Drilling Authority No. 468

Date Issued 7 December 1970

WELL NAME Crim Res Signal Keller Lk. P-11

FIELD ..... Area: .....

LOCATION: Unit P Section 14 Grid 64-20-122-30

Latitude 64-23-53 Longitude 122-32-00

U.W.L.R. 64.23139 — 122.53333

U.W.I. 300P1164.20122300

Rig Release Date: .....

Status .....

Information Release Date .....

CHANGE OF NAME:

DATE RECEIVED	INDEX
7-12-70	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
18-2-71	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well ~~History Supplement~~.
	Well Completion Data.
	Work-over Report No. .....
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells – Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells – Vitter's Method.
	M.P.R. – Oil – Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale..... Small scale.....

LAND 52-90 (3-69)

Drilling Authority No. 468

Date Issued December 7/70

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

WELL COMPLETION DATA

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

Well name and number CDN RES SIGNAL HILLS LK P-14

Permit No. 4931 Lease No.

MISSION OIL DEVELOPMENT LTD. Exploratory Licence No.
(Permittee, Licensee, Lessee)

CANADIAN RESERVE OIL AND GAS LTD. Exploratory Licence No. 1712
(Operator)

Location: Unit P Section 14 Grid 64° 20' 122° 30'

Latitude 64° 13' 53" N Longitude 122° 32' 00" W

Unique well identifier 300P1464201222300

Universal Well Location Reference 64.23139° N, 122.53333° W

Pool(s) NONE

Interval(s) open to production

	DATE	DEPTH
Spudded	Feb. 3/71	0
Suspended		
Resumed Operations		
Finished Drilling	Feb. 15/71	1589 Driller
Deepened		1590' — DIL Log
Complete (gas/oil)		1576' — BHC-S 1574' — FDC
Abandoned	Feb. 17/71	1589
Rig released	Feb. 17/71	1589

Elevation: Gr. 1278' K.B. 1287' (Corrected El.)

Rig No. 34C

Drilling Contractor Commonwealth Drilling

Contractor's Business Licence No. 931

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at —	Sacks of Cement and Additives
1. 7"	K-55	20 lb	428.37	425	160 sxs Cement Fondu
2.					+ 3% salt.
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION	
	Depths	Sub-Sea
Ft. Simpson Sh.	767	+ 433
Fume	1112	+ 88
Bear Rock	1354	- 154
T.D.	1589	- 389

CORE RECORD

From	To	Rec.	From	To	Rec.
NOT CORED					

LOG RECORD

Run No.	Type of Log	From	To
1	Dual Ind. Laterolog	425	1584
1	Borehole Comp. Sonic	425	1574
1	Formation Density Log	1000	1572

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
Feb.17/71	1100	1589	115 sxs Neat Oilwell Plug down 1:55 A.M.
Feb. 17/71	400	800	135 sxs Neat Oilwell Plug down 6:40 A.M. Well on vacuum
Feb.17/71	0	400	95 sxs Neat Oilwell Returns to surface.

Placed 5 sxs in top of well, welded on plate and name post.

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
		NONE												

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
	NONE				

PRESENT STATUS OF WELL

Oil ..... (Interval.)

Gas ..... (Interval.)

Dry X

Susp. .....

Company ..... CANADIAN RESERVE OIL AND GAS LTD.

Signed by ..... E. W. Unick

Title ..... Drilling & Production Engineer.

Date ..... February 19, 1971.

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

File No. 460
Drilling Authority No.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

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

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

Name and number of well CDN RES SIGNAL HILLS LK P-14
Location: Unit P Section 14 Grid 64° 20', 122° 30'
Latitude 64° 13' 53" N Longitude 122° 32' 00" W
From Established Reference Marker
Universal Well Location Reference 64.23139° N, 122.53333° W
Permit No. 422 Lease No.

Mission Oil Development Ltd.
(Permittee, Licensee, Lessee)

Date of commencement of proposed program February 16, 1971

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at None Encountered
Gas at None Encountered
Water at
Total Depth 1589' Date of last operations February 16, 1971.
Present condition of well Open hole below surface casing is in good condition.

CASING RECORD

	Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1.	7"	20 lb.	428.37	425'	160 sxs Cement Pondu	None
2.						
3.						
4.						
5.						

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	1589 to 1160	Bune and Bear Rock	130 sxs	No feel.
2	800 to 400	Glacial drift and base surface casing	130 sxs	Feel in 8 hours.

The following logs have been run Dual Ind. Lat., BHCS, Density, Sidewall Neut. Porosity.
Other operations proposed Possible test of Bune Carbonate

Operations to be carried out by Commonwealth Drilling Contractor Licence No. 931
Address Edmonton, Alberta Address
Responsible Agent in field J. R. Knight, 301 - 627 Eighth Avenue S.W., Calgary, Alberta.
Dated at Calgary, this 16th Day of February 19 71
Signed by [signature] Company CANADIAN RESERVE OIL AND GAS LTD.
Title Drilling & Prod. Engineer Operator's Exploratory Licence No. 1712

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

This application has been examined and proposed programme approved, subject to the following conditions:
Confirming oral approval given by Mr. G. L. Blue on the 16th February 1971, including the condition that the casing is to be cut off three feet below ground level and a steel plate is to be welded on the top, and a three-foot riser with name plate is to be installed., and a 5-sack cement surface plug run.

Dated 16th February, 19 71
Oil Conservation Engineer [signature]

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

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

Drilling Authority No. 468

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 CDN RES SIGNAL HILLER LK P-14

Location: Unit P Section 14 Grid 64° 20', 122° 30'

Latitude 64°13'53" N Longitude 122°32' 00" W

Unique Well Identifier 300P146420122300

Universal Well Location Reference 64.23139° N., 122.53333° W.

Elevation: Ground 1190 (estimated) K.B. 1200 (estimated) feet above sea-level.

Well is expected to produce from Hume formation at a depth of about 1700 feet. Expected total final depth 2200

Area assigned to well

(For Oil Conservation Engineer's use only)

Permit No. 4931 Lease No. Acreage 55,668

Permittee, licensee, or lessee Mission Oil Development Ltd.

Exploratory Licence No. 1712

Surface owned by Crown or Crown

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

Petroleum and natural-gas rights owned by Crown

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1. 7"	17	K-55	New	400	155
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment Hume formation.
Control equipment will include a Hydril blowout preventor and a hydraulic Shaffer ram-type BOP.

Well will be drilled with Rotary Rig No. 34C by Commonwealth Drilling (Western) Limited
(Drilling Contractor or company)

Responsible agent of applicant:— Contractor's business Licence No. 931

At well J. R. Knight, Consultant At registered office E. W. Unick

Address 301 - 627 - 8th Ave. S.W. Calgary. Address 1600, ~~639~~ Fifth 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, Alberta, this 4th day of December 19 70

Signed by E. W. Unick Company CANADIAN RESERVE OIL AND GAS LTD.

Title Drilling & Production Engineer Operator's Licence No. 1712

(For Oil and Mineral Division use only)

APPROVED

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

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

Dated 7th December 19 70 Please see over page
Oil Conservation Engineer

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

IAND 52-90-1 (3-69)

reports received by radio on the progress of the well.

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

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

5. Production and Intermediate strings of casing are to be approved by the Oil Conservation Engineer, prior to running.

B.H.J. Thoms

B.H.J. Thoms, Oil Conservation Engineer

WELL NAME:	CAN RES-SIGNAL-KELLER LK. P-14
LOCATION:	(Approximate) 64° 13' 53" North Latitude 122° 32' West Longitude
ELEVATIONS:	(Estimated) Ground - 1190' K.B. - 1200'
PARTICIPANTS:	Canadian Reserve Oil and Gas Ltd. Signal Oil & Gas Ltd.
PERMIT:	Well to be drilled on Permit No. 4931 Grid co-ordinates 64° 20' N; 122° 30' W
A.F.E.:	Number 60-0013
OBJECTIVE:	This well will evaluate all horizons down to and including the Hume carbonates of Middle Devonian age with said Hume formation being the principal drilling target.

D R I L L I N G P R O G R A M

1. Drill conductor hole to 30' with bucket. Cement 12" conductor pipe in hole with 35 sacks Cement Fondu.

2. Drill 9-7/8" surface hole to depth of 50' into Imperial Shale (350-400' K.B.). Run 7" surface casing with guide shoe on bottom and float collar one joint up; use two centralizers on casing. Cement casing with 155 sacks Cement Fondu.

   Note:
   1. Cement Fondu should be mixed with 7.92 U.S. gal/sack
   2. Cementing swage on top of casing should be made up after casing has been run. This should eliminate the possibility of overtightening the swage as could occur if make up is undertaken on the catwalk.
   3. Mixing water temperature should be 50° - 70° F.

3. Pressure test BOP's to 1500 psig. Drill 6-1/4" hole to T.D. Core and test as directed in geological prognosis.

4. Drilling Mud:

   Surface Hole - Glacial Deposits and Cretaceous

   Below Shoe - Fort Simpson Shale equivalent
   Thickness may vary from 1,000' to 2,500'

   3,000'-4,400' Hume Carbonates

. . . . /2

4. Drilling Mud: (continued)

Surface Hole:
Drill conventionally, allow viscosity to rise from drilled deposits. At surface depth, raise viscosity as hole condition dictates to facilitate surface casing operations.

Should lost circulation occur, slug with Sawdust/Gel/DV-68 pills. When raising viscosity add one gallon DV-68 for every 10 sacks Hydrogel.

Note: Performance of Bentonite will depend on hardness of the drilling water. Calcium ion of the water should be below 40 ppm. Source water should be checked initially and a Soda Ash treatment formularized as necessary.

Shoe to Total Depth:
Drill out with water, treat out cement contamination with Bicarbonate of Soda.

Drill ahead with fresh water, controlling mud weight below 8.6#/gallon by dilution and desilting action.

Mud-up is recommended immediately, however, it may be determined at the wellsite if the operator desires as dictated by amount of shale present, deviation problems, hole condition, (e.g. tight connections - fill on bottom).

To Mud-Up:

1. Solids content of drilling water should be as low as possible (fresh water desireable).

2. Soften with Soda Ash to reduce Calcium Ion below 40 ppm.

   Add: 15 sacks Hydrogel/100 bbls calculated volume
   1.5 gals DV-68/100 bbls calculated volume

Control:

Viscosity - as low as hole condition and cleaning will allow.

Weight - below 9.0#/gallon by constant dilution and desilting action for maximum penetration.

Maintain viscosity when diluting as required with constant additions of Gel:DV/10:1 ratio.

Flow Properties - yield point equal to or slightly higher than the plastic viscosity for maximum hole cleaning at low viscosity.

Annular Velocity - should not exceed 130'/minute after mud-up.

pH - 9.0 with caustic soda.

. . . . /3

4. Drilling Mud: (continued)

Filtrate - 10.0 - 12.0 cc's after mud-up with CMC regular or high viscosity as flow property control dictates. Should sloughing problems occur, reduce filtrate below 8.0 cc's.

Lignosulfonate (Peltex) is included in the material for control of gel strengths should gas cutting become a problem or unanticipated contaminants such as anhydrite be present.

GEOLOGICAL PROGNOSIS

SPUD: The well will spud in unconsolidated sand, gravels and boulders of unknown thickness which directly overlay Cretaceous clastics. These clastics are expected to extend to ± 400 feet drilling depth.

FORMATION:

DEVONIAN	DEPTH	SUBSEA
Imperial Shale	400	+ 800
Carbonate (unnamed)	850	+ 350
Middle Devonian Shale	900	+ 300
Hume Carbonate	1700	- 500
Total Depth	2200	- 1000

DRILLING TIMER: Geograph or comparable device.

SAMPLES:

Canadian Reserve
10' washed, bottled and described from immediately below surface casing shoe to total depth.

Signal
As per their request.

Dept. of Indian Affairs & Northern Development
As directed by the Department.

Wellsite geologist should be on location from spud to total depth.

CORING: Cut a 50' core in the Hume formation. Core point to occur after drilling 5 to 10 feet of continuous, effective porosity based on sample evaluation. Additional coring - to be contingent on results of testing (see below). Cores to be sent to and analyzed by Core Labs, 6101 - 6th Street S.E., Calgary, Alberta. Gamma-Correlation logs to be run on all cores cut.

. . . . /4

TESTING: DST #1: Hume Formation - test 50-foot cored interval referred to above (coring) provided visual examination of core warrants such action.

Additional Testing - If water-free hydrocarbon recovered on DST #1 core and test remainder of column in 50-foot increments until formation waters are encountered or porosity expires.

Samples of all fluids recovered to be sent to Edmonton for complete analysis.

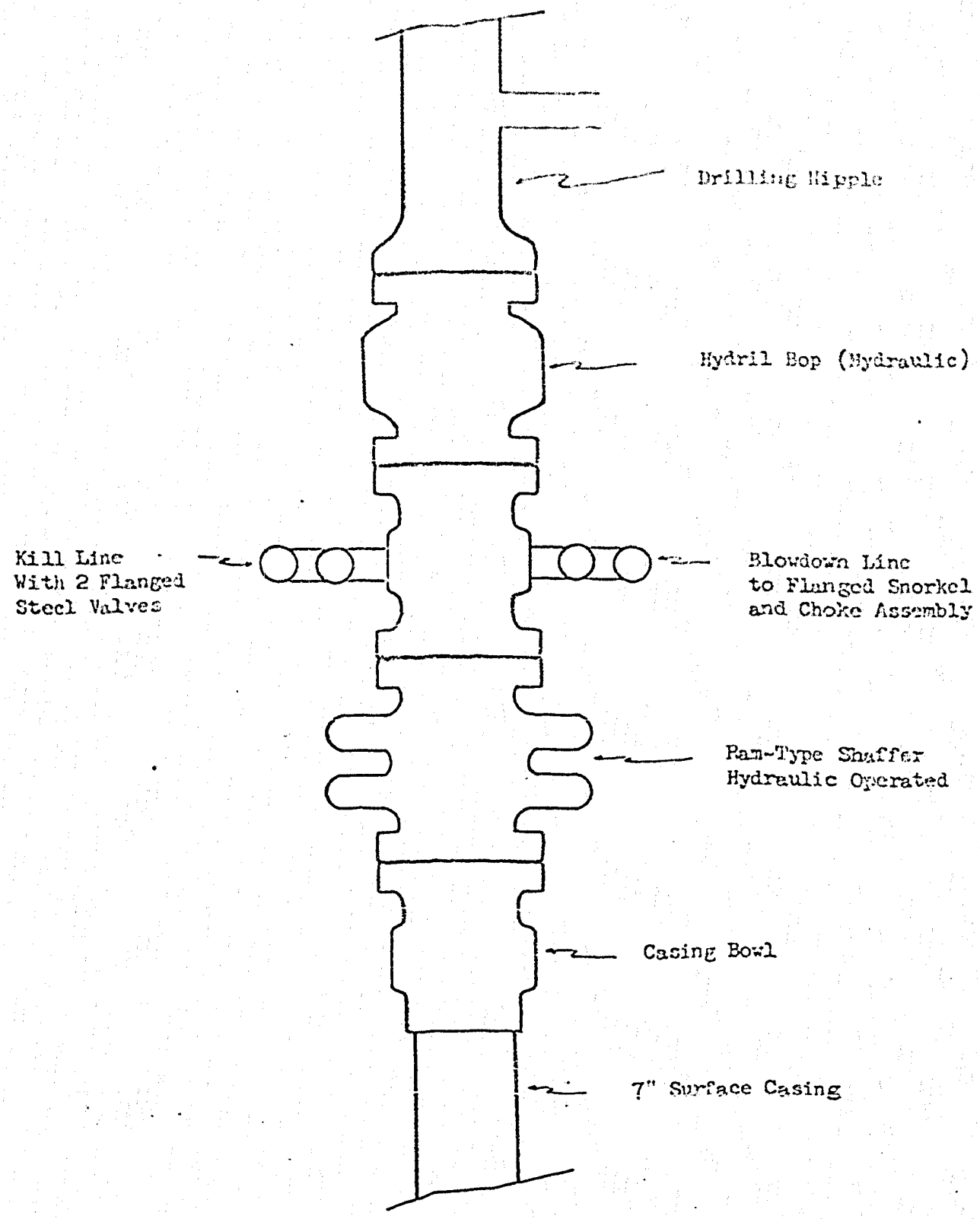
LOGGING: by Schlumberger of Canada.

Dual Induction Laterolog:
2" & 5" = 100' scale from total depth to surface casing depth.

Integrated Borehole Compensated Gamma-Sonic with Caliper:
2" & 5" = 100' scale from total depth to surface casing depth.

Formation Density Log:
5" = 100' scale from total depth to 100 feet above Hume top.

Sidewall Neutron Porosity Log:
5" = 100' scale from total depth to 100 feet above Hume top.


Drilling Nipple
Hydril Bop (Hydraulic)
Kill Line
With 2 Flanged
Steel Valves
Blowdown Line
to Flanged Snorkel
and Choke Assembly
Ram-Type Shaffer
Hydraulic Operated
Casing Bowl
7" Surface Casing

750-11-5-9

WELL REPORT

TIFCO EXPLORATION LTD.
SUITE 1411 EXECUTIVE PLAZA
227 9th AVENUE S.W.
CALGARY 1, ALBERTA
(403) 269-2534

H.B. TIFFIN
Consultant Geologist
RES 289-1284

750-11-5-9

WELL REPORT

CDN RES SIGNAL KELLER LK P-14

64.23139° N, 122.53333° W

KELLER LAKE, N.W.T.

February 18, 1971

I N D E X

SUMMARY OF WELL DATA

Section I

Well Name: CDN RES SIGNAL KELLER LK P-14

Permittee, Licencee or Lessee: Mission Oil Development Ltd.

Operator: Canadian Reserve Oil & Gas Ltd., 1600, 639 - 5th Avenue S.W., Calgary 1, Alberta.

Location: P-14-64-20-122-30
64.23139° N, 122.53333° W,
300 P14642012300

Permit or Lease Number: Permit 4931

Drilling Contractor: Commonwealth Drilling (Western) Ltd.
Rig No. 34C Type: N58

Drilling Authority: No. 468 December 7, 1970

Classification: Wildcat

Elevations: Ground ~~1196~~ (est.) 1278'
Kelly Bushing ~~1199~~ (est.) 1207'

Spudded: 4:00 p.m. February 3, 1971

Completed Drilling: February 15, 1971

Total Depth: 1589 (Driller); Logger's Depths: 1590' DIL log
1576' BHC-S log
1574' FDC log

Well Status: Dry & Abandoned

Rig Released: February 17, 1971

Hole Sizes:

0 - 425	9 7/8" hole
425 -1589	6 1/4" hole

Casing:

Surface Casing - Ran 428.37' 13 jts. 7" 20# K-55
Mann. New ST & C casing. Landed at 425 K.B.
Cemented with 160 Sax Fondu + Fly Ash + 3% Salt.
Good returns. Plug down 3:00 a.m. February 8, 1971.

STRATIGRAPHIC MARKERS

CDN RES SIGNAL KELLER LK P-14

K.B. Elevation: 1199

Formation	Depth	Datum
Pleistocene (Glacial Till)	0	+ 1190
Devonian:		
Fort Simpson	767	+ 432
Hume	1112	+ 87
Chinchaga	1356	- 157
Total Depth: Driller	1589	- 390
Schlumberger	1590	- 391

SAMPLE DESCRIPTIONS

CDN RES SIGNAL KELLER LK P-14

100 - 110'	Sandstone - white to pale grey, fine to very coarse grained, poorly sorted, angular, quartzose and felspathic, unconsolidated sandstone (glacial drift).
110 - 260'	Sandstone and Conglomerate - sandstone as above, moderate amounts boulder chips of brown, fine crystalline dolomite and pink granite (glacial drift).
260 - 330'	Sandstone and Shale - sandstone and conglomerate as above, Trace dark brownish grey, soft, bentonitic shale.
330 - 425'	Sandstone, Conglomerate & Siltstone - sandstone and conglomerate as above, moderate amounts medium grey and greenish grey, hard, silicious, calcareous, salt and pepper, glauconitic siltstone (samples poor).
425' - 440'	Missing
440' - 660'	Sandstone and Conglomerate - sandstone and conglomerate as above, moderate amounts boulder chip of pink granite and brown, finely crystalline dolomite. (rare chip has fine vuggy porosity).
660 - 730'	Sandstone - white to clear, very coarse grained, quartzose, subrounded, medium-sorted, frosted, unconsolidated sandstone.
730 - 780'	Conglomerate - vari-colored conglomerate and pea gravel, composed of granitic crystalline rocks, limestone, dolomitic siltstones and quartzitic sandstone.

FORT SIMPSON 767 (+432)

780 - 850'	Shale - medium to dark-grey, soft, sub-fissile shale. Trace ironstone and pyrite (first shale appeared in 850-60 sample. Drilling time with short toothed bit increased from 2 to 14 mins/ft. When pulled, bit was green and balled up with dark grey to black soft shale).
850 - 930'	Shale - medium to dark grey, in part greenish, soft, sub-fissile shale, Trace ironstone fragments.

Sample Descriptions (Cont'd)

930 - 1010' Shale - shale as above, trace ironstone fragments and thin dolomitic silty interbeds.

1010 - 1060' Shale and Siltstone - shale as above, with moderate amounts light grey, calcareous, argillaceous siltstone with carbonaceous flecks.

1060 - 1080' Siltstone and Shale - siltstone as above, with minor amounts shale as above.

1080 - 1100' Shale and Siltstone - shale as above with moderate amounts siltstone as above.

1100 - 1110' Shale - medium to dark grey, soft, sub-fissile shale.

1110 - 1120 Shale - shale as above, with few thin interbeds lighter grey siltstone.

HUME 1112' (+87)

1120 - 1150' Shale, Siltstone and Limestone - shale as above, with thin siltstone interbeds as above. Minor amounts grey-brown, crypto-crystalline, dense, slightly argillaceous limestone.

1150 - 1170' Shale, Siltstone and Limestone - medium to dark grey, soft, sub-fissile shale. Moderate amounts light grey, argillaceous, calcareous, slightly glauconitic siltstone and moderate amounts light buff and brown, crypto-crystalline to very finely crystalline, slightly argillaceous limestone, in part pellatoid, rare fossil fragments.

1170' - 1210' Limestone - grey-buff to brown, crypto-crystalline to very finely crystalline, slightly argillaceous, dense limestone, in part pyritic and in part pellatoid and fragmental, few fossil fragments (Ost.).

1210 - 1220' Limestone - limestone as above, with moderate amounts dark brown, very finely crystalline, hard argillaceous, dense limestone with impregnated black bitumin.

1220 - 1230' Limestone - dark brown limestone as above.

1230 - 1280' Marlstone and Limestone - pale greenish-grey and pale grey-buff, calcareous marlstone, in part dolomitic. Minor amounts grey-buff, crypto-crystalline, dense limestone.

1280 - 1300' Marlstone & Dolomite - marlstone as above with moderate amounts brown, fine to medium crystalline and sucrosic, slightly argillaceous dolomite, bare trace inter-granular porosity, no visible stain.

Sample Descriptions (Cont'd)

1300 - 1320' Marlstone and Limestone - marlstone as above, with moderate amounts pale buff-grey, crypto-crystalline, argillaceous, dolomitic, dense, limestone, in part pellatoid.

1320 - 1330' Marlstone and Dolomite - marlstone as above, with minor amounts brown, fine to medium crystalline and sucrosic, slightly argillaceous dolomite , no visible porosity, trace disseminated black bitumin.

1330 - 1350' Marlstone and Dolomite - marlstone as above, with moderate amounts dolomite as above, dolomite becoming finely crystalline and sucrosic, in part pellatoid, no visible porosity, trace disseminated black bitumin.

1350 - 1360' Dolomite and Limestone - dolomite as above, with moderate amounts brown, very finely crystalline, slightly argillaceous limestone, in part pellatoid.

CHINCHAGA 1356' (-157)

1360 - 1380' Limestone - brown and grey-buff, very finely crystalline, slightly argillaceous limestone, in part pellatoid and fragmental, few inclusions white crystalline calcite. Few fossil fragments.

1380 - 1390' Limestone, Dolomite and Anhydrite - limestone as above, moderate amounts brown, fine to medium crystalline and granular, slightly anhydritic and slightly argillaceous dolomite with bare trace intergranular porosity. Trace white to pale buff, very finely crystalline, slightly dolomitic anhydrite.

1390 - 1400' Anhydrite - white to buff, very finely crystalline, slightly dolomitic anhydrite, minor brown and grey-buff, very finely crystalline, argillaceous, calcareous dolomite.

1400 - 1420' Anhydrite and Dolomite - anhydrite as above, and in part mottled and admixed with brown very finely crystalline, slightly argillaceous dolomite.

1420 - 1430' Dolomite and Anhydrite - light buff to brown, very finely crystalline, slightly argillaceous and slightly anhydritic dolomite. Bare trace fine vuggy porosity, no visible stain. Moderate amounts white to pale buff, very finely crystalline anhydrite.

1430 - 1440' Dolomite and Anhydrite - dolomite and anhydrite (poor sample)

1440 - 1500' Anhydrite - white to brown, crypto-crystalline to very finely crystalline, anhydrite, in part slightly dolomitic.

Sample Descriptions (Cont'd)

1500 - 1530' Anhydrite and Dolomite - anhydrite as above, with minor amounts brown, very finely crystalline, slightly argillaceous, pellatoid dolomite, in part fragmental.

1530 - 1540' Dolomite and Anhydrite - brown, very finely crystalline, slightly argillaceous, anhydritic, dense dolomite, moderate amounts anhydrite as above.

1540 - 1570' Anhydrite - buff pale grey-buff, very finely crystalline, slightly dolomitic anhydrite.

1570 - 1589 Anhydrite and Dolomite - anhydrite as above, minor amounts brown crypto-crystalline, slightly argillaceous, dense dolomite, in part pellatoid.

Total Depth:	Driller	1589	(-390)
	Schlumberger	1590	(-391)

WELL HISTORY LOG

Well Name: CDN RES. SIGNAL KELLER LK P-14

Location: 64.23139° N; 122.53333° W

Operator: Can. Reserve Oil & Gas Ltd.

Elevation: Ground 1190 (est.) K.B. 1199 (est.)

Spud Date: 4:00 p.m. Feb. 3/71

Finished Drilling: Feb. 15/71

Status: Dry & Abandoned

Total Depth: 1589 (Driller)

Bottom Formation: Chinchaga

Geologist: H.B. Tiffin

Surface Casing: Ran 428.37' 7" 20# K-55 ST & C Csg. Set at 425 K.B. with 160 Sax Fondu plus fly ash plus 3% Salt. P.D. 3:00 a.m. Feb. 8/71

Cores: Nil

DST's: Nil

Logs: Dual Induction Laterolog
BHC Sonic Gamma Caliper
Formation Density

Plugs:			
	#1	1100–1589	115 Sax
	#2	800–400	135 Sax
		400– 0	95 Sax

—LEGEND—

	Breccia		Dolomite, streak
	Conglomerate		Sandy
	Granite Wash		Silty
	Sandstone		Calcareous
	Siltstone		Dolomitic
	Shale, light color		Anhydritic
	Shale, med color		Gypsiferous
	Shale, dark color		Chert, light & dark
	Shale, black		Argillaceous
	Marlstone		Glauconitic
	Limestone		Salt Cast
	Dolomite		Nodules
	Anhydrite		Bioclastic or Frag
	Gypsum		Oolites
	Salt		Pellets
	Coal	P	Pyrite
	Glacial Till	F	Fossils
	Igneous	C	Carbonaceous
	Volcanic	E	Earthy
	Metamorphic	C	Chalky
T	Marl, limy	L	Lithographic
T	Marl, dolomitic	Cx	Cryptocrystaline
	Limestone, streak		No Samples

POR

GOOD >20%
FAIR 12–20%
POOR 6–12%
TRACE <6%

GRAIN SIZE

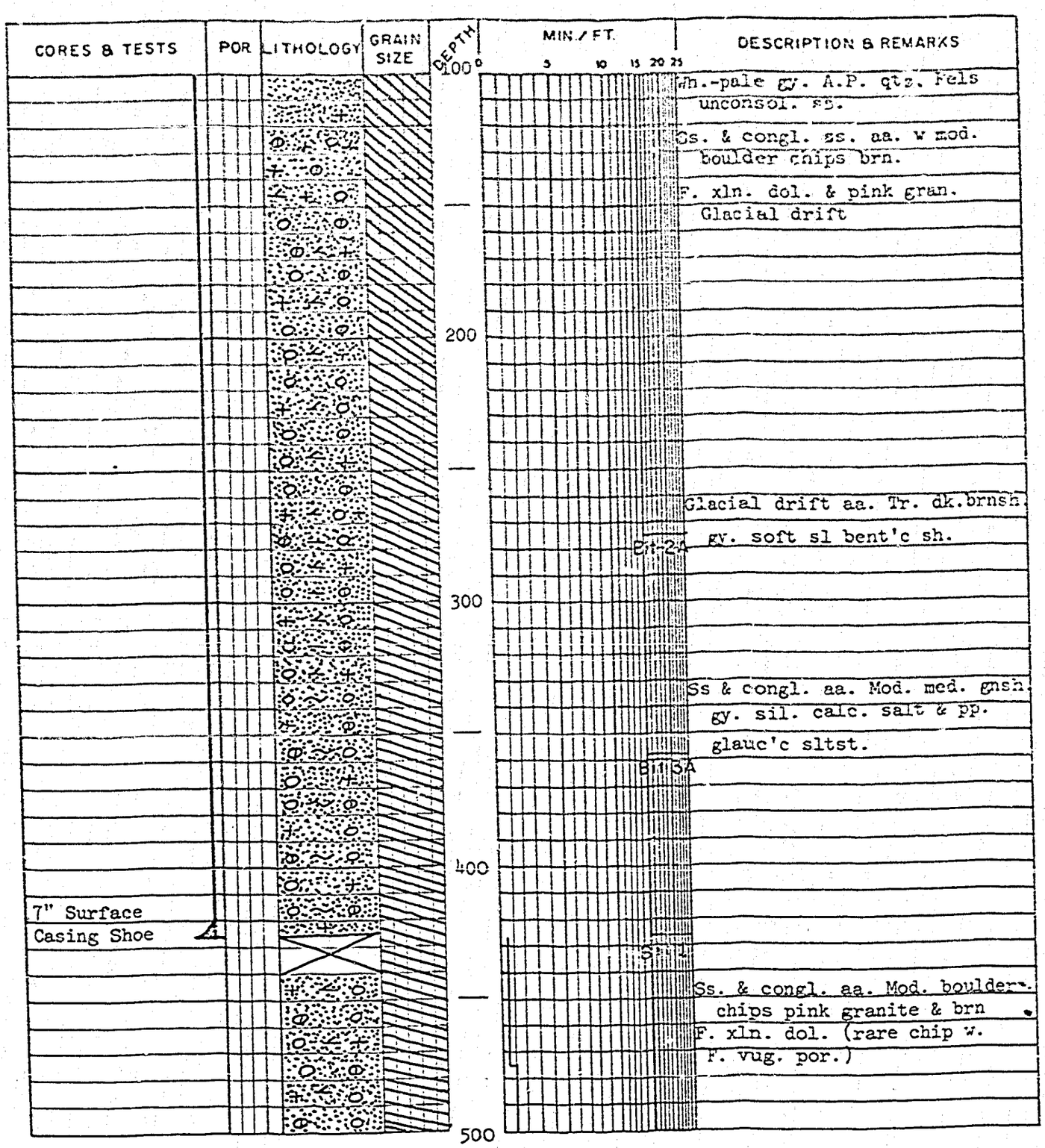
VERY FINE
FINE
MEDIUM
COARSE
VERY COURSE

O Oil, heavy stain
◐ Oil, med, poor or spotty stain
○ Oil, light, questionable stain
D Oil, dead or asphaltic
↑ Gas, (positive test)
W Water, (positive test)

WELL HISTORY LOG

WELL NAME: Cdn-Res Signal Keller Lk P-14 DATE February 4, 1971

INTERVAL SHOWN: 100 - 500' PAGE NO. 1

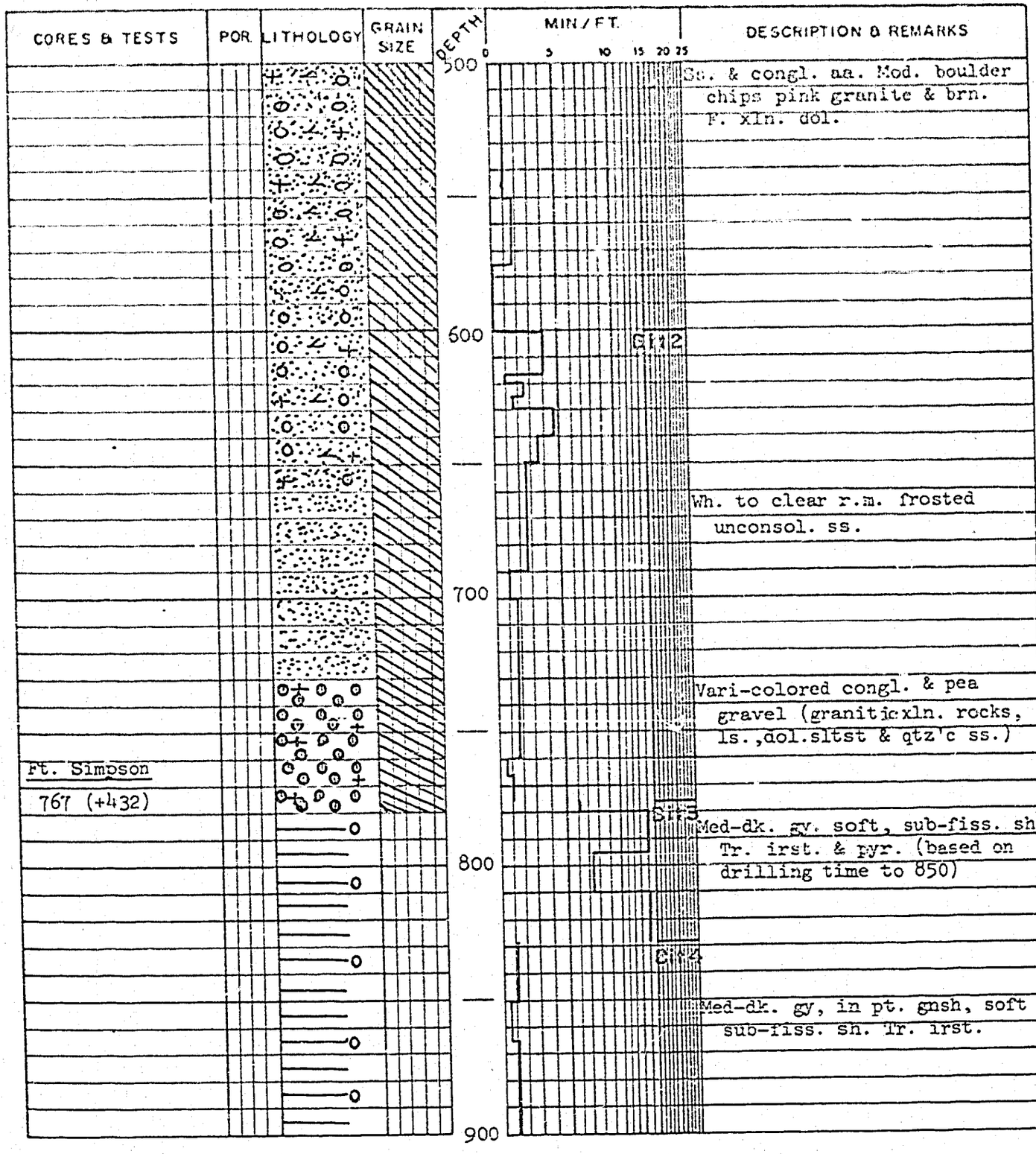


H.B.TIFFIN, P.Geol., CALGARY, ALBERTA Telephone: Bus. 263-2514 Res. 289-1284

WELL HISTORY LOG

WELL NAME Cdn-Pan Signal Keller Lk F-14 DATE February 10, 1971

INTERVAL SHOWN 500 - 900 PAGE NO. 2

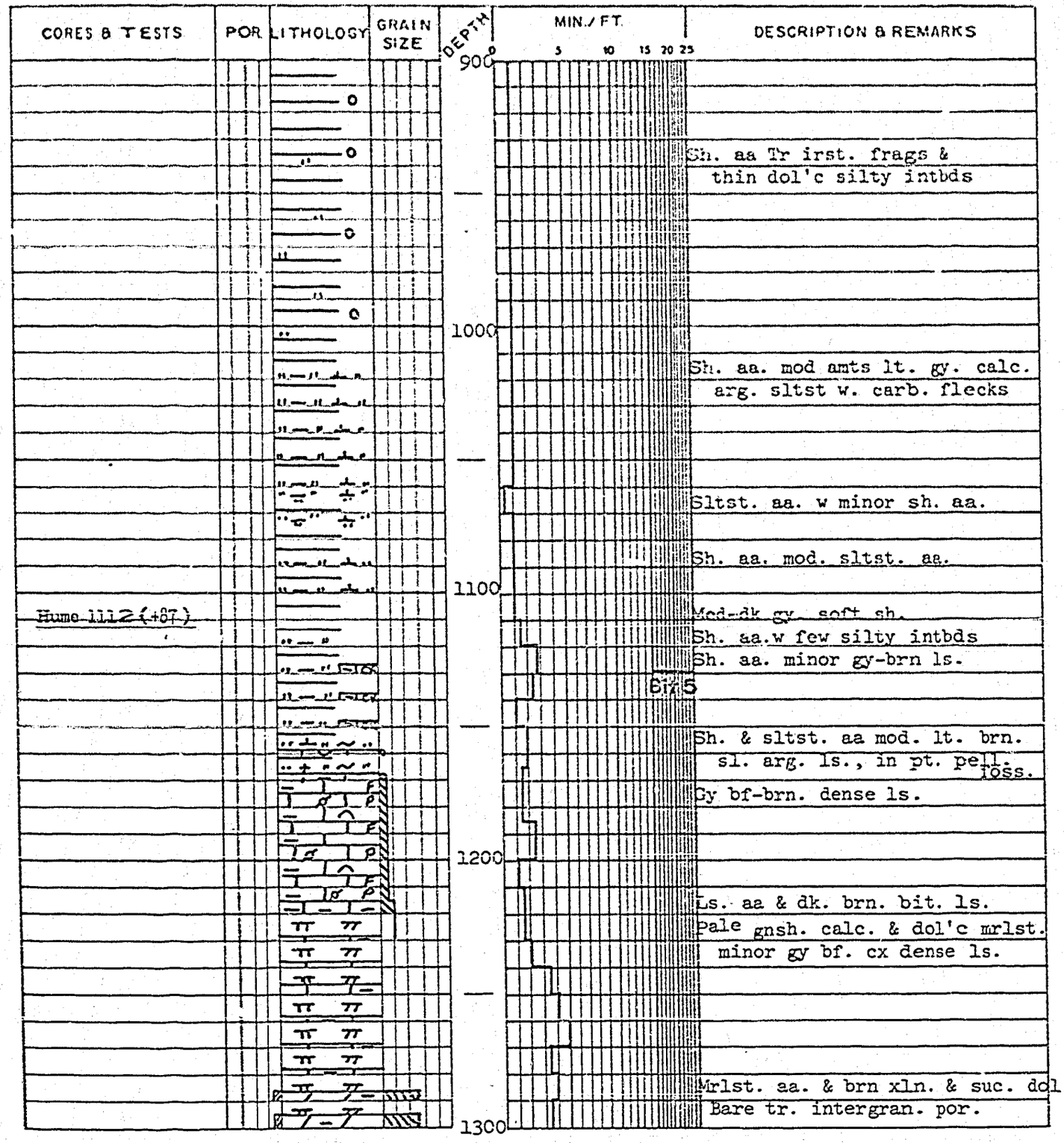


H.B.TIFFIN, P.Geol., CALGARY, ALBERTA Telephone: Bus. 263-2514 Res. 289-1284

WELL HISTORY LOG

WELL NAME: Cdn-Ren Signal Keller Lk F-14 DATE: February 12, 1971

INTERVAL SHOWN: 900 - 1300' PAGE NO 3

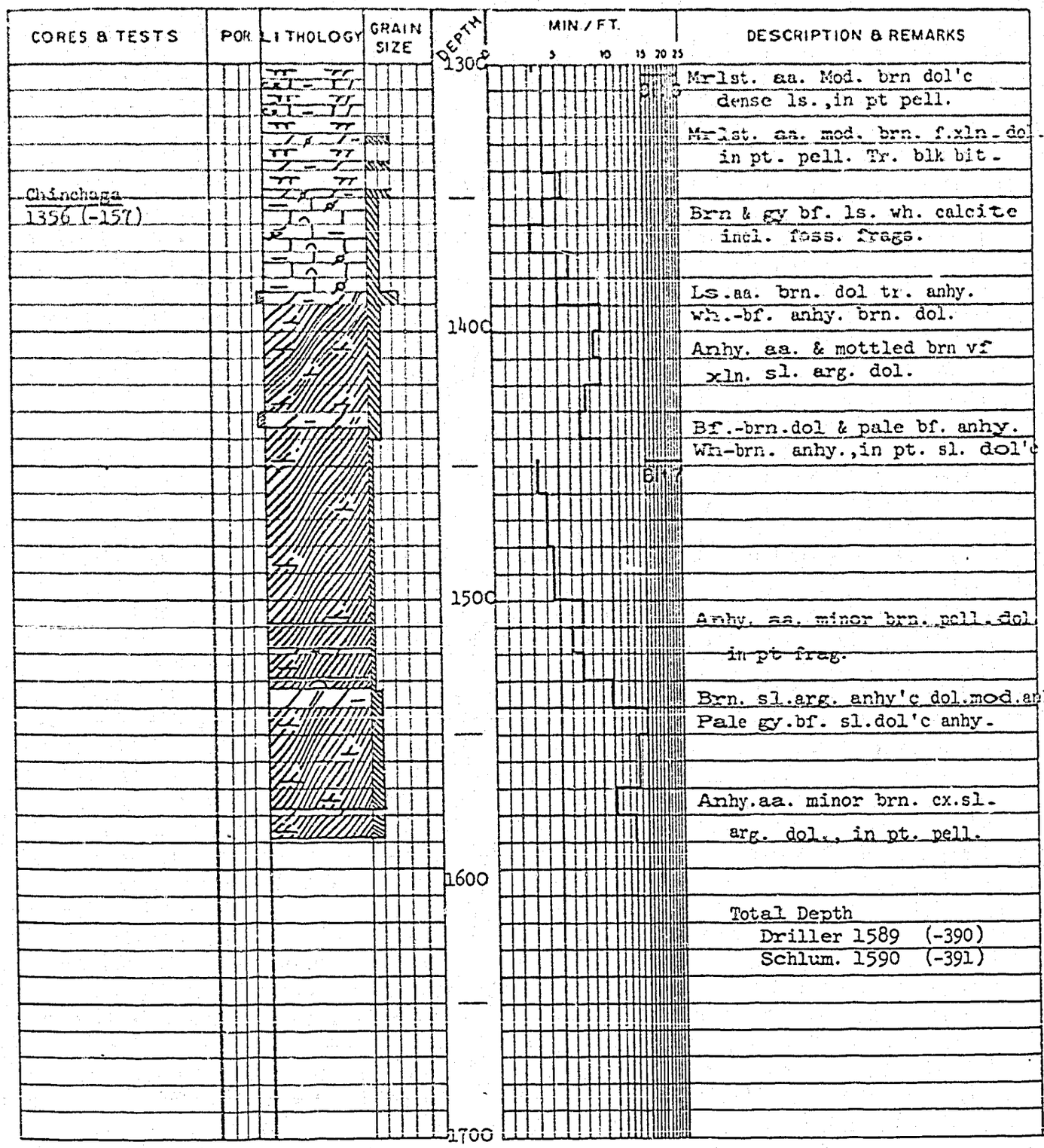


H.B.TISFIN, P.Geol., CALGARY, ALBERTA Telephone: Bus. 263-2514 Res. 289-1284

WELL HISTORY LOG

WELL NAME: Cdn. Res. Signal Keller Lk F-14 DATE: Feb. 13/71

INTERVAL SHOWN: 1300 - 1700' PAGE NO. 4



H.B.TIFFIN, P.Geol., CALGARY, ALBERTA Telephone: Bus. 263-2514 Res. 289-1284

DAILY PROGRESS REPORT

CDN RES SIGNAL KELLER LK P-14

February 4, 1971	Depth: 8:00 A.M. 72' Progress: 72' Mud Wt. 8.8 Vis. 78	Operation: Conditioning mud Hrs. on bottom: 5 Additives: 4600# Gel 25# Caustic
February 5, 1971	Depth: 8:00 A.M. 277' Progress: 205' Mud Wt. 8.9 Vis. 41	Operation: Work on pump Hrs. on bottom: 9 Additives: nil
February 6, 1971	Depth: 8:00 A.M. 396' Progress: 119' Mud Wt. 9.1 Vis. 62	Operation: Drilling Hrs. on bottom: 8 Additives: 2400# Gel 80# Caustic 8 Sax Sawdust
February 7, 1971	Depth: 8:00 A.M. 425' Progress: 29' Mud Wt. 9.1 Vis. 62	Operation: Circ. surface csg. Hrs. on bottom: 4 3/4 Additives: 1000# Gel 8 Sax Sawdust
February 8, 1971	Depth: 8:00 A.M. 425' Progress: nil	Operation: W.O.C. Hrs. on bottom: nil
February 9, 1971	Depth: 8:00 A.M. 425' Progress: nil	Operation: Nippling up Hrs. on bottom: nil
February 10, 1971	Depth: 8:00 A.M. 425' Progress: nil	Operation: Drill mouse hole Hrs. on bottom: nil
February 11, 1971	Depth: 8:00 A.M. 624' Progress: 199' Mud Wt. 8.8 Vis. 40	Operation: Drilling Hrs. on bottom: 5 1/4 Additives: 100# BiCarb 50# Soda Ash 3600# Gel 25# Caustic 4 gals. DV 68
February 12, 1971	Depth: 8:00 A.M. 828' Progress: 204' Mud Wt. 8.9 Vis. 70	Operation: Tripping Hrs. on bottom: 14 Additives: 1600# Gel 1/2 gal. DV 68

CDM RES SIGNAL KNOLL FED IX F-14

February 13, 1971	Depth: 8:00 A.M. 1303' Progress: 475' Mud Wt. 9.5 Vis. 48 W.L. 8.2 F.C. 2/32 pH 8.5	Operation: Tripping Hrs. on bottom: 16 1/2 Additives: 1400# Gel 2 gals. DV 68
February 14, 1971	Depth: 8:00 A.M. 1430' Progress: 127' Mud Wt. 9.5 Vis. 55 W.L. 14.4 F.C. 2/32 pH 6.8	Operation: Drilling Hrs. on bottom: 13 Additives: 3400# Gel 1 gal. DV 68 50# Soda Ash 25# Caustic 25# Peltex 25# CMC
February 15, 1971	Depth: 8:00 A.M. 1578' Progress: 148' Mud Wt. 9.6 Vis. 60 W.L. 8.0 F.C. 2/32 pH 10.0	Operation: Drilling Hrs. on bottom: 19 3/4 Additives: 500# Gel 75# CMC 100# Soda Ash 25# Caustic 25# Peltex
February 16, 1971	Depth: 8:00 A.M. 1589' Progress: 11' Mud Wt. 9.6 Vis. 65 W.L. 9.6 F.C. 2/32 pH 10.5	Operation: Logging Hrs. on bottom: 2 1/4 Additives: nil
February 17, 1971	Depth: 8:00 A.M. 1589' Progress: nil	Operation: Running plugs Hrs. on bottom: nil

BIT RECORD

CDN RES SIGNAL KELLER LK P-14

Bit No.	Size	Type	From	To	Footage	Hours
1A	9 7/8"	DTJ	0	256	256	12 3/4
2A	9 7/8"	DTJ	256	338	82	5
3A	9 7/8"	DGJ	338	425	87	9 1/2
1	6 1/4"	DTJ	425	600	175	4 3/4
2	6 1/4"	DGJ	600	775	175	7
3	6 1/4"	V2	775	828	53	8 1/2
4	6 1/4"	DTJ	828	1130	302	7 1/2
5	6 1/4"	DTJ	1130	1303	173	9
6	6 1/4"	DGJ	1303	1448	145	15 1/4
7	6 1/4"	DGJ	1448	1589	141	19 3/4

DEVIATION RECORD

CDN RES SIGNAL KELLER LK P-14

Depth	Deviation
100	1/4°
210	1/4°
338	0
425	1/4°
655	1/2°
1125	1 1/2°
1420	1 1/2°
1589	3/4°

MUD ADDITIVES

(From Spud Feb. 3/71 to finished logging Feb. 16/71)

Gel	17,500 lbs.
Caustic	180 lbs.
Peltex	50 lbs.
CMC	100 lbs.
BiCarb	100 lbs.
DV 68	7 1/2 gals.
Soda Ash	200 lbs.
Sawdust	8 Sax

ABANDONMENT PLUGS

CDN RES SIGNAL KELLER LK P-14

DATE	PLUG INTERVAL	REMARKS
February 17, 1971	1100 - 1589	115 sxs Neat Oilwell cement. No feel.
February 17, 1971	400 - 800 (stage one)	135 sxs Neat Oilwell cement.
	0 - 400 (stage two)	95 sxs Neat Oilwell cement. Returns to surface.

Cut off casing 3' below ground, placed approximately 5 sxs in top to fill hole and welded on plate with well marker.

LOST CIRCULATION ZONES

On February 10th, circulation was lost while drilling at 600' in loose sand (Glacial Drift). Approximately 50 barrels of mud was lost prior to regaining circulation by building a filter cake over the interval with heavy mud. This same interval took some cement while running abandonment plugs.

April 19, 1971.
Calgary, Alberta.

LOGS

Section IV

Feb. 15/71	Dual Induction-Laterolog	
	2" - 100 ft.	425'- 1584'
	5" - 100 ft.	425'- 1584'
Feb. 15/71	Borehole Compensated Sonic - Gamma - Caliper	
	2" - 100 ft.	425'- 1574'.
	5" - 100 ft.	425'- 1574'
Feb. 16/71	Formation Density	
	2" - 100 ft.	1000' - 1572'
	5" - 100 ft.	1000' - 1572'

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO. 24C LOCATION Canadian Fee 30 Sibunk LSD. 14 SEC. TWP. RGE. W. DATE Feb 17 19 71

DIRECTIONS TO WELL

MAILING POINT SHIPPING POINT MILES MOVED ROAD CONDITIONS DAYS FROM SPUD

TOUR MIDNIGHT TO 8 AM TO 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1589	1589	T.D.													

BLTS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
L																		
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
															4	
															5	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BLTS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
L																		
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
															4	
															5	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL: (10 days) 200 - 400 - 207

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BLTS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
L																		
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
															4	
															5	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL: (2nd stage) 200 - [illegible]

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Dat:
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT RAN JTS CSG

TD KB. USED SAX CEM

PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS - (YES/NO)

EQUIPMENT CHANGES

RENTAL EQUIPMENT ON HAND

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative J R Knight

Approved by Toolpusher F Patterson

TRANSFER #

REMARKS	TIME START	TIME STOP	TIME INTVL.
Rig To Run Cement Plug #1	12:00	1:15	1¼
Run Plug #1	1:15	2:15	1
Trip out 18 Stands D.P.	2:15	2:45	¾
Laid Down 26 Joints D.P.	2:45	3:45	1
Run in To 800'	3:45	4:15	½
Circ & Rig To Run Plug #2	4:15	5:15	1
Run 1st-Stage Plug #2	5:15	6:45	1½
Pull out & Laid Down 12 Jts.	6:45	7:30	¾
Rig To Run 2nd Stage Plug #2	7:30	8:00	½
FIRES — D. Hunter — DRILLER'S SIGNATURE			
Rig To Run Plug #2	8:00	11:00	3
Wait on Cement To Set			
Run Cement	11:00	12:30	1½
Pull Out 13 Singles + Liner Assy	12:30	1:00	½
Trip Out D.O.T.'s	1:00	4:00	3
Tear Out Floor & Clean Ice Out of Sub.	4:00	8:00	4
Put 5 Sx Plug @ Surface Cut Off Csg 3 ft Below Ground Level Weld On Plate. Rig Released 8:30 PM			
FIRES — J R Knight — DRILLER'S SIGNATURE			

CONSERVATION BOARD COPY

COM 40065

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO. 34C LOCATION CANADIAN TECSEIS BIGNAL LSD. P.14 SEC. KELLER LAKE TWP. RGE. W. DATE Feb 16 19 71

DIRECTIONS TO WELL

MAILING POINT EDMONTON SHIPPING POINT MILES MOVED ROAD CONDITIONS DAYS FROM SPUD 12

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
1589						

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

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

PUMP		12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

PUMP		12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

MOTOR HOURS — Next Oil Change

1 2 3 4 5

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS — At Feet / Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME START	TIME STOP	INTVL.
12 mn	8 00	8

Logging (by Schlumberger)

FIRES DRILLER'S SIGNATURE

8 00	3 30	7½
3 30	4 00	½

Logging

MOVE OUT LOGGING UNIT

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill-Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

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

PUMP		8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

PUMP		8 a.m.	10 a.m.	12 noon	2 p.m.
No. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

MOTOR HOURS — Next Oil Change

1 2 3 4 5

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS — At Feet / Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

4 00	5 00	1
5 00	6 00	1
6 00	9 00	3½
9 00	12 00	2½

LOAD OUT LOGGERS

RUN INTO LAY DOWN COLLARS

LAY DOWN COLLARS

RUN IN PIPE TO CIRC

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
					26	

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

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

PUMP		4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

PUMP		4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

MOTOR HOURS — Next Oil Change

1 2 3 4 5

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS — At Feet / Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUG DOWN A.M. P.M. — PLUS %

CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND

DAYS FROM SPUD:

EQUIPMENT CHANGES

TOTCO RING ON BIT # Boiler Operated: Hrs.

TOTAL COMPANY TIME HPS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative J R Knight

Approved by Toolpusher F Pitcheson

TRANSFER #

CONSERVATION BOARD COPY

COM 40064

COMMONWEALTH DRILLING

DAILY DRILLING LOG

DIRECTIONS TO WELL

RIG NO. 34 LOCATION CANADIAN RESERVE STRIP LSD. 8 SEC. 17 TWP. 51 RGE. 24 W. 4 DATE FEB 15 19 71

MAILING POINT EDMONTON SHIPPING POINT MILES MOVED ROAD CONDITIONS DAYS FROM SPUD 11

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1544	34	1578	7¾	32M	16	1		19	4¾	2⅞	551.25				27

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1	6¼	2-6-3	7/16	DH794	20	120	130	11½			1	450	48				
I															Drilling			
T																		
S																		

M.U.D	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP		12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP		12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.5	9.5	9.6	9.6	No. 1	PRESSURE	450	450	450	450	No. 2	PRESSURE					1	
VISCOSITY	64	62	62	60	MODEL	S.P.M.	48	48	48	48	MODEL	S.P.M.					2	
GEL						LINER SIZE	4½	4½	4½	4½		LINER SIZE					3	

W.L. 8.0 F.C. 2/32 pH. 10.5 DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1578	11	1589	2¼	32M	16	1		19	4¾	2⅞	551.25				16

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1	6¼	2-6-3	7/16	DH794	20	120	141	13¾			1	450	48	350	3	3	2
I																		
T																		
S																		

M.U.D	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP		8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP		8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.6	9.6			No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY	61	60			MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. 9.5 F.C. 2/32 pH. 10.5 DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL: Schlumberger ran Sonic-GR-Cal. and Mudlog unit off.

SURVEYS: At Feet / Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1544		TD		32	16	1		19	4¾	2⅞	551.31				16

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1	6¼																
I																		
T																		
S																		

M.U.D	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP		4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP		4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.6	9.6		No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY		63			MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. 9.6 F.C. 2/32 pH. 10.5 DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL: STRAP OUT SAME 1589.46

SURVEYS: At Feet 1589 / Degrees ¼

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.	✓			

TOTCO RING ON BIT #

Boiler Operated: Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT RAN JTS CSG

TO KB. USED SAX CEM

PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND

DAYS FROM SPUD:

EQUIPMENT CHANGES

TOTAL COMPANY TIME HRS. | TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative J R Knight

Approved by Toolpusher W Kuchmistri

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Serv + S.O.P.	1200	1215	¼
Drilling	1215	800	7¾
Drilling	800	815	¼
Drilling	815	1030	2¼
Circ To Log	1030	1230	
Dummy Trip Into Casing	1230	130	1
Wait 1 Hr To See If Any Fill	130	230	1
Run In Slow No Fill	230	330	1
Circ. To Log	330	400	½
Service Rig 4 Hours	400	445	¾
Circ To Log	445	830	4¼
Hoist To Log	830	930	1
Rig To Log	930	10	½
Logging	10	12	2

CONSERVATION BOARD COPY

COM 40063

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO. 34C LOCATION Cowdens Lloydminster Sask LSD. 14 SEC. KEHEK TWP. LAKE RGE. W. DATE FEB 14 19 71

DIRECTIONS TO WELL

MAILING POINT EDMONTON SHIPPING POINT MILES MOVED ROAD CONDITIONS DAYS FROM SPUD 10

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
885	45	1430	6½	32M	14	—		19	4¾	2¾	551.35				21

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	6	6¼	DG	3-13	DH789	20	125	123	13			1	400	44	—	DRILLING		
I																		
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.4	9.2	9.2		No. 1 PRES-SURE	400	400	400	400	No. 2 PRES-SURE					1	
VISCOSITY	58	37	55		MODEL S.P.M.	44	44	44	44	MODEL S.P.M.					2	
GEL					LINER SIZE	4½	4½	4½	4½	LINER SIZE					3	

W.L. 14.4 F.C. 2/32 pH 6 DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 1420 / 1½ — 5

ADDITIVES: 25# C.M.C. GENERAL: 1700# GEL WATER MIX

25# GUAR GUM 25# GELTEX CLEAN SHALE TANK

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1430	47	1477	6¼	32	14	1		19	4¾	2⅞	551.35				5

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	6	6¼	DG	3-13	DH789	20	130	145	5¼			1	400	44	50	1	1	2
I	1	6¼	DG	3-13	DH789	20	120	29	¼			1	400	46	50			
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.2	9.2		9.3	No. 1 PRES-SURE	400			400	No. 2 PRES-SURE					1	
VISCOSITY	55	60		59	MODEL S.P.M.	44			67½	MODEL S.P.M.					2	
GEL				EST	LINER SIZE	4½			4½	LINER SIZE					3	

W.L. 14.4 F.C. pH 6.17 DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GEL 2 CMC GENERAL: TRK-009 AT 46

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1477	67	1544	7¼	32				19	4¾	2⅛	551.35				29

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1	6¼	06	3-12	DH774	20	120	96	9¼			1	400	47	50			
I																		
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.4	9.4	9.5	9.5	No. 1 PRES-SURE	400	400	400	400	No. 2 PRES-SURE					1	
VISCOSITY	65	65	70	70	MODEL S.P.M.	47	47	47	47	MODEL S.P.M.					2	
GEL					LINER SIZE	7½	7½	7½	7½	LINER SIZE					3	

W.L. 22.4 F.C. 2/14 pH 7.5 DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL: 100# soda Ash 50 CMC 25# caustic 25# pottop

small stock water

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril	✓			
Pipe Rams.	✓			
Blind Rams.	✓			

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

TOTCO RING ON BIT # Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUG DOWN A.M. P.M. — PLUS % — CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND

DAYS FROM SPUD:

EQUIPMENT CHANGES

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative R. Knight

Approved by Toolpusher

TRANSFER #

REMARKS

	TIME START	TIME STOP	INTVL
Rig Serv + Lubs.	1200	1215	¼
Drilling	1215	100	3/4
Circ + Cond. Mud (TREAT OUT ANHYDRATE)	100	200	1
Drilling	200	645	4¾
Survey	645	700	¼
Drilling	700	800	1
FIRES			
R. Hunter DRILLER'S SIGNATURE			
Rig Serv + Lubs	800	815	¼
Drilling	815	1030	2¼
Trip out Check Blind Rams	1030	1200	1½
Change Bit Run #1	1200	200	2
Drilling	200	400	2
FIRES			
DRILLER'S SIGNATURE			
Service Rig + Bops.	400	415	¼
Drilling 6¼" Hole	415	1230	7¾
FIRES			
DRILLER'S SIGNATURE			

CONSERVATION BOARD COPY

COM 40062

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO. 34C LOCATION CANADIAN DESERT SAND LSD. 04 SEC. KEELER LAKE TWP. RGE. W. DATE FEB 13 19 71

DIRECTIONS TO WELL

MAILING POINT EDMONTON SHIPPING POINT MILES MOVED ROAD CONDITIONS DAYS FROM SPUD 9

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1025	78	1303	5	31M	12	—		19	4¼	2⅜	551.35				25

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	5	6¼	DT	3 7/8	E2368	20	150	173	9	—	—	1	800	44	700	3	5	I
I																		
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.6	9.7	9.5		No. 1 PRESSURE	600	800	800		No. 2 PRESSURE					1	
VISCOSITY	56	55	48		MODEL S.P.M.	40	44	H		MODEL S.P.M.					2	
GEL					LINER SIZE	H 12		H 12		LINER SIZE					3	

W.L. 8.2 F.C. 2/32 pH. 8.5 DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

500 # GEL SMALL STREAM WATER CLEAN SUCKER TANK

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
	1¼			6	5					FEB 4 NEW		

FIRES DRILLER'S SIGNATURE

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1303	0	1303	—					19	4¾	2⅜	551.35				25

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	6	6¼	D	3	DH													
I																		
T	6	6¼	D	3 3/8	DH389													
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	TRIP				No. 1 PRESSURE	TRIP				No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1303	80	1385	6½	32	13	—		19	4¾	2⅜	551.35				5

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	2	6¼	OC	3 5/8	DH789	D-20	100-150	82	6h	505	4½	1	700	48	50-55			
I																		
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.6	9.4	9.7	No. 1 PRESSURE	400	400	400	400	No. 2 PRESSURE					1	
VISCOSITY	TRIP	50	54	53	MODEL S.P.M.	46	HR	46	46	MODEL S.P.M.					2	
GEL					LINER SIZE	4½				LINER SIZE					3	

W.L. 9.6 F.C. 4/32 pH. 8.5 DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GEL 400# DUO SPERSE 1 GAL CAUSTIC 500# GENERAL: PUMP SPARKLE WATER TANK

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
T.I.H SEAU of B.O.P.S.	1200	1215	¼
DRILLING	1215	515	5
TRIP STDG	515	800	2¾
SEAU RIG & B.O.P.S	800	815	¼
FINISH TRIP	815	930	1¼
WORK PLUGED BIT	930	1015	¾
TRIP OUT TO 400'	1015	1115	1
OPEN KILL LINE & REVERSE CIRC at TOOKE	1115	1200	¾
BREAK CIRC	1200	1230	½
CLEAN 150' FROM 600'-750'	1230	300	2½
RUN IN 6 STANDS	300	345	¾
CLEANING HOLE	345	400	¼
[illegible]	[illegible]	[illegible]	[illegible]
SERVICE RIG & B.O.P.S	400	445	¾
CLEAN 150' TO BOTTOM	445	530	1¼
DRILLING	530	[illegible]	[illegible]

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT =

Boiler Operated 0¼ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND — TRANSFER =

DAYS FROM SPUD:

EQUIPMENT CHANGES

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative J K Knight

Approved by Toolpusher

CONSERVATION BOARD COPY

COM 40061

COMMONWEALTH DRILLING

DAILY DRILLING LOG

DIRECTIONS TO WELL

RIG NO. 34C LOCATION Canadian Reserve - S. Grosel LSD 14 SEC. Keller Lake TWP. RGE. W. DATE Feb 12 19 71

MAILING POINT SHIPPING POINT MILES MOVED ROAD CONDITIONS DAYS FROM SPUD 8

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
802	26	828	4 1/4	30M	4.	

DRILL COLLARS: No. 19, O.D. 4 3/4, I.D. 2 3/8, Length 551.35, Air Wt., Sub. Wt., C.B. Ft., Ft. up on Kelly 12

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
3	6 1/4	V2	3-3-3	CR844	15-20	150	63	8 1/2	135	2	1	350	45		2	4	I

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	9.2	9.1	8.9	
VISCOSITY	45	50	70	
GEL				
W.L. 10.4	F.C. 2/32	pH. 9.0		

PUMP: No. 1 PRESSURE, MODEL, S.P.M., LINER SIZE; No. 2 PRESSURE, MODEL, S.P.M., LINER SIZE

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: 600 # Gel

GENERAL: WATER

DRLG 1 Gal. 15 # Soda Ash

CLEANED SHAKER TANK TWICE

SURVEYS: At Feet, Degrees

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

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
822	272	1102	6 3/4	30M	9	—

DRILL COLLARS: No. 19, O.D. 4 3/4, I.D. 2 1/4, Length 551.35, Air Wt., Sub. Wt., C.B. Ft., Ft. up on Kelly 15

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
3	6 1/4	OT	3-14	EZ332	15-20	150	272	6 1/2			1	700	40	4			

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT	9.1	9.2	9.2	9.1
VISCOSITY	48	44	51	51
GEL				
W.L. 10.4	F.C. 2/32	pH. 9.0		

PUMP: No. 1 PRESSURE, MODEL BTH, S.P.M. 44, LINER SIZE 4 1/2; No. 2 PRESSURE, MODEL, S.P.M., LINER SIZE

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: Gel 1000 #

GENERAL: DUMPED SHAKER TANK

SURVEYS: At Feet, Degrees

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

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
1100	125	1225	4 3/4	31		

DRILL COLLARS: No. 19, O.D. 4 3/4, I.D. 2 3/8, Length 551.35, Air Wt., Sub. Wt., C.B. Ft., Ft. up on Kelly 10

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
4	6 1/4	OT	3-14	EZ332	20	150	302	7 1/2			1	750	44		2	4	I
5	6 1/4	OT	3-14	EZ355	20	150	75	4	—	—	1	1000	50				

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT		9.0		8.9
VISCOSITY		54		44
GEL				
W.L. 10.4	F.C. 2/32	pH. 9.0		

PUMP: No. 1 PRESSURE 700, MODEL BTH, S.P.M. 44, LINER SIZE 4 1/2; 1000, 1000, 60, 50; No. 2 PRESSURE, MODEL, S.P.M., LINER SIZE

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: Gel 1000 # Drill 2 Gal

GENERAL: DUMPED SHAKER TANK

SURVEYS: At Feet 1175, Degrees 1/2

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

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.	✓	✓		

TOTCO RING ON BIT # Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN JTS CSG — TO K8. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO)

EQUIPMENT CHANGES

RENTAL EQUIPMENT ON HAND — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

REMARKS

REMARKS	START	STOP	INTVL
Rig Serd at 0.0'S.	1200	1215	1/4
Drilling	1215	115	1
Condition + work Sloughing Hole	115	145	1/2
Repair Oil Leak (Auto Trans)	145	245	1
Drilling	245	600	3 1/4
Trip Out	600	700	1
Check Blind Rams	700	715	1/4
Run In	715	800	3/4

FIRES

L. Hunter DRILLER'S SIGNATURE

Rig Serd at 0.0'S.	800	818	1/4
Finish in (2) Bit #4	818	830	1/4
Clean 30' to Bottom	830	915	3/4
Drilling	915	4	6 1/4

FIRES

DRILLER'S SIGNATURE

Service Rig + Dops	4	415	1/4
Drilling	415	500	1/2
Circ Sample	500	515	1/4
Survey	515	530	1/4
Hoist for Bit #4	530	600	1/2
Run in Bit #5	600	800	1 1/4
Drilling	800	1200	4

FIRES

DRILLER'S SIGNATURE

CONSERVATION BOARD COPY

COM 40060

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO 34C LOCATION Rowan Drlg Co Yard LSD 14 SEC KELLER LAKE TWP RGE W DATE Feb 14 19 71

DIRECTIONS TO WELL

MAILING POINT SHIPPING POINT MILES MOVED ROAD CONDITIONS DAYS FROM SPUD 7

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
600	24	624	1½	25M				19	4¾	2⅜	601.35				21

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1	6¼	J2	3 ¼"	E2234	15	150	175	3¾			1	1000	53		8	7	1-1
	2	6¼	DG	2 ⅝"	E2861	20	125	24	1½			1	500	52				

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	8.7	[illegible]	8.8		No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	80	[illegible]	48		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 9.0 DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: WATER 500# GEL. GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES E. Hunter DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
624	51	775	5½	30	3	1		19	4¾	2⅜	661.35				7

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	6¼	DG	2 ⅝"	E2861	20	125	151	7	11½		2	1	500	52		8	6	1-1

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	8.3	9.0	[illegible]	9.0	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	48	40	50	51	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet 655 / Degrees ½

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
775	27	802	4½	30	3	1		19	4¾	2⅜	55[illegible]				

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	3	12¼	J2	3 ¼"	CHGFT	7-10	180	27	4½	17½	2	1	300	42				

TOUR 4 PM TO MIDNIGHT

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			8.8	9.0	No. 1 PRESSURE			700	300	No. 2 PRESSURE					1	
VISCOSITY			55	64	MODEL S.P.M.			46	45	MODEL S.P.M.					2	
GEL					LINER SIZE			4½		LINER SIZE					3	

W.L. F.C. pH. 9.0 DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GEL 400 OVBS 1½ GAL WATER LAZY STREAM 4 HRS GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

TOTCO RING ON BIT = 3 Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND

DAYS FROM SPUD:

EQUIPMENT CHANGES

TRANSFER #

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

REMARKS

TIME START	TIME STOP	INTVL.	REMARKS
1200	1220	½	WORK ON PUMP (HEAD GASKET)
1220	115	2¼	WORK PLUGGED BIT
115	130	¼	SERV RIG + BOPS.
130	430	3	TRIP PLUGGED BIT
430	630	2	REAM 115' TO BOTTOM
630	800	1½	DRILLING
800	818	¼	RIG SERV + B.O.P.S
818	948	1½	DRILLING
948	1030	¾	REPAIR PUMP (HEAD GASKET)
1030	1100	½	SURVEY
1100	300	4	DRILLING
300	400	1	HOIST FOR BIT
400	415	¼	SERVICE RIG + BOPS
415	445	½	CHANGE BIT ON PLUG COLLOR
445	530	¾	RUN IN
530	730	2	REAM 175' TO BOTTOM
730	12	4½	DRILLING 6 1/4" HOLE

FIRES DRILLER'S SIGNATURE

CONSERVATION BOARD COPY

COM 40059

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO. 34C LOCATION Cowden #1 Sec. 5 Blk. ED SEC. 5 TWP. 14 RGE. Keller Lake W. DATE Feb 18 19 71

DIRECTIONS TO WELL

MAILING POINT Edmonton SHIPPING POINT MILES MOVED ROAD CONDITIONS DAYS FROM SPUD

1ST 24 HOURS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
I																		
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES

REMARKS: TEAR OUT

TIME: START 1100 STOP 900 INTVL. 8

DRILLER'S SIGNATURE

2ND 24 HOURS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
I																		
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES

REMARKS: Tear Out

TIME: START STOP INTVL.

DRILLER'S SIGNATURE

3RD 24 HOURS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
I																		
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Frac Water Tanks

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES

REMARKS: TEAR OUT

TIME: START 400 STOP 800 INTVL. 8

DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING On BIT # Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN JTS CSG TO KB. USED SAX CEM PLUG DOWN A.M. P.M. PLUS %

CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND

TRANSFER #

DAYS FROM SPUD:

EQUIPMENT CHANGES

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative J R Knight

Approved by Toolpusher F Matthison

CONSERVATION BOARD COPY

COM 40066

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO. 34C LOCATION Gas Reserve Signal Keller Lake LSD. P14 SEC. ___ TWP. ___ RGE. ___ W. ___ DATE Feb 10 19 71

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___ DAYS FROM SPUD ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

FIRES ___ Eric Lubigan DRILLER'S SIGNATURE

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
425	25	450	1	20M				15	4¼	2⅛	431				28

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1	6¼	DT	3-¾	E232H	15M	125	35	1			1	900	50				

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				63	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				28	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES: Drlg Mud 100# Soda Ash 50# 300# Gel.					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

FIRES ___ L. Hunter DRILLER'S SIGNATURE

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
450	150	600	2¾	25M		1		19	4¼		593¼				25

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1	6¼	DT	3-¾	E232H	15M	150	175	2¾			1	1500	53	40			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		69	69	69	No. 1 PRESSURE	1000	1000			No. 2 PRESSURE					1	
VISCOSITY		31	32	32	MODEL S.P.M.	53	53			MODEL S.P.M.					2	
GEL					175 LINER SIZE	4½	4½			LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op:	4	U. Flow:		O. Flow:						4	
ADDITIVES: Gel 3100# Caustic 25 Lb. & 4 Gpl.					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

FIRES ___ Earl Grant DRILLER'S SIGNATURE

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL.
Service Rig	12 00	12 15	¼
Rig To Drill Mouse Hole	12 15	1 00	¾
Work On Hydrolic Lines To Tongs	1 00	3 00	2
Thaw Mud Lines	3 00	5 00	2
Drill Moose Hole	5 00	8 00	3
Rig Set	8 00	8 15	¼
Finish Drilling Mouse Hole	8 15	1 00	4¾
Drill out Shoe	1 00	3 00	2
Drilling 6¼" Hole	3 00	4 00	1
Rig Serv.	4 00	4 15	¼
Drilling	4 15	5 15	1
Repair nipple on gas mud line	5 15	6 15	1
Drilling 6¼" hole	6 15	8 00	1¾
Lost circ mix mud pump	8 00	11 30	3½
Work on pump suction Heavy Mud	11 30	12 00	½

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND

TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

EQUIPMENT CHANGES

Approved by Operator's Representative J R Kungle

Approved by Toolpusher Earl Grant

CONSERVATION BOARD COPY

COM 40058

COMMONWEALTH DRILLING

DAILY DRILLING LOG

DIRECTIONS TO WELL

RIG NO. 34C LOCATION GAN. RITSEAUR-SIGNAL KELLER LAKE LSD. P14 SEC. ___ TWP. ___ RGE. ___ W. ___ DATE FEB 9 19 71

MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___ DAYS FROM SPUD ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
I.																		
T.																		
S.																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP		12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP		12 mn.	2 a.m.	1 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY					MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
I.																		
T.																		
S.																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP		8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP		8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY					MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
I.																		
T.																		
S.																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP		4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP		4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY					MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL: Pressured bleeder manifold to 1200 psi for 10 min - OK

SURVEYS: At Feet / Degrees

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril	✓	10	1200	Before drill out plug
Pipe Rams.	✓	10	1200	
Blind Rams.	✓	10	1200	

TOTCO RING ON BIT # ___ Boiler Operated: ___ hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M.

CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND

TRANSFER #

DAYS FROM SPUD:

EQUIPMENT CHANGES

TOTAL COMPANY TIME ___ HRS.

TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative J R Knight

Approved by Toolpusher J. Watterson

REMARKS

	TIME START	TIME STOP	INTVL.
NIPPLE UP B.O.P.'S	12 mn	8 AM	8
FIRES — DRILLER'S SIGNATURE Eric Dubiger			
Rig Service	8 00	8 10	1/4
Head up	8 10	1400	5 3/4
Laid Down 6" Dcs	12 00	1 00	1
Laid Down 6 Joints D.P.	1 00	1 30	1/2
Rig To Pressure Test			
Blind Rams & Floor			
3" Cameron Valve	13 0	4 00	2 1/2
FIRES — DRILLER'S SIGNATURE D. Hunter			
Rig Service	4 00	4 15	1/4
Thaw Kill Line	4 15	5 00	3/4
Pressure Blind Rams 1200 PSI	5 00	5 15	1/4
Thaw out Flow Line	5 15	6 15	1
Pres. Test Pipe Rams & Hydril + Blowout Manifold	6 15	8 45	3 1/2
Run In With Rig	8 45	9 45	1
Ping @ 390			
Drill out Plug	9 45	11 30	1 3/4
Rig up To Drill Mouse Hole	11 30	12 00	1/2
FIRES — DRILLER'S SIGNATURE			

CONSERVATION BOARD COPY

COM 40057

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO. 34C LOCATION CAN. RESERVE SIGNAL HILL KERR LAKE SD 11 SEC. ___ TWP. ___ RGE. ___ W. ___ DATE FEB 8 19 71

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___ DAYS FROM SPUD ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP		12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP		12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY					MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE Eric Lebrun

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
425															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP		8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP		8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY					MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE D. Lawson

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP		4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP		4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY					MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE Paul Lowe

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT = ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG

TO 425 KB. USED 160 SKS FOUND CEM

PLUS 3 % SALT PLUG DOWN 3:30 A.M. P.M.

CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND — TRANSFER # ___

DAYS FROM SPUD:

TOTAL COMPANY TIME ___ HRS.

TOTAL CONTRACTOR'S TIME ___ HRS.

EQUIPMENT CHANGES

Approved by Operator's Representative ___

Approved by Toolpusher E. Hutchison

REMARKS	TIME START	TIME STOP	TIME INTVL.
RIG TO CEMENT.	12:00	1:15	1¼
Lowering	1:15	3:00	1¾
W.O.C.	3:00	8:00	5
W.O.C.	8:00	4:00	8
W.O.C.	4:00	6:00	2
NIPPLE UP	6:00	12:00	6

CONSERVATION BOARD COPY

COM 40056

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO. 34C LOCATION CAN. RESERVE SIGNAL HELLER LAKE LSD. P14 SEC. ___ TWP. ___ RGE. ___ W. ___ DATE FEB 7 19 71

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___ DAYS FROM SPUD ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
		425													

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1			No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY		62			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE Eric Lubigan

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
425															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.2		No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY			60		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE L. Hunter

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.0		9.2		No. 1 PRES-SURE					No. 2 PRES-SURE	200				1	
VISCOSITY	60		61		MODEL S.P.M.					MODEL S.P.M.	300				2	
GEL					LINER SIZE					LINER SIZE	2½				3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ 24 HRS

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
					Jack Hunter							

FIRES ___ DRILLER'S SIGNATURE [signature]

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL.
Circ Casing + Rig Service	12⁰⁰		
WAIT FOR MOTOR TO CEMENT.		8⁰⁰	8
Rig Serv	8⁰⁰	8¹⁵	¼
Circ Casing + WAIT FOR MOTOR TO CEMENT	8¹⁵	4⁰⁰	7¾
RIG SERVICE	4⁰⁵	4⁵	¾
Circ CASING + WAIT MOTOR TO CEMENT	4⁵	11⁰⁰	6¾
RIG UP TO CEMENT	11⁰⁰	12⁰⁰	1

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler Hrs. Operated: 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT RAN 13 JTS 7 CSG TO 425 KB. USED 160 SAX FONDU CEM PLUS 2 % SALT. PLUG DOWN 3:15 A.M. P.M. CEMENT RETURNS - (YES) / NO) To Pit

RENTAL EQUIPMENT ON HAND

TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

EQUIPMENT CHANGES

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

CONSERVATION BOARD COPY

COM 40055

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO 34C LOCATION Gana Rescaue Signal Keller Lake LSD. 7-14 SEC. ____ TWP. ____ RGE. ____ W. ____ DATE Feb 6 1971

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____ DAYS FROM SPUD ____

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	Drill Collars No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
338	58	396	4 3/4	16	3	-	6	6 1/2		170.70				

Bits No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
3A	9 7/8	DG	2-2	EP587	15	160	58	4 3/4			1	250	40		R	N	S

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	9.1		9.1	
VISCOSITY	58		62	
GEL				

PUMP No. 1	12 mn.	2 a.m.	4 a.m.	6 a.m.
PRESSURE				
S.P.M.	40	40	40	40
LINER SIZE				

PUMP No. 2: —

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet 338 — Degrees 0

ADDITIVES: 15 lbs. Caustic GENERAL:

MOTOR HOURS 1–5 / Next Oil Change — Weather — Temp. — Water Bbls.

Drilling Line Record: Size / Make / Serial No. / No. Lines / Trips / Ton Miles / Total Miles / Slip / Feet or Cut / At Miles / Date Slip or Cut / Next Slip / Ft. Left on Spool

REMARKS	START	STOP	INTVL.
Trip In	12:00	1:00	1
Clean To Btm (6')	1:00	1:15	1/4
Survey	1:15	1:30	1/4
Drill	1:30	4:15	2 3/4
Repair Cathead Drive Chain.	4:15	6:00	1 3/4
Drill	6:00	8:00	2

FIRES ____ Eric Ivbriger? DRILLER'S SIGNATURE

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	Drill Collars No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
396	29	425	4 3/4	15M	3	1	3 / 3	6 / 4 3/4	2 1/2 / 2 3/8	81.10 / 84.47				5

Bits No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
3A	9 7/8	DG	2-2	EP587	15M	120	87	9 1/2			1	250	40	—	Circ		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT	9.6	9.6	9.6	9.6
VISCOSITY	48	49	48	41
GEL				

PUMP No. 1	8 a.m.	10 a.m.	12 noon	2 p.m.
PRESSURE	250	250	250	
S.P.M.	40	40	40	
LINER SIZE	6 3/4	6 3/4	6 3/4	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: Gel 1000 # GENERAL: ~~[illegible]~~

Weather ____ Temp. 16 below Water ____ Bbls.

Drilling Line Record Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
7/8			6	—			NEW					

REMARKS	START	STOP	INTVL.
Rig Serv	8:00	8:15	1/4
Drill	8:15	1:00	4 3/4
Circ + Mix Mud	1:00	2:30	1 1/2
Dummy Trip	2:30	3:30	1
Circ To Cond. Hole	3:30	4:00	1/2

FIRES ____ B. Hunter? DRILLER'S SIGNATURE

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	Drill Collars No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
		425		15	3	1	3 / 3	6 / 4 3/4	2 1/2 / 2 3/4	81.10 / 84.47				5

Bits: —

MUD 4 p.m. / 6 p.m. / 8 p.m. / 10 p.m. — WEIGHT, VISCOSITY, GEL: —

PUMP No. 1 / No. 2: —

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet 425 — Degrees 1/4

ADDITIVES: ____ GENERAL: Ran 13 jts 428.37 ft 7" Casing

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record: —

REMARKS	START	STOP	INTVL.
Service Rig	4:00	4:15	1/4
Circ Hole	4:15	8:15	4
Drop Survey	8:15	8:30	1/4
Trip Out	8:30	9:00	1/2
Rig Up To Run Casing	9:00	9:30	1/2
Run Casing	9:30	11:30	2
Rig Up Circ Head	11:30	12:00	1/2

FIRES ____ Paul Gray? DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals. Fuel Rec'd Today (add) ____ gals. TOTAL ____ gals. Fuel on Hand 11.59 p.m. (deduct) ____ gals. FUEL USED ____ gals.

CASING REPORT: RAN 13 JTS 7" CSG TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M./P.M. CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND ____ TRANSFER # ____

DAYS FROM SPUD: ____ TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

EQUIPMENT CHANGES ____

Approved by Operator's Representative: J.R. Knight

Approved by Toolpusher: T. Mathieson

CONSERVATION BOARD COPY

COM 40054

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO. 34C LOCATION GAR. RESERVE SIGNAL KELLER LAKE LSD P14 SEC. ___ TWP. ___ RGE. ___ W. ___ DATE FEB 5 19 71

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___ DAYS FROM SPUD ___

DATE FEB 5/71 RIG # 34C

DAYLIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
256	21	277	13	10		2	6			170.91				0

B/I/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1A	9⅞	DT	3-⅝				256	13¾							5	3	I
I	2A	9⅞	DT	3-⅝	DK32IE	18	160											
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flows ___ O. Flows ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
277	61	338	2¼	10	2	—	6	6¼ 4¾	2⅞ 2¼	—				Driver

B/I/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	2A	9⅞	DT	3 ½"	DK32IE	10	125	82	5		-	1	410	30	-	6	1	I
I	3A	9⅞	DT	3 ½"	EF59T													
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10.0	10.0	13.1		No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY	36	38	50		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flows ___ O. Flows ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___

ADDITIVES: 1 SK SAW DUST BYPASSING SHAKER 12 GEL GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
277	0	334	—	10	2		6			6" 2¼ 170.0				0

B/I/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1	9⅞	OC	3½	EAST													
I																		
T																		
S																		

MUD	4 a.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 a.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flows ___ O. Flows ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___

ADDITIVES: 12 GEL 50 CAUSTIC WATER GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspection Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT = Bailer Operated Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Form Equip. Chk'd. ___

Fuel on Hand 12:01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11:59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

SURVEYS RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ cc. PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND ___ TRANSFER # ___ DAYS FROM SPUD: ___ EQUIPMENT CHANGES ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher F. W. Atkinson

REMARKS

REMARKS	TIME START	TIME STOP	INTVL
TRIP	12⁰⁰	4³⁰	9½
KELLY FROZE IN RAT HOLE UNTHAW SAME.	4³⁰	5¹⁵	¾
DRILL	5¹⁵	6⁰⁰	¾
DRAIN & CHANGED OIL IN PUMP MOTOR	6⁰⁰	6³⁰	½
DRILL	6³⁰	7³⁰	1
WORK ON PUMP	7³⁰	8⁰⁰	½

FIRES ___ DRILLER'S SIGNATURE Eric Dubois

REMARKS	TIME START	TIME STOP	INTVL
RIG SERV	8⁰⁰	8¹⁵	¼
DRILLING	8¹⁵	10¹⁵	2
MIX LOST CIRC MATERIAL	10¹⁵	10⁴⁵	½
CHANGE OIL #1 PUMP MOTOR	10⁴⁵	11¹⁵	½
DRILLING	11¹⁵	12³⁰	1¼
MIX GEL + CIRC HOLE	12³⁰	1³⁰	1
WORK PLUGGED BIT	1³⁰	2⁰⁰	½
TRIP OUT & STRAP PIPE	2⁰⁰	3⁰⁰	1
CLEAN PLUGGED BIT & MAKE UP NEW	3⁰⁰	3³⁰	½
CLEANING MUD TANKS	3³⁰	4⁰⁰	½

FIRES ___ DRILLER'S SIGNATURE L. Hunter

REMARKS	TIME START	TIME STOP	INTVL
RIG SERVICE	4⁰⁰	4¹⁵	¼
FINISH CLEANING TANKS	4¹⁵	7¹⁵	3
WORK ON PUMPS	7¹⁵	9¹⁵	1
MIX & CONDITION MUD	9¹⁵	11⁰²	1¾
RUNNING IN WITH BIT #3A	11⁰⁰	12	1
HOLE SLUFFED IN			

FIRES ___ DRILLER'S SIGNATURE [signature]

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT. IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.

		Hrs.
Driller	Eric Dubois	12
Derrick	Albert Puchak	12
Motor	[illegible]	12
Floor	Brian Jaworski	12
Floor		
Floor		

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.

		Hrs.
Driller	Leonard Hunter	12
Derrick		
Motor	Lenny Kovin	12
Floor	[illegible]	12
Floor		
Floor		
Other		

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT

		Hrs.
Driller	[illegible]	12
Derrick	[illegible]	12
Motor	Bill Gillett	12
Floor	[illegible]	12
Floor		
Floor		

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval F. W. Atkinson

SAFETY TALKS

Given By: ___

Subject: ___

COM40053

CUSTOMER'S COPY COM40033

COMMONWEALTH DRILLING

DAILY DRILLING LOG

RIG NO. 34C LOCATION CAN. RESERVE SIGNAL HILLER LAND P14 SEC. TWP. RGE. W. DATE FEB 4/71 19 71 DATE FEB 4/71 RIG # 34C

DIRECTIONS TO WELL

MAILING POINT

SHIPPING POINT

MILES MOVED

ROAD CONDITIONS

DAYS FROM SPUD

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
72	0	72						1	5 3/4		27.57		5.35		0

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	A-1	9 7/8	OTJ	3-K	ES021													

	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				8.5
VISCOSITY				78
GEL				

MUD PUMPS: No. 1 PRES. SURE; MODEL; S.P.M.; LINER SIZE. No. 2 PRES. SURE; MODEL; S.P.M.; LINER SIZE.

MUD PROPERTIES: 12 mn. | 2 a.m. | 4 a.m. | 6 a.m.

MODE HOURS: 1 | 2 | 3 | 4 | 5 | Weather | Temp. | Next Oil Change | Water Bbls.

W.L. F.C. pH. DESILTER: Hours Ops U. Flow: C. Flow:

SURVEYS: At Feet | Degrees

ADDITIVES: 3/M GEL 2.5# CAUSTIC GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
72	59	131	2	10 000	-	-		5	6"	2 7/8	97.04				DOWN

B 4 T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1A	9 7/8	DT	3/ 7/32"	ES021	9 000	100	1-31	7			1	300	46	-	DRILLING		

	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT	9.7	9.2		
VISCOSITY	70	75		
GEL				

MUD PUMPS: No. 1 PRES. SURE 200; MODEL; S.P.M. 26; LINER SIZE 6 1/2. No. 2 PRES. SURE; MODEL; S.P.M.; LINER SIZE.

MUD PROPERTIES: 8 a.m. | 10 a.m. | 12 noon | 2 p.m.

HOLE HOURS: 1 | 2 | 3 | 4 | 5 | Weather | Temp. | Next Oil Change | Water Bbls.

W.L. F.C. pH. DESILTER: Hours Ops U. Flow: O. Flow:

SURVEYS: At Feet 100 | Degrees 1/4 0

ADDITIVES: GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
131	125	256	5 3/4	10M	1	—		6	6 1/4	2 7/8	170.70				21

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1C	9 7/8	MAT	3/ 1/2	ES021	10M	100	256	19 3/4			1	300	46				

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				9.9
VISCOSITY				47
GEL				

MUD PUMPS: No. 1 PRES. SURE; MODEL; S.P.M.; LINER SIZE. No. 2 PRES. SURE; MODEL; S.P.M.; LINER SIZE.

MUD PROPERTIES: 4 p.m. | 6 p.m. | 8 p.m. | 10 p.m.

HOLE HOURS: 1 | 2 | 3 | 4 | 5 | Weather | Temp. | Next Oil Change | Water Bbls.

W.L. F.C. pH. DESILTER: Hours Ops U. Flow: O. Flow:

SURVEYS: At Feet 210 | Degrees 1/4

ADDITIVES: ADD LAZY STREAM GENERAL: WATER 5 HRS

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	INTVL
DRAIN PUMP MOTOR + REFILL W/ FRESH OIL	12 00	12 30	1/2
CLEAN MUD TANKS	12 30	2 30	2
CONDITION MUD	2 30	5 45	3 3/4
UN PLUG BIT	5 45	6 30	7
CONDITION MUD	6 30	8 00	1 1/2
FIRES Eric Tuttle DRILLER'S SIGNATURE			
RIG SERV	8 00	8 15	1/4
CIRC + CLEAN HOLE	8 15	10 00	1 3/4
DRILLING	10 00	12 00	2
SURVEY + CONN.	12 00	12 30	1/2
WORK PLUGED BIT	12 30	1 30	1
PULL OUT & CLEAN BIT	1 30	2 30	1
WORK ON AIR LINES	2 30	3 00	1/2
RUN IN	3 00	3 30	1/2
CIRC. & CLEAN TO BOTTOM 30'	3 30	4 00	1/2
FIRES D Hunter DRILLER'S SIGNATURE			
RIG SERVICE	4 00	4 15	1/4
DRILLING	4 15	5 15	1
CIRC & CLEAN HOLE	5 15	6 00	3/4
DRILLING	6 00	7 30	1 1/2
~~CIRC~~ WORK ON PUMP REPAIR + FILL	7 30	8 00	1/2
CIRC & SURVEY	8 00	8 30	1/2
DRILLING	8 30	11 15	2 3/4
REPAIR PUMP DRAIN GREENE	11 15	11 30	1/4
DRILLING 9 7/8 HOLE	11 30	12 00	1/2
FIRES P Hall DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT = Boiler Operated Hrs.

Crown-o-matic Chk'd | Rig Savers Chk'd | Kelly Cock Chk'd | Firm Equip. Chk'd

Fuel on Hand 12:01 a.m. gals.
Fuel Rec'd Today (ortn) gals.
TOTAL gals.
Fuel on Hand 11:59 p.m. (endtot) gals.
FUEL USED gals.

RECEIVED FROM HAN JTS GC
TO KB. USED SAX CEM
PLUS PLUG DOWN A.M. P.M.
DAYS FROM SPUD
EQUIPMENT CHANGES
CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND TRANSFER =

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative J R Knight

Approved by Toolpusher F Robertson

EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT. IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. Hrs.

Driller Eric Tuttle 12
Derrick Albert Pustek 12
Motor Lenard Linton 12
Floor Brad Granke 12
Floor
Floor

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. Hrs.

Driller Leonard Hunter 12
Derrick Todd Barnard 12
Motor Larry Kerr 12
Floor Andy Barstad 16
Floor
Floor
Other

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT Hrs.

Driller Paul Lacy 12
Derrick Frank Bailey 12
Motor Bill Bryant 12
Floor
Floor
Floor

INJURIES - COMPLETE BELOW

Position	Name	Signature	Hrs.

Toolpushers Approval F Robertson

SAFETY TALKS

Given By:

Subject:

COM 40052

CUSTOMER'S COPY COM 40052

COMMONWEALTH DRILLING

DAILY DRILLING LOG

DIRECTIONS TO

WELL

RIG NO 34C LOCATION CAN RESERVE SIGNAL KELLER LAKE RD #14 SEC TWP RGE W. DATE 3 FEB 19 71

MAILING POINT SHIPPING POINT MILES MOVED ROAD CONDITIONS DAYS FROM SPUD

COMPANY

DATE 3 FEB 1971 RIG 34C

DAILY DRILLING REPORT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				
W.L. F.C. pH.				
ADDITIVES:				

PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRES. SURF.				
No. 1 MODEL S.P.M.				
No. 1 LINER SIZE				
No. 2 PRES. SURF.				
No. 2 MODEL S.P.M.				
No. 2 LINER SIZE				

DESILTER: Hours Opr. U. Flow: O. Flow:

GENERAL:

MOTOR HOURS

	Next Oil Change
1	
2	
3	
4	
5	

SURVEYS: At Feet / Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1A	9 7/8	OTT	3 1/2		25021													

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				
W.L. F.C. pH.				
ADDITIVES:				

PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRES. SURF.				
No. 1 MODEL S.P.M.				
No. 1 LINER SIZE				
No. 2 PRES. SURF.				
No. 2 MODEL S.P.M.				
No. 2 LINER SIZE				

DESILTER: Hours Opr. U. Flow: O. Flow:

GENERAL:

MOTOR HOURS

	Next Oil Change
1	
2	
3	
4	
5	

SURVEYS: At Feet / Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
0	72	72	5	2				1	5 7/8	3	275	Swivel			0

BITS	No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1A	9 7/8	OTS	3 1/2		ES021	1M	90	72	5			1	200					

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT			8.8	9.2
VISCOSITY			33	
GEL				
W.L. F.C. pH.				
ADDITIVES: KCL & GEL				

PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRES. SURF.			200	
No. 1 MODEL S.P.M.			30	
No. 1 LINER SIZE			6 1/2	
No. 2 PRES. SURF.				
No. 2 MODEL S.P.M.				
No. 2 LINER SIZE				

DESILTER: Hours Opr. U. Flow: O. Flow:

GENERAL: HOLE CAVING IN SHAKER NOT OPERATING LOOSE SHEAVE

MOTOR HOURS

	Next Oil Change
1	
2	
3	
4	
5	

SURVEYS: At Feet / Degrees

Weather ~40° Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT = Bailer Operated Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12:01 a.m.	gals.
Fuel Recd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

PAN DTS CSG

TO KB. USED SAX CEM

PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS - (YES/NO)

RENTAL EQUIPMENT ON HAND TRANSFER =

DAYS FROM SPUD:

EQUIPMENT CHANGES

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

REMARKS

	TIME START	TIME STOP	HRS.
Dig Rat Hole	12 00	8 00	8
Lay down Rat Hole Digging Equip.	8 00	9 00	1
Rig up Pump + Mud Mixer	9 00	1 30	4 1/2
Mix Gel to Spud	1 30	3 00	2 1/2
Rig to Spud	3 00	4 00	1
Spud DT 4 00 Pm			
Drilling 9 7/8 Hole	4 00	9 00	5
Drilling in sand cannot make			
connection hole caved in	9 00	11 00	2 00
Flush Kelly & clean Tanks	11 00	12 00	1

FIRES

DRILLER'S SIGNATURE

FIRES

DRILLER'S SIGNATURE

EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT. IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.

		Hrs.
Driller	Eric Luber	12
Derrick	Albert Pustaki	12
Motor	Full D.C.	12
Floor	Bob Sparks	12
Floor		
Floor		

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.

		Hrs.
Driller	Leonard Hunter	12
Derrick	Frank Gannon	12
Motor	Tony Klein	12
Floor	Irving Hunter	12
Floor		
Floor		
Other		

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT

		Hrs.
Driller	Hank Fox	12
Derrick	Earl Olson	12
Motor	Bill Bebout	12
Floor	Ken Green	12
Floor		
Floor		

INJURIES - COMPLETE BELOW

Position	Signature	Hrs.

Toolpushers Approval T. Watterson

SAFETY TALKS

Given By

Subject:

CUSTOMER'S COPY

COM40051

COM40051