Lou Sedalee

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 4-6 COMPANY Gulf Interprov LOCATION [illegible] DATE Feb 11 19 70

THIS IS 13 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked

	HRS.
DRILLER	8
DERRICK	8
MOTOR	8
FLOOR	8
FLOOR	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked

	HRS.
DRILLER	8
DERRICK	8
MOTOR	8
FLOOR	8
FLOOR	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked

	HRS.
DRILLER	8
DERRICK	8
MOTOR	8
FLOOR	8
FLOOR	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
712					16	6½	1	30			

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
1	8¾	X3A	out	[illegible]				712			

MUD	12 MN.	4 A.M.	8 A.M.	ADDITIVES
WEIGHT				
VISCOSITY				
GEL				

PUMPS		
NO. 1	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

AT SURVEYS DEGREE

MOTOR HOURS	NEXT OIL CHANGE
1	
2	
3	
4	
5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OFF CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	270
SINGLES	
D. COLLARS	
OTHER FT.	
C.B. FT.	
SUBS. FT.	
FT. UP ON KELLY	
TOTAL	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
[illegible]			

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
712	1321	2033	5½	12	16	6½	1	30			

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
1	8¾	X3A	2-2-2	[illegible]				712			

MUD	6 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS		
NO. 1	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

AT SURVEYS DEGREE

MOTOR HOURS	NEXT OIL CHANGE
1	
2	
3	
4	
5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OFF 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	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
[illegible]			

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE
1496	41	1537	3½	15	16	6½	1	30			

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION
1	8¾	X3A	2-2-2	[illegible]				712			

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS		
NO. 1	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

AT SURVEYS DEGREE

MOTOR HOURS	NEXT OIL CHANGE
1	
2	
3	
4	
5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OFF 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	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
[illegible]			

Torco 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 _____

CASCADE DRILLING (Company Limited)

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 21-E COMPANY [illegible] LOCATION [illegible] THIS IS 12 DAY ON THIS WELL DATE Dec 10 19 70

NOTE - Please show FOOTAGE made while Control Drilling as well as HOURS

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked — HRS.

DRILLER Glen Larson 8
DERRICK [illegible] 8
MOTOR Terry Larson 8
FLOOR Jamie Reed 8
FLOOR Ezio Rullo 8
FLOOR
FIREMAN
EXTRA
INJURIES:
FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked — HRS.

DRILLER [illegible] 8
DERRICK [illegible] 8
MOTOR [illegible] 8
FLOOR [illegible] 8
FLOOR [illegible] 8
FLOOR
FIREMAN
EXTRA
INJURIES:
FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked — HRS.

DRILLER [illegible] 8
DERRICK [illegible] 8
MOTOR [illegible] 8
FLOOR 2nd Floorman 8
FLOOR Second Derrick 8
FLOOR
FIREMAN
EXTRA
INJURIES:
FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
												SINGLES

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1	
	2	
	3	
	4	
	5	

D. COLLARS
STDS. FT.
O.B. FT.
SUBS FT.
FT. UP ON KELLY
TOTAL

PUMPS													
NO. 1	PRESS. SURE	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET ON	CUT	FEET LEFT ON SPOOL	HEAT SLIP
MODEL	S.P.M.										
	LINER SIZE										
NO. 2	PRESS. SURE	GENERAL									
MODEL	S.P.M.										
	LINER SIZE										

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Tearing up floor			
Last Report Test			
Tear Down			

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
												SINGLES

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1	
	2	
	3	
	4	
	5	

D. COLLARS
STDS. FT.
O.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

PUMPS													
NO. 1	PRESS. SURE	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET ON	CUT	FEET LEFT ON SPOOL	HEAT SLIP
MODEL	S.P.M.										
	LINER SIZE										
NO. 2	PRESS. SURE	GENERAL									
MODEL	S.P.M.										
	LINER SIZE										

W.L. F.C. pH.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	BOILER HRS.	DRILL PIPE SIZE	STANDS
												SINGLES

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	DEPTH IN	HRS.	DEPTH OUT	CONDITION

MUD	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT				
VISCOSITY				
GEL				

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1	
	2	
	3	
	4	

D. COLLARS
STDS. FT.
O.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

PUMPS													
NO. 1	PRESS. SURE	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET ON	CUT	FEET LEFT ON SPOOL	NEXT SLIP AT
MODEL	S.P.M.										
	LINER SIZE										
NO. 2	PRESS. SURE	GENERAL									
MODEL	S.P.M.										
	LINER SIZE										

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Rig			
Pressure Test Manifold			
Lay Down Drill Pipe			
Pull Wear Bushing			
Rig Up Casing Crew			
Run 7" Casing			
Rig Up Cementers			
Cement 7" Casing			
Nipple Down BOP			
Set Slips			
Cut Off Casing			
Clean Pits			
Rig Release			

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

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

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER [illegible]

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. COMPANY

THIS IS DAY ON THIS WELL

LOCATION DATE 19

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked | HRS

driller
derrickman
motor
floor
fireman
engine
floorman
mechanic

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked | HRS

driller
derrickman
motor
floor
fireman
engine
floorman
mechanic

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked | HRS

driller
derrickman
motor
floor
fireman
engine
floorman
mechanic

BITS — NO. | SIZE | TYPE | MAKE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | DEPTH IN | HRS | DEPTH OUT | CONDITION

MUD — WEIGHT | VISCOSITY | GEL | ADDITIVES | WATER HOURS | MUD TYPE

PUMPS — NO. 1 MAKE | NO. 2 MAKE | SIZE | STROKE | NO. LINERS | TON MILES | TOTAL MILES | SLIP | PUMP OUT | PUMP PRESS. | NEXT SLIP

GENERAL

DRILL COLLARS — NO. | O.D. | I.D. | WT.

FUEL — USED | ON HAND

DRILLING RECORD — NUMBER | FROM | TO | FEET | TIME (HOURS)

Number of Days Tour

Number of Days Tour

Tetco Ring-on Bit No. B.O.P. Calipered Date Results From Pipe Rack

B.O.P. Test Operated Time Results

TOTAL CONTRACTOR TIME HRS TOOL PUSHER

TOTAL COMPANY TIME HRS APPROVED BY

CASCADE DRILLING
company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 21-C COMPANY Cascade Drilling LOCATION [illegible] DATE Feb 3 19 72

THIS IS 10 DAY ON THIS WELL

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked

DRILLER [illegible] 8
DERRICK [illegible] 8
MOTOR [illegible] 8
FLOOR [illegible] 8
FLOOR [illegible] 8
FLOOR
FIREMAN
SWAMPER
HANDYMAN
FLOOR

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked

DRILLER Norm Gallant 8
DERRICK Mike Gallant 8
MOTOR Malcolm Gallant 8
FLOOR Jim Flood 8
FLOOR Joe Stevens 8
FLOOR Jessie Lane 8
FIREMAN
SWAMPER
HANDYMAN

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked

DRILLER [illegible]
DERRICK [illegible]
MOTOR [illegible]
FLOOR [illegible]
FLOOR [illegible]
FIREMAN
SWAMPER
HANDYMAN
FLOOR

BITS

MUD
WEIGHT
VISCOSITY
GEL

PUMPS

GENERAL

[illegible] Rig on Bit No. D.P. Collapsed Date Result From Pipe Rack

B.O.P. Test Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOOLPUSHER [illegible]

TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING
Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. [illegible] COMPANY [illegible] LOCATION [illegible]

THIS IS [illegible] DAY ON THIS WELL

DATE [illegible] 19[illegible]

NOTE - Please show FOOTAGE made while Cementing Drilling as well as HOURS

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked | HRS

[illegible]

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked | HRS

[illegible]

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked | HRS

[illegible]

BITS

MUD

PUMPS

Total Ring on Bit No. ____ B.O.P. Calipered Date ____ Results ____ From Pipe Rack ____

B.O.P. Test Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS TOOL PUSHER [illegible]

TOTAL COMPANY TIME ____ HRS APPROVED BY [illegible]

CASCADE DRILLING
company limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 212 COMPANY Gulf Oil Can LOCATION Gold Creek 244 THIS IS 2 DAY ON THIS WELL DATE Feb 2 19 70

NOTE - Please show FOOTAGE made while Conitrol Drilling as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked

BITS

MUD — WEIGHT, VISCOSITY, GEL

PUMPS

Totco Ring on Rig No. ____ BOP Calibrated Date ____ Results ____ From Pipe Rack ____

B.O.P. Test Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS TOOL PUSHER ____

TOTAL COMPANY TIME ____ HRS APPROVED BY ____

CASCADE DRILLING
company limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

NOTE - Please show FOOTAGE made while Control Drilling as well as HOURS

M/C No. ____ COMPANY ____ LOCATION ____ THIS IS ____ DAY ON THIS WELL ____ DATE ____ 19 ____

Tour - Midnight - 8 a.m.
Specify Actual Hours Worked

Tour - 8 a.m. - 4 p.m.
Specify Actual Hours Worked

Tour - 4 p.m. - Midnight
Specify Actual Hours Worked

BITS

MUD — WEIGHT, VISCOSITY, GEL

PUMPS

Time Ring on Bottle ____ D.P. Collapsed Date ____ Results ____ From Pipe Rack ____

B.O.P. Test Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS. TOOLPUSHER ____

TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

CASCADE DRILLING
company limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. 21 COMPANY Otis Coastal LOCATION THIS IS DAY ON THIS WELL DATE 19

NOTE - Please show FOOTAGE made while Coastal Drilling as well as HOURS.

Tour - Midnight - 8 a.m.
Specify Actual Hours Worked

DRILLER
DERRICKMAN
MOTOR
FLOOR
FLOOR
FLOOR
FLOOR
WORKMAN
EXTRA
UNCOUPLING
HOURS

Tour - 8 a.m. - 4 p.m.
Specify Actual Hours Worked

DRILLER
DERRICKMAN
MOTOR
FLOOR
FLOOR
FLOOR
FLOOR
WORKMAN
EXTRA
UNCOUPLING
HOURS

Tour - 4 p.m. - Midnight
Specify Actual Hours Worked

DRILLER Ken Collins 8
DERRICKMAN Mac Collins 8
MOTOR Earl Dale 8
FLOOR Joe Nixon 8
FLOOR Jack Sykes 8
FLOOR
FLOOR
WORKMAN
EXTRA
UNCOUPLING
HOURS

BITS

MUD
WEIGHT
VISCOSITY
GEL

PUMPS

ADDITIVES

AT DERRICK FLOOR

MOTOR HOURS

DRILL PIPE

DRILL COLLARS

STANDS

TOOL PUSHER

TOOL PUSHER

TOTAL

REMARKS

Total Hours on Bit No. D.P. Calipered Date Results From Pipe Rack

B.O.P. Test Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOOL PUSHER

TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING
Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. COMPANY

LOCATION

THIS IS DAY ON THIS WELL

DATE 19

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

driller
derrickman
motor
floor
floor
floor
fireman
extra
engineer
mechanic
mechanic
welder

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS.

driller
derrickman
motor
floor
floor
floor
fireman
extra
engineer
mechanic
mechanic
welder

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

driller
derrickman
motor
floor
floor
floor
fireman
extra
engineer
mechanic
mechanic
welder

BITS

MUD
WEIGHT
VISCOSITY
GEL
WL FC pH

PUMPS

DRILLING

SURVEYS

MOTOR HOURS

Joint Ring on Rig No. D.P. Collapsed Date Results From Pipe Rack

B.O.P. Last Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOTAL HOURS

TOTAL COMPANY TIME APPROVED BY

CASCADE DRILLING
Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. _____ COMPANY _____ LOCATION _____ THIS IS _____ DAY ON THIS WELL DATE _____ 19__

NOTE - Please show FOOTAGE made while Control Drilling as well as HOURS

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS

DRILLER
DERRICK
MOTOR
FLOOR
FLOOR
FIREMAN
FLOOR
EXTRA
INVOICED
FLOOR

BITS | MUD | PUMPS

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS

DRILLER
DERRICK
MOTOR
FLOOR
FLOOR
FIREMAN
FLOOR
EXTRA
INVOICED
FLOOR

BITS | MUD | PUMPS

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS

DRILLER
DERRICK
MOTOR
FLOOR
FLOOR
FIREMAN
EXTRA
INVOICED
FLOOR

BITS | MUD | PUMPS

Oct 11 1954

Total Rig on Rig No. _____ D.P. Collapsed Data _____ Results _____ From Pipe Rack _____

B.O.P. Test Operated _____ Time _____ Results _____ TOTAL CONTRACTOR TIME _____ HRS

TOTAL COMPANY TIME _____ HRS APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. [illegible] COMPANY [illegible]

THIS IS [illegible] DAY ON THIS WELL

LOCATION [illegible] DATE [illegible] 19 [illegible]

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked — HRS.

Position	Name	Hrs.
Driller	[illegible]	[illegible]
Derrick	[illegible]	[illegible]
Motor	[illegible]	[illegible]
Floor	[illegible]	[illegible]
Floor	[illegible]	[illegible]
Floor		
Fireman		
Extra		
Injuries:		

Fired:

From: 327

REMARKS: [illegible]

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked — HRS.

Position	Name	Hrs.
Driller	[illegible]	8
Derrick	[illegible]	8
Motor	[illegible]	8
Floor	[illegible]	8
Floor	[illegible]	8
Floor		
Fireman		
Extra		
Injuries:		

Fired:

From: 327

Additives: [illegible]

General: [illegible]

REMARKS: Fill tanks [illegible] / [illegible] to [illegible] well

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked — HRS.

Position	Name	Hrs.
Driller	Harry Collins	8
Derrick	Mike Collins	8
Motor	[illegible]	8
Floor	[illegible]	8
Floor	[illegible]	8
Floor		
Fireman		
Extra		
Injuries:		

Fired:

Mud: 10.6 / 120

REMARKS: [illegible] / Mix [illegible] / [illegible] / [illegible] / [illegible] / [illegible] / [illegible] water / [illegible] 12 [illegible]

Form field labels (each tour): From, Footage, To, Hrs. on Bottom, Wt. Drill String (000 Lbs.), Drill Collars (No., O.D., I.D., Wgt.), Fuel, Boiler, Drill Pipe, Stands, Singles, D. Collars, Other Ft., K.B. Ft., Subs Ft., Ft. Up on Kelly, Total; Bits (No., Size, Type, Size Jets, Serial No., Weight, R.P.M., Ft. Drld., Depth In, Hrs., Depth Out, Condition); Mud (Weight, Viscosity, Gel, Additives); At Surveys Degree; Motor Hours; Next Oil Change; Pumps (No. 1 Model, No. 2 Model, S.P.M., Liner Size); Size, Trips, No. Lines, Ton Miles, Total Miles, Slip, Feet In, Cut, Feet Left on Spool, Next Slip; General; W.L., F.C., pH.

Totco Ring on Bit No. [illegible] D.P. Calipered Date [illegible] Results [illegible]

B.O.P. Test Operated [illegible] Time [illegible] Results [illegible] From Pipe Rack

TOTAL CONTRACTOR TIME [illegible] HRS. TOOLPUSHER [illegible]

TOTAL COMPANY TIME [illegible] HRS. APPROVED BY [illegible]

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

RIG No. COMPANY

LOCATION

THIS IS DAY ON THIS WELL

DATE 19

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked — HRS.

DRILLER
DERRICK
MOTOR
FLOOR
FLOOR
FLOOR
FIREMAN
EXTRA
TRAINEES
FINES

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked — HRS.

DRILLER
DERRICK
MOTOR
FLOOR
FLOOR
FLOOR
FIREMAN
EXTRA
INJURIES
FINES

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked — HRS.

DRILLER
DERRICK
MOTOR
FLOOR
FLOOR
FLOOR
FIREMAN
EXTRA
INJURIES
FINES

FROM | FOOTAGE | TO | HOURS ON BOTTOM | BIT DRILLED STRING (FROM DRL.) | DRILL COLLARS: NO. | O.D. | I.D. | LGTH. | FUEL | DRILLING TIME: SPUDDED | COMPLETED | REMARKS | TIME: START | FINISH | INTERVAL

BITS: NO. | SIZE | TYPE | MAKE | SERIAL NO. | GRADE | NEW OR USED | AT DRILL | DEPTH IN | DRL. | DEPTH OUT | CONDITION

MUD: WEIGHT | VISCOSITY | GEL | 12 HRS. | 24 HRS. | 48 HRS. | 96 HRS.

PUMPS: NO. 1 | NO. 2 | MAKE | LINER SIZE | STROKE | H.P. | GAL. PER STK. | P.S.I. | NO. STKS. PER MIN.

ADDITIVES

BIT SURVEYS RECORD

MOTOR HOURS | MOTOR OIL CHANGED

SIZE | TRIPS | NO. LINERS | TON MILES | TOTAL MILES | FLOW | FEET PER HR. | FEET PER DAY ON BRGS. | WEAR BLOW

GENERAL

D. COLLARS
DRIVERS
O.D. PIPE
SIZE PIPE
PUMPS
TOOLS
TOTAL

Take Ring on Bit No. D.P. Collapsed Date Results From Pipe Rack

No. of Test Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOUR NUMBER

TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING (Company Limited)

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

RIG No. _____ COMPANY _____ LOCATION _____ THIS IS 1st DAY ON THIS WELL DATE _____ 19

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

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked — HRS

DRILLER
DERRICK
MOTOR
FLOOR
FLOOR
FLOOR
FIREMAN
EXTRA
HELPER
FUEL

BIT No. | SIZE | TYPE | MAKE JETS | SERIAL NO | WEIGHT | R.P.M. | FT. DRLD | DEPTH IN | HRS | DEPTH OUT | CONDITION

MUD — 12 HR | 8 A.M. | 4 P.M. | 8 P.M.
WEIGHT
VISCOSITY
GEL
PUMPS — No. 1 Liner / Stroke / GPM; No. 2 Liner / Stroke / GPM
ADDITIVES
BIT SURVEYS RECORD
MUD & HOURS
DAILY MUD CHARGES
DEVIATION
TIME
DRILLERS
TOOL PUSHERS
DRILLING MUD
STANDS
SINGLES
15 DRILLERS
OTHERS
DRILLER
TOOL PUSHER
TOTAL

BASE | TRIPS | NO. LINERS | TON MILES | TOTAL MILES | SLIP | CUT | SLIP & CUT LINE | NEXT SLIP

GENERAL

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked — HRS

DRILLER
DERRICK
MOTOR
FLOOR
FLOOR
FLOOR
FIREMAN
WATER
HELPER
FUEL

BIT No. | SIZE | TYPE | MAKE JETS | SERIAL NO | WEIGHT | R.P.M. | FT. DRLD | DEPTH IN | HRS | DEPTH OUT | CONDITION

MUD — 12 HR | 8 A.M. | 4 P.M. | 8 P.M.
WEIGHT
VISCOSITY
GEL
PUMPS — No. 1 Liner / Stroke / GPM; No. 2 Liner / Stroke / GPM
ADDITIVES
BIT SURVEYS RECORD
MUD & HOURS
DAILY MUD CHARGES
DEVIATION
TIME
DRILLERS
TOOL PUSHERS
DRILLING MUD
STANDS
SINGLES
15 DRILLERS
OTHERS
DRILLER
TOOL PUSHER
TOTAL

BASE | TRIPS | NO. LINERS | TON MILES | TOTAL MILES | SLIP | CUT | SLIP & CUT LINE | NEXT SLIP

GENERAL

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked — HRS

DRILLER Keith Callin 8
DERRICK Lyle Nelson 8
MOTOR Elmer Beal 8
FLOOR Jack Pecore 8
FLOOR Len Steeves 8
FLOOR
FIREMAN
WATER
HELPER
FUEL

BIT No. | SIZE | TYPE | MAKE JETS | SERIAL NO | WEIGHT | R.P.M. | FT. DRLD | DEPTH IN | HRS | DEPTH OUT | CONDITION

MUD — 12 HR | 8 A.M. | 4 P.M. | 8 P.M.
WEIGHT
VISCOSITY
GEL
PUMPS — No. 1 Liner / Stroke / GPM; No. 2 Liner / Stroke / GPM
ADDITIVES
BIT SURVEYS RECORD
MUD & HOURS
DAILY MUD CHARGES
DEVIATION
TIME
DRILLERS
TOOL PUSHERS
DRILLING MUD
STANDS
SINGLES
15 DRILLERS
OTHERS
DRILLER
TOOL PUSHER
TOTAL

BASE | TRIPS | NO. LINERS | TON MILES | TOTAL MILES | SLIP | CUT | SLIP & CUT LINE | NEXT SLIP

GENERAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL

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

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

TOTAL CONTRACTOR TIME _____ HRS. TOOL PUSHER _____

TOTAL COMPANY TIME _____ HRS. INSPECTED BY _____