Drilling Authority No. 589

Date Issued 21-03-72

WELL NAME CanDel et al SOBC Mountain R. A-23

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

LOCATION: Unit A Section 23 Grid 65-50-129-15

Latitude 65-42-14 Longitude 129-19-12

U.W.L.R. 65.70389 -- 129.32000

U.W.I. 300A236550129150

Rig Release Date: 26-04-72

Status D + A

Information Release Date 26-04-74

CHANGE OF NAME:

DATE RECEIVED		INDEX
23-03-72		Application for a Drilling Authority.
26-06-72	DK	Well Completion Data.
26-06-72	DK	Well History Report.
		Application to Amend a Drilling Authority.
		Application to change a Well Name.
		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.....

IAND 52-90 (3-69)

DATE RECEIVED

LOGS:

Name	Run No.	Type	Interval

ANALYSES:

Sample	Lab. No.	Formation	Interval

A.O.F. Potential	Formation	Interval	MC.F.D.	Test Date

DRILL STEM TESTS:

No.	Formation	Interval

DEPARTMENT OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT
MINISTÈRE DES AFFAIRES INDIENNES ET DU NORD CANADIEN

OIL & MINERAL DIVISION
DIVISION DU PÉTROLE ET DES MINÉRAUX

WELL COMPLETION DATA
RENSEIGNEMENTS SUR LES FORAGES

Drilling Authority No. 589
N° de l'autorisation de forage

Date Issued March 21, 1972
Date de délivrance

To be submitted in duplicate within thirty days after the completion, rework, abandonment, recompletion or suspension of every well.
À présenter en double dans les trente jours suivant l'achèvement, le remaniement, l'abandon et le reconditionnement de chaque puits, ou après suspension.

Well Name & No. – *Nom et n° du puits*	Permit No. – *N° de permis*	Lease No. – *N° de concession*
CanDel etal SOBC Mountain R A-23	3291	

(Permittee, License, Lessee) – *(Détenteur de permis ou de licence, du concessionnaire)*	Exploratory Licence No. – *N° de licence de sondage*
Standard Oil Company of British Columbia Limited	1914 (71-72) 1501 (72-73)
(Operator) – *(Exécutant)*	**Exploratory Licence No. – *N° de licence de sondage***
CanDel Oil Ltd.	1938 (71-72) 1534 (72-73)

LOCATION – *EMPLACEMENT*

Unit – *Unité*	Section	Grid – *Étendue quadrillée*	Latitude	Longitude
A	23	65-50-129-15	65° 42' 14"	129° 19' 12"

Unique Well Identifier – *Code d'ordinateur*	Universal Well Location Reference – *Références universelles d'emplacement du puits*	
300A236550129150	65.70389°	129.32000°

	Date	Depth – *Profondeur*
Spudded *Début des travaux*	Mch. 25/72 4 p.m.	
Suspended *Suspension des travaux*	–	
Resumed Operations *Reprise des travaux*	–	
Finished Drilling *Forage terminé*	Apr. 21/72	5097' Driller 5098' Logger
Deepened *Approfondissement*	–	
Complete (Gas/Oil) *Achèvement (Gaz/Pétrole)*	–	
Abandoned *Abandon*	Apr. 26/72	
Rig Released *Fin des travaux*	Apr. 26/72 9:30 a.m.	

Pool(s) *Gisement(s)* –

Interval(s) Open to Production *Intervalle(s) de production* –

Elevation: Gr. *Altitude du sol* 362' K.B. *du carré d'entraînement* 379'

Rig No. *N° de la tour de forage* 7

Drilling Contractor *Entrepreneur en forage* Kenting Petrolia Drilling Ltd.

Contractor's Business Licence No. *N° du permis de l'entrepreneur* 0165

CASING RECORD – *TUBAGE*

Casing Size (Inches) *Diamètre (en pouces)*	Grade *Qualité*	Weight *Poids*	Amount *Longeur*	Set at – *Fixation à*	Sacks of Cement and Additives *Sacs de ciment et d'additifs*
1. 16" Conductor Pipe	Shop Fabricated		Cemented full Length		
2. 8-5/8"	55	24#	517'	511' K.B.	320 sx. oilwell
3.					cement + 2% $CaCl_2$
4.					
5.					
6.					

Geological Tops *Sommet des formations*	Elevation – *Profondeur* Depths *Sous le niveau du sol*	Sub-Sea *Sous le niveau de la mer*
Drift	Surface	
Cretaceous	80	+ 299
Devonian Imperial	1314	- 935
Canol	2146	- 1767
Kee Scarp	2210	- 1831
Hare Indian	2332	- 1953
Hume	3022	- 2643
Gossage/Bear Rock		
Limestone	3352	- 2973
Dolomite	4023	- 3644
Sil/Ord. Ronning	4448	- 4069
T.D. Schlumberger	5098	- 4719
T.D. Driller	5097	- 4718

Core Record – *Carottes*

From – *de*	To – *à*	Rec. *Récupérés*	From – *de*	To – *à*	Rec. *Récup.*
Nil					

Log Record – *Diagrammes*

Run *Série*	Type of Log *Genre de diagramme*	From – *De*	To – *À*
	Schlumberger:		
1	Dual Induction Laterolog	5094'	513'
1	B.H.C. Sonic Log	5096'	514'
1	Sidewall Neutron Porosity	5094'	514'
1	Formation Density Log	5093	514'

CEMENTING RECORD (Plug, Squeeze, etc.) *CIMENTATION (Bouchon, sous pression, etc.)*				PERFORATING RECORD (Shot, Jet) *PERFORATION (Tir, à jet)*				SERVICING RECORD (Acidizing, Fracing, etc.) *ENTRETIEN (acidification, fracturation, etc.)*			
Date	From – *de*	To – *à*	Remarks – *Remarques*	Date	From – *de*	To – *à*	Remarks – *Remarques*	Date	From – *de*	To – *à*	Remarks – *Remarques*
Apr. 24	5097'	5000'	34 sx. Plug down 10:00 PM.								
Apr. 24	4500	4400	50 sx. + 2% $CaCl_2$. P.D. 11:00 p.m. Felt @ 4390'								
Apr. 25	3400	3300	38 sx. + 3% $CaCl_2$. P.D. 7:45 p.m. Felt @ 3306'								
Apr. 25	2300	2100	95 sx. + 3% $CaCl_2$. P.D. 4:14 p.m. Felt @ 2075'								
Apr. 26	563	463	82 sx. + 3% $CaCl_2$. P.D. 12:40 a.m. Felt @ 450'								

Cut casing 5' below ground level. Cemented w/5 sx. on top. Welded on steel plate, post & sign.

JUN 2 1972

DRILL STEM TESTS – *ESSAIS AUX TIGES*

No. – *N°*	Date	Formation	From – *de*	To – *à*	V.O. Mins. *Vanne ouverte (minutes)*	I.S.I. Mins. *Première obturation (minutes)*	F.S.I. Mins. *Obturation définitive (minutes)*	I.S.I.B.H.P. *Pression de fond à la 1re obturation*	F.S.I.B.H.P. *Pression de fond à l'obturation définitive*	I.F.B.H.P. *Pression de fond au jaillissement*	F.F.B.H.P. *Pression de fond à l'écoulement définitif*	L.H.P. *Pression hydrostatique de début*	F.H.P. *Pression hydrostatique définitif*	Remarks – *Remarques*
1	Apr. 23	Ord/Sil Ronning	4463	4766	60	30	90	1967	1967	1068	1967	1971	1971	Rec. 600' mud 400' muddy salt water 3250' sulf. salt water
2	Apr. 24	Dev. Bear Rock	4165	4262	60	30	90	1843	1843	1207	1836	1843	1839	Rec. 1000' muddy salt water 2850' salt water

ANALYSIS – *ANALYSE*

Lab. No. *N° de laboratoire*	Sample *Échantillon*	From – *de*	To – *à*	Source	Remarks – *Remarques*
933-2519	Salt water	4463	4766	DST. #1 (top of tool)	Water Analysis
933-2519	Salt water	4165	4262	DST. #2 (top of tool)	Water Analysis
933-2519	Water	-	-	Lake Water	Water Analysis
933-2519	Water	-	-	Mud System	Water Analysis

PRESENT STATUS OF WELL
ÉTAT ACTUEL DU PUITS

Oil *Pétrole* ..... (Interval)*(Intervalle)*

Gas *Gaz* ..... (Interval)*(Intervalle)*

Dry *Sec* ..... Dry and Abandoned

Susp. *Travaux sus.* .....

Company *Société* ..... CanDel Oil Ltd.

Signed by *Signé par* .....

Title *Titre* ..... Vice President, Production

Date ..... May 29, 1972

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

Présenter les formules remplies à l'ingénieur en conservation du district.

Drilling Authority No. ....589.....
Project No. .....

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

OIL & GAS OPERATIONS UNIT
Oil and Mineral Division
MAR 23 1972
OTTAWA, CANADA
Dept. of Indian Affairs & Northern Development

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 .....CanDel etal SOBC Mountain R A-23.....

Location: Unit .....A..... Section .....23..... Grid .65-50-129-15.....
Latitude...65°...42'...14"..... Longitude ...129°...19'...12".....
Unique Well Identifier....300A236550129150.....
Universal Well Location Reference...65.70389°...129.32000°.....
shot pt. 164

Elevation: Ground .362'...Line 26X.....K.B. .375' Est.....feet above sea-level.
Well is expected to produce from ..Devonian, Sil-Ord.....formation at a depth of about.....feet. Expected total final depth ...5000.....
Area assigned to well .....
(for District Conservation Engineer's use only)

.....

Permit No. ....3291..... Lease No.....Acreage ...52,644.....
Permittee, licensee, or lessee ...Standard Oil Company of British Columbia, Limited.....
Explanatory Licence No. .....1914 (71-72)...1501 (72-73)
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. 16"	Conductor	New-Shop fabricated		40'	Full Length
2. 8 5/8"	24#	K-55	New	500'	Full Length
3. Other casing - 1F needed - will be negotiated					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment.Devonian, Sil-Ord.....
....BOP Stack & Drilling Fluid.....
.....
.....

Well will be drilled with Rotary Rig No. ....7..... by ..Petrolia Oilwell Drilling Ltd.....
(Drilling Contractor or company)

.....

Responsible agent of applicant:— Contractor's Business Licence No....0165.....
At well...D.R. Nelson..... At registered office....R.K. Terrell.....
Address ..Mackenzie Mountain Lodge, NORMAN WELLS... Address ..330 - 5th Avenue S.W., CALGARY 1.
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at ....Calgary....., this ....13th... day of ....March.....1972.
Signed by [signature]..... Company ..CanDel Oil Ltd.....
Title Exploration Manager..... Operator's Licence No....1938 (71-72)...1534 (72-73)

(For Oil and Mineral Division use only)

APPROVED

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

.....
.....Please see attached sheet for Conditions of Approval.....
.....
Dated...March 21.....19.72... [signature]
District Conservation Engineer

Forms to be submitted to District Conservation Engineer,
Department of Indian Affairs and Northern Development.

IAND 52-90-1 (7-71)

Voir au verso

CONDITIONS OF APPROVAL FOR DRILLING AUTHORITY NO. 589
FOR CanDel etal SOBC Mountain R A-23

1. Copies of this Drilling Authority shall be exhibited at the Drilling Rig in both the Doghouse and the Drilling Foreman's Office between spud and rig release dates.

2. The Company will submit to this office, on Tuesday of each week/daily, the latest 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. Any additional strings of casing must be approved by the District Conservation Engineer prior to running.

M. D. Thomas
District Conservation Engineer
Districts 2 and 3

March 21, 1972

Drilling Authority No. 589

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well [redacted]

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

Name and number of well: CanDel et al SOBC Mountain R A-23

Location: Unit: A Section: 23 Grid: 65-50-129-15

Latitude: 65° 42' 14" Longitude: 129° 19' 12"

From Established Reference Marker

Universal Well Location Reference: 65.70389° 129.32000°

Permit No. 3291 Lease No.

Standard Oil Company of British Columbia
(Permittee, Licencee, Lessee)

Date of commencement of proposed program: April 22, 1972

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at: Nil

Gas at: Nil

Water at: 4165-4262' (Bear Rock) 4463-4766 (Ronning)

Total Depth: 5097' Date of last operations: April 26, 1972

Present condition of well: Abandoned

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 16" Conductor Pipe	Shop Fabricated	36'	40		nil
2. 8-5/8"	24# J-55	517'	511'	320 sacks Oilwell Cement + 2% $CaCl_2$	nil
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	5097-5000'	Ronning	34	
2	4500-4400'	Bear Rock-Ronning	50 + 2% $CaCl_2$	Felt top @ 4390'
3	3400-3300'	Hume-Bear Rock	38 + 3% $CaCl_2$	Felt top @ 3306'
4	2300-2100	Imperial-Canol-KeeScarp	95 + 3% $CaCl_2$	Felt top @ 2075'
5	563-463	Cretaceous	82 + 3% $CaCl_2$	Felt top @ 450'
		Cut casing 5' below ground level - cemented with 5 sacks.		
		Welded plate on top. Installed post and sign.		

The following logs have been run: Dual Induction Laterolog, BHC Sonic, SNP - Density

Other operations proposed

Operations to be carried out by: Kenting Petrolia Drilling Contractor Licence No. 0165

Address: 700 6th Ave. S. W., Calgary, Alberta Address

Responsible Agent in field: D. R. Nelson

Dated at: Calgary, Alberta, this 10th Day of August 19 72

Signed by: [signature] Company: CanDel Oil Ltd.

Title: Drilling Manager Operator's Exploratory Licence No. 1938

Note:—The District 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 ON 24 APRIL 1972.

Dated August 16, 19 72

[signature]
District Conservation Engineer

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

IAND 52-90-5 (7-71)

Voir au verso.

GEOLOGICAL PROGNOSIS

Well Name: CanDel etal SOBC Mountain R A-23

Location: A-23-65-50-129-15

Elevation: Ground 362' (shot point 164, Line 26X)

K.B. Est. 375'

Operator: CanDel Oil Ltd.

Contractor: Petrolia Oilwell Drilling Ltd., Rig #7

Markers:

Formation	Drilling Depth	Sub-Sea Depth
Cretaceous	?	
Devonian Imperial	near surface	
Canol	2165	-1790
Kee Scarp	2290	-1915
Hare Indian	2340	-1965
Hume	3105	-2730
Gossage - Bear Rock	4195	-3820
Sil-Ordovician		
Ronning	5015	-4640
Total Depth	5115	-4740

Note: Some anhydrite may be present in the Bear Rock section.

Samples: One bag of washed samples will be taken at 10 foot intervals from surface to total depth.

Testing: All tests at discretion of wellsite geologist.

Coring: If water free hydrocarbons are recovered on a test, a core should be cut and further tests run if warranted.

..... 2

Logging:

Dual Ind. Laterolog	2" T.D. to surface casing 5" T.D. to surface casing
BHC Sonic Gamma w/Caliper	2" T.D. to surface casing 5" T.D. to surface casing
Formation Density	2" T.D. to surface casing 5" T.D. to surface casing
Sidewall Neutron Porosity	2" T.D. to surface casing 5" T.D. to surface casing

Measurements:

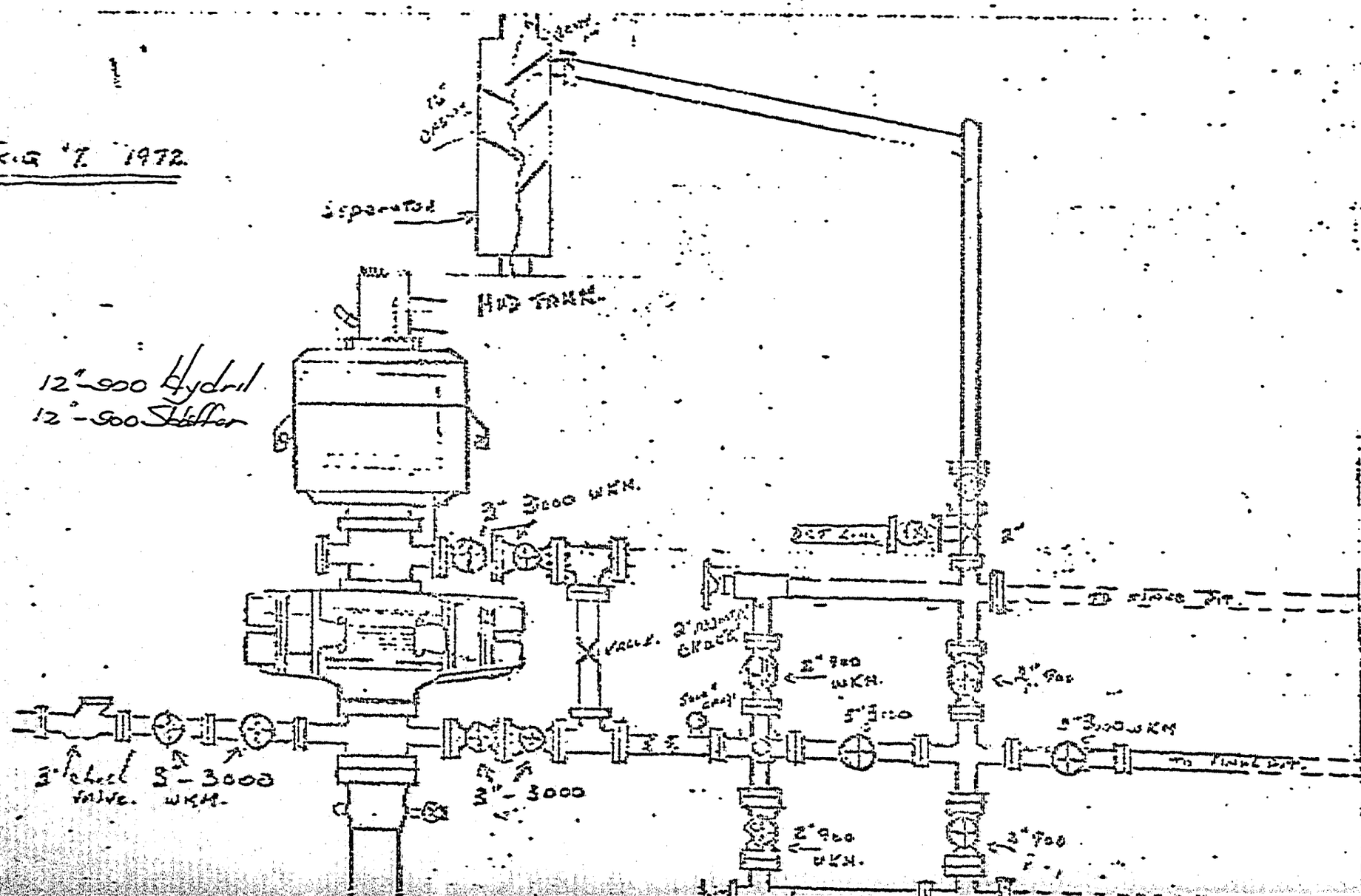
Pipe must be tallied on all trips out for coring, testing, logging or as requested by the wellsite geologist or engineer in charge.

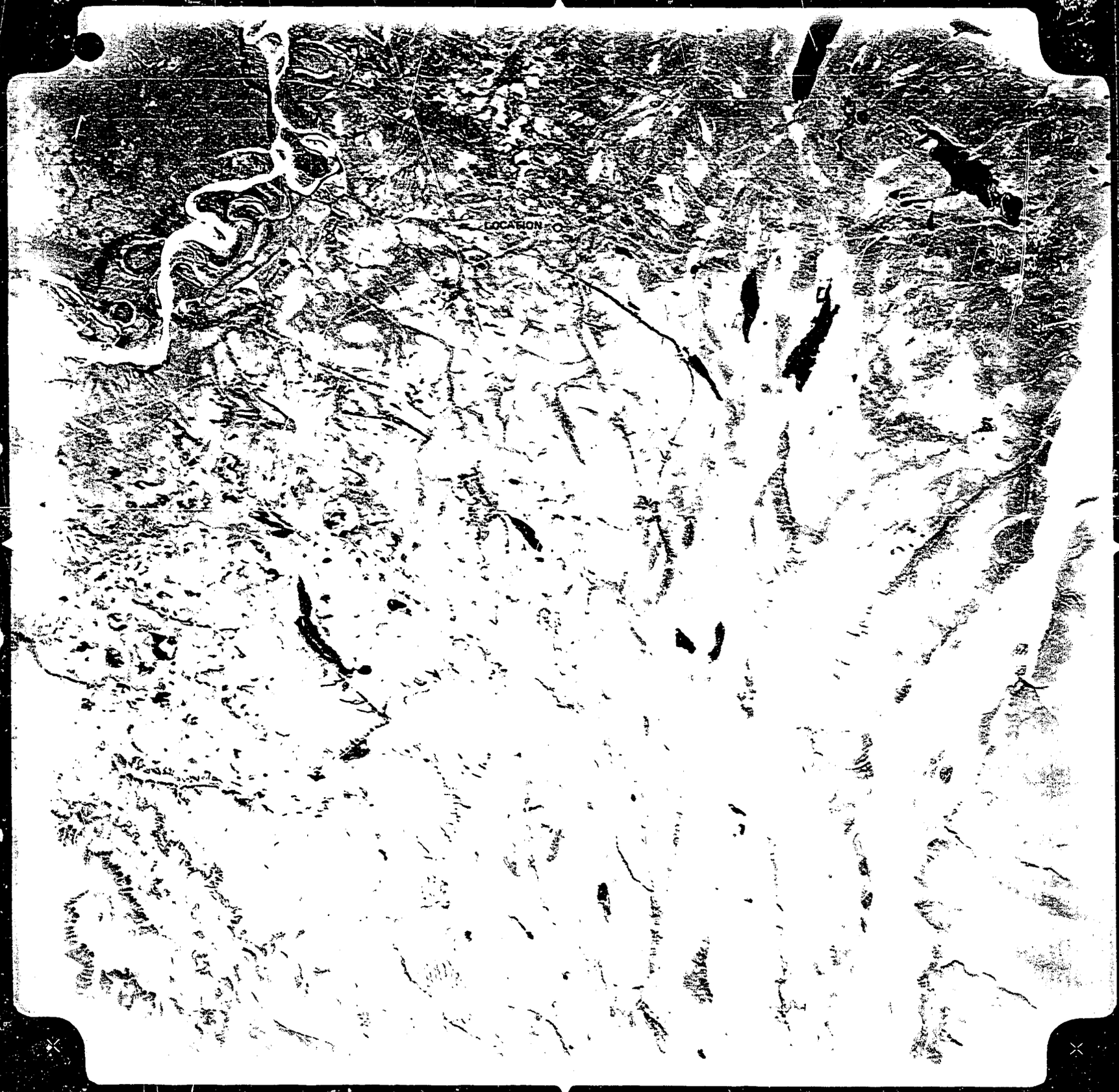
CanDel Oil Ltd.,
28th Floor, Calgary Place No. 1,
330 - 5th Avenue S.W.,
CALGARY 1, Alberta Telephone: 265-3430

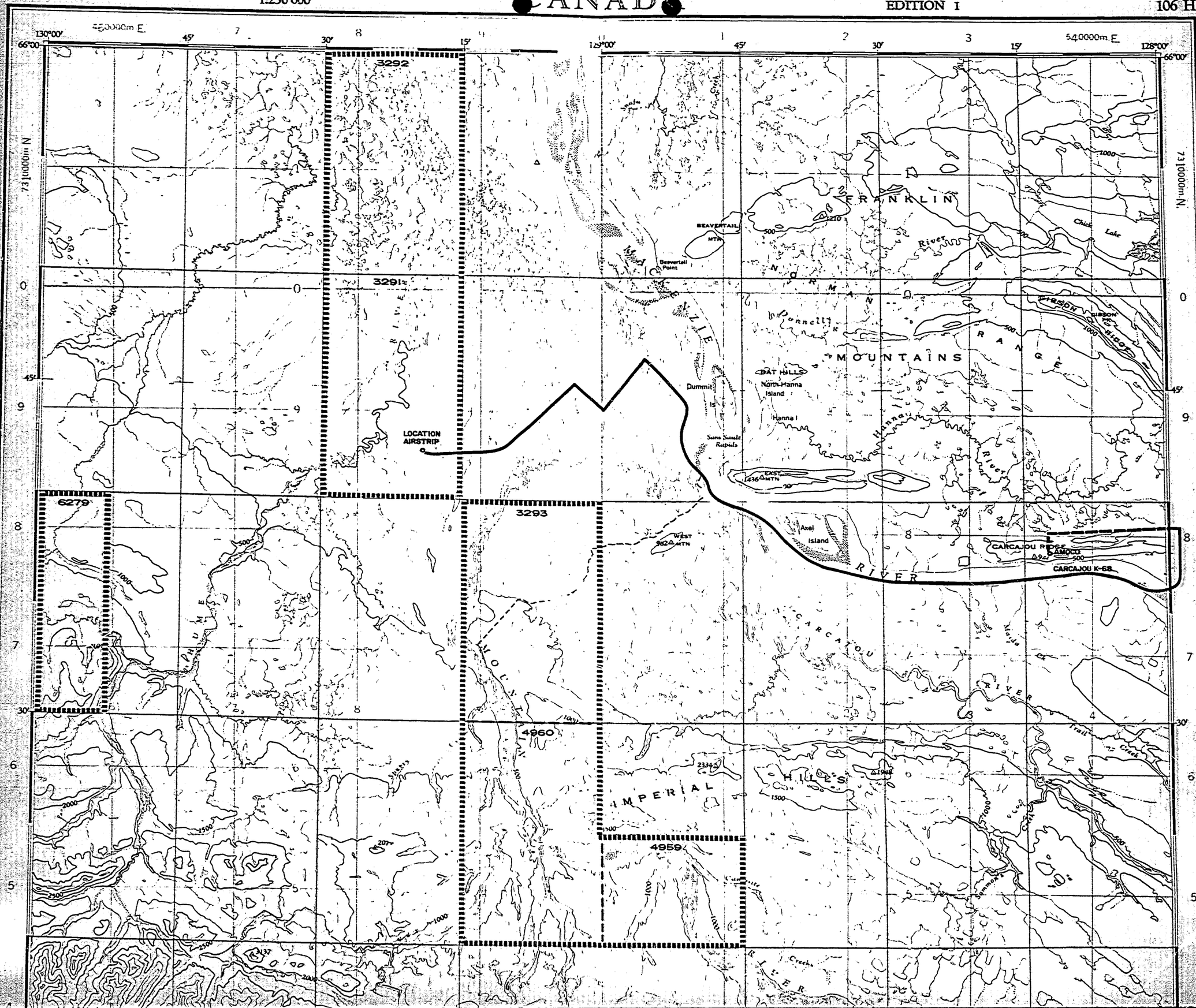
K.E. Basaraba	Home Phone	282-4698
D.M. Ericson	" "	252-3277
R.K. Terrell	" "	289-7652

****

K.G. 7 1972



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3292
3291
6279
3293
4960
4959
LOCATION AIRSTRIP
FRANKLIN
MOUNTAINS
NORMAN
RANGE
BEAVERTAIL MTN
Beavertail Point
Bonnell Lake
BAT HILLS
Norm-Hanna Island
Hanna I
Dummit Is
Sans Sasale Rapids
EAST MTN
WEST MTN
Axel Island
CARCAJOU RIVER
CARCAJOU RIDGE
SAMOCO
CARCAJOU K-68
IMPERIAL
HILLS
Chick Lake
Gibson Ridge
Hanna River
Marjo Creek
Trail Creek
Sammokes Creek
Clear Creek
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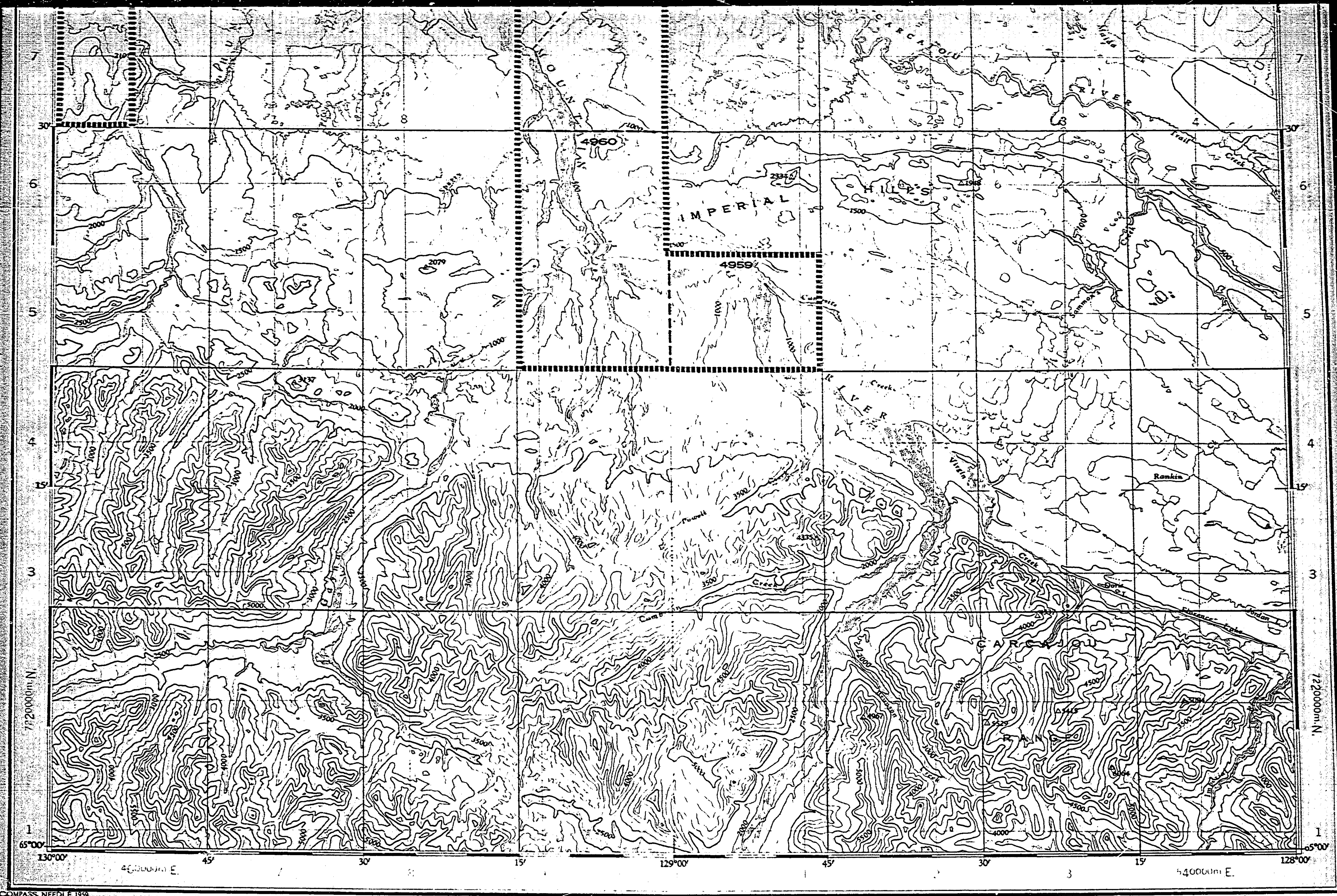

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Copies may be obtained from the Map Distribution Office, Department of Mines and Technical Surveys, Ottawa.

Road, all weather	Chemin, toute saison	═
Wagon or winter road	Chemin de terre ou d'hiver	— —
Trail or portage	Sentier ou portage	- - -
Town	Ville	☐
Village or settlement	Village ou hameau	○
Post office	Bureau de poste	P
Horizontal control point	Point géodésique	△
Boundary monument	Borne frontière	▫

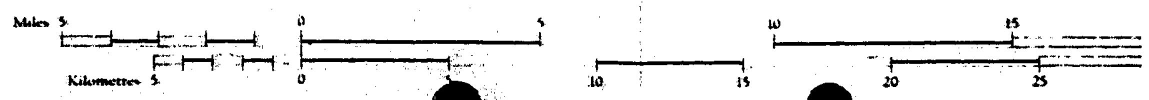
2 of 2

SANS SAULT RAPIDS

NORTHWEST TERRITORIES

DISTRICT OF MACKENZIE

Scale 1:250,000 Échelle



Transverse Mercator Projection
North American Datum 1927
Contour Interval 500 feet
Elevations in feet above Mean Sea Level

Projection Transverse de Mercator
Réseau géodésique nord-américain unifié 1927
Équidistance des courbes: 500 pieds
Élévations en pieds au-dessus du niveau moyen de la m

Établie et imprimée par la DIRECTION DES

CANDEL OIL LTD.

MOUNTAIN RIVER AREA

PROPOSED WELLSITE ACCESS ROAD

━━━━ Proposed Wellsite Access Road

WELL HISTORY REPORT

CANDEL etal SOBC MOUNTAIN H A-23

THIS IS A CONCISE REPORT OF THE

OPERATIONS CONDUCTED AT THE WELL

"CANDEL ETAL SOBC MOUNTAIN R A-23"

Data in this report was compiled
for CanDel Oil Ltd. by P. L. Brown,
Geological Consultant at the well

K. E. Basaraba,
CANDEL OIL LTD.

May 29, 1972

WELL HISTORY REPORT

CANDEL etal SOBC MOUNTAIN R A-23

CONTENTS

Back Folder Contents:

Electrical Surveys
Litholog
Drilling Time Logs
(a) 2" - 100' from 500' to 2,000'
(b) 5" - 100' from 2,000' to 5,097'
Drilling Progress Graph.

SECTION I – SUMMARY OF WELL DATA:

(a) Name and Number of Well: CanDel etal SOBC Mountain R A-23

(b) Permitee, Licensee, or Lessee: Standard Oil Company of British Columbia, Limited

(c) Operator: CanDel Oil Ltd.
330 – 5th Avenue S. W., Calgary, Alberta

(d) Location: Grid System: A-23-65-50-129-15
Latitude 65°-42'-14"N. Longitude 129°-19'-12"W.
Universal Well Location Reference: 65.70389° 129.32000°
Unique Well Identifier: 300A236550129150

(e) Co-ordinates: Shot Pt. 164, Line 26X

(f) Permit Number: 3291

(g) Drilling Contractor: Petrolia Oilwell Drilling Ltd.
Rig No. 7, Rotary Unit 40

(h) Drilling Authority: Number: 589
Date: March 21, 1972

(i) Classification: Wildcat

(j) Elevations: Ground: 362'; K.B. 379'

(k) Spudded: 4:00 P.M. March 25, 1972

(l) Completed Drilling: 9:45 A.M. April 21, 1972

(m) Total Depth: 5,097' Driller; 5,098' Schlumberger

(n) Well Status: Plugged and Abandoned

(o) Rig Release Date: 9:30 A.M. April 26, 1972

(p) Hole Sizes to Total Depth:

Surface: 0-40' Rathole
40' - 510' Pilot Hole 7 7/8"
40' - 511' Surface 12 1/4"

Main Hole: 511' - 5,097' - 7 7/8"

(q) Casing: Surface: Ran 13 jts., 8 5/8", 24#, 55 New Casing (517'), Landed at 511' K.B. Cemented w/320 sxs Oilwell Cement plus 2% $CaCl_2$. 3 Bbls Returns. Plug Down 1:30 A.M. March 28, 1972.

SECTION II - GEOLOGICAL SUMMARY

(a) Formation Tops

Formation Name	Sample Top	Subsea	E-Log Top	Subsea
Base Glacial Drift	80	+299	-	-
Cretaceous	80	+299	(80)	(+299)
Devonian Imperial	-	-	1314	-935
Canol	2150	-1771	2146	-1767
Kee Scarp	2272	-1893	2210	-1831
Hare Indian	2362	-1983	2332	-1953
Hume	3020	-2641	3022	-2643
Gossage Bear Rock Limestone	-	-	3352	-2973
Gossage Bear Rock Dolomite	4020	-3641	4023	-3644
Sil-Ord Ronning	4450	-4071	4448	-4069
Total Depth - Driller	5097	-4718	5097	-4718

(b) Cored Intervals: No Cores Cut

(c) Paleontological Determinations: No break down made.

(d) Sample Description:

Samples were caught at 10 foot intervals from 50' to Total Depth.

Samples were lagged from 1,500 feet to Total Depth.

SAMPLE DESCRIPTION:

0 - 50	No Samples.
50 - 70	Sand Grains, unconsolidated, very fine grained, clear and frosted quartz; much light grey clay.
70 - 80	Kaolin, light grey and sand grains as above.
80 - 90	Shale, dark grey, silty, blocky, slightly micaceous, trace black bitumin specks.
90 - 110	Shale, dark grey, very finely silty & sandy, rare bitumen & pyrite.
110 - 170	Shale, dark grey, silty to very finely sandy, blocky; much pyrite, becomes lighter colored towards base.
170 - 180	Shale, medium grey, silty, blocky.
180 - 200	As above, less silty; some platy; trace brown very argillaceous siltstone.
200 - 210	Shale, medium-dark grey, slightly silty, blocky, hard.
210 - 220	Shale, dark grey, very slightly micaceous, blocky.
220 - 230	Shale, dark grey, blocky, very silty.
230 - 260	Shale, medium-dark grey, silty, blocky.
260 - 290	Shale, dark grey, blocky; pyrite at top.
290 - 300	Shale, medium-dark grey, blocky; with some buff grey silt bands.
300 - 320	Shale, medium-dark grey, blocky, slightly micaceous.
320 - 330	Shale, dark grey, blocky; trace ironstone.
330 - 360	Shale, medium-dark grey, platy and blocky; rare pyrite and inoceramus. (?)
360 - 380	Shale and Siltstone, medium-dark grey, very glauconitic, large blebs of glauconite, pyrite.
380 - 410	Shale, dark grey, blocky, much glauconite, very slightly calcareous; rare pyrite.
410 - 430	Shale, dark grey, blocky; much pyrite; trace calcite.
430 - 440	Shale, dark grey, blocky; some glauconite and pyrite.
440 - 460	Shale, dark grey, blocky; trace dark brown ironstone, glauconite, in part silty.
460 - 490	Shale, dark grey, slightly micaceous, platey and blocky; rare pyrite.
490 - 510	Shale, medium-dark grey, blocky; trace sideritic shale.
510 - 560	Shale, medium-dark grey, platy and blocky.
560 - 580	Shale, medium-dark grey, slightly micaceous, platy & blocky; some pyrite.
580 - 620	Shale as above; with some red sideritic shale and pyrite.
620 - 650	Shale, medium grey, blocky.
650 - 660	Shale, medium-dark grey, silty, very slightly glauconitic, blocky.
660 - 680	Shale, medium-dark grey, blocky.
680 - 700	Siltstone, medium grey, very slightly calcareous and glauconitic; with shale as above.
700 - 750	Shale, medium grey, silty, blocky.
750 - 770	Shale as above; trace brown ironstone; with red-brown, brown and purple sideritic shale and pyrite in lower half.
770 - 800	Shale, medium grey, slightly micaceous, blocky.
800 - 820	Shale, medium grey, very slightly silty & calcareous, blocky; rare pyrite.
820 - 840	Siltstone, dark grey, very argillaceous, slightly calcareous.
840 - 850	Shale, medium grey, silty, blocky.
850 - 860	Shale, dark grey, some loose sand grains (caved?), blocky; some pyrite.
860 - 900	Shale, medium-dark grey, slightly micaceous; thin lime streak at top, blocky.
900 - 920	Shale, dark grey, blocky; some fine-very fine loose sand grains.
920 - 950	Shale, medium grey, platy and blocky; some ironstone.
950 - 990	Shale, medium-dark grey, blocky; some ironstone.
990 - 1010	Shale, medium-dark grey, platy and blocky; some ironstone.
1010 - 1020	Shale, medium-dark grey, mainly platy; rare fossils - belemnites.
1020 - 1030	Shale as above; some red and brown platy sideritic shale.

Sample Description Continued:

1030 - 1070 Shale, medium grey, platey and blocky; trace calcite fragments at base; medium grey color in shales now has a slight green tone down to the Canol Formation).

1070 - 1100 Shale, medium to dark grey, platey and blocky, some calcite, pyrite and ironstone in top 10 feet.

1100 - 1110 Shale, medium-dark grey; trace red shale; some ironstone.

1110 - 1140 Shale, dark grey, blocky; some pyrite at top.

1140 - 1150 Shale, dark grey - black, in part sub-bituminous, blocky and as above.

1150 - 1190 Shale, dark grey to black, blocky, slightly micaceous; some pyrite at top.

1190 - 1200 Shale as above; some pyrite - belemnite.

1200 - 1210 Shale, medium dark grey, blocky; some pyrite, slickensides.

1210 - 1220 Shale as above; some platy and slightly micaceous; rare pyrite. Shales cracked when heated (? gas show).

1220 - 1240 Shale, medium grey, slightly micaceous, blocky and platy; some brown sideritic shale at base.

1240 - 1250 Shale, dark grey, flakey, slightly micaceous, rare pyrite.

1250 - 1300 Shale, medium grey, blocky; trace siderite at base.

1300 - 1320 Shale as above; some siderite and pyrite; trace of slickensides.

1320 - 1340 Shale, medium-dark grey, platy and blocky; some pyrite.

1340 - 1350 Shale, medium grey, silty to very finely sandy beds; some pyrite.

1350 - 1360 Shale, medium-dark grey, platey, soft, much pyrite.

1360 - 1410 Shale, medium-dark grey, slightly micaceous and silty, blocky, some pyrite; trace glauconite 1400.

1410 - 1460 Shale, dark grey to black, slightly silty and micaceous, scattered pyrite (most at 1430).

1460 - 1470 Sandstone, grey, salt and pepper, in part slightly calcareous and micaceous, very fine grained, well sorted; some coarse calcite rhombs.

1470 - 1480 Sandstone, dirty grey, argillaceous, very slightly calcareous, very fine grained, coarse calcite rhombs.

1480 - 1520 Sandstone grey, argillaceous, very fine grained; with brown and red-brown sideritic sandstone.

1520 - 1530 Sandstone, grey, salt and pepper, silicious, slightly micaceous, very fine grained.

1530 - 1560 Sandstone, dirty grey, argillaceous, silicious, slightly micaceous, very fine grained some dark grey silty shale at base.

1560 - 1570 Sandstone as above; with grey-dark grey and black splintery shale, becoming more argillaceous and less sandy towards base; some pyrite at base.

1570 - 1610 Siltstone, medium grey, argillaceous, in part very slightly micaceous and calcareous, with medium-dark grey platey shale.

1610 - 1620 Siltstone, medium grey, argillaceous; scattered small bitumen specks.

1620 - 1640 Shale, medium-dark grey, in part silty, trace pyrite and siltstone as above; some brown argillaceous siltstone at base.

1640 - 1650 Sandstone, grey, argillaceous, very slightly calcareous, very fine grained, trace black bitumen specks; some pyrite.

1650 - 1670 Shale, medium to dark grey, platey (some very splintery) some brown sideritic siltstone at top.

1670 - 1690 Shale, medium grey, slightly micaceous and silty, blocky and splintery.

1690 - 1700 Shale, medium grey, very silty, slightly micaceous, blocky.

1700 - 1740 Shale, medium-dark grey, very micaceous, slightly silty, blocky.

1740 - 1780 Shale, medium-dark grey, slightly micaceous, platey and blocky.

1780 - 1790 Shale, medium grey, some silty streaks, blocky and platey.

1790 - 1800 Shale, medium-dark grey, platey and blocky.

1800 - 1820 Sandstone, light grey, slightly micaceous (phlogopite), very fine grained.

Sample Description Continued:

1820 - 1830 Shale, very dark grey, micaceous, platey and flakey and sandstone as above.
1830 - 1870 Sandstone, grey, argillaceous, micaceous, very fine grained and shale as above. Sand becomes a silt in basal 30 feet and in part very slightly calcareous.
1870 - 1880 Shale, medium grey, blocky.
1880 - 1890 Shale, very dark grey, in part micaceous, platey and blocky.
1890 - 1900 Shale, medium grey, blocky.
1900 - 1910 Shale, medium-dark grey, micaceous, blocky and platey; some white gypsum filled fractures.
1910 - 2030 Shale, medium grey, platey and blocky (splintery at 2,000').
2030 - 2050 Shale, dark grey, splintery and blocky.
2050 - 2070 Shale, medium grey, green grey; some brown and red sideritic shale; trace brown very fine grained sideritic sandstone.
2070 - 2100 Shale, medium grey, green grey, blocky; with thin silt streaks.
2100 - 2120 As above with some green grey very argillaceous siltstone; some pyrite at base.
2120 - 2130 Shale, medium-dark grey, flakey and blocky.
2130 - 2140 Shale, red brown, sideritic, and as above; some carbon material.
2140 - 2150 Shale, dark grey to black, sub-bituminous, platey and blocky.

CANOL 2150 (-1771)

2150 - 2160 Shale, black, bituminous; with some black chert, much pyrite; some quartz crystals and pyrobitumen.
2160 - 2180 Shale, black, bituminous, much pyrite, some white calcareous veining and calcite crystals.
2180 - 2190 Limestone, very dark brown grey, very argillaceous, micro crystalline.
2190 - 2200 Limestone, brown grey, brown, very fine to micro crystalline; trace fossils; some black bitumitic shale; much pyrite; some dark green grey and grey platey shale.
2200 - 2210 Limestone, mottled dark brown grey, light grey, some buff, very argillaceous, micro-finely crystalline; much pyrite and bitumitic shale.
2210 - 2220 Limestone, mottled light grey-very dark brown, argillaceous, very finely crystalline shale and pyrite as above; some white calcite crystals.
2220 - 2230 Limestone, dark brown, very argillaceous, micro crystalline, shale, calcite and pyrite.
2230 - 2250 Limestone, mottled very dark brown, brown and buff, argillaceous, in part fragmental, micro crystalline, some granular, fossiliferous, black shale streaks.
2250 - 2272 Limestone, grey, brown and dark grey, lighter colored finely crystalline, dar is micro crystalline, very argillaceous; much black bitumitic shale; pyrite.

KEE SCARP 2272

2272 - 2280 Limestone, mottled light grey and brown, very fine to medium crystalline; trace bitumen, vitreous luster; some fossil material; much black bitumitic shale; Sample had bitibg acrid odor when heated to dry - not sulfurous. Some indication of porosity.
2280 - 2290 Limestone, brown, dark to very dark grey, some earthy, argillaceous, fine to very finely crystalline; brachiopods; some bitumen and black bitumitic shale.

Sample Description Continued:

2290 - 2300 Shale, dark grey-black, bitumitic; with limestone as above; some clear calcite crystals, pyrite and fossil debris.
2300 - 2320 Shale, medium-dark grey; trace chalky limestone and as above.
2320 - 2340 Shale, dark grey-black, some very sh.., (mica?), bitumitic, some pyrite and calcite crystals; shale dark grey and splintery at base.
2340 - 2350 As above, trace very dark grey argillaceous micro crystalline limestone.
2350 - 2362 Shale, medium-dark grey, trace dark brown, black, sub-bituminous, pyrite, crinoids.

HARE INDIAN 2362

2362 - 2370 Shale, dark grey to black, non bitumitic, platey and blocky; some selenite.
2370 - 2380 Mainly shale as above; trace dark grey argillaceous silicious limestone; some pyrite.
2380 - 2390 Quartzite, light grey, extremely small cuttings - too small to examine properly.
2390 - 2400 As above; Shale, medium-dark grey and black bitumitic, splintery; some pyrite; abundant extremely fine quartz grains and fragments.
2400 - 2410 Limestone, medium grey, very argillaceous, micro crystalline; some light buff very finely granular calcareous dolomite; some dark grey platey shale.
2410 - 2450 Shale, medium grey, medium green grey, very fossile and platey; blocky at base; some pyrite.
2450 - 2460 Limestone, grey-medium grey, argillaceous, very finely granular and crystalline; some light grey earthy limestone.
2460 - 2480 Limestone, light grey, earthy to micro crystalline, slightly fossiliferous, some medium grey very finely granular and crystalline dolomitic limestone; some black shale; trace pyrite.
2480 - 2500 Limestone, earthy as above; much brown grey very finely granular and crystalline slightly dolomitic argillaceous limestone.
2500 - 2520 Limestone, light grey-grey, very finely crystalline, fossiliferous and brown grey limestone as above; much dark grey to black shale, in part bitumitic.
2520 - 2530 Shale, dark grey to black as above.
2530 - 2540 Limestone, grey, very finely crystalline; some medium grey very finely granular argillaceous dolomite.
2540 - 2550 Shale, black, bitumitic, some pyrite; some dark brown grey argillaceous limestone.
2550 - 2560 Limestone, medium green grey, medium grey, very argillaceous, micro crystalline and granular; some white chalky lime.
2560 - 2570 Shale as above - splintery, with some bands light grey dolomitic limestone.
2570 - 2580 Shale, dark grey and green grey, blocky and platey; with buff very finely crystalline fossiliferous limestone.
2580 - 2590 Limestone, green grey and grey, very argillaceous, micro crystalline; some shale as above.
2590 - 2620 Shale, dark grey to black, splintery; some pyrite, bitumitic and limestone, light grey-dirty grey, very argillaceous, some bitumitic, very fine-micro crystalline.
2620 - 2650 Limestone, dirty to medium grey, some buff grey, micro crystalline and granular; some earthy, argillaceous, traces slight porosity, some black bitumitic splintery shale.
2650 - 2660 Limestone, mottled light-medium grey, argillaceous, micro crystalline, fossiliferous.
2660 - 2670 Limestone, light buff, earthy-chalky, some finely granular, fossiliferous; trace porosity and as above.

Sample Description Continued:

2670 - 2680 Limestone, dirty grey-medium grey; trace brown grey, argillaceous, micro granular and crystalline.
2680 - 2730 Limestone, mottled buff, dirty grey and dark grey, argillaceous, micro crystalline and granular, less earthy at 2710 with some dark grey platey shale and trace pyrite.
2730 - 2750 Limestone, mottled dark grey and brown grey, argillaceous, micro granular and crystalline rare fossil fragments.
2750 - 2760 Limestone, medium-dark grey, very argillaceous, micro crystalline; some buff earthy fossiliferous lime; calcite crystals.
2760 - 2770 Limestone, very dark grey, very argillaceous, micro granular and crystalline.
2770 - 2780 Limestone, medium brown, argillaceous, very finely crystalline; some buff earthy granular limestone with fair porosity; some dark grey shale.
2780 - 2790 Limestone, medium brown as above with trace bitumen.
2790 - 2800 Shale, medium grey, medium green grey, splintery.
2800 - 2810 Limestone, dark grey, dark brown grey, very argillaceous, micro crystalline and granular.
2810 - 2820 Limestone and Shale as above; trace pyrite.
2820 - 2830 Limestone as above, lighter brown and slightly dolomitic; some gypsum crystals.
2830 - 2860 Limestone, dark grey and dark brown grey, very argillaceous, micro crystalline.
2860 - 2920 Limestone, very dark grey, very argillaceous, micro crystalline; shale stringers increasing in basal 25 feet.
2920 - 2960 Limestone, brown, grey and buff, argillaceous, finely-micro crystalline; some earthy with questionable porosity; some gypsum crystals at top; some dark grey and green grey shale (splintery) in basal 20 feet.
2960 - 2982 Limestone, very dark grey, some very dark brown grey, very argillaceous.

EVIE 2982

2982 - 2990 Shale, dark grey, platey; much pyrite.
2990 - 3000 Shale, medium to dark grey, black, flakey and splintery; some argillaceous dark dolomite.
3000 - 3020 Shale, green grey, medium-dark grey, some black greasy shale, bitumitic, platey splintery and flakey.

HUME 3020

3020 - 3030 Limestone, dark brown to very dark grey, very argillaceous, micro crystalline; rare pyrite and calcite crystals.
3030 - 3040 Limestone, buff grey, earthy-chalky, argillaceous; trace porosity, fossiliferous, some dark grey and brown argillaceous micro crystalline limestone; some pyrite.
3040 - 3050 Poor Samples - Trip for bit - Lime as above and dark grey shale.
3050 - 3060 Limestone, brown grey; trace blue grey, argillaceous, micro crystalline, much medium-dark grey and black shale; some pyrite.
3060 - 3070 Limestone, grey and brown, slightly argillaceous, micro crystalline, much dark grey shale; more pyrite; rare fossil fragments (brachs).
3070 - 3080 Limestone, buff earthy, some chalky; trace bitumen, fossils; some dark brown very argillaceous micro crystalline limestone; some pyrite and shale.
3080 - 3090 Limestone, mottled very dark grey and dark brown grey with light grey and buff, very argillaceous, micro crystalline; some chalky fossiliferous Lime; some black shale and pyrite.
3090 - 3100 As above; less chalky and more earthy buff variety; much black bitumitic shale.

Sample Description Continued:

3100 - 3130	Limestone, mottled very dark grey-black with dirty grey fossiliferous lime, argillaceous; some black bitumitic shale stringers; reefy appearance towards base with fair porosity.
3130 - 3150	Limestone, mottled buff, dark brown and grey, argillaceous, micro crystalline, some calcite crystals; some buff earthy limestone at base.
3150 - 3160	Limestone, very dark brown, argillaceous, crypto crystalline; some chalky light grey fossiliferous limestone.
3160 - 3180	Limestone as above, some dark grey; some buff very finely granular earthy fossiliferous lime; trace black platey shale at base.
3180 - 3190	Dark Limestone as above, much light grey - white, finely crystalline fossiliferous limestone; trace porosity.
3190 - 3210	Limestone, cream to light yellow grey, finely crystalline, vitreous luster, some light grey chalky lime at base; some dark grey to black bitumitic shale.
3210 - 3220	Limestone, mottled light and dark grey, some brown, argillaceous, very fine to micro crystalline; some buff earthy and chalky lime.
3220 - 3230	Limestone, brown, brown grey, argillaceous, very fine to micro crystalline, slightly fossiliferous; some calcite.
3230 - 3240	Limestone, medium and brown grey, argillaceous, micro crystalline, fossiliferous, some dark grey shale.
3240 - 3250	Limestone, dark brown grey, dark grey, very argillaceous, micro crystalline; with some buff earthy-chalky fossiliferous limestone; some black bitumitic shale.
3250 - 3270	Limestone, dark grey and brown, argillaceous, micro crystalline, trace cream finely crystalline limestone; fossiliferous; much black bitumitic shale.
3270 - 3280	Shale, dark grey to black, platey; with very dark limestone as above; some pyrite.
3280 - 3300	Shale, dark grey to black, blocky and platey; some black argillaceous lime streaks; some pyrite.
3300 - 3310	Dolomite, light blue grey, argillaceous, crypto crystalline; and shale as above.
3310 - 3320	As above; more shale; some pyrite; some chalky grey fossiliferous limestone.
3320 - 3330	Limestone, dirty grey, argillaceous, micro crystalline; some dark grey shale and pyrite.
3330 - 3340	Dolomite as 3310; and limestone, brown to dark brown, argillaceous, micro crystalline; some pyrite and shale streaks.
3340 - 3350	Shale, dark grey, blocky and platey, and much pyrite.
3350 - 3360	As above; more pyrite; some brown and grey argillaceous micro crystalline limestone.
3360 - 3370	Shale, dark grey with limestone as above; some calcite crystals; trace anhydrite.
3370 - 3380	Shale as above, very flakey; some chalky fossiliferous limestone.
3380 - 3390	Limestone, very dark grey and brown, very argillaceous, crypto crystalline, rare pyrite; trace brown very finely crystalline pelletoidal fossiliferous limestone; some calcite.
3390 - 3400	Limestone, very dark brown and brown grey, very argillaceous, mottled with light colored lime, crystalline - pseudo oolitoc appearance in part; some black and dark grey shale.
3400 - 3450	Limestone, mottled very dark grey and brown grey with white light grey lime, very argillaceous, micro crystalline; fossiliferous; much dark grey to black shale.
3450 - 3460	Limestone, mottled black (65%) and white (35%), black almost shale and white nearly calcite; fetid odor in acid; micro-crypto crystalline, trace fossils; some black splintery shale.

Sample Description Continued:

3460 - 3470 As above; with black and dark-medium grey shale - up to 40%.
3470 - 3480 Shale, black - dark grey, in part bitumitic, splintery; with limestone as above (30%), quite pyritic.
3480 - 3490 Shale, brown, brown grey, red brown & grey, platy.
3490 - 3500 Shale, medium to dark grey (70%) and limestone as above 30%; some pyrite.
3500 - 3520 Limestone, dark grey, very argillaceous, micro crystalline, fossiliferous, much grey chalky lime; scattered calcite veins.
3520 - 3540 Limestone as above; rare black bitumen specks, trace calcite.
3540 - 3550 Limestone, dark grey, very argillaceous, micro crystalline, slightly fossiliferous, some calcite crystals & veins.
3550 - 3560 Limestone, dark brown grey, dark grey, argillaceous, micro-crypto crystalline, slightly fossiliferous; some calcite & pyrite.
3560 - 3570 Limestone, dark grey, very argillaceous, micro crystalline, some pyrite.
3570 - 3580 Shale, dark grey, blocky & limestone as above; some pyrite and calcite.
3580 - 3610 Limestone, dark grey, very argillaceous, micro crystalline, slightly fossiliferous, chalky at base.
3610 - 3630 Limestone as above, increase of buff & grey fossiliferous chalky lime (40%), numerous white calcite veins.
3630 - 3670 Limestone, dark grey, very argillaceous, slightly fossiliferous, some chalky marl (washes out), many white calcite veins and crystals.
3670 - 3680 Limestone, dark grey, very argillaceous, micro crystalline, some pyrite and fossils.
3680 - 3700 Limestone, mottled dark grey & grey, argillaceous, slightly fossiliferous, rare pyrite, some calcite; micro crystalline; some brown lithographic lime; some grey chalk.
3700 - 3730 Limestone, dark grey, very argillaceous, micro crystalline, slightly fossiliferous; some marl.
3730 - 3770 Limestone, dark grey & brown grey, argillaceous, micro-crypto crystalline, slightly fossiliferous, some chalky lime; scattered calcite; rare bitumen, traces brown pelletoidal lime.
3770 - 3790 Limestone, dark grey, very argillaceous, mottled with buff earthy fossiliferous marl.
3790 - 3800 Limestone, dark grey & brown grey, argillaceous, micro-crypto crystalline, fossiliferous, mottled with buff grey chalky limestone; some calcite.
3800 - 3830 Limestone, dark grey, argillaceous, micro crystalline, mottled as above, fossiliferous, some calcite veins & crystals, rare vugs.
3830 - 3840 Limestone, dark brown grey, argillaceous, micro crystalline.
3840 - 3870 Limestone, dark grey & dark brown grey, very argillaceous, micro-crypto crystalline, mottled with buff grey chalky lime; some calcite veins & crystals; trace brown pelletoidal limestone; looks similar to 3400' section.
3870 - 3890 Limestone, dark brown & grey, argillaceous, micro crystalline; some mottled chalky lime, trace brown & grey colitic & pelletoidal lime; some calcite; rare bitumen & pyrite.
3890 - 3920 Limestone, dark grey, argillaceous, micro crystalline, mottled with buff grey fossiliferous chalky lime; abundant calcite veins & crystals.
3920 - 3940 Limestone, medium grey, very argillaceous, with very chalky fossiliferous lime; numerous calcite veins & crystals; some dark brown & grey crypto-crystalline argillaceous limestone; trace bitumen.
3940 - 3950 Limestone as above & Dolomite, brown, very dark grey, very fine-micro granular, argillaceous, vitreous luster; much calcite, rare pyrite, porous
3950 - 3970 Limestone, dark grey, very argillaceous, micro crystalline & chalky fossiliferous lime; trace calcite.
3970 - 3990 Limestone, light buff grey - grey, earthy-chalky, fossiliferous & as above, some brown grey pelletoidal lime at base.

Sample Description Continued:

3990 - 4000 Limestone, medium grey & brown grey, micro crystalline - mottled with grey chalky fossiliferous limestone.
4000 - 4010 Limestone, grey & brown, slightly argillaceous & dolimitic, micro-crypto crystalline; trace black bitumitic shale.
4010 - 4020 Limestone, very dark grey, very argillaceous, micro crystalline, some marly, slightly fossiliferous limestone; trace pyrite and black shale.

GOSSAGE - BEAR ROCK DOLOMITE 4020

4020 - 4030 Dolomite, grey, light brown, micro-very finely granular, vitreous.
4030 - 4050 Dolomite, medium grey & brown grey, in part slightly calcareous & argillaceous, micro granular.
4050 - 4060 Dolomite, medium grey - grey, very finely granular; trace inter granular porosity.
4060 - 4080 Dolomite, brown & grey, very fine to micro granular; trace calcite & bitumen.
4080 - 4090 Dolomite, light brown - buff, very fine-micro granular & crystalline.
4090 - 4100 Dolomite, grey & brown, fine to micro granular & crystalline, trace bitumen, vitreous luster; some black bitumitic shale partings.
4100 - 4110 Dolomite, brown, very fine to finely crystalline & granular; some white calcite.
4110 - 4120 Dolomite, light brown & buff, finely granular & crystalline; some inter crystalline porosity. (about 8%).
4120 - 4130 Dolomite, as above, some bitumen & calcite; some darker very finely to micro crystalline dense dolomite, rare pyrite.
4130 - 4140 Dolomite, darker brown grey, argillaceous, crystalline, rare pin point vugs.
4140 - 4150 Dolomite, brown, slightly argillaceous, very fine - micro crystalline.
4150 - 4170 Dolomite, brown & grey brown, very finely crystalline.
4170 - 4190 Dolomite, darker brown, finely crystalline; trace white quartz & calcite.
4190 - 4220 Dolomite, medium-dark grey, argillaceous, very finely crystalline; some white calcite; some pin point vugs; rare pyrite at top, some inter crystalline porosity, becoming micro crystalline dense at base.
4220 - 4240 Dolomite, dark grey, fine-very finely crystalline, pin point vugs, slightly argillaceous, good inter crystalline porosity.
4240 - 4250 Dolomite, brown, slightly argillaceous, micro to finely crystalline, pin point vugs, inter crystalline porosity.
4250 - 4260 Dolomite, brown, micro-crypto xln; trace black shale.
4260 - 4290 Dolomite, brown, very finely granular & crystalline; looks oil stained, no cuts or fluorescence, slightly argillaceous, trace black shale partings, some white calcite; pin point vugs at base.
4290 - 4300 Dolomite, medium brown, finely granular & crystalline, some medium, abundant pin point vugs. Some good porosity, vitreous luster; some calcit
4300 - 4320 Dolomite, brown, argillaceous, very finely-micro granular, part earthy, white calcite crystals & veins.
4320 - 4340 Dolomite, brown, very finely crystalline to finely granular, abundant pin point vugs, some porosity, some white calcite.
4340 - 4350 Dolomite, medium brown grey, argillaceous, micro-crypto crystalline,dense
4350 - 4360 Dolomite, light brown, very fine-micro granular, some very finely crystalline, some pin point vugs; trace poor porosity & as above.
4360 - 4380 Dolomite, brown, very fine-finely crystalline, abundant pin point vugs, vitreous luster, trace bitumen, fair inter crystalline porosity.
4380 - 4390 As above with some light buff fine-medium granular dolomite with good porosity; grains unconsolidated.
4390 - 4400 Dolomite, brown grey, argillaceous, finely crystalline.

Sample Description Continued:

4400 - 4410 Dolomite, medium brown grey, argillaceous, slightly anhydritic, micro crystalline.
4410 - 4435 Rubble Zone.
4410 - 4420 Dolomite, dark brown, dark grey, argillaceous, micro crystalline, dense; some blue grey & light grey finely granular dolomite, abundant coarse white dolomite crystals.
4420 - 4430 As above; much white crystalline dolomite & calcite; some shale.
4430 - 4440 Dolomite, light grey, white, cream, mainly micro crystalline, some dark grey and dark blue grey dolomite; rare anhydrite, trace pyrite; coarse dolomite crystals.
4440 - 4450 Dolomite, light grey, cream, white, micro crystalline; with trace light blue grey pyritic slightly silty dolomite; trace light green shale; some dark grey very argillaceous micro crystalline dolomite.

RONNING 4450

4450 - 4460 Dolomite, light grey-white, finely granular & crystalline to micro crystalline, vitreous luster, some blue dolomite and green shale as above.
4460 - 4490 Dolomite, light grey - white, very finely crystalline; vitreous luster; trace blue grey dolomite.
4490 - 4500 Dolomite as above fine to very finely crystalline; some blue grey pyritic dolomite; some green shale.
4500 - 4510 Dolomite, light grey & buff, finely crystalline, scattered pin point vugs, trace clear quartz, some light blue dolomite (pyritic), trace black & green shale. Fair inter crystalline porosity.
4510 - 4530 Dolomite, buff - light buff grey, very finely crystalline, large white dolomite crystals; some fair porosity.
4530 - 4540 Dolomite, light brown & buff, micro crystalline; trace dark blue grey argillaceous, slightly silty dolomite.
4540 - 4560 Dolomite, light buff, very fine to micro crystalline; trace green waxey shale; rare pyrite.
4560 - 4580 Dolomite as above; trace blue grey argillaceous silty slightly pyritic dolomite; many white dolomite rhombs.
4580 - 4590 Dolomite, cream - light grey, micro-crypto crystalline, slightly anhydritic (?), hard, dense.
4590 - 4620 Dolomite, buff, grey, blue grey & brown, micro crystalline; trace blue grey shale; some pyrite.
4620 - 4630 Dolomite, light grey - cream, micro crystalline.
4630 - 4650 Dolomite, cream & dark brown, micro crystalline, argillaceous; some black and green pyritic shale partings.
4650 - 4700 Dolomite, dark brown, very argillaceous, micro crystalline.
4700 - 4720 Dolomite, dark grey, dark brown grey, very argillaceous, micro crystalline, vitreous luster; trace black shale.
4720 - 4730 Dolomite, brown, very fine to micro crystalline; some green waxey shale.
4730 - 4755 This section drilled very rapidly.
4730 - 4740 Dolomite, medium grey & medium brown grey, argillaceous, very fine-micro crystalline, some milky grey & brown chert. No visible porosity, trace buff earthy dolomite & black & green shale.
4740 - 4755 Dolomite, medium brown and brown grey, very fine to micro crystalline vitreous luster; some milky grey & brown chert.
4755 - 4760 Dolomite, brown, argillaceous, micro crystalline, chert as above; some black shale partings.
4760 - 4770 Dolomite, brown, slightly argillaceous, micro crystalline, vitreous luster; some chert and green waxey shale.

Sample Description Continued:

4770 - 4780	Dolomite, brown, very fine-micro crystalline, trace green and black shale and chert.
4780 - 4790	Dolomite, brown and dark grey, argillaceous, some silicious, very fine-micro crystalline, vitreous luster; some shale as above.
4790 - 4800	Dolomite, brown, argillaceous, some silicious, very finely crystalline, trace pyrite, vitreous luster.
4800 - 4810	Dolomite, dark grey, very argillaceous, micro crystalline.
4810 - 4820	Dolomite, buff, very finely crystalline, some fair inter crystalline porosity and dolomite as above.
4820 - 4860	Dolomite, dark grey, dark brown grey, argillaceous, micro crystalline, trace gypsum and quartz.
4860 - 4870	Dolomite, dark brown and brown grey, argillaceous, micro-crypto crystallin
4870 - 4880	Dolomite, as above, some lighter brown, very fine to micro crystalline, white dolomite crystallization on fracture planes. Lost Circulation at 4887.
4880 - 4890	Dolomite, light brown grey, earthy-very finely granular; some pin point vugs, some porosity and as above. Drilled hard.
4890 - 4900	Dolomite, light brown and buff, very fine-finely granular, some poor inter granular porosity, trace bitumen; and Dolomite, light brown, crypto crystalline.
4900 - 4920	Dolomite, light buff grey, very finely granular, fair inter granular porosity.
4920 - 4930	Dolomite, light brown, very finely granular, fair porosity, vitreous luster; some black shale.
4930 - 4940	Dolomite, brown - dark brown, argillaceous, micro crystalline; some white calcite and black shale.
4940 - 4950	Dolomite, light brown and medium grey, slightly argillaceous, micro crystalline; some buff earthy dolomite and some white calcite.
4950 - 4970	As above; some medium-dark grey micro crystalline slightly silicious dolomite; trace silica and calcite.
4970 - 4980	Dolomite, mottled buff and medium grey, micro granular and crystalline, argillaceous; some calcite.
4980 - 4990	As above, darker color. Some slightly silicious.
4990 - 5000	Dolomite, dark grey, argillaceous, micro crystalline; some calcite.
5000 - 5010	Dolomite, medium and dark grey, argillaceous, silicious, micro crystalline vitreous luster; some black bitumitic shale.
5010 - 5020	As above, mottled with brown dolomite.
5020 - 5040	Dolomite, mottled medium grey and brown grey, argillaceous, micro crystalline, much calcite veining and crystals.
5040 - 5050	Dolomite, grey and buff, very finely granular and some brown grey micro-crystalline; trace inter granular porosity. Much calcite.
5050 - 5070	Dolomite, medium brown and brown grey, micro granular and crystalline, some white calcite and black shale partings, in part silicious, trace white quartz.
5070 - 5080	Dolomite, medium-dark brown grey, argillaceous, micro crystalline, trace calcite and quartz.
5080 - 5090	Dolomite, medium grey, micro crystalline; some white quartz.
5090 - 5097	Dolomite, buff and brown, micro granular and crystalline, much white calcite; some white silicious rock, trace porosity. Some clear quartz crystals, rare pyrite.

TOTAL DEPTH 5097

SECTION III - ENGINEERING SUMMARY

(a) Report of Drill Stem Tests

Drill Stem Test No. 1 - Ronning Formation - Interval 4463' - 4766'
Double Packer - Straddle By-Pass Test.
Times: Pre Flow 5', Initial Shut-In 30', Valve Open 60', Final Shut-In 90'. Good blow on Pre Flow & Open Flow, decreasing to slight at end of test period.
Recovery: 4250' Fluid - 600' Mud, 400' Muddy salt water, (46,000 ppm), 3250' sulfurous salt water (98,000 ppm); Temp. 152.
Pressures: IHP 1971# 1st Flow 293-902# ISI 1967#
FHp 1971# Main Flow 1068-1967# FSI 1967#

Drill Stem Test No. 2 - Gossage Bear Rock Dolomite - Interval 4165' - 4262'
Double Packer - Straddle By-Pass Test.
Times: Pre Flow 5', Initial Shut-In 30', Valve Open 60', Final Shut-In 90'. Good blow on Pre Flow & Open Flow, decreasing to slight at end of test period.
Recovery: 3,850' Fluid - 1000' slightly muddy salt water, 2,850' salt water (80,400 ppm); Temp. 145
Pressures: IHP 1843# 1st Flow 559-890# ISI 1843#
FHP 1839# Main Flow 1207-1836# FSI 1843#

Final Drillstem Report Forms follow on pages: 18 and 19.

(b) Casing Record: (See Item (q) on Page 1. and Casing Tally Page 20)

(c) Bit Record:

No.	Make	Size	Type	Interval	Footage	Hours	Weight	RPMs
1A	HW	7 7/8	X1G	40 - 510	470	11 3/4	20	85/130
2A	Reed	12 1/4	Reamer	40 - 511	471	14 1/4	20	130
1	HW	7 7/8	X1G	511 - 2188	1677	27	30	65/80
2	HW	7 7/8	X1G	2188 - 2447	259	15	30/45	62/80
3	HW	7 7/8	XV	2447 - 3054	607	28 1/2	30/42	60/80
4	HW	7 7/8	J33	3054 - 3570	516	25 1/4	25/30	55
5	HW	7 7/8	XV	3570 - 3601	31	4	10/15	44/60
6	HW	7 7/8	X1G	900 - 1127	227	9 3/4	5/30	95/110
7	HW	7 7/8	X3A	1127 - 1420	293	5	30	110
8	HW	7 7/8	XV	1420 - 2207	787	18 3/4	35/38	110
9	HW	7 7/8	XV	2207 - 2364	157	7 3/4	40	65/80
10	HW	7 7/8	XV	2364 - 2513	149	16 1/4	45	44/75
4RR	HW	7 7/8	J33	2513 - 3271	758	38	25/36	40/60
11	HW	7 7/8	J44	3271 - 4634	1363	89 1/4	18/35	50/60
12	HW	7 7/8	J55	4634 - 5097	463	37 1/4	18/25	48/56

TOTALS:

Surface Hole 40-510'
Pilot Hole 11 3/4 Hrs.
12 1/4" Hole 14 1/4 Hrs.
26 Hours

Main Hole
511' - 3601' 114 3/4 Hrs.

Lost Main Hole @ 900'
New Hole - 900' - 5097' 222 Hrs.
Ream Bridges 8 Hrs.

(d) Mud Report:

The original hole was drilled from surface to 3601' with water; the hole was lost and subsequently a gel-chemical base mud was used from 900' to T.D.

A daily record of materials added is included in the Daily Drilling Reports.

Total Materials:

Gel 135,700#, Weight Material 19,800#, Lime 670#, Calcium Chloride 500#, Soda Ash 200#, Benex 244#, Quik Seal 339 sxs, Fiber Seal 48 sxs, Sawdust 7 3/4 boxes, Diesel 40 bbls.

(e) Deviation Record:

Depth	Degrees	Depth	Degrees	Depth	Degrees	Depth	Degrees
94	1/2	890	1/2	1100	1/2	4042	3 3/4
154	1/2	1110	7/8	1554	1/2	4105	3 3/4
193	1/2	1330	1	1955	1	4198	3 3/4
248	1/2	1550	1 1/2	2114	1 1/2	4292	5
303	1/4	1740	1 3/4	2334	2	4323	5 1/8
363	1/2	1958	1 3/4	2513	2	4354	5
126	1/8	2142	1 7/8	2868	2 3/4	4384	4 3/4
225	3/4	2364	1 7/8	3271	2 1/4	4446	5
307	1/2	2400	2	3545	2 1/2	4509	5
396	1/2	2647	2 1/2	3603	2 1/2	4572	4 3/4
411	1/4	2898	2 3/4	3697	2 1/2	4634	4 1/2
510	1/8	3054	2 3/4	3822	2 3/4	4727	5 1/2
511	1/2	3365	3	3947	3 1/2	4821	6
670	0	1243	1/2	4010	4	4915	6 1/2
						5041	6 1/2
						5097	6 1/2

(f) Abandonment Plugs:

Plug No. 1 5097 - 5000 with 34 sxs cement, Plug Down 10:00 P.M., April 24, 1972

Plug No. 2 4500 - 4400 with 50 sxs cement plus 3% $CaCl_2$, Plug Down 11:00 P.M. April 24, 1972. Plug Felt at 4390'.

Plug No. 3 3400 - 3300 with 38 sxs cement plus 3% $caCl_2$, Plug Down 7:45 A.M. April 25, 1972. Plug Felt at 3306'.

Plug No. 4 2300 - 2100 with 95 sxs cement plus 3% $CaCl_2$, Plug Down 4:14 P.M. April 25th, 1972. Plug Felt at 2075.

Plug No. 5 563 - 463 with 82 sxs cement plus 3% $CaCl_2$, Plug Down 12:40 A.M. April 26th, 1972. Plug Felt at 450'.

Cut casing 5' below G.L. cemented with 5 sxs on top. Weld on steel plate; with proper post and sign.

(g) Lost Circulation Zones:

Zone 1 Gossage Bear Rock Limestone 3565 - 3570
Lost all mud - No Returns - Mixed mud and lost circulation material, built volume and drilled blind to 3601'. No Returns.
Ran 3 gel/diesel cement plugs with Halliburton. Continued losing circulation after drilling out Plugs 1 & 2. Felt Plug No. 3, 54' off bottom with good returns. Pulled out and ran in with drilling string. Encountered bridges from 829' to 1127'. Lost original hole and making new hole from about 900'.

Redrilled through same interval, encountered no drilling break, no lost circulation and no indication of cement plugs in samples.

Zone 2 Ronning Formation 4887 - 5097
Drilling mud was being lost to the formation in this interval, with main losses in the following zones: 4,887', 4,936', 5,041' and 5,097'. Drilling mud was lost in hole and partially in the tanks; Lost circulation material was added and volume built. Hole was bottomed at 5097 feet. No additional mud was lost to the formation during logging and testing periods.

(h) Report of Blowouts:

Tripping out with Bit No. 10, well started to discharge gas cut mud on connections with drill pipe at 1156'. Ran back in to 1698 feet, closed Hydril, put on Kelly. Ran gas cut mud through choke; Mixed weight material, circulated thru flow line. Lit gas with about a 4' flare. No pressures read - no build up. Gas would sporadically discharge mud to a maximum 45-55 feet up derrick. Gas flow abated with no further problems. Gas believed to be coming from sands at about 1400 feet.

SECTION IV - LOGS

The following Schlumberger Electrical Surveys were run April 22-23, 1972:

1 - Dual Induction Laterolog 2" & 5" - 100' from 5,094' to 513'
2 - Sidewall Neutron Porosity Log 2" & 5" - 100' from 5,094' to 514'
3 - Borehole Compensated Sonic - Gamma Ray Caliper 2" & 5" - 100' from 5,096' to 514'
4 - Formation Density Log 2" & 5" - 100' from 5,093' to 514'

SECTION V - ANALYSIS

Water analyses are included on pages 16 and 17.

CORE LABORATORIES – CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS

File 933-2519 Page 1 of 4

Company: CanDel Oil Ltd.

Well: CanDel et al SOBC Mountain R. A-23 K.B. _____ Grd. 362'

Location: 65° 42' 14.00 N.L. 129° 19' 12.00 W.L. Field: Mountain River Area Province: N.W.T.

Formation: Ronagan Interval: 4463' - 4766'

Sampled from: DST #1 (Top of Tool) by: G. Wiggett

Date sampled: April 23/72 Date analysed: May 8/72 Analyst: ML

Recovery: 4250' liquid, (98,200 PPM).

Mud type _____ Water cushion _____

Resistivity: 0.072 Ohm-meters @ 74 °F

Specific gravity: 1.0667 @ 60°F

pH: 7.3 H_2S: Absent

Refractive Index: 1.3499 @ 75°F

Total Solids:

Calculated: 100,075 mg/liter

By evaporation @ 110°C: - mg/liter

By evaporation @ 180°C: - mg/liter

At ignition: - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO_3	SO_4	CO_3	OH
34827	3352	484	Trace	Abs.	-	-	60168	298	946	Nil	Nil

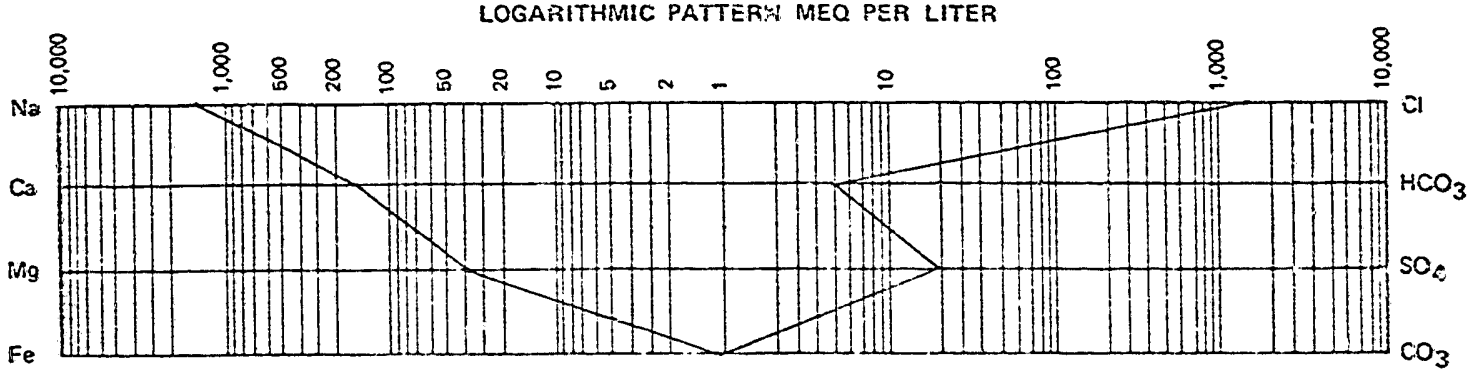
PER CENT CALCULATED SOLIDS

34.8	3.3	.5	Trace	Abs.	-	-	60.1	.3	.9	.0	.0

MEQ PER LITER

1514.2	167.3	39.8	Trace	Abs.	-	-	1696.7	4.9	19.7	.0	.0

LOGARITHMIC PATTERN MEQ PER LITER



99700. 34827.0

CORE LABORATORIES – CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS

File 933-2519 Page 2 of 4

Company: CanDel Oil Ltd.

Well: CanDel et al SOBC Mountain R. A-23 K.B. _____ Grd. 362'

Location: 65° 42' 14.00 N.L. 129° 19' 12.00 W.L. Field: Mountain River Area Province: N.W.T.

Formation: Bear Rock Interval: 4165' - - 4263'

Sampled from: DST #2 (Top of Tool) by: G. Wiggett

Date sampled: April 24/72 Date analysed: May 9/72 Analyst: ML

Recovery: 3850' liquid, (80,400 PPM).

Mud type _____ Water cushion _____

Resistivity: 0.083 Ohm-meters @ 71 °F

Specific gravity: 1.0596 @ 60°F

pH: 7.6 H_2S: Present

Refractive Index: 1.3482 @ 75°F

Total Solids:

Calculated: 88,060 mg/liter

By evaporation @ 110°C: - mg/liter

By evaporation @ 180°C: - mg/liter

At ignition: - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO_3	SO_4	CO_3	OH
30684	2901	422	Trace	Abs.	-	-	52808	332	913	Nil	Nil

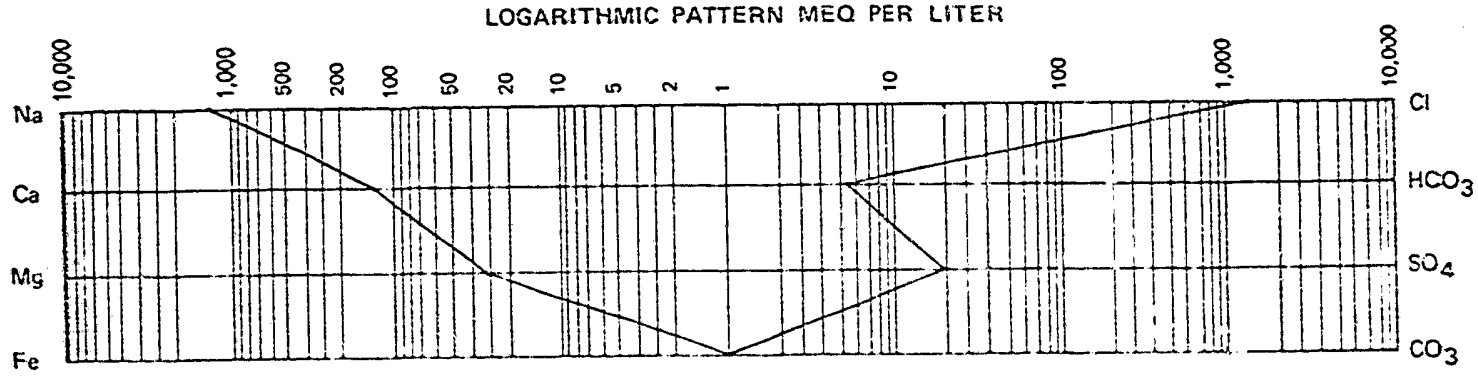
PER CENT CALCULATED SOLIDS

34.8	3.3	.5	Trace	Abs.	-	-	60.0	.4	1.0	.0	.0

MEQ PER LITER

1334.1	144.8	34.7	Trace	Abs.	-	-	1489.2	5.4	19.0	.0	.0

LOGARITHMIC PATTERN MEQ PER LITER



87639. 30684.0

CORE LABORATORIES – CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS

File 933-2519 Page 3 of 4

Company: CanDel Oil Ltd.

Well: CanDel et al SOBC Mountain R. A-23 K.B. _____ Grd. 362'

Location: 65° 42' 14.00 N.L. 129° 19' 12.00 W.L. Field: Mountain River Area Province: Alberta

Formation _____ Interval _____

Sampled from: Water From Lake by _____

Date sampled _____ Date analysed: May 9/72 Analyst: ML

Remarks: Appeared sulphurous at time of sampling.

Mud type _____ Water cushion _____

Resistivity: 0.34 Ohm-meters @ 70 °F

Specific gravity: 1.0157 @ 60°F

pH: 7.6 H_2S: Absent

Refractive Index: 1.3371 @ 73°F

Total Solids:

Calculated: 22,479 mg/liter

By evaporation @ 110°C: – mg/liter

By evaporation @ 180°C: – mg/liter

At ignition: – mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO_3	SO_4	CO_3	OH
7436	998	136	Trace	Abs.	-	-	13138	512	259	Nil	Nil

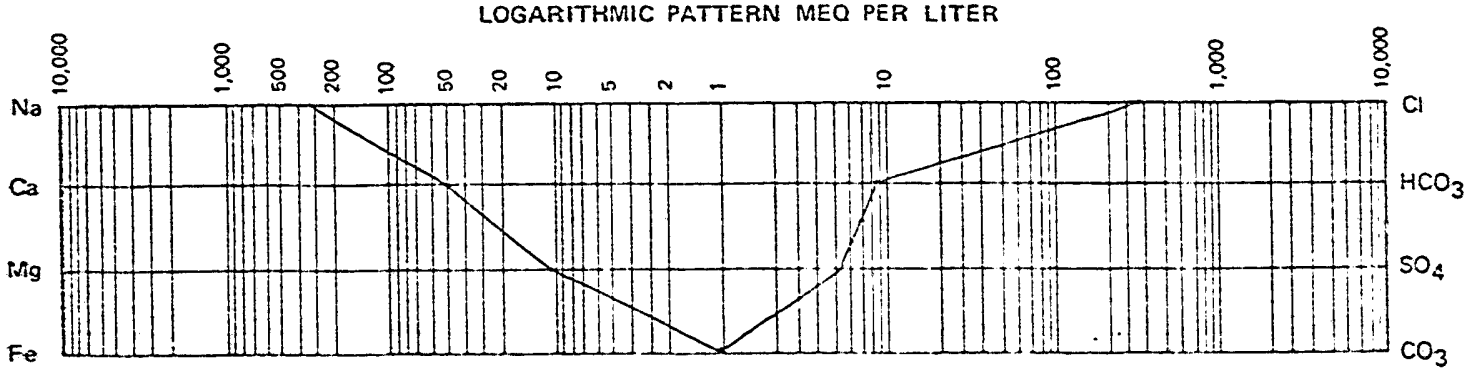
PER CENT CALCULATED SOLIDS

33.1	4.4	.6	Trace	Abs.	-	-	58.4	2.3	1.2	.0	.0

MEQ PER LITER

323.3	49.8	11.2	Trace	Abs.	-	-	370.5	8.4	5.4	.0	.0

LOGARITHMIC PATTERN MEQ PER LITER



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CORE LABORATORIES – CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS

File 933-2 Page 4 of 4

Company CanDel Oil Ltd.

Well CanDel et al SOBC Mountain R. A-23 K.B. Grd. 362'

Location 65° 42' 14.00 N.L. 129° 19' 12.00 W.L. Field Mountain River Area Province N.W.T.

Formation Interval

Sampled from by

Date sampled Date analysed May 9/72 Analyst ML

Remarks Water associated with gas, appears to be make-up water.

Mud type Water cushion

Resistivity 11.5 Ohm-meters @ 71 °F

Specific gravity 1.0001 @ 60°F

pH 7.9 H_2S Absent

Refractive Index .3324 @ 73°F

Total Solids:

Calculated 604 mg/liter

By evaporation @ 110°C – mg/liter

By evaporation @ 180°C – mg/liter

At ignition – mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO_3	SO_4	CO_3	OH
64	80	20	Trace	–	–	–	81	327	32	Nil	Nil

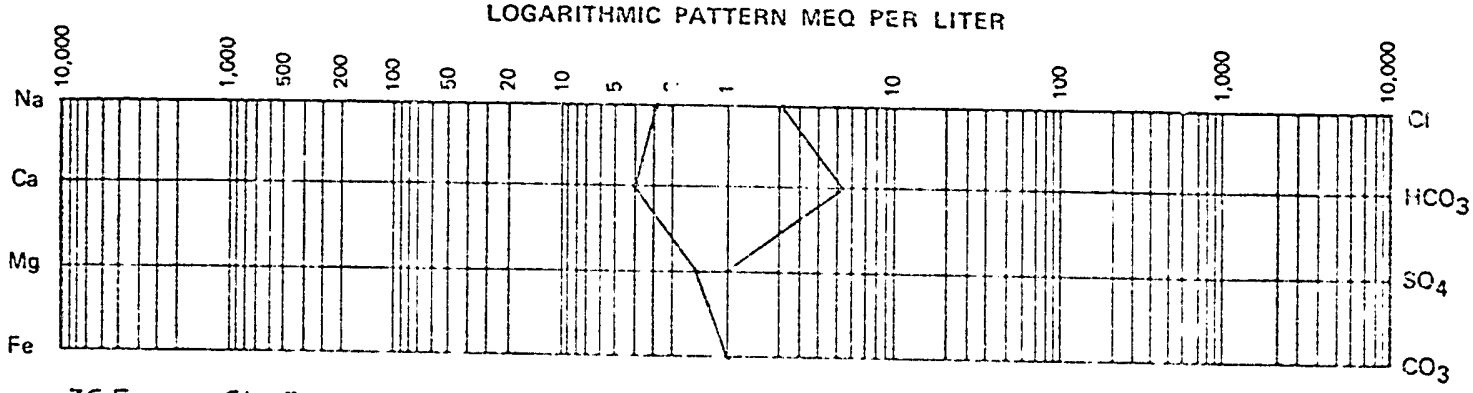
PER CENT CALCULATED SOLIDS

10.6	13.2	3.3	Trace	–	–	–	13.4	54.1	5.3	.0	.0

MEQ PER LITER

2.8	4.0	1.6	Trace	–	–	–	2.3	5.4	.7	.0	.0

LOGARITHMIC PATTERN MEQ PER LITER



365. 64.0

Halliburton Services Limited

18

FORMATION TESTING DATA SHEET

REFER TO INVOICE NO 09725

HALLIBURTON DISTRICT: Edmonton

JOB DATE: April 23, 1972

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA

PRESSURE DATA

	TOP	CENTRE	BOTTOM
GAUGE NUMBER	2804	2613	2622
GAUGE DEPTH	4442	4495	5095
BLANKED OFF	NO	YES	YES
HOUR CLOCK TRAVEL	12 hrs.	24 hrs.	24 hrs.
INITIAL HYDROSTATIC	1971	2007	2242
FIRST FLOW INITIAL	293	1678	
FIRST FLOW FINAL	902	1978	
FIRST CLOSED IN	1967	2000	
SECOND FLOW INITIAL	1068	1864	
SECOND FLOW FINAL	1967	1998	
SECOND CLOSED IN	1967	2001	
THIRD FLOW INITIAL			
THIRD FLOW FINAL			
THIRD CLOSED IN			
FINAL HYDROSTATIC	1971	2004	2242

TYPE OF TEST: Dual straddle

TESTER: G. Wiggett

EMPL. NO.:

WITNESS: P. Brown

DRILLING CONTRACTOR: Petrolia 7

EQUIPMENT AND WELL DATA

FORMATION TESTED	Ronning ~~Ronagan~~	GAUGE DEPTH / TEMPERATURE	PF MPAS / °F EST
NET PRODUCTIVE THICKNESS	FT.	MUD TYPE	Gel
KB ELEVATION	379	MUD WEIGHT	8.6 MUD VISC 58
ALL DEPTHS MEASURED FROM	☒ KB ☐ GROUND	CASING OR HOLE SIZE	7 7/8"
PACKER DEPTHS (TOP / BOTTOM)	4463 / 4766	RATHOLE SIZE	N/A
DEPTH OF TESTER VALVE	4431	DRILL PIPE (OD / WEIGHT)	4" / 15.5
CASING PERFORATED INTERVAL	N/A	DRILL COLLARS ABOVE TESTER (ID / LENGTH)	2 1/8" / 315'
TOTAL DEPTH	5097	SURFACE CHOKE	1"
AMOUNT AND TYPE CUSHION	Nil	BOTTOM CHOKE	5/8"

FLUID SAMPLER DATA

SAMPLER PRESSURE AT SURFACE _____ PSIG

RECOVERY: C.C. OIL _____ CU.FT. GAS _____

C.C. WATER _____

C.C. MUD _____

TOTAL LIQUID C.C. _____

SAMPLE SHIPPED TO LABORATORY: YES ☐ NO ☐

OIL GRAVITY _____ API @ _____ °F

GAS/OIL RATIO _____ CU.FT./BBL.

~~HYDROMETER~~/REFRACTOMETER ~~[illegible]~~

CHLORIDE CONTENT

RECOVERY WATER _____ @ _____ °F 98,200 PPM

RECOVERY MUD FILTRATE _____ @ _____ °F _____ PPM

MUD PIT SAMPLE FILTRATE _____ @ _____ °F _____ PPM

TIME PERIODS

	FIRST	SECOND	THIRD		AM	PM
FLOW	5	60		TESTER OPENED	11:55	
CLOSED IN	30	90		PACKER UNSEATED		3:00

LIQUID RECOVERY DATA

FEET (MEASURED FROM TESTER VALVE)	DESCRIPTION OF LIQUID
600	Mud
400	Muddy salt water
3250	Sulfhurous salt water
4250	TOTAL LIQUID RECOVERY

GAS FLOW RATE DATA

TYPE OF INSTRUMENT: ☐ CRITICAL FLOW PROVER ☐ PITOT TUBE ☐ ORIFICE WELL TESTER ☐ SIDE STATIC

FLOW TIME	INSTRUMENT PRESSURE "WATER	"MERC	PSI	ORIFICE SIZE	GAS TEMP.	GAS RATE MCFD/COEF

REMARKS: Strong air blow during first flow. Strong air blow decreasing to weak towards end of second flow. Hole would not take fluid when packers unseated. Worked pipe and hoisted slowly for 14 stands.

COMPANY: CANADIAN DELHI OIL LTD.

LEGAL DESCRIPTION: 65° -42'-14" 129° -19'-12"

PROVINCE OR TERRITORY: N.W.T.

FIELD OR AREA: MOUNTAIN RIVER

TEST NUMBER: 1

WELL NAME AND NUMBER: CANDEL ET AL BORK MOUNTAIN A-23

TESTED INTERVAL: 4463 - 4766

Halliburton Services Limited

FORMATION TESTING DATA SHEET

REFER TO INVOICE NO. 09725

HALLIBURTON DISTRICT: Edmonton

JOB DATE: April 24, 1972

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA.

PRESSURE DATA

	TOP	CENTRE	BOTTOM
GAUGE NUMBER	2804	2622	2613
GAUGE DEPTH	4144	4197	5095
BLANKED OFF	~~YES~~ NO	YES ~~NO~~	YES ~~NO~~
HOUR CLOCK TRAVEL	12 hrs.	12 hrs.	12 hrs.
INITIAL HYDROSTATIC	1843	1869	2272
FIRST FLOW — INITIAL	559	1406	
FIRST FLOW — FINAL	890	1689	
FIRST CLOSED IN	1843	1866	
SECOND FLOW — INITIAL	1207	1501	
SECOND FLOW — FINAL	1836	1865	
SECOND CLOSED IN	1843	1866	
THIRD FLOW — INITIAL			
THIRD FLOW — FINAL			
THIRD CLOSED IN			
FINAL HYDROSTATIC	1839	1863	2269

TYPE OF TEST: Dual straddle

TESTER: G. Wiggett

TIMER NO.:

WITNESS: P. Brown

DRILLING CONTRACTOR: Petrolia 7

EQUIPMENT AND WELL DATA

FORMATION TESTED	Bear Rock	GAUGE DEPTH / TEMPERATURE	145 °F MEAS / °F EST.
NET PRODUCTIVE THICKNESS	FT	MUD TYPE	Gel
K.B. ELEVATION	379	MUD WEIGHT / MUD VISC.	8.6 / 58
ALL DEPTHS MEASURED FROM	☑ KB ☐ GROUND	CASING OR HOLE SIZE	7 7/8"
PACKER DEPTHS (TOP / BOTTOM)	4165 / 4262	RATHOLE SIZE	N/A
DEPTH OF TESTER VALVE	4133	DRILL PIPE (OD / WEIGHT)	4" / 15.5
CASING PERFORATED INTERVAL	N/A	DRILL COLLARS ABOVE TESTER (ID / LENGTH)	2 1/8" / 485'
TOTAL DEPTH	5097	SURFACE CHOKE	1"
AMOUNT AND TYPE CUSHION	Nil	BOTTOM CHOKE	5/8"

FLUID SAMPLER DATA

SAMPLER PRESSURE AT SURFACE _____ PSIG

RECOVERY: C.C. OIL _____ CU.FT. GAS _____

C.C. WATER _____

C.C. MUD _____

TOTAL LIQUID C.C. _____

SAMPLE SHIPPED TO LABORATORY: YES ☐ NO ☐

GRAVITY _____ API @ _____ °F

GOR RATIO _____ CU.FT./BBL.

~~RESISTIVITY~~ REFRACTOMETER ~~PPM OF READING~~

			CHLORIDE CONTENT
RECOVERY WATER	@	°F	80,400 PPM
RECOVERY MUD FILTRATE	@	°F	PPM
MUD PIT SAMPLE FILTRATE	@	°F	PPM

TIME PERIODS

	FIRST	SECOND	THIRD		AM	PM
FLOW	5	60		TESTER OPENED	12:05	
CLOSED IN	30	90		PACKER UNSEATED	3:10	

LIQUID RECOVERY DATA

FEET (MEASURED FROM TESTER VALVE)	DESCRIPTION OF LIQUID
1000	Muddy salt water
2850	Salt water
3850	TOTAL LIQUID RECOVERY

GAS FLOW RATE DATA

TYPE OF INSTRUMENT: ☐ CRITICAL FLOW PROVER ☐ PITOT TUBE ☐ ORIFICE WELL TESTER ☐ SIDE STATIC

FLOW TIME	INSTRUMENT PRESSURE: WATER	MERC	PSI	ORIFICE SIZE	GAS TEMP.	GAS RATE MCFD @ 60°F

REMARKS: Strong air blow during first flow. Stong air blow decreasing to weak blow at end of test.

COMPANY: CANADIAN DELHI OIL LTD.

LEGAL DESCRIPTION: 65°-42'-14" 129°-19'-12"

PROVINCE OR TERRITORY: N.W.T.

FIELD OR AREA: MOUNTAIN RIVER

TEST NUMBER: 2

WELL NAME AND NUMBER: CANDEL ET AL 50.6 MOUNTAIN A-23

TESTED INTERVAL: 4165 - 4262

CASING RECORD

13 joints 8-5/8" 24# K-55 ST&C landed at 511' K.B. with 320 sacks oilwell cement + 2% $CaCl_2$. Plug down 1:30 a.m. March 28, 1972. 3 barrels returns to surface.

TALLY

Jt.	Feet	
1	39.57	
2	39.63	
3	39.61	
4	39.58	
5	39.58	
6	39.61	
7	39.61	
8	39.57	
9	39.60	
10	39.61	
11	39.61	
12	39.62	
13	39.59	
	514.79	
	1.50	Float Collar
	1.10	Shoe
	517.39	

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: March 26 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 248 ft. Operation in progress: Drilling 7 7/8" Pilot Hole

Progress: 248 ft. in. 6 ½ hours on bottom: Table speed: 85 RPM. Bit weight: all lbs.

Drilling Mud: Weight: - lbs/gal. Viscosity: 60 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: 275 psi.

Materials: Gel 6,500#, Quik Seal 25#, Lime 100# Sawdust 1/2 Box

Deviation:

Depth:	94	154	193						
Degrees.	1/2	1/2	1/2						

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
1A	HC	7 7/8	X1G	40'	248	208	6 ½	OB

Geologic Markers: Base Glacial Drift Depth 70' Elev. 309

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Rig to Spud	8	Trip - Plugged Bit - Clean	3
Spud w/7 7/8" Bit	1/2	Build Volume-Mix mud, sawdust	3 1/4
Build Volume, Lost Circ.	2 1/2		
Surveys	3/4		
Drilling	6		

Remarks:

Spud Date: 4:00 P.M. March 25, 1972

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Candel et al SOBC Mountain R A-23 Date: March 27 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 453 ft. Operation in progress: Reaming Pilot Hole with 12¼" Bit.

Progress: D 262' R 453' ____ ft. in. 5 ¼ 11 ½ hours on bottom: Table speed: 85 130 RPM. Bit weight: 20 lbs.

Drilling Mud: Weight: 9 lbs/gal. Viscosity: 48 secs. Water loss: ____cc. FC ____ /32

Gel Strength: ____ pH. ____ Solids. ____ Pump Pressure: 3-600 psi.

Materials: Gel 1200, Lime 20#

Deviation:

Depth:	24S	303	363	126R	225R	307 R	396 R	411	510
Degrees.	1/2	1/4	1/2	1/8	3/4	1/2	1/2	1/4	1/8

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
1A	HW	7 7/8	X1G	40	510	470	11 3/4	
2A	Reed	12 ¼	Reamer	40	453	413	11 1/2	OB

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Drilling 7 7/8" Hole	5 ¼
Surveys	2 ¾
Rig S ervice	¼
Hoist Bit 1A	½
Repair Pump Drive & Hook Up	2 ¾

Operation	Hours
Pick Up Reamer	1
Ream 7 7/8" Hole	11 ½

Remarks:

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Candel et al SOPC Mountain R A-23 Date: March 28 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 511 ft. Operation in progress: WOC -

Progress: Ream 58 ft. in. 3 1/4 hours on bottom: Table speed: 130 RPM. Bit weight: 20 lbs.

Drilling Mud: Weight:____ lbs/gal. Viscosity:____ secs. Water loss:____ cc. FC ____ /32

Gel Strength:____ pH.____ Solids.____ Pump Pressure: 650 psi.

Materials: None

Deviation:

Depth:	511								
Degrees.	1/2								

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
2A	Reed	12 1/4	Reamer	40	511	471	14 3/4	

Geologic Markers: None Depth____ Elev.____

Depth____ Elev.____

Depth____ Elev.____

Summary of Operations:

Operation	Hours	Operation	Hours
Ream 7 7/8" Hole	3 3/4	Circulate Casing-Rig to cement	5 1/2
Trip out Reamer (2)	2 1/2	Cement Surface Casing	1
Circulate to run casing	1 3/4	WOC -	
Survey & Hoist	1/2	Clean Mud Tanks, Dig Cellar,	
Rig to Run Casing	3/4	Prepare Heading Up Equipment	6 1/2
Pick up 8 5/8" casing, Install Shoe & Float & Run Same	2 1/4		

Remarks:

Ran 13 jts. 8 5/8" 24#, J55, New Casing (517') Landed at 511' K.B.; Cemented w/320 sxs Oilwell Cement plus 2% $CaCl_2$. 3 Bbls Returns.

Plug Down 1:30 AM March 28, 1972.

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Candel et al SOBC Mountain R A-23 Date: March 29 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 810 ft. Operation in progress: Drilling 7 7/8" Hole

Progress: 299 ft. in 4 1/4 hours on bottom: Table speed: 80 RPM. Bit weight: 30 lbs.

Drilling Mud: Weight:____ lbs/gal. Viscosity:____ secs. Water loss:____ cc. FC ____ /32

Water

Gel Strength:____ pH.____ Solids.____ Pump Pressure: 1250 psi.

Materials: $CaCl_2$ 500#, Benex 6#, Lime 200#

Deviation:

Depth:	670								
Degrees.	0								

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
1	EW	7 7/8	XIG	511	810	299	4 1/4	OB

Geologic Markers: None Depth____ Elev.____

Depth____ Elev.____

Depth____ Elev.____

Summary of Operations:

Operation	Hours
Cut Off Casing - Weld Bowl	2 1/2
Head Up BOPs'	5 1/2
Finish Nippling Up	3
Pressure Test Blind Rams	1/4
Pick Up Square Collars, String Reamer, Lay Flare Line	4 3/4

Operation	Hours
Run In, Pressure Test Pipe Rams & Hydril to 1200# 15 mins OK	1 1/2
Drill Out	1 1/4
Lay 2 Single & Pick Up Collars	1/2
Drill 7 7/8" Hole	4 1/4
Survey	1/4

Remarks:

Pressure Testerd Bowl to 2,000# psi OK
Checked Motor Shut Offs OK

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Candel et al SOBC Mountain R A-23 Date: March 30 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 2170 ft. Operation in progress: Drilling

Progress: 1360 ft. in 22 hours on bottom: Table speed 64/80 RPM. Bit weight: 30 lbs.

Drilling Mud: Weight: 8.6 lbs/gal. Viscosity: ____ secs. Water loss: ____ cc. FC ____ /32

Gel Strength: ____ pH 10.5 Solids ____ Pump Pressure: 1250 psi.

Materials: Benex 20#, Lime 200#

Deviation:

Depth:	890	1110	1330	1550	1740	1958			
Degrees	1/2	7/8	1	1 1/2	1 3/4	1 3/4			

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
1	HC	7 7/8	XIG	511	2170	1659	26 1/4	OB

Geologic Markers: Canol Depth 2150 Elev. -1771

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Rig Service - Check BOPs'	1/4		
Drilling	22		
Surveys	1 1/2		
Work on Rotary Air Line	1/4		

Remarks:

Reported by: P. L. Brown

DAILY DRILLING REPORT

Well Name: Candel et al SOBC Mountain R A-23 Date: March 31 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM/PM

Depth: 2464 ft. Operation in progress: Drilling

Progress: 294 ft. in 16 3/4 hours on bottom: Table speed: 65/80 RPM. Bit weight: 30/45 lbs.

Drilling Mud: Weight: 8.4 lbs/gal. Viscosity: ____ secs. Water loss: ____ cc. FC ____ /32

Gel Strength: ____ pH. ____ Solids. ____ Pump Pressure: 1250 psi.

Materials: Benex 8#, Lime 150#

Deviation:

Depth:	2142	2364	2400						
Degrees.	1 7/8	1 7/8	2						

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
1	HI	7 7/8	XIG	511	2188	1677.	27	
2	HI	7 7/8	XIG	2188	2447	259	15	
3	HI	7 7/8	XV	2447	2464	17	1	

Geologic Markers:

Kee Scarp Depth 2272 Elev. -1893

Depth 2362 Elev. -1983

Hare Indian Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Drilling	16 3/4	Survey - Trip for Bit	1 1/2
Survey & Trip for Bit	3 3/4	Slip Drill Line	1/4
Work on Pump	1/4	Finish Run-In, Clean 20'	1
Rig Service	1/4		
Survey	1/4		

Remarks:

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Candel et al SOBC Mountain R A-23 Date: April 1 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 2929 ft. Operation in progress: Drilling

Progress: 465 ft. in 23 1/4 hours on bottom: Table speed: 62 RPM. Bit weight: 45 lbs.

Drilling Mud: Weight: 84 lbs/gal. Viscosity: - secs. Water loss: - cc. FC - /32

Gel Strength: - pH 10.4 Solids - Pump Pressure: 1300 psi.

Materials: None

Deviation:

Depth:	2647	2898							
Degrees.	2 1/2	2 3/4							

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
3	HW	2 7/8	XV	2447	2929	482	24 1/4	OB

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Drilling 7 7/8# Hole	23 1/4
Rige Service - Check BOPs	1/4
Surveys	1/2

Operation	Hours

Remarks:

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Candel et al SOBC Mountain R A-23 Date: April 2 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379' ft. Time: 8 AM PM

Depth: 3405 ft. Operation in progress: Drilling

Progress: 476 ft. in 21 hours on bottom: Table speed: 62 54 RPM. Bit weight: 45 32 lbs.

Drilling Mud: Weight: 8.4 lbs/gal. Viscosity: 28 secs. Water loss: ____cc. FC ____/32

Gel Strength: ____ pH. ____ Solids. ____ Pump Pressure: 1400 psi.

Materials: None

Deviation:

Depth:	3054	3365							
Degrees.	2 3/4	3							

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
3	HW	7 7/8	XV	2447	3054	607	28 1/2	
4	HW	7 7/8	J33	3054	3405	351	8 3/4	

Geologic Markers:

EVIE Depth 2982 Elev. -2603

HUME Depth 3020 Elev. -2641

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Drilling	21		
Trip for Bit - Clean 75'	2 1/2		
Rig Service - Check BOPs	1/2		
& Survey			

Remarks:

Reported by: P.L. Brown

DAILY DRILLING REPORT

Well Name: Candel et al SOBC Mountain R A-23 Date: April 3 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 3570 ft. Operation in progress: Mixing Mud & Lost Circulation Materials

Progress: 165 ft. in 8 ½ hours on bottom: Table speed: 54 RPM. Bit weight: 32 lbs.

Drilling Mud: 3:00PM April 2 Weight: 8.4 lbs/gal. Viscosity: 28 secs. Water loss: ____cc. FC ____ /32

Gel Strength: ____ pH. ____ Solids ____ Pump Pressure: 1400 psi.

Materials: 7,600# Gel, 22# Benex, Sawdust 1½ boxes, Kwikseal 20 sxs.

Deviation:

Depth:									
Degrees.									

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
4	HW	7 7/8	J33	3054	3570	516	25 ¼	

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Drilling	8 1/2
Rig Service Check BOPs'	1/4
Lost Circ, Mix Gel Work stuck	
pipe.	6 1/4
Trip Out	2

Operation	Hours
Run in to 2162	1 1/4
Mix Gel & Lost Circ. Material	2
Circulate at 2162 Good Returns	1/2
Run in 2960 - Circ. " "	3/4
Run in 3535 Circ. & Clean Fill	2
Lost Circ. Pump mud down hole	1/2

Remarks:

Lost Circulation at 3563 feet - (543' into the Hume Formation).
No samples recovered.

Drilling Time Rate:

3555-56	2.9'
57	2.5
58	2.7
59	3.1
60	2.6
61	2.2
62	2.1
63	2.9
64	Dropped 1 Foot
65	0.8
66	0.6
67	0.4
68	0.8
69	1.1
70	1.7

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Can Del et al SOBC Mountain R A-23 Date: April 4 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM

Depth: 3582 ft. Operation in progress: Clean out plugged drill pipe & collars

Progress: 12 ft. in. 1 1/4 hours on bottom: Table speed: 46 RPM. Bit weight: 15 lbs.

Drilling Mud: Weight: - lbs/gal. - Viscosity: - secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: 200 psi.

Materials: Gel 24,600#, Benex 24#, Kwik Seal 83 sx, Sawdust 4 boxes; 40bbl Diesel

Deviation:

Depth:									
Degrees.									

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
5	HW	7 7/8	XV	3570	3582	12	1 1/4	

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Pull 13 Stands	1/2	Drill - No Returns	3/4
Mix Gel & Lost Circ Material	2 1/2	Build Volume	1/2
Pump 400 Bbls of plug N.Retns	1	Drill - No Returns	1/4
Build Volume, mix gel & lost		Clean Suction Tank pump 40bbls	
Circ. Mtrl. Trip-lay Sq Clrs	4	Diesel, mix mud for diesel plug	4 1/4

Remarks:

Build Volume 1 1/2
Drill - No Returns 1/4
Build Volume 1/2
Pump Gel Plug - Pipe plugged off 1
Trip & Clean 1530' plugged pipe 7

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Can Del et al SOBC Mountain R A-23 Date: April 5, 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 ~~PM~~ AM

Depth: 3601 ft. Operation in progress: Wait on Water - Build Volume

Progress: 19 ft. in. 2 3/4 hours on bottom: Table speed: ~~60~~ 44 RPM. Bit weight: ~~15~~ 10 lbs.

Drilling Mud: Weight: - lbs/gal. Viscosity: - secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: 250 psi.

Materials: Kwik Seal 80 bags

Deviation:

Depth:									
Degrees.									

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
5	HI	7 7/8	XV	3570	3601	31	4	

Geologic Markers:

Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Clean Out Plugged Collars	4 1/4
Run In with Bit	1
Break Circ & Circ to Condtn	
Hole @3553 G.Returns; Lost	
Returns @3575 Build Volume &	
Mix Lost Circ. Material	3 3/4
Pump Lost Circ Mtrl down	2
Drill with No Returns	1/2

Operation	Hours
Build Volume	1 1/2
Drill with no Returns	3/4
Build Volume - WO Water	3 3/4
Drill with No Returns	1
Build Volume and WO Water	4 1/4
Drill with No Returns	1/2
Wait On Water - Build Volume	3/4

Remarks:

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Can Del et al SOBC Mountain R A-23 Date: April 6 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 3601 ft. Operation in progress: Running in Pipe -

Progress: 0 ft. in. 0 hours on bottom: Table speed: - RPM. - Bit weight: - lbs.

Drilling Mud: Weight: - lbs/gal. Viscosity: - secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: - psi.

Materials: Gel 4800, Kwik Seal 60 Bags, Fiber Seal 48 Bags, Sawdust 1 Box

Deviation:

Depth:									
Degrees.									

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.

Geologic Markers:

Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
WO Water, Build Volume, Mix	
Lost Circ. Mat. Pump same	
down Hole - No Returns	8
Run Water, Build Volume	3
Mix Gel plug w/Haliburton w/	

Operation	Hours
Mix Gel plug w/120 sx & pump	1/2
Displace w/water	1/2
Pull 15 Stands Slow	1
Break Circ @2160 Cir. Returns	1 1/2
Run in 1 stand Circ 2254 "	3/4

Remarks:

120 sx & pump same	1
Displace gel plug w/water	1/4
Pull 2 stands	1/2
WO gel plug to set, pump NR	1 1/4
Rig To Run Gel Plug No.2	1

Run in 1 stand Circ 2348 "	3/4
Run in 2 stands " 2536 "	1/2
Run in 2 stands " 2724 "	1
Run in 2 stands " 2912 "	1
Run 2 stands - No Returns	1 1/2

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Can Del etal SOBC Mountain R A-23 Date: April 7 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 3602 ft. Operation in progress: Drilling Out Cement Plug

Progress: 1 ft. in. 3/4 hours on bottom: Table speed: - RPM. Bit weight: - lbs.

Drilling Mud: Weight: - lbs/gal. Viscosity: - secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: - psi.

Materials:

Deviation:

Depth:									
Degrees.									

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
5	HW	7 7/8	XV	3570	3602	32	4 3/4	

Geologic Markers:

Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Rig Service - Check BOPs	1/4
Pull 3 Stands - No Returns	1/4
Run In 10 Stands /Rig to Run	
Gel Plug No. 3	2 1/4
Run 120 bgs Gel -Diesel Plug	1/2
Break Circ. 65' f/Bottom GR	1/4
Clean to Bottom-Drill-No Rets	3/4
Build Volume - W.O. Water	4

Operation	Hours
Rig to & Run Cement Plug 50sx	1
Pull 15 Stands, Break Circ. Rets	1/2
Circ. Work Pipe, WOC	6
W.O.C.	6 1/4
Run In - Touch Cement 110' off	
Bottom - Circulate	1
Drill Out Cement	3/4

Remarks:

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Can Del etal SOBC Mountain R A-23 Date: April 8 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 3602 ft. Operation in progress: Circulating Off Bottom - Condition Hole

Progress: 0 ft. in. 0 hours on bottom: Table speed: - RPM. Bit weight: - lbs.

Drilling Mud: Weight: - lbs/gal. Viscosity: - secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: - psi.

Materials:

Deviation:

Depth:									
Degrees.									

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.

Geologic Markers:

_____ Depth ____ Elev. ____

_____ Depth ____ Elev. ____

_____ Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Drill Out Cement Lost Circ	
30' off bottom	3/4
Hole Tight Pull 3 Stands	3/4
Work Pipe, Put Kelly on 400#	
Pump w/no Returns	1 3/4

Operation	Hours
WOC	10 3/4
Run In & Touch Cement Plug	1/4
Break Circ. 140' off bottom	3/4

Remarks:

Hoist, Stand Collars, Run In Open End, Bridged off 23 Stnds from Bottom; Clean out bridge, Run In 5 stnds. Put Kelly On Circ, Singles Btm. 4 3/4

Pick Up Singles, Work to Bottom, 2 1/2
Circ. Lost Returns 35' off "
Work Pipe; Rig to run gel-diesel cement plug. Run 120 sxs gel w/diesel 50 sxs cement w/2% Cal. Set at 3593; Pull 12 stnds slow 1 3/4

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 9 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 930 ft. Operation in progress: Drilling Out Bridges

Progress: 30 ft. in. 6 hours on bottom: Table speed: 110 RPM. Bit weight: 30 lbs.

Drilling Mud: Weight: - lbs/gal. Viscosity: 168 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids - Pump Pressure: - psi.

Materials: Gel 13,300#, Benex 26#

Deviation:

Depth:									
Degrees.									

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
6	HC	7 7/8	XIG	900	930	30	6	OB

Geologic Markers: None

Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Circ. 54' off Bottom, Gd Retns	1 3/4	Clean Bridg from 870-890	8
Hoist, Run In w/drlng string	2 1/4	Clean Bridge from 900	1
Bridged Off @ 829', Pick Up		Trip Out, Stand 8 Collars in	
Kelly, Clean bridges from 829		Derrick.	1
to 870; Mix mud	4	Clean out Bridges 900-930	6

Remarks: Bit apears to be drilling new hole.

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 10 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM PM

Depth: 1420 ft. Operation in progress: Reaming w/Bit No.8 at 1416'

Progress: 490' ft. in. 8 3/4 hours on bottom: Table speed: 95 110 RPM. Bit weight: 5 30 lbs.

Drilling Mud: Weight: 9.2 lbs/gal. Viscosity: 130 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: 600 psi.

Materials: Gel 3,600#

Deviation:

Depth:	1243	1100							
Degrees.	1/2	1/2							

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
6	Bi	7 7/8	X1G	900	1127	227	9 3/4	
7	Bi	7 7/8	X3A	1127	1420	293	5	
8	Bi	7 7/8	X	1420	Reaming	at 1416		

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Rig Service - Check BOPs'	1/2	Trip, Pick Up Reamers, Square	
Clean Bridge from 930	3 3/4	Collars - Run In	2 1/2
Trip for Bit No.7	2	Clean Out Bridges - Ream from	
Drill New 7 7/8" Hole	5	1010'	4 1/2
Trip for Bit, Clean Bridge at		Surveys	1/2
985', Mix Mud	3 1/2	Ream	1 3/4

Remarks:

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 11. 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 2207 ft. Operation in progress: Hoisting for Bit No.8

Progress: 787 ft. in 17 1/4 hours on bottom: Table speed: 110 RPM. Bit weight: 35/38 lbs.

Drilling Mud: Weight: 9.2 lbs/gal. Viscosity: 54 secs. Water loss: - cc. FC 2 /32

Gel Strength: - pH. - Solids. - Pump Pressure: 1675 psi.

Materials: Gel 11,700#

Deviation:

Depth:	1554	1955	2114						
Degrees.	1/2	1	1 1/2						

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
8	HW	7 7/8	XV	1420.	2207	787	18 3/4	

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Rig Service - Check BOPs	1/4	Replace O Plug in Stand Pipe	
Clean to 1420'	1 3/4	Union	1/2
Drill 7 7/8" Hole	17 1/4	Hoist Bit No.8	1 1/4
Surveys	1		
Lay Down Singles; Replace			
w/Stands from Derrick	2		

Remarks:

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: Can Del Gtal ~~[illegible]~~ SOBC Mountain R. A-23 Date: April 12 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 2415 ft. Operation in progress: Drilling 7 7/8" Hole

Progress: 208 ft. in. 13 ½ hours on bottom: Table speed: 65/80 RPM. Bit weight: 40/45 lbs.

Drilling Mud: Weight: 8.9 lbs/gal. Viscosity: 40 secs. Water loss: ____ cc. FC ____ /32

Gel Strength: ____ pH. ____ Solids. ____ Pump Pressure: 1100 psi.

Materials: Gel 6,500 Benex 4#

Deviation:

Depth:	2334								
Degrees.	2								

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
9	HW	7 7/8"	XV	2207	2364	157	7 ¾	
10	HW	7 7/8"	XV	2364	2415	51	5 ¾	

Geologic Markers:

Hare Indian Depth 2362 Elev. -1983

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Finish out w/bit No.8	1/4
Turn Pins in 6 Pt.Reamer	3/4
Run in w/DCs'	1/2
Slip 52' Drill Line	1/2
Run In, Ream 1010-1260, Clean 40' to Bottom	2

Operation	Hours
Drill	7 3/4
Hoist Bit No.9	2 1/2
Run Drill Collars	1/2
Slip & Cut Drilling Line	1
Run In w/Bit No.10	1 1/2
Break Circ. Clean 10' to Bot.	1
Drill	5 3/4

Remarks:

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 13 19 72

Location: Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 2594 ft. Operation in progress: Drilling 7 7/8" Hole

Progress: 179 ft. in 16 1/4 hours on bottom: Table speed: 40/60 RPM. Bit weight: 36 lbs.

Drilling Mud: Weight: 8.9 lbs/gal. Viscosity: 45 secs. Water loss: 15 cc. FC 2 /32

Gel Strength: - pH. - Solids - Pump Pressure: 1200 psi.

Materials: Gel 3,100#, Benex 14#, Weight Material 3,800#

Deviation:

Depth:	2513								
Degrees.	2								

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
10	HL	7 7/8	XV	2364	2513	149	16 1/4	
4RR	HL	7 7/8	J33	2513	2594	81	5 3/4	

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Rig Service - Check BOPs'	1/4
Drill w/Bit No.10	10 1/2
Survey - Hoist up to 1156',	
Well started to flow; Run back	
to 1627', Close Hydril, Put on	
Kelly; Run GCM thru choke; mix	
Weight Material, Circulate thru	
Flow Line	5

Operation	Hours
Hoist Bit No. 10 Slowly	1
Run In Bit No.4RR slowly	1 1/4
Break Circ. Clean to Bottom	1/4
Drill w/Bit No.4RR	5 3/4

Remarks:

Ran Into ledges at 1,005 & 1,060

Believed gas coming from sands about 1,400' - 1,600'.

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 14 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 3092 ft. Operation in progress: Drilling 7 7/8" Hole

Progress: 498 ft. in. 21 3/4 hours on bottom: Table speed: 50/60 RPM. Bit weight: 35 lbs.

Drilling Mud: Weight: 9.0 lbs/gal. Viscosity: 43 secs. Water loss: 15.2 cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: 1300 psi.

Materials: Gel 3,500#, Benex 14#

Deviation:

Depth:	2868								
Degrees.	2 3/4								

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
4RR	HI	7 7/8	J33	2513	3092	579	27 1/2	OB

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Rig Service - Check BOPs'	1/4		
Lay Down Singles - Pick			
Stands up from Derrick	1 3/4		
Drill	21 3/4		
Survey	1/4		

Remarks:

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 15 - 1972

Location: Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 3416 ft. Operation in progress: Drilling 7 7/8" Hole

Progress: 324 ft. in 19½ hours on bottom: Table speed: 46/60 RPM. Bit weight: 25/35 lbs.

Drilling Mud: Weight: 8.9 lbs/gal. Viscosity: 40 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: 1350 psi.

Materials: Gel 3,500# Benex 14#

Deviation:

Depth:	3271								
Degrees.	2 1/4								

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
4RR	HI	7 7/8	J33	2513	3271	758	38	
11	HI	7 7/8	J44	3271	3416	145	9	

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Rig Service - Check BOPs'	1/4	Break Circ. Circ. 1' off Bottom	1/4
Drill w/Bit No4RR	10 1/2	Drill w/Bit No. 11	9
Survey & Strap Out	2	Lay Down Singles; Pick Up	
Service 6 Point Reamer	1/2	Stands from Derrick	1/2
Run In w/Bit No.11	1.		

Remarks:

Strap Tally 3243.46
Pipe Tally 3241.66
1.80

Reported by: P.L. Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 16 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 3708 ft. Operation in progress: Drilling 7 7/8" Hole

Progress: 292 ft. in. 18 hours on bottom: Table speed: 50/60 RPM. Bit weight: 25/35 lbs.

Drilling Mud: Weight: 8.9 lbs/gal. Viscosity: 42 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: 650 psi.

Materials: Gel 1,000#, Quik Seal 26 sxs, Benex 4#, Sawdust

Deviation:

Depth:	3545	3603	3697						
Degrees.	2 1/2	2 1/2	2 1/2						

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
11	HJ	7 7/8	J44	3271	3708	437	27	OB

Geologic Markers: None

Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Rig Service - Check BOPs'	1/4
Drilling	17 1/4
Circulate Samples	1
Survey & Hoist Slowly - Lay	
Down Stabilizers, Reamers &	
Square Collars	2 1/4

Operation	Hours
Survey	1

Remarks:

Circulated Samples & Conditioned Mud before entering expected Lost Circulation Zone at 3563. Drilled ahead and encountered no drilling break and experienced no lost circulation.

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SCBC Mountain R A-23 Date: April 17 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 4037 ft. Operation in progress: Drilling 7 7/8" Hole

Progress: 329 ft. in. 22½ hours on bottom: Table speed: 50/60 RPM. Bit weight: 35/25 lbs.

Drilling Mud: Weight: 8.7 lbs/gal. Viscosity: 40 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: 650 psi.

Materials: Gel, 3,400#, Benex 14#

Deviation:

Depth:	3822	3947	4010						
Degrees.	2 3/4	3 1/2	4						

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
11	Hi	7 7/8	J44	3271	4037	766	49½	OB

Geologic Markers: Gossage (Bear Rock Dolomite) Depth 4017 Elev. -3638

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Rig Service - Check BOPs'	1/4		
Drill	22 1/2		
Surveys	1 1/4		

Remarks:

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 18 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 4400 ft. Operation in progress: Drilling 7 7/8" Hole

Progress: 363 ft. in. 21 ½ hours on bottom: Table speed: 55/60 RPM. Bit weight: 18/35 lbs.

Drilling Mud: Weight: 9.0 lbs/gal. Viscosity: 38 secs. Water loss: ____ cc. FC ____ /32

Gel Strength: ____ pH. ____ Solids. ____ Pump Pressure: 650 psi.

Materials: Gel 2300#, Benex 8#, Soda Ash 200#, Weight Material 12,000#

Deviation:

Depth:	4042	4105	4198	4292	4323	4354	4384		
Degrees.	3 3/4	3 3/4	3 3/4	5	5 1/8	5	4 3/4		

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
11	HS	7 7/8	J44	3271	4400	1129	71	OB

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Rig Service - Check BOPs'	1/4		
Drill	21 1/2		
Surveys	2 1/4		

Remarks: Gas in mud forced well to flow on connections

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 19 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 4634 ft. Operation in progress: Drilling 7 7/8" Hole

Progress: 234 ft. in. 18¼ hours on bottom: Table speed: 60 RPM. Bit weight: 25 lbs.

Drilling Mud: Weight: 9.1 lbs/gal. Viscosity: 38 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: 650 psi.

Materials: Gel 600#, Benex 2#

Deviation:

Depth:	4446	4509	4572	4634					
Degrees.	5	5	4 3/4	4 1/2					

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
11	HW	7 7/8	J44	3271	4634	1363	89 1/4	

Geologic Markers: Ronning 4430 Depth -4430 Elev. - 4051

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Rig Service - Check BOPs'	1/4
Drill	18 1/4
Surveys	1
Survey-Strap Out No. Corr.	1 3/4
Pick Up Sq. Collars f/Derrick & Lay Down same	3/4

Operation	Hours
Run In w/Bit No.12	1 1/2
Break Circ. & Clean 10'-Btm.	1/2

Remarks:

Pipe Strap: 4637.84'
Pipe Tally 4635.24'
2.60' No Correction made

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 20 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 4887 ft. Operation in progress: Mix Gel & Lost Circ. Material - Build Volume

Progress: 253 ft. in. 19 1/4 hours on bottom: Table speed: 55 RPM. Bit weight: 18/25 lbs.

Drilling Mud: Weight: 9.0 lbs/gal. Viscosity: 42 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: 1350 psi.

Materials: Gel 3,800#, Benex 4, Kwik Seal 3 sxs;

Deviation:

Depth:	4727	4821							
Degrees.	5 1/2	6							

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
12	HW	7 7/8	J55	4634	4887	253	19 1/4	OB

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Drill	19 1/4	Lost Circ @ 4887', Mix lost	
Rig Service - Check BOPs'.	1/4	circ material, circ w/partial	
Surveys	1	returns	2
Clean Plugged Bit	1/2		
Circ. Btm Hole Sample	1		

Remarks: Lost circulation while circulating up bottom hole sample @ 4887'

Reported by: PL. Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 21 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 5072 ft. Operation in progress: Drilling 7 7/8" Hole - Losing Mud to Formation

Progress: 185 ft. in. 16½ hours on bottom: Table speed: 55 RPM. Bit weight: 18/20 lbs.

Drilling Mud: Weight: 8.9 lbs/gal. Viscosity: 50 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids - Pump Pressure: 1200/1350 psi.

Materials: Gel 14,000#, Benex 38#, Kwik Seal 33 sxs

Deviation:

Depth:	4915	5041							
Degrees.	6 1/2	6 1/2							

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
12	HC	7 7/8	J55	4634	5072	438	35 ¾	OB

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Build Volume, Mix Gel, Lost	
Circ. Mtrl. Full Returns	3/4
Drill	3 1/4
Lost Circ ¢ 4936, Mix Lost	
Circ Mtrl. Circulate	2 1/4
Drill	1 1/4

Operation	Hours
Surveys	3/4
Rig Service - Check BOPs'	1/4
Drill	12
Lost Circ. Mix Gel, Lost Circ	
Mtrl. Build Volume	3 1/2

Remarks:

Lost Circulation Zones: 4887'
4936'
5041'

Losing mud to formation from 4887' on to 5072'.

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 22 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 5097 T.D. ft. Operation in progress: Running Schlumberger Logs

Progress: 25 ft. in. 1 ½ hours on bottom: Table speed: 55 RPM. Bit weight: 20 lbs.

Drilling Mud: Weight: 8.9 lbs/gal. Viscosity: 50 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids - Pump Pressure: 1350 psi.

Materials: Gel 12,200#, Benex 22#, Kwik Seal 9 sxs.

Deviation:

Depth:	5097								
Degrees.	6 1/2								

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.
12	EW	7 7/8	J55	4634	5097	463	37 ¼	

Geologic Markers:

None Depth ____ Elev. ____

TOTAL DEPTH - DRILLER Depth 5097 Elev. -4718

TOTAL DEPTH - SCHLUMBERGER Depth 5098 Elev. -4719

Summary of Operations:

Operation	Hours
Rig Service - Check BOPs	1/4
Drill - Losing mud to Fmtn.	1 1/2
Circ. Sample - Loose Circ &	
Mud to Fmtn. Circ. Build Volume,	
Mix Mud.	7 1/2

Operation	Hours
Dummy Trip 12 Stnds; No Fill	1
Circ. Build Volume, Fmtn taking	
Mud	5 3/4
Survey. - Strap Out to Log	2 1/4
Rig to Log & Logging	5 3/4

Remarks:

Pipe Strap 5108.29
Pipe Tally 5103.76
4.53

Completed Drilling at depth 5097' KB. Losing Mud to Formation and unable to drill ahead. T.D. reached at 9:45 AM April 21, 1972

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 23 19 72

Location: Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 5097 TD ft. Operation in progress: Making up packer for DST No.1

Progress: 0 ft. in. 0 hours on bottom: Table speed: - RPM. Bit weight: - lbs.

Drilling Mud: Weight: 8.6 lbs/gal. Viscosity: 58 secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: - psi.

Materials: Gel 8,500#

Deviation:

Depth:									
Degrees.									

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours
Logging	13 1/2	Trip Out to Run DST No. 1	2
Tear Out Loggers	1/2	Run In tail Pipe	1/2
Run in w/bit, clean 20' fill			
to bottom	2		
Circulate, condition mud,			
Build volume, Screen Lost Circulation Material	5 1/2		

Remarks:

Schlumberger Logging:

1. Dual Induction Laterolog - 2"&5" - 100' from 5098' - 513' 3½ Hrs.
2. Sidewall Neutron Potosity Log, scales as above; 5095' - 513' 4 ½ Hrs.
3. Formation Density Log, scales as above; 5094' - 514' 4½ Hrs.
4. Borehole Compensated Sonic - GR - as above; 5098' - 514' 4 Hrs.

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 24 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 5097 TD ft. Operation in progress: Running in with Bit

Progress: 0 ft. in. 0 hours on bottom: Table speed: - RPM. - Bit weight: - lbs.

Drilling Mud: Weight: - lbs/gal. Viscosity: - secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids - Pump Pressure: - psi.

Materials: 4,000 # Weight Material

Deviation:

Depth:									
Degrees.									

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.

Geologic Markers: None Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours
Make Up Packer for DST No.1	2
Run In w/DST No.1	1 1/2
Head Up to Test Check MS Off	1/4
Testing	3 1/4
Hoist 5 Stands	3/4
Mix Wt. Mtrl, pump into hole; mud not dropping. Work Pipe	1

Operation	Hours
Hoist - Mud dropping normally	3/4
Mix Weight Material	1/2
Hoist-Break Down DST No.1	2 1/2
Make Up, Run In w/DST No.2	3
Head Up Test	1/2
Testing	3 1/4
Hoist DST No.2	2 3/4
Break & Lay Down Tool	1 1/2
Run In with Bit	1/2

Remarks:

DST No. 1 (Ronning) 4463' - 4766'; Pre Flow 5', ISI 30', VO 60', FSI 90'
Good blow on Pre Flow & Open flow, decreasing to slight at end of open flow. Recovered: 4250' Fluid: 600' Mud, 400' muddy salt water (46,000 ppm), 3250' sulfurous salt water. (98,000 ppm); Temp. 152.

FIELD READINGS

IHP	IFP	ISIP
2007#	1827#	1977#
FHP	FFP	FSIP
1992#	1977#	1977#

DST No. 2 (Gossage-Bear Rock) 4165' - 4262'; Pre Flow 5', ISI 30', VO 60', FSI
Good blow on Pre Flow & Open Flow, decreasing to slight at end of flow period. Recovered: 3,850' Fluid: 1000' slightly muddy salt water, 2850' salt water (80,400 ppm). Temp. 145.

FIELD READINGS

IHP	1857 #	IFP	1467#	ISIP	1857#
FHP	1857#	FFP	1842#	FSIP	1857#

Reported by: P.L.Brown

DAILY DRILLING REPORT

Well Name: CanDel etal SOBC Mountain R A-23 Date: April 25-26 19 72

Location: Lsd.____ Sec.____ Twp.____ Rge.____ W.____ M. KB 379 ft. Time: 8 AM ~~PM~~

Depth: 5097' TD ft. Operation in progress: Running Abandonment Plugs

Progress: - ft. in. - hours on bottom: Table speed: - RPM. Bit weight: - lbs.

Drilling Mud: Weight: - lbs/gal. Viscosity: - secs. Water loss: - cc. FC - /32

Gel Strength: - pH. - Solids. - Pump Pressure: - psi.

Materials:

Deviation:

Depth:									
Degrees.									

Bits:

No.	Make	Size	Type	From	To	Footage	Hours	Cond'n.

Geologic Markers: None

Depth ____ Elev. ____

Depth ____ Elev. ____

Depth ____ Elev. ____

Summary of Operations:

Operation	Hours	Operation	Hours

Remarks:

Plug No.1 5098' - 5000' cemented w/34 sxs Plug Down 10:00 PM April 24, 1972 - Not Felt

Plug No.2 4500'- 4400' cemented w/50 sxs plus 3% $CaCl_2$ Plug Down 11:00 P.M. April 24th, 1972; Felt at 4390'.

Plug No.3 3400' - 3300' cemented w/38 sxs plus 3% $CaCl_2$. Plug Down 7:45 PM, April 25, 1972. Felt at 3306

Plug No.4 2300' - 2100' cemented w/95 sxs plus 3% $CaCl_2$. Plug down 4:14 P.M. April 25th, 1972; Plug felt at 2075

Plug No.5 563' - 463' cemented with 82 sxs plus 3% CaCl2. Plug down 12:40AM April 26th, 1972. Plug felt at 450'.

Cut casing 5' below G.L. cemented with 5 sxs on top. welded on stell plate with proper post and sign.

Reported by: P.L. Brown Rig Released 9:30 A.M. April 26, 1972

CANDEL etal SOBC 65°-42-14" NL

WELL NAME Mountain R. A-23 LOCATION 129°-19'-12" W λ

CONTRACTOR Kenting - Petrolia RIG No. 7 TD 5097

DATE SPUDDED March 25, 1972 DATE RELEASED April 26, 1972

FOOTAGE PRICE _____ DAY WORK RATE _____

MUD CO. _____ CORING CONTRACTOR _____

REMARKS: Ran 13 jts, 517', 8 5/8" Csng, Landed at 511' K.B.
Cemented w/320 sxs, + 2% $CaCl_2$, Plug down 1:30AM, 3/28

Drilled w/water to 3569', Lost Circulation at 3563', Drilled blind to 3602', Set 2 gel-cement-diesel plugs, no returns, Set 3rd Plug, Felt & Circulated 54' off bottom, Good Returns, Ran in drilling string, Hole bridged from 829' down, Lost original hole, Drilling new hole w/mud.

No lost circulation in this zone on new hole

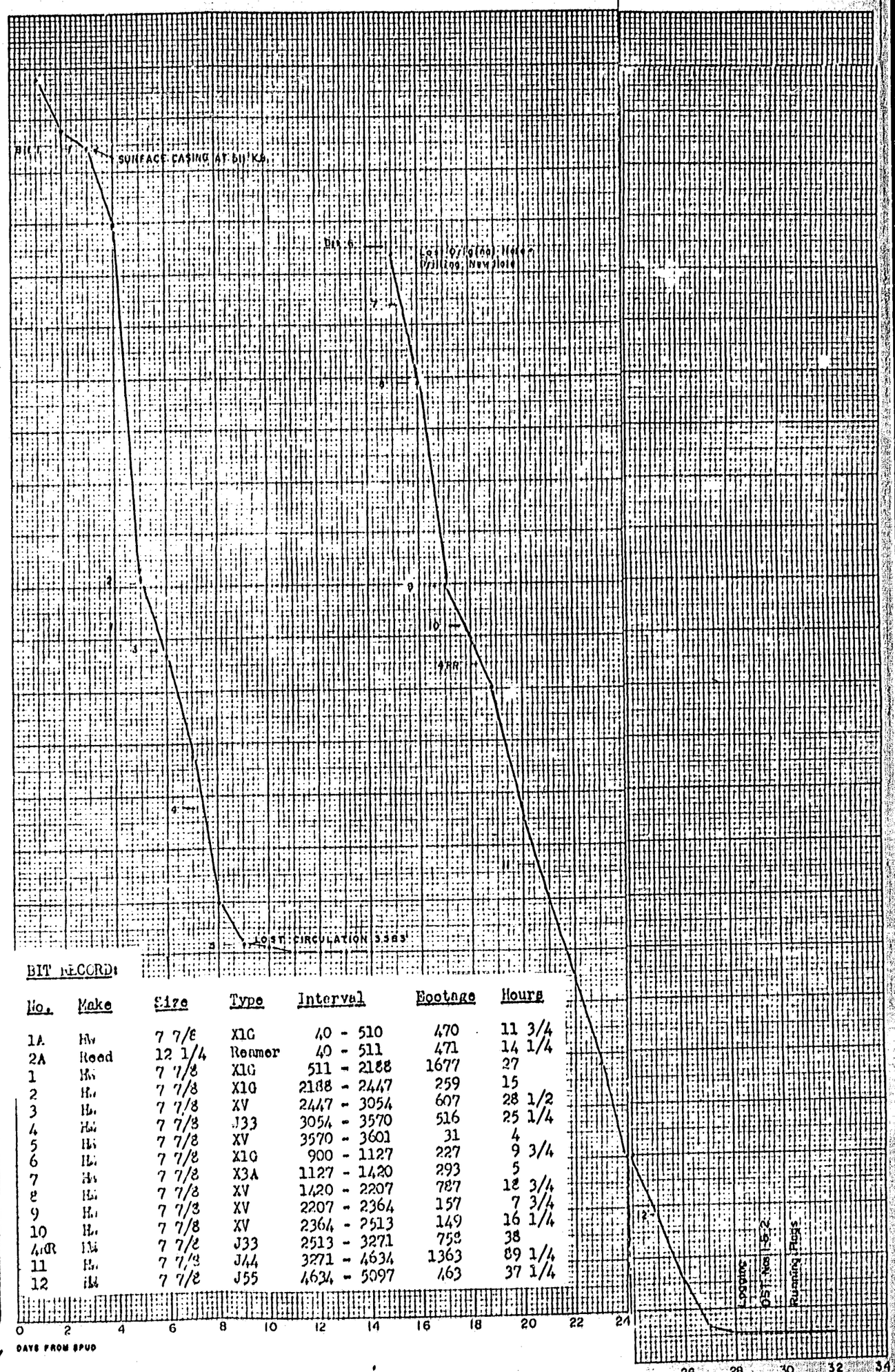
Lost Circulation 4887, 4936, 5041 & 5097

DRILLING PROGRESS GRAPH

MUD PROPERTIES VIS.	WT.	WL.	PH
60			
48			
98			
156	9.2		
43	9.2		
58	9.2		
75 130	9.2		
47	9.1		
46	91		
47	8.9	8.2	
45	90		
38	9.2	10.0	
43	9.2		
54	9.2		
78	92		
50 48	9.1 8.9		
52	8.9		
55 50	8.8 9.0		
45 42	8.9 8.9		
45	8.8		
50	8.8		
48	8.9		
46 43	8.9 8.9	15.2	
40 46	9.0 9.0		
43 60	9.0 9.0		
61 40	8.9 8.9		
42 62	8.9 8.8		
52 65 45	8.8 8.9 8.9		
44 42	8.9 8.9		
55	8.9		
46 38	8.8 8.7		
41 44	8.8 8.6		
40 37	8.7 8.6		
39 39	8.8 8.8		
40	8.9		
40 38	8.8 9.0		
40 38	9.0 9.1		
42 40	9.1 9.0		
38 40	9.1 9.0		
39 40 45	9.0 9.0 9.0		
42 50	90 9.1		
46	8.9		
45 50 47/67	8.9 8.9 37		

FORMATION TOPS	DEPTH
	200
	400
	600
	800
	1000
	1200
	1400
	1600
	1800
	2000
CANOL 2145	
KEE SCARP 2210	2200
HARE INDIAN 2332	
	2400
	2600
	2800
EVIE	
HUME 3022	3000
	3200
	3400
	3600
	3800
GOSSAGE DOL 4023	4000
	4200
RONNING 4448	4400
	4600
	4800
	5000

VERT. DEV. 1 2 3 4



BIT RECORD:

No.	Make	Size	Type	Interval	Footage	Hours
1A	Hw	7 7/8	X1G	40 - 510	470	11 3/4
2A	Reed	12 1/4	Reamer	40 - 511	471	14 1/4
1	Hw	7 7/8	X1G	511 - 2188	1677	27
2	Hw	7 7/8	X1G	2188 - 2447	259	15
3	Hw	7 7/8	XV	2447 - 3054	607	28 1/2
4	Hw	7 7/8	J33	3054 - 3570	516	25 1/4
5	Hw	7 7/8	XV	3570 - 3601	31	4
6	Hw	7 7/8	X1G	900 - 1127	227	9 3/4
7	Hw	7 7/8	X3A	1127 - 1420	293	5
8	Hw	7 7/8	XV	1420 - 2207	787	18 3/4
9	Hw	7 7/8	XV	2207 - 2364	157	7 3/4
10	Hw	7 7/8	XV	2364 - 2513	149	16 1/4
4RR	Hw	7 7/8	J33	2513 - 3271	758	38
11	Hw	7 7/8	J44	3271 - 4634	1363	89 1/4
12	Hw	7 7/8	J55	4634 - 5097	463	37 1/4

WATER ANALYSES

FOR

CANDEL OIL LTD.

CANDEL ET AL SOBC MOUNTAIN R. A-23
MOUNTAIN RIVER AREA
NORTHWEST TERRITORIES

CORE LABORATORIES - CANADA LTD.
Petroleum Reservoir Engineering
CALGARY - EDMONTON - REGINA

CORE LABORATORIES – CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS

File 933-2519 Page 1 of 4

Company CanDel Oil Ltd.

Well CanDel et al SOBC Mountain R. A-23 K.B. _____ Grd. 362'

Location 65° 42' 14.00 N.L. 129° 19' 12.00 W.L. Field Mountain River Area Province N.W.T.

Formation Ronagan Interval 4463' - 4766'

Sampled from DST #1 (Top of Tool) by G. Wiggett

Date sampled April 23/72 Date analysed May 8/72 Analyst ML

Recovery 4250' liquid, (98,200 PPM).

Mud type _____ Water cushion _____

Resistivity 0.072 Ohm-meters @ 74 °F

Specific gravity 1.0667 @ 60°F

pH 7.3 . H_2S Absent

Refractive Index 1.3499 @ 75°F

Total Solids:

Calculated 100,075 mg/liter

By evaporation @ 110°C - mg/liter

By evaporation @ 180°C - mg/liter

At ignition - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO_3	SO_4	CO_3	OH
34827	3352	484	Trace	Abs.	-	-	60168	298	946	Nil	Nil

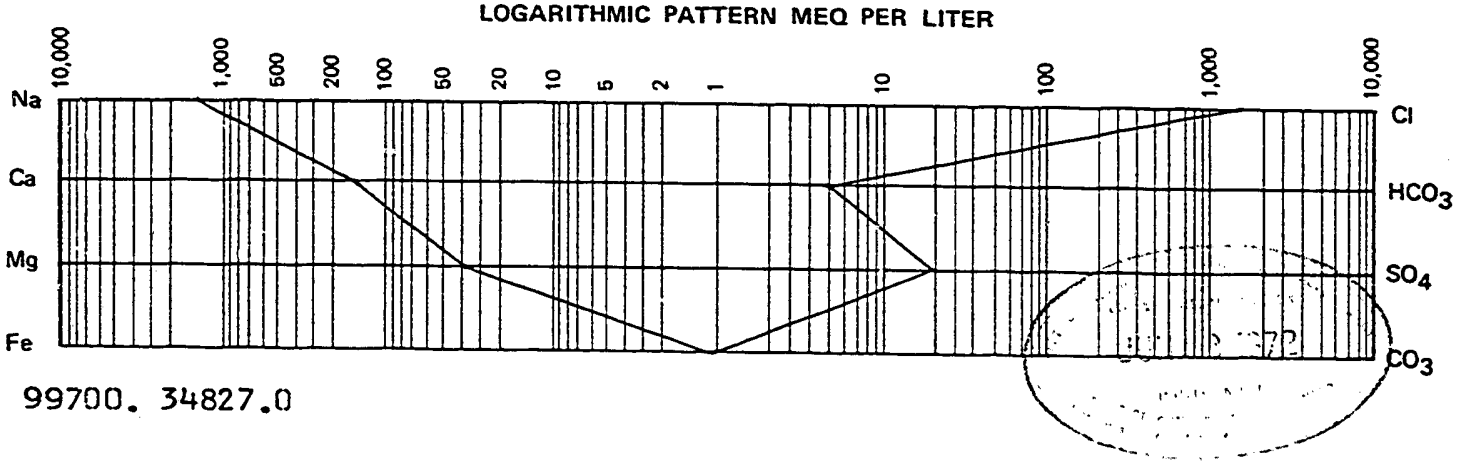
PER CENT CALCULATED SOLIDS

34.8	3.3	.5	Trace	Abs.	-	-	60.1	.3	.9	.0	.0

MEQ PER LITER

1514.2	167.3	39.8	Trace	Abs.	-	-	1696.7	4.9	19.7	.0	.0

LOGARITHMIC PATTERN MEQ PER LITER



99700. 34827.0

CORE LABORATORIES – CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS

File 933-2519 Page 2 of 4

Company: CanDel Oil Ltd.

Well: CanDel et al SOBC Mountain R. A-23 K.B. _____ Grd. 362'

Location: 65° 42' 14.00 N.L. 129° 19' 12.00 W.L. Field: Mountain River Area Province: N.W.T.

Formation: Bear Rock Interval: 4165' - - 4263'

Sampled from: DST #2 (Top of Tool) by: G. Wiggett

Date sampled: April 24/72 Date analysed: May 9/72 Analyst: ML

Recovery: 3850' liquid, (80,400 PPM).

Mud type _____ Water cushion _____

Resistivity: 0.083 Ohm-meters @ 71 °F

Specific gravity: 1.0596 @ 60°F

pH: 7.6 H_2S: Present

Refractive Index: 1.3482 @ 75°F

Total Solids:

Calculated: 88,060 mg/liter

By evaporation @ 110°C: - mg/liter

By evaporation @ 180°C: - mg/liter

At ignition: - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO_3	SO_4	CO_3	OH
30684	2901	422	Trace	Abs.	-	-	52808	332	913	Nil	Nil

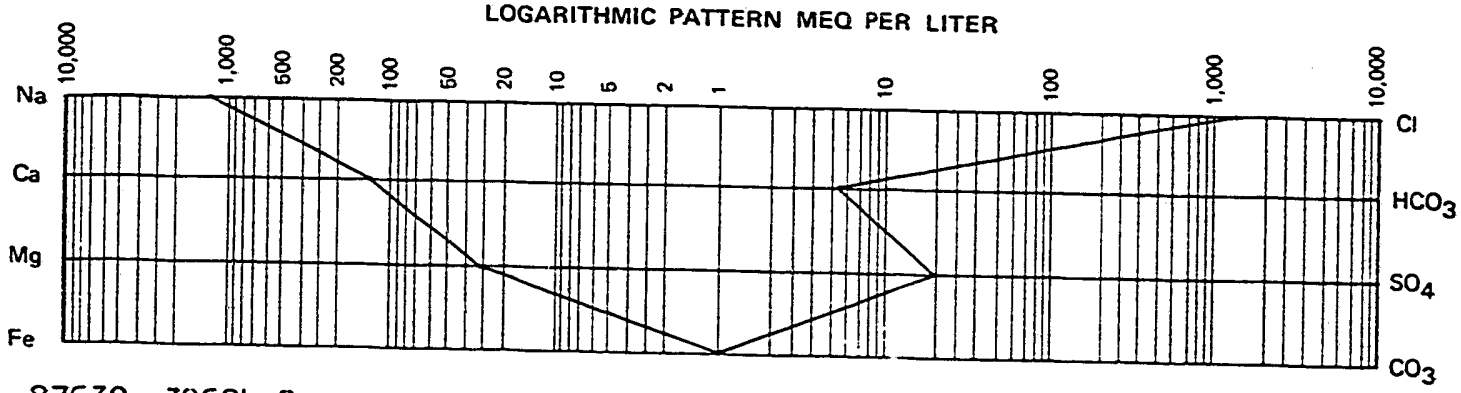
PER CENT CALCULATED SOLIDS

34.8	3.3	.5	Trace	Abs.	-	-	60.0	.4	1.0	.0	.0

MEQ PER LITER

1334.1	144.8	34.7	Trace	Abs.	-	-	1489.2	5.4	19.0	.0	.0

LOGARITHMIC PATTERN MEQ PER LITER



87639. 30684.0

CORE LABORATORIES – CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS

File 933-2519 Page 3 of 4

Company: CanDel Oil Ltd.

Well: CanDel et al SOBC Mountain R. A-23 K.B. _____ Grd. 362'

Location: 65° 42' 14.00 N.L. 129° 19' 12.00 W.L. Field: Mountain River Area Province: Alberta

Formation _____ Interval _____

Sampled from: Water From Lake by _____

Date sampled _____ Date analysed: May 9/72 Analyst: ML

Remarks: Appeared sulphurous at time of sampling.

Mud type _____ Water cushion _____

Resistivity: 0.34 Ohm-meters @ 70 °F

Specific gravity: 1.0157 @ 60°F

pH: 7.6 H_2S: Absent

Refractive Index: 1.3371 @ 73°F

Total Solids:

Calculated: 22,479 mg/liter

By evaporation @ 110°C: - mg/liter

By evaporation @ 180°C: - mg/liter

At ignition: - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO_3	SO_4	CO_3	OH
7436	998	136	Trace	Abs.	-	-	13138	512	259	Nil	Nil

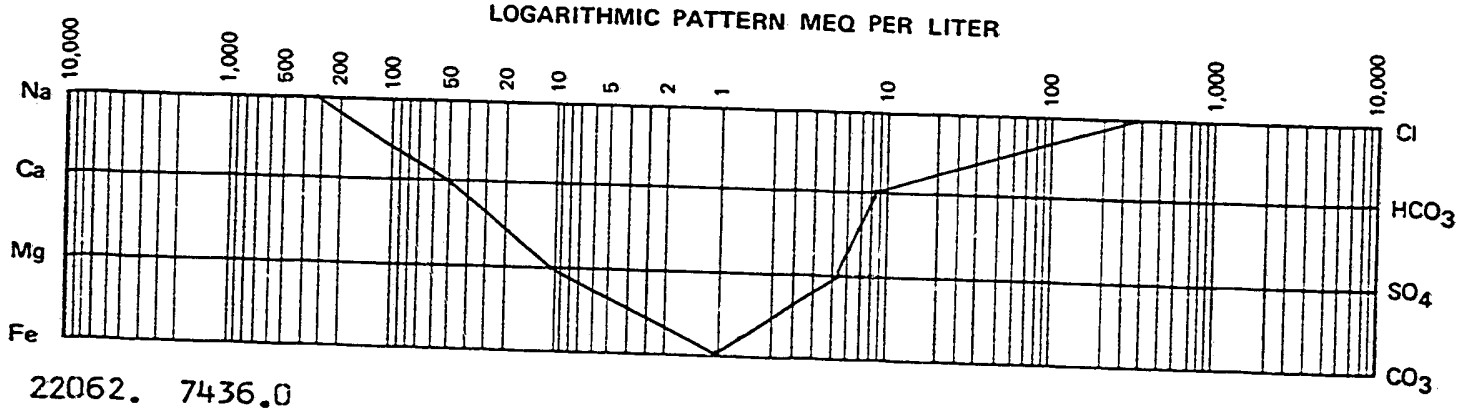
PER CENT CALCULATED SOLIDS

33.1	4.4	.6	Trace	Abs.	-	-	58.4	2.3	1.2	.0	.0

MEQ PER LITER

323.3	49.8	11.2	Trace	Abs.	-	-	370.5	8.4	5.4	.0	.0

LOGARITHMIC PATTERN MEQ PER LITER



22062. 7436.0

CORE LABORATORIES — CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS

File 933-2519 Page 4 of 4

Company CanDel Oil Ltd.

Well CanDel et al SOBC Mountain R. A-23 K.B. _____ Grd. 362'

Location 65° 42' 14.00 N.L. 129° 19' 12.00 W.L. Field Mountain River Area Province N.W.T.

Formation _____ Interval _____

Sampled from _____ by _____

Date sampled _____ Date analysed May 9/72 Analyst ML

Remarks Water associated with gas, appears to be make-up water.

_____ Mud type _____ Water cushion _____

Resistivity 11.5 Ohm-meters @ 71 °F

Specific gravity 1.0001 @ 60°F

pH 7.9 H_2S Absent

Refractive Index 1.3324 @ 73°F

Total Solids:

Calculated 604 mg/liter

By evaporation @ 110°C - mg/liter

By evaporation @ 180°C - mg/liter

At ignition - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO_3	SO_4	CO_3	OH
64	80	20	Trace	-	-	-	81	327	32	Nil	Nil

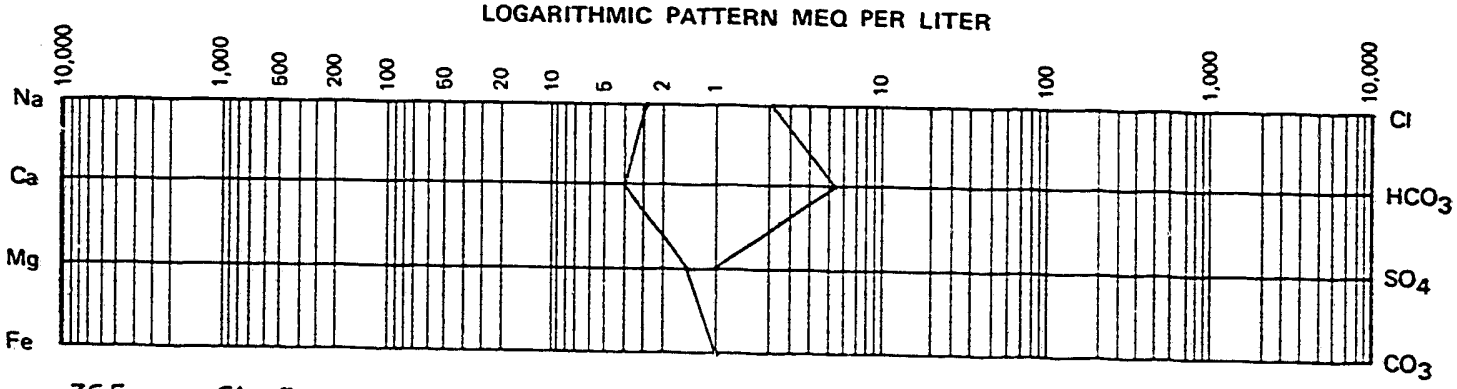
PER CENT CALCULATED SOLIDS

10.6	13.2	3.3	Trace	-	-	-	13.4	54.1	5.3	.0	.0

MEQ PER LITER

2.8	4.0	1.6	Trace	-	-	-	2.3	5.4	.7	.0	.0

LOGARITHMIC PATTERN MEQ PER LITER



365. 64.0

FORMATION TESTING

Technical Report

CALGARY, ALBERTA

A Halliburton Company

Halliburton Services Limited

FORMATION TESTING
DATA SHEET

REFER TO INVOICE NO. 09725

HALLIBURTON DISTRICT: Edmonton

JOB DATE: April 24, 1972

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA:

PRESSURE DATA

	TOP	CENTRE	BOTTOM
GAUGE NUMBER	2804	2622	2613
GAUGE DEPTH	4144	4197	5095
BLANKED OFF	~~YES~~/NO	YES ~~NO~~	YES ~~NO~~
HOUR CLOCK TRAVEL	12 hrs.	12 hrs.	12 hrs.
INITIAL HYDROSTATIC	1843	1869	2272
FIRST FLOW — INITIAL	559	1406	
FIRST FLOW — FINAL	890	1689	
FIRST CLOSED IN	1843	1866	
SECOND FLOW — INITIAL	1207	1501	
SECOND FLOW — FINAL	1836	1865	
SECOND CLOSED IN	1843	1866	
THIRD FLOW — INITIAL			
THIRD FLOW — FINAL			
THIRD CLOSED IN			
FINAL HYDROSTATIC	1839	1863	2269

TYPE OF TEST	TESTER	EMPL. NO
Dual straddle	G. Wiggett	
WITNESS: P.Brown	DRILLING CONTRACTOR: Petrolia 7	

EQUIPMENT AND WELL DATA

FORMATION TESTED	Bear Rock	GAUGE DEPTH TEMPERATURE	145 °F MEAS. °F EST.
NET PRODUCTIVE THICKNESS	FT.	MUD TYPE	Gel
K B ELEVATION	379	MUD WEIGHT / MUD VISC.	8.6 / 58
ALL DEPTHS MEASURED FROM	☑ KB ☐ GROUND	CASING OR HOLE SIZE	7 7/8"
PACKER DEPTHS	TOP 4165 / BOTTOM 4262	RATHOLE SIZE	N/A
DEPTH OF TESTER VALVE	4133	DRILL PIPE (OD / WEIGHT)	4" / 15.5
CASING PERFORATED INTERVAL	N/A	DRILL COLLARS ABOVE TESTER (ID / LENGTH)	2 1/8" / 485'
TOTAL DEPTH	5097	SURFACE CHOKE	1"
AMOUNT AND TYPE CUSHION	Nil	BOTTOM CHOKE	5/8"

FLUID SAMPLER DATA

SAMPLER PRESSURE AT SURFACE _____ PSIG

RECOVERY: C.C. OIL _____ CU.FT. GAS _____

C.C. WATER _____

C.C. MUD _____

TOTAL LIQUID C.C. _____

SAMPLE SHIPPED TO LABORATORY: YES ☐ NO ☐

OIL GRAVITY _____ API @ _____ °F

GAS/OIL RATIO _____ CU.FT./BBL.

~~RESISTIVITY~~/REFRACTOMETER ~~OR CL READING~~

			CHLORIDE CONTENT
RECOVERY WATER	@	°F	80,400 PPM
RECOVERY MUD FILTRATE	@	°F	PPM
MUD PIT SAMPLE FILTRATE	@	°F	PPM

TIME PERIODS

	FIRST	SECOND	THIRD		AM	PM
FLOW	5	60		TESTER OPENED	12:05	
CLOSED IN	30	90		PACKER UNSEATED	3:10	

LIQUID RECOVERY DATA

MEASURED FROM TESTER VALVE

FEET	DESCRIPTION OF LIQUID
1000	Muddy salt water
2860	Salt water
3850	TOTAL LIQUID RECOVERY

GAS FLOW RATE DATA

TYPE OF INSTRUMENT: ☐ CRITICAL FLOW PROVER ☐ PITOT TUBE ☐ ORIFICE WELL TESTER ☐ SIDE STATIC

FLOW TIME	INSTRUMENT PRESSURE "WATER	"MERC.	PSI	ORIFICE SIZE	GAS TEMP.	GAS RATE MCFD @ 60°F

REMARKS: Strong air blow during first flow. Stong air blow decreasing to weak blow at end of test.

DEPT. OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT — OIL & MINERAL DIVISION — JUN 2 1972 — INUVIK, N.W.T. — DISTRICT CONSERVATION OFFICER — Northwest Territories

COMPANY: CANADIAN DELHI OIL LTD.

LEGAL DESCRIPTION: 65°-42'-14" 129°-19'-12"

PROVINCE OR TERRITORY: N.W.T.

FIELD OR AREA: MOUNTAIN RIVER

TEST NUMBER: 2

WELL NAME AND NUMBER: CANDEL ET AL SOBC MOUNTAIN A-23

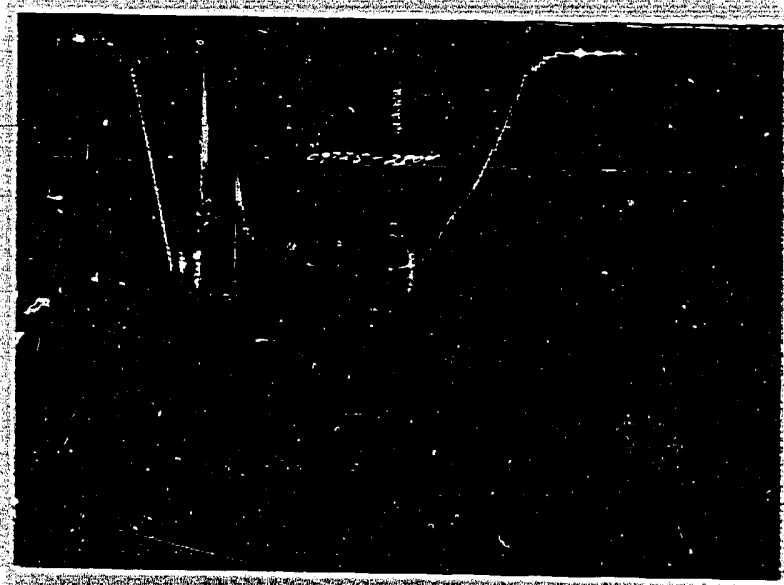
TESTED INTERVAL: 4165 - 4262

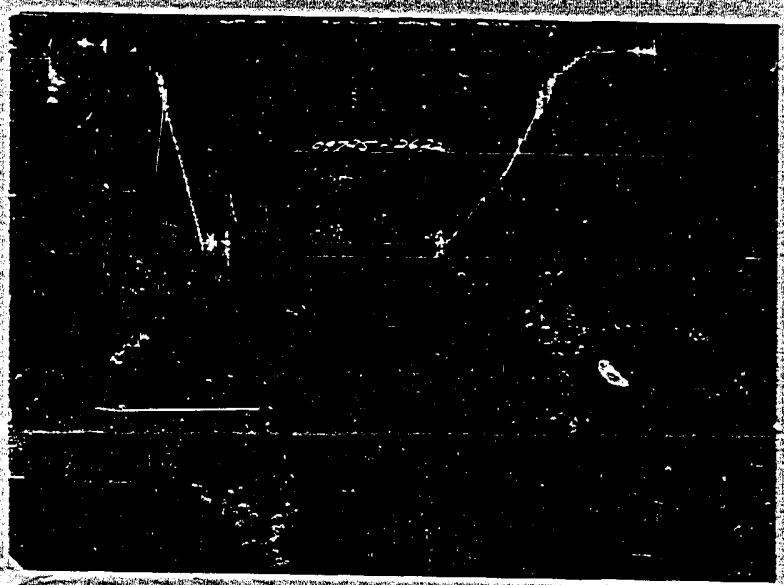
FORM 344B

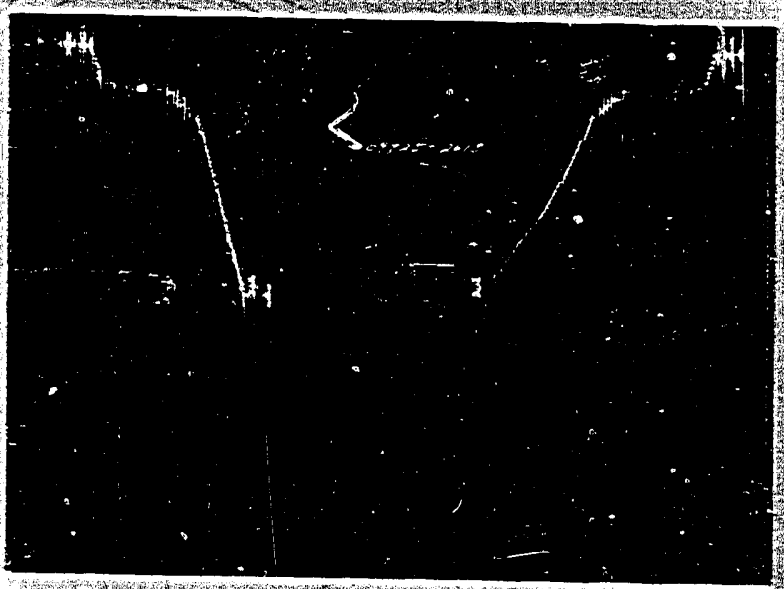
PRESSURE

TIME

Each horizontal line equal to 1000 psi







TEMPERATURE RECORD

Each concentric line equals 10° F.
Temperature increases outwardly

Ticket No. 09725

Temperature Range °F

70 °F to 170 °F

A to B—Initial CIP

B to C—2nd Flow

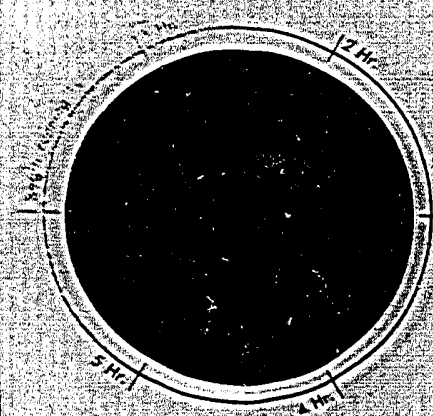
C to D—Final CIP

A 120 °F

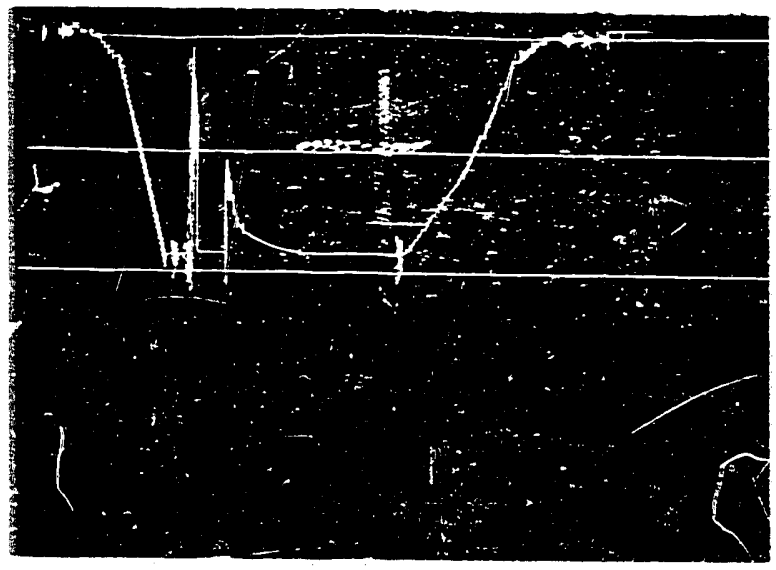
B 140 °F

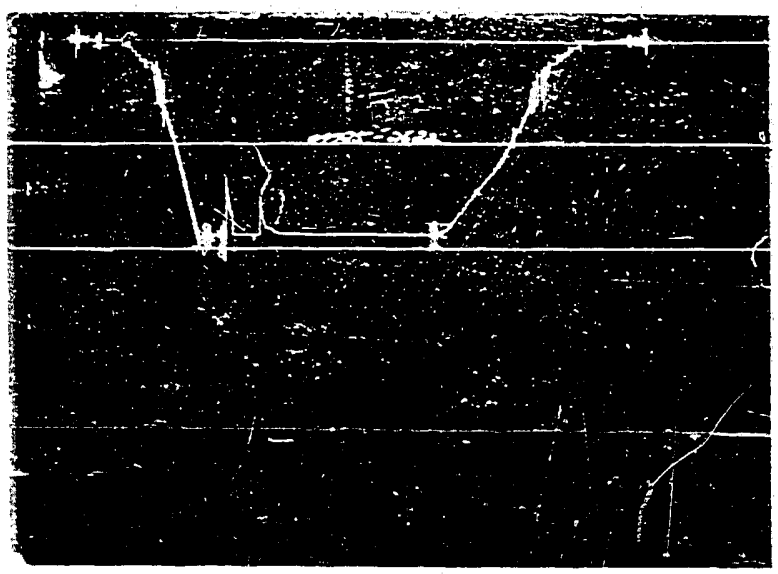
C 145 °F

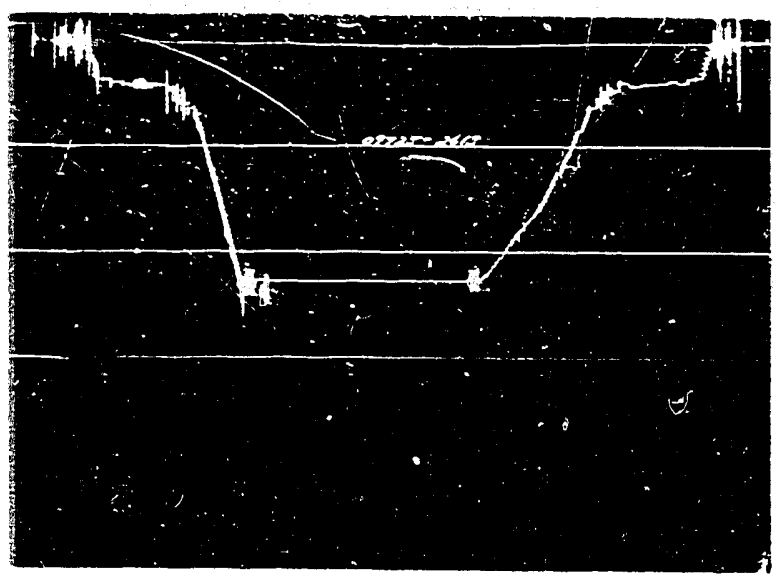
D 141 °F



FORM 410







NOMENCLATURE

AOF = absolute open flow potential, MCFD

AOF_t = theoretical absolute open flow potential if damage were removed, MCFD

B = formation volume factor, res bbl/ST bbl

c = compressibility, psi^{-1}

D = gauge depth from KB, ft

DR = damage ratio, dimensionless

E = KB elevation, ft

F = drill pipe capacity, bbl/ft

G = hydrostatic gradient of recovery fluid, psi/ft

h = net productive thickness of formation, ft

h^1 = thickness of test interval, ft

k = average effective permeability, md

k^1 = estimated average effective permeability, md

m = slope of final CIP buildup plot, psig/cycle ($psig^2$/cycle for gas)

M = slope of flow plot, min^{-1}

P_D = average pressure drop across damaged zone during flow, psig

P_f = reservoir pressure, psig

P_s = wellbore flow pressure, psig

$\bar{P}$ = weighted average wellbore flow pressure, psig

PI = productivity index, bbl/day-psi

PI_t = theoretical productivity index if damage were removed, bbl/day-psi

PS = potentiometric surface, fresh water corrected to 100°F, ft

Q = average liquid production rate during test, bbl/day

Q_g = measured gas production rate, MCFD at 60°F, 14.4 psig, sp. gr. 0.60

Q_m = maximum production rate, U.S. gal/min

Q_{mt} = maximum theoretical production rate if damage were removed, U.S. gal/min

q = flow rate calculated from hydrostatic of recovery, psi/×min

r_i = radius of investigation, ft

r_w = wellbore or shaft radius, ft

R_s = solution gas-oil ratio, MCFD/ST bbl

s = fluid saturation, fraction

t = effective flow time, min

t_f = time interval from start of continuous production to some future point of interest, min

T = reservoir temperature, °R

μ = viscosity, cp

x = time increment during which q values are calculated, min

Z = compressibility factor, dimensionless

ϕ = porosity, fraction

θ = time point during the closed-in period, minutes

Subscripts

g = gas

o = oil

w = water

t = total

FORMATION TESTING

Technical Report

CALGARY, ALBERTA

A Halliburton Company

Halliburton SERVICES LIMITED

FORMATION TESTING
DATA SHEET

REFER TO INVOICE NO. 09725

HALLIBURTON DISTRICT: Edmonton

JOB DATE: April 23, 1972

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA:

PRESSURE DATA

	TOP	CENTRE	BOTTOM
GAUGE NUMBER	2804	2613	2622
GAUGE DEPTH	4442	4495	5095
BLANKED OFF	~~YES~~/NO	YES/~~NO~~	YES/~~NO~~
HOUR CLOCK TRAVEL	12 hrs.	24 hrs.	24 hrs.
INITIAL HYDROSTATIC	1971	2007	2242
FIRST FLOW — INITIAL	293	1678	
FIRST FLOW — FINAL	902	1978	
FIRST CLOSED IN	1967	2000	
SECOND FLOW — INITIAL	1068	1864	
SECOND FLOW — FINAL	1967	1998	
SECOND CLOSED IN	1967	2001	
THIRD FLOW — INITIAL			
THIRD FLOW — FINAL			
THIRD CLOSED IN			
FINAL HYDROSTATIC	1971	2004	2242

TYPE OF TEST	Dual straddle
TESTER	G. Wiggett
EMPL. NO.	
WITNESS	P. Brown
DRILLING CONTRACTOR	Petrolia 7

EQUIPMENT AND WELL DATA

FORMATION TESTED	Ronagan	GAUGE DEPTH / TEMPERATURE	OF MEAS. / OF EST.
NET PRODUCTIVE THICKNESS	FT.	MUD TYPE	Gel
KB ELEVATION	379	MUD WEIGHT / MUD VISC.	8.6 / 58
ALL DEPTHS MEASURED FROM	☑ KB ☐ GROUND	CASING OR HOLE SIZE	7 7/8"
PACKER DEPTHS (TOP / BOTTOM)	4463 / 4766	RATHOLE SIZE	N/A
DEPTH OF TESTER VALVE	4431	DRILL PIPE (OD / WEIGHT)	4" / 15.5
CASING PERFORATED INTERVAL	N/A	DRILL COLLARS ABOVE TESTER (ID / LENGTH)	2 1/8" / 315'
TOTAL DEPTH	5097	SURFACE CHOKE	1"
AMOUNT AND TYPE CUSHION	Nil	BOTTOM CHOKE	5/8"

FLUID SAMPLER DATA

SAMPLER PRESSURE AT SURFACE _____ PSIG

RECOVERY: C.C. OIL _____ CU.FT. GAS _____

C.C. WATER _____

C.C. MUD _____

TOTAL LIQUID C.C. _____

SAMPLE SHIPPED TO LABORATORY: YES ☐ NO ☐

OIL GRAVITY _____ API @ _____ °F

GAS/OIL RATIO _____ CU.FT./BBL.

~~RESISTIVITY~~/REFRACTOMETER ~~CORRECTION~~

			CHLORIDE CONTENT
RECOVERY WATER	@	°F	98,200 PPM
RECOVERY MUD FILTRATE	@	°F	PPM
MUD PIT SAMPLE FILTRATE	@	°F	PPM

TIME PERIODS

	FIRST	SECOND	THIRD		AM	PM
FLOW	5	60		TESTER OPENED	11:55	
CLOSED IN	30	90		PACKER UNSEATED		3:00

LIQUID RECOVERY DATA

FEET (MEASURED FROM TESTER VALVE)	DESCRIPTION OF LIQUID
600	Mud
400	Muddy salt water
3250	Sulfhurous salt water
4250	TOTAL LIQUID RECOVERY

GAS FLOW RATE DATA

TYPE OF INSTRUMENT: ☐ CRITICAL FLOW PROVER ☐ PITOT TUBE ☐ ORIFICE WELL TESTER ☐ SIDE STATIC

FLOW TIME	INSTRUMENT PRESSURE "WATER	"MERC.	PSI	ORIFICE SIZE	GAS TEMP.	GAS RATE MCFD @ 60°F

REMARKS: Strong air blow during first flow. Strong air blow decreasing to weak towards end of second flow. Hole would not take fluid when packers unseated. Worked pipe and hoisted slowly for 14 stands.

DEPT. OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT — OIL & MINERAL DIVISION — JUN 3 1972 — INUVIK, N.W.T. — DISTRICT ENGINEER, Northwest Territories & Yukon Territory

COMPANY: CANADIAN DELHI OIL LTD.

LEGAL DESCRIPTION: 65° -42'-14" 129° -19'-12"

PROVINCE OR TERRITORY: N.W.T.

FIELD OR AREA: MOUNTAIN RIVER

TEST NUMBER: 1

WELL NAME AND NUMBER: CANDEL ET AL SOBC MOUNTAIN A-23

TESTED INTERVAL: 4463 - 4766

FORM 344B

NOMENCLATURE

AOF = absolute open flow potential, MCFD

AOF_t = theoretical absolute open flow potential if damage were removed, MCFD

B = formation volume factor, res bbl/ST bbl

c = compressibility, psi^{-1}

D = gauge depth from KB, ft

DR = damage ratio, dimensionless

E = KB elevation, ft

F = drill pipe capacity, bbl/ft

G = hydrostatic gradient of recovery fluid, psi/ft

h = net productive thickness of formation, ft

h^1 = thickness of test interval, ft

k = average effective permeability, md

k^1 = estimated average effective permeability, md

m = slope of final CIP buildup plot, psig/cycle ($psig^2$/cycle for gas)

M = slope of flow plot, min^{-1}

P_D = average pressure drop across damaged zone during flow, psig

P_f = reservoir pressure, psig

P_s = wellbore flow pressure, psig

$\bar{P}$ = weighted average wellbore flow pressure, psig

PI = productivity index, bbl/day-psi

PI_t = theoretical productivity index if damage were removed, bbl/day-psi

PS = potentiometric surface, fresh water corrected to 100°F, ft

Q = average liquid production rate during test, bbl/day

Q_g = measured gas production rate, MCFD at 60°F, 14.4 psig, sp. gr. 0.60

Q_m = maximum production rate, U.S. gal/min

Q_{mt} = maximum theoretical production rate if damage were removed, U.S. gal/min

q = flow rate calculated from hydrostatic of recovery, psi/×min

r_i = radius of investigation, ft

r_w = wellbore or shaft radius, ft

R_s = solution gas-oil ratio, MCFD/ST bbl

s = fluid saturation, fraction

t = effective flow time, min

t_f = time interval from start of continuous production to some future point of interest, min

T = reservoir temperature, °R

μ = viscosity, cp

x = time increment during which q values are calculated, min

Z = compressibility factor, dimensionless

ϕ = porosity, fraction

θ = time point during the closed-in period, minutes

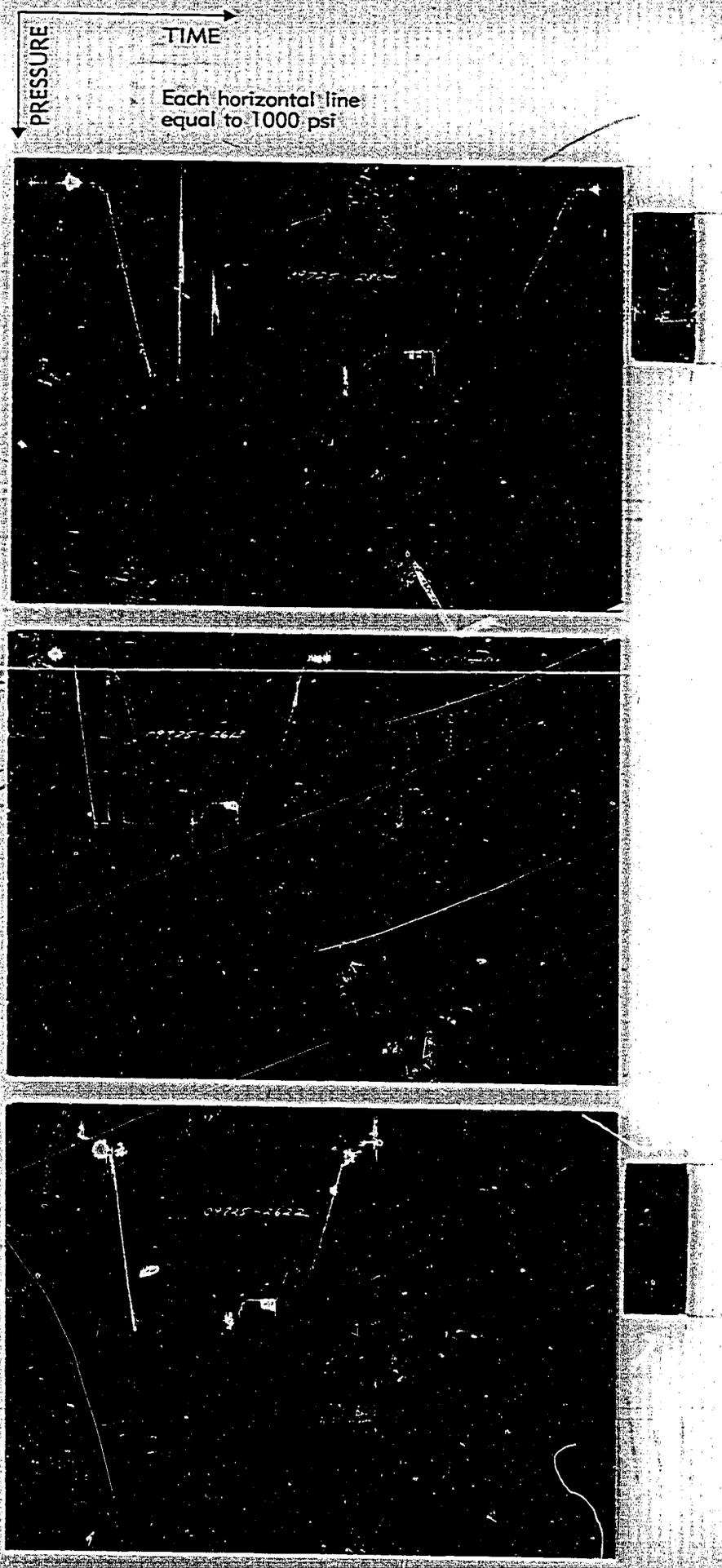
Subscripts

g = gas

o = oil

w = water

t = total



AG
AG
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G
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h'
k
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P_E
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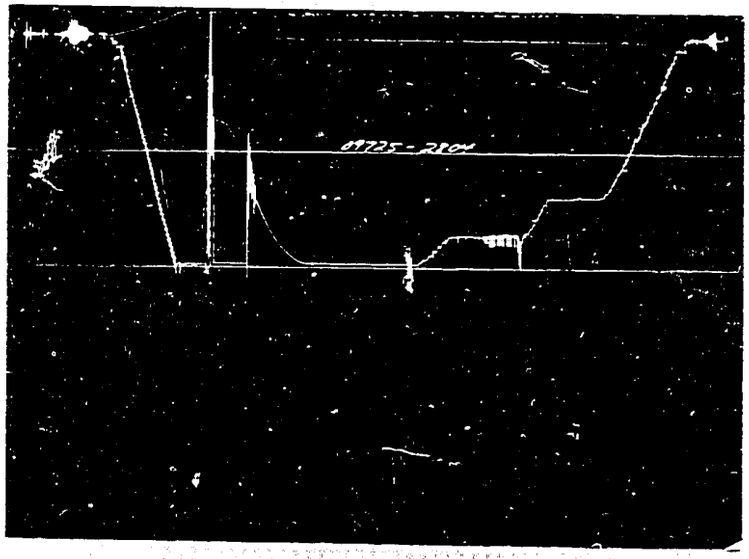
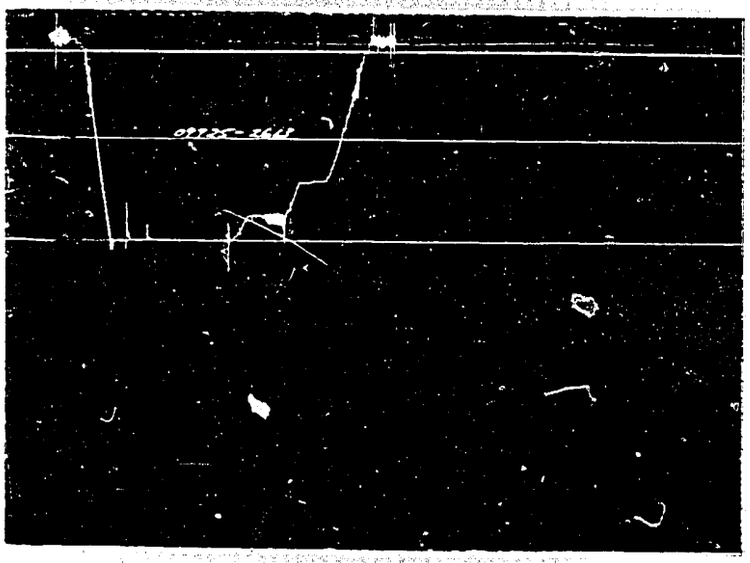
PRESSURE

TIME

Each horizontal line
equal to 2000 psi





FORMATION TESTING

Technical Report

CALGARY, ALBERTA

A Halliburton Company

COMPANY	CANADIAN DELHI OIL LTD.
LEGAL DESCRIPTION	65°42'-14" 129°-19'-12"
PROVINCE OR TERRITORY	N.W.T.
FIELD OR AREA	MOUNTAIN RIVER
WELL NAME AND NUMBER	CANDEL ET AL SOBO MOUNTAIN A-23
TEST NUMBER	2
TESTED INTERVAL	4165 - 4262

Halliburton SERVICES LIMITED

FORMATION TESTING
DATA SHEET

REFER TO INVOICE NO. 09725

HALLIBURTON DISTRICT: Edmonton

JOB DATE: April 24, 1972

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA.

PRESSURE DATA

	TOP	CENTRE	BOTTOM
GAUGE NUMBER	2804	2622	2613
GAUGE DEPTH	4144	4197	5095
BLANKED OFF	~~YES~~/NO	YES ~~NO~~	YES ~~NO~~
HOUR CLOCK TRAVEL	12 hrs.	12 hrs.	12 hrs.
INITIAL HYDROSTATIC	1843	1869	2272
FIRST FLOW — INITIAL	559	1406	
FIRST FLOW — FINAL	890	1689	
FIRST CLOSED IN	1843	1866	
SECOND FLOW — INITIAL	1207	1501	
SECOND FLOW — FINAL	1836	1865	
SECOND CLOSED IN	1843	1866	
THIRD FLOW — INITIAL			
THIRD FLOW — FINAL			
THIRD CLOSED IN			
FINAL HYDROSTATIC	1839	1863	2269

TYPE OF TEST	TESTER	EMPL. NO
Dual straddle	G. Wiggett	
WITNESS: P.Brown	DRILLING CONTRACTOR: Petrolia 7	

EQUIPMENT AND WELL DATA

FORMATION TESTED	Bear Rock	GAUGE DEPTH TEMPERATURE	145 °F MEAS / °F EST.
NET PRODUCTIVE THICKNESS	FT.	MUD TYPE	Gel
K B ELEVATION	379	MUD WEIGHT / MUD VISC.	8.6 / 58
ALL DEPTHS MEASURED FROM	☑ KB ☐ GROUND	CASING OR HOLE SIZE	7 7/8"
PACKER DEPTHS (TOP / BOTTOM)	4165 / 4262	RATHOLE SIZE	N/A
DEPTH OF TESTER VALVE	4133	DRILL PIPE (OD / WEIGHT)	4" / 15.5
CASING PERFORATED INTERVAL	N/A	DRILL COLLARS ABOVE TESTER (ID / LENGTH)	2 1/8" / 485'
TOTAL DEPTH	5097	SURFACE CHOKE	1"
AMOUNT AND TYPE CUSHION	Nil	BOTTOM CHOKE	5/8"

FLUID SAMPLER DATA

SAMPLER PRESSURE AT SURFACE _____ PSIG

RECOVERY: C.C. OIL _____ CU.FT. GAS _____

C.C. WATER _____

C.C. MUD _____

TOTAL LIQUID C.C. _____

SAMPLE SHIPPED TO LABORATORY: YES ☐ NO ☐

OIL GRAVITY _____ API @ _____ °F

GAS/OIL RATIO _____ CU.FT./BBL.

~~RESISTIVITY~~/REFRACTOMETER ~~CP. CP. READING~~ — CHLORIDE CONTENT

RECOVERY WATER _____ @ _____ °F 80,400 PPM

RECOVERY MUD FILTRATE _____ @ _____ °F _____ PPM

MUD PIT SAMPLE FILTRATE _____ @ _____ °F _____ PPM

TIME PERIODS

	FIRST	SECOND	THIRD		AM	PM
FLOW	5	60		TESTER OPENED	12:05	
CLOSED IN	30	90		PACKER UNSEATED	3:10	

LIQUID RECOVERY DATA

MEASURED FROM TESTER VALVE — FEET	DESCRIPTION OF LIQUID
1000	Muddy salt water
2860	Salt water
3850	TOTAL LIQUID RECOVERY

GAS FLOW RATE DATA

TYPE OF INSTRUMENT: ☐ CRITICAL FLOW PROVER ☐ PITOT TUBE ☐ ORIFICE WELL TESTER ☐ SIDE STATIC

FLOW TIME	INSTRUMENT PRESSURE "WATER	"MERC.	PSI	ORIFICE SIZE	GAS TEMP.	GAS RATE MCFD @ 60°F

REMARKS: Strong air blow during first flow. Stong air blow decreasing to weak blow at end of test.

JUN 2 1972 INUVIK, N.W.T. DISTRICT CONSERVATIONIST

COMPANY: CANADIAN DELHI OIL LTD.

LEGAL DESCRIPTION: 65°-42'-14" 129°-19'-12"

PROVINCE OR TERRITORY: N.W.T.

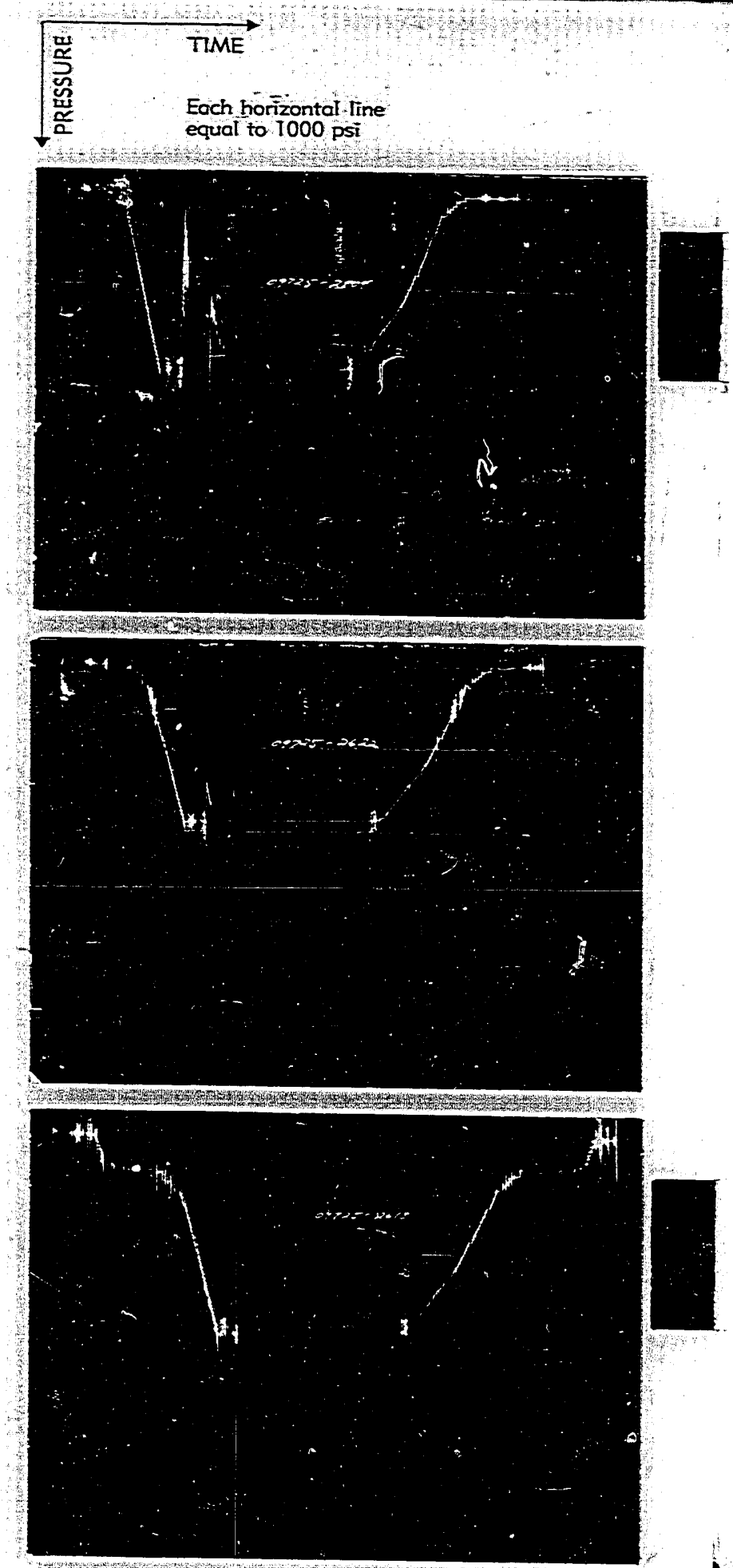
FIELD OR AREA: MOUNTAIN RIVER

TEST NUMBER: 2

WELL NAME AND NUMBER: CANDEL ET AL SOBC MOUNTAIN A-23

TESTED INTERVAL: 4165 - 4262

FORM 344B



TEMPERATURE RECORD

Each concentric line equals 10° F.
Temperature increases outwardly
Ticket No. 09725
Temperature Range °F

70 °F to 170 °F

A to B—Initial CIP

B to C—2nd Flow

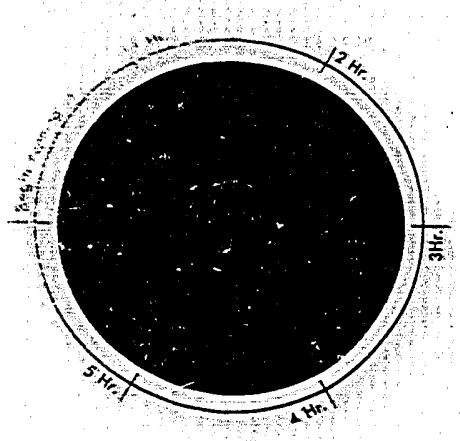
C to D—Final CIP

A 120 °F

B 140 °F

C 145 °F

D 141 °F



FORM #18

AOF
AOF
B
c
D
DR
E
F
G
h
h^1
k
k^1
m
M
P_D
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NOMENCLATURE

AOF = absolute open flow potential, MCFD

AOF_t = theoretical absolute open flow potential if damage were removed, MCFD

B = formation volume factor, res bbl/ST bbl

c = compressibility, psi^{-1}

D = gauge depth from KB, ft

DR = damage ratio, dimensionless

E = KB elevation, ft

F = drill pipe capacity, bbl/ft

G = hydrostatic gradient of recovery fluid, psi/ft

h = net productive thickness of formation, ft

h^1 = thickness of test interval, ft

k = average effective permeability, md

k^1 = estimated average effective permeability, md

m = slope of final CIP buildup plot, psig/cycle ($psig^2$/cycle for gas)

M = slope of flow plot, min^{-1}

P_D = average pressure drop across damaged zone during flow, psig

P_f = reservoir pressure, psig

P_s = wellbore flow pressure, psig

$\overline{P}$ = weighted average wellbore flow pressure, psig

PI = productivity index, bbl/day-psi

PI_t = theoretical productivity index if damage were removed, bbl/day-psi

PS = potentiometric surface, fresh water corrected to 100°F, ft

Q = average liquid production rate during test, bbl/day

Q_g = measured gas production rate, MCFD at 60°F, 14.4 psig, sp. gr. 0.60

Q_m = maximum production rate, U.S. gal/min

Q_{mt} = maximum theoretical production rate if damage were removed, U.S gal/min

q = flow rate calculated from hydrostatic of recovery, psi/×min

r_i = radius of investigation, ft

r_w = wellbore or shaft radius, ft

R_s = solution gas-oil ratio, MCFD/ST bbl

s = fluid saturation, fraction

t = effective flow time, min

t_f = time interval from start of continuous production to some future point of interest, min

T = reservoir temperature, °R

μ = viscosity, cp

x = time increment during which q values are calculated, min

Z = compressibility factor, dimensionless

ϕ = porosity, fraction

θ = time point during the closed-in period, minutes

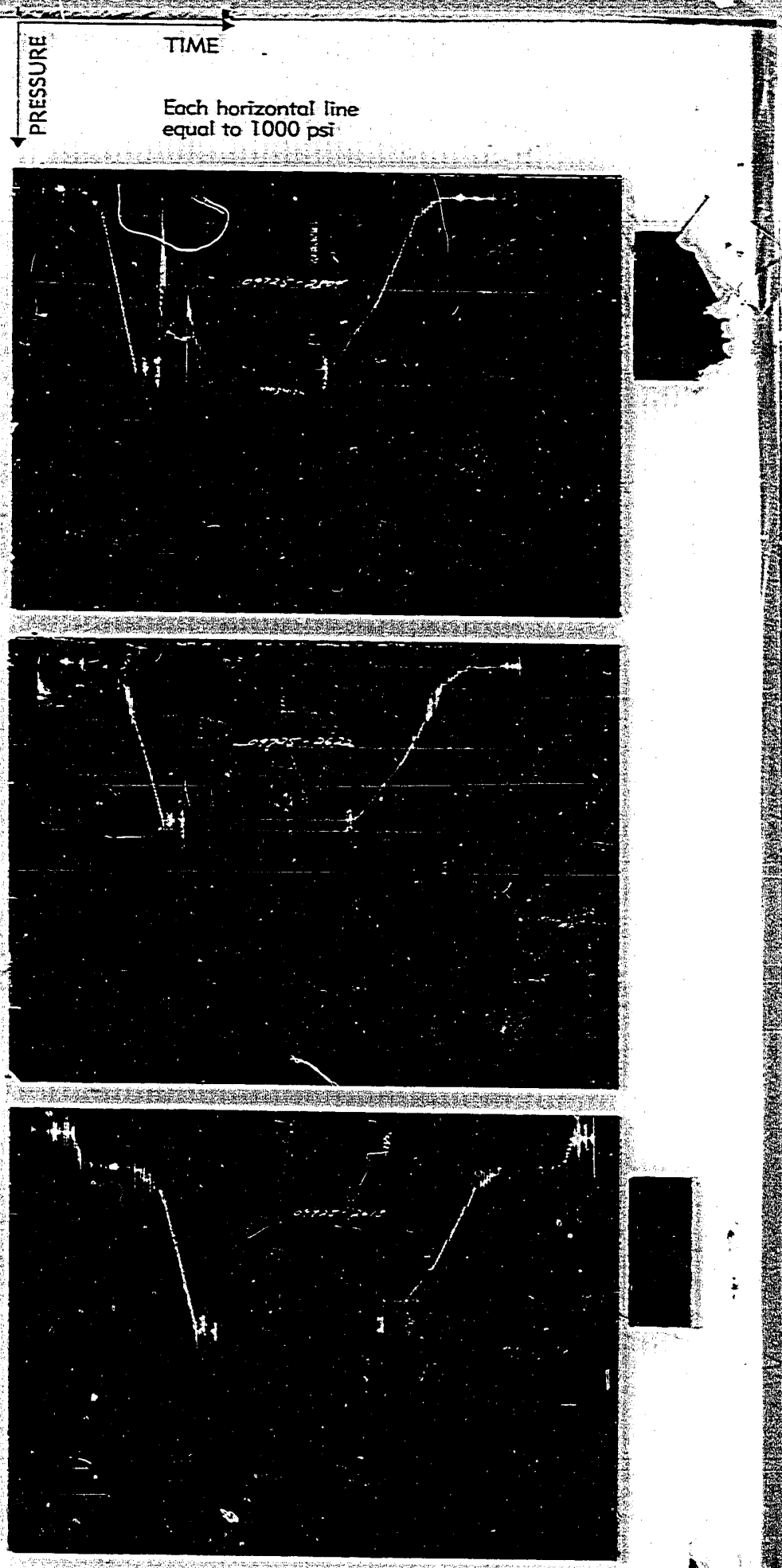
Subscripts

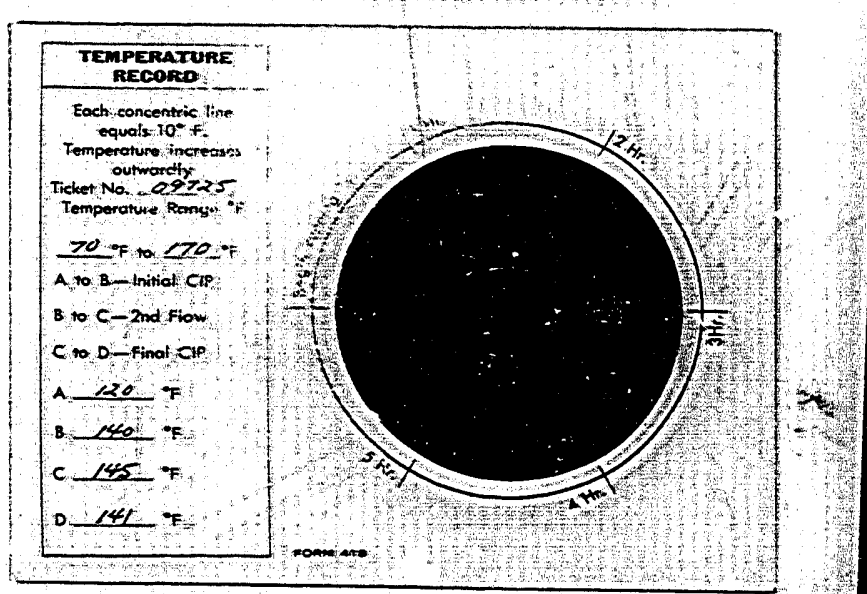
g = gas

o = oil

w = water

t = total





AOF
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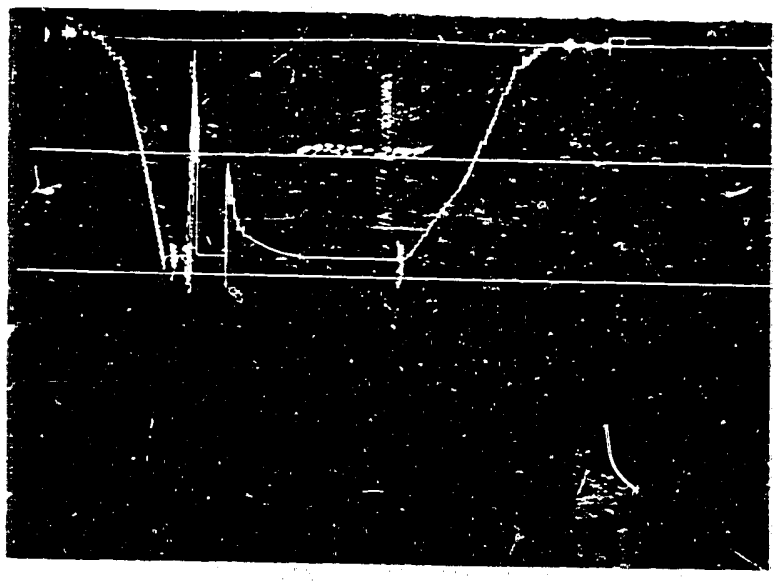

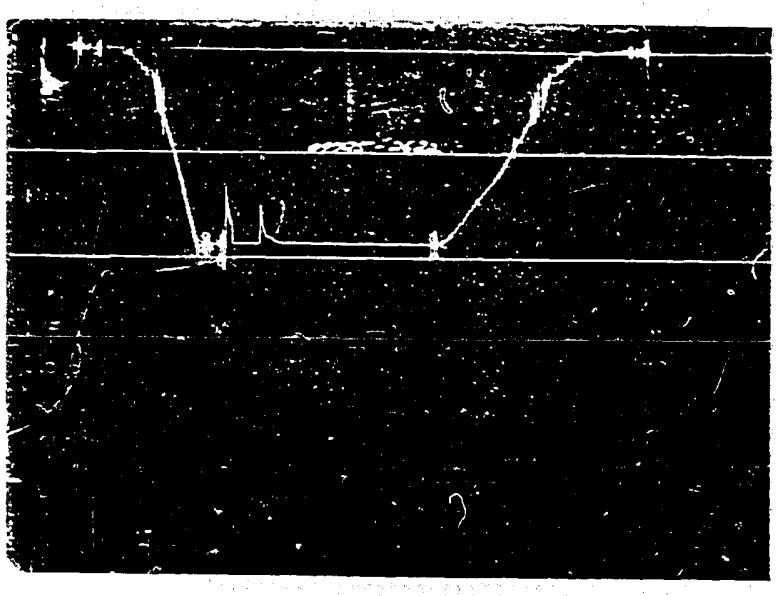

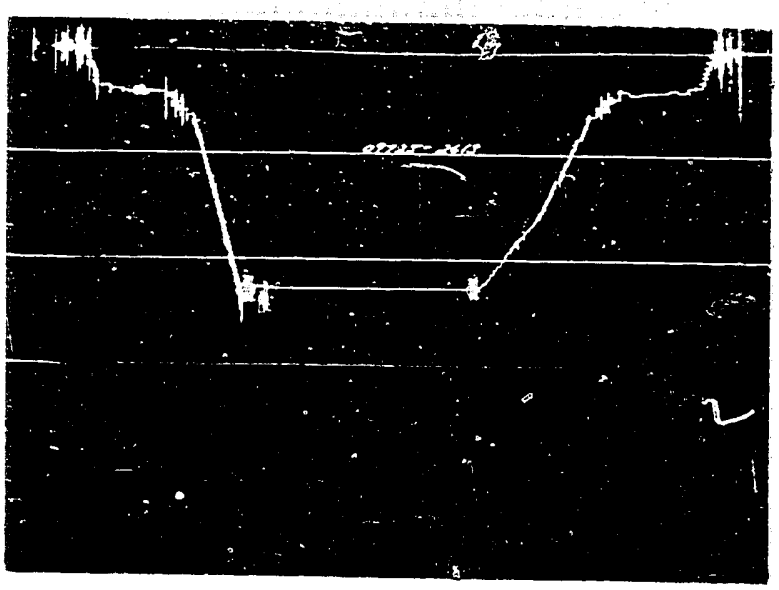

DAILY DRILLING REPORT — REPORT NO. 34

LEASE	WELL NO.	API WELL NUMBER	DATE
Can Del Et Al SOBC	A-23	Mountain River	4-26-72

OPERATOR: Can Del Oil Ltd.

CONTRACTOR: KENTING - PETROLIA — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION: A-23 65° 42' 14" N 129° 19' 72" W.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK-TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. W/O D.P.			
STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
	BIT	FT.	BIT NO.		TIME			
			SIZE		WEIGHT			
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT			
	D.C. ID OD	FT.	TYPE		VISC.-SEC.			
	STB RMR OD	FT.	JETS 1 32"		PV/YP	/	/	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/	/
	STB RMR OD	FT.	DEPTH OUT		WL.-CC'S.			
			DEPTH IN		pH			
			TOTAL FTG.		SOLIDS %			
			TOTAL HRS. RUN					
	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE		MUD & CHEMICALS ADDED			
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	FT.						
	TOTAL	FT.						
WT. OF STRING		LBS.						

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
	BIT	FT.	BIT NO.		TIME			
			SIZE		WEIGHT			
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT			
	D.C. ID OD	FT.	TYPE		VISC.-SEC.			
	STB RMR OD	FT.	JET 1/32"		PV/YP	/	/	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/	/
	STB RMR OD	FT.	DEPTH OUT		WL.-CC'S.			
			DEPTH IN		pH			
			TOTAL FTG.		SOLIDS %			
			TOTAL HRS. RUN					
	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE		MUD & CHEMICALS ADDED			
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	FT.						
	TOTAL	FT.						
WT. OF STRING		LBS.						

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
	BIT	FT.	BIT NO.		TIME			
			SIZE		WEIGHT			
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT			
	D.C. ID OD	FT.	TYPE		VISC.-SEC.			
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/	/	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/	/
	STB RMR OD	FT.	DEPTH OUT		WL.-CC'S.			
			DEPTH IN		pH			
			TOTAL FTG.		SOLIDS %			
			TOTAL HRS. RUN					
	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE		MUD & CHEMICALS ADDED			
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	FT.						
	TOTAL	FT.						
WT. OF STRING		LBS.						

MORNING TOUR

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-P FL-P COM-C
				Felt plug No 4# @ 2075								
				Ran plug No 5# 563-463. Cemented w/ 82 sks Dowell plas.								
				3 1/2 Pads Plug down @ 12:40 A.M April 26, 72.								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	1/4		Feel Plug #4 & Pull Up To Run Plug #5
12:15	12:45	1/2		Run Plug #5
12:45				Pull Out of Hole, Clean Mud Tanks, Tearing
				Out Flare Lines & BOPS.
	8:00	7 1/4		Lay 53 Joints Drill Pipe.

DRILLER: A. Matthes

DAY TOUR

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-P FL-P COM-C
				Felt plug No# 5 @ 450 D Barker								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30			Tearing out rig
8:30	9:00	1/2		Feel plug 5# & Lay drill pipe
9:00	9:30	1/2		Run 5 SK plug In Csg & Weld Cap & Sign
9:30	4:00			Tear out rig Lay derrick P.M.
				Rig Release 9:30 P.M. April 26, 72.
				Loading Out Trucks.

DRILLER: D. Barker

EVENING TOUR

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-P FL-P COM-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	11:00	7		tearing out draining rig skid out pumps.
				Mud Tanks dog house & tool house
				+ load out derrick

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL SOBC	A-23	MOUNTAIN RIVER A-23	4-25-72

OPERATOR: CAN DEL OIL LTD.

CONTRACTOR: KENTING - PETROLIA RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. Baker

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

MORNING TOUR

TIME DISTRIBUTION – HOURS: CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. W/O/D.P.	
STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
	STB RMR OD	FT.	JETS 1 32"		PV/YP	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/
	STB RMR OD	FT.	DEPTH OUT		WL.-CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
	STB RMR OD	FT.	JET 1/32"		PV/YP	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/
	STB RMR OD	FT.	DEPTH OUT		WL.-CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/
	STB RMR OD	FT.	DEPTH OUT		WL.-CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARTL-P COM-D-C
				Felt plug 2nd @ 3390								
				Ran plug #2 3# 4 BH 3 000 20% excess 3 sks hole full								
				Plug 3rd Cpkt displaced w/ 22 bbls Blue 3 bbls @ 5.77								

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

D. Baker

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	6:30	6 1/2		W.O.C. LAY 21 SINGLES.
6:30	7:15	3/4		RUN IN & FEEL PLUG #2 HOIST 11 STDS.
7:15	7:45	1/2		RUN PLUG #3
7:45	8:00	1/4		PULL 5 STDS & BREAK CIRC.

DRILLER: G. Matson

DAY TOUR

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARTL-P COM-D-C
				Felt plug 3rd @ 3306								
				Ran plug no 4th 2300-2100 20% excess 9 Gpkt plug 3rd displaced w/ 19 bbls plug down @ 4.15								

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

D. Baker

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	3:30	7 1/2		W.O.C. LAY 35 SINGLES
3:30	4:00	1/2		~~Run~~ FEEL PLUG #3 PULL UP TO
				RUN PLUG #4, RUN BACK.

DRILLER: [illegible]

EVENING TOUR

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARTL-P COM-D-C

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	1/4		PLUG #4 DOWN 4:15
4:15				W.O.C. LAY 29 SINGLES

DRILLER

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 35

LEASE	WELL NO.	API WELL NUMBER	DATE
Can Del E-Al Sdbc	A-23	Mountain River	4-24-72

OPERATOR: Canadian Deline

CONTRACTOR: **KENTING - PETROLIA** — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D.H. Barker

LEGAL LAND DESCRIPTION: A-23: 65° 42' 14" N 129° 19' 12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	15.3	E		3½ HYD		1	Emsco	DA500	16
						2	"	"	"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
8 5/8	NKK	24 55	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1/8	8	

FT. CUT OFF — PRESENT LENGTH 4688'

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD 546.79	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	XO Sub	2.20	
48	STANDS DP	4510.67	FT.
	SINGLES DP		FT.
	KELLY DOWN	33.34	FT.
	TOTAL	5097	FT.
WT. OF STRING	106000		LBS.

BIT RECORD: BIT NO.; SIZE; MFG.; TYPE; JETS 1 32"; SER. NO.; DEPTH OUT; DEPTH IN; TOTAL FTG.; TOTAL HRS. RUN; COND. 1/8's T/B/ GAGE; GPM/ PD–PSI

MUD RECORD: TIME; WEIGHT; PRESSURE GRADIENT; VISC.–SEC.; PV/YP; GELS.; WL –CC'S.; pH; SOLIDS %

MUD & CHEMICALS ADDED: TYPE | AMT. | TYPE | AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD 596.79	FT.
1	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	XO Sub	2.20	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD: BIT NO.; SIZE; MFG.; TYPE; JET 1/32"; SER. NO.; DEPTH OUT; DEPTH IN; TOTAL FTG.; TOTAL HRS. RUN; COND. 1/8's T/B/ GAGE; GPM/ PD–PSI

MUD RECORD: TIME 11⁰⁰ 1⁰⁰; WEIGHT 8.8 8.8; PRESSURE GRADIENT; VISC.–SEC. 42 47; PV/YP; GELS.; WL –CC'S.; pH; SOLIDS %

MUD & CHEMICALS ADDED: GEL 1400#; BENEX 6#

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP	54	FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD: BIT NO.; SIZE; MFG.; TYPE; JETS 1/32"; SER. NO.; DEPTH OUT; DEPTH IN; TOTAL FTG.; TOTAL HRS. RUN; COND. 1/8's T/B/ GAGE; GPM/ PD–PSI

MUD RECORD: TIME; WEIGHT; PRESSURE GRADIENT; VISC.–SEC.; PV/YP; GELS.; WL –CC'S.; pH; SOLIDS %

MUD & CHEMICALS ADDED: TYPE | AMT. | TYPE | AMT.

MORNING TOUR

FOOTAGE: FROM | TO | DR–D RM–R CORE–C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | S.P.M. | PUMP NO. LINER SIZE | S.P.M. | METHOD RUN SGL–S PAR'EL–P COM'D–C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	3¹⁵	3¼		Testing
3¹⁵	6⁰⁰	2¾		Hoist Test #2
6⁰⁰	7³⁰	1½		Break + La.) Packer.
7³⁰	8⁰⁰	½		Run in w/ Pkr

DRILLER: L. Ryb

DAY TOUR

FOOTAGE: FROM 5097 | TO | DR–D RM–R CORE–C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | S.P.M. | PUMP NO. LINER SIZE | S.P.M. | METHOD RUN SGL–S PAR'EL–P COM'D–C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	¼		Slip 52' Drilling Line.
8¹⁵	9²⁰	1¼		Finish In Clean 6' Fill To Btm.
9²⁰	2⁰⁰	4½		Circ. [redacted]. Cond Mud + Build Volume.
2⁰⁰	3¹⁵	1¼		Hoist
3¹⁵	3³⁰	¼		Repair Break Out Line.
3³⁰	4⁰⁰	½		Finish Out

DRILLER

EVENING TOUR

FOOTAGE: FROM 5097 | TO | DR–D RM–R CORE–C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | S.P.M. | PUMP NO. LINER SIZE | S.P.M. | METHOD RUN SGL–S PAR'EL–P COM'D–C

Ran Plug No 1# 5098 – 5000 34 sks oil well displaced with 51 BBLs. plug Down @ 10⁰⁰ PM. Plug No 2#
4500 – 4400 15% Excess 50 SKS Oil well plus 3% Cab. displaced w/ 44 BBLS

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

Plug No 2# Down @ 11:30 PM. Ap-.24 D. Barker.

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	5⁰⁰	1		Lay Down Testing Tool, Load Up Shank.
5⁰⁰	5¹⁵	¼		Rig Service, Check Hydr. Oil
5¹⁵	7¹⁵	2		Lay 19 – 6¼ Collars.
7¹⁵	9⁰⁰	1¾		Run in Open End
9⁰⁰	9³⁰	½		Circ, Rig To Run Plug #1
9³⁰	10⁰⁰	½		Run Plug #1
10⁰⁰	11⁰⁰	1		Pull up 6 Stds + Single, Break Circ, Run Plug #2
11⁰⁰				Pull 5 Stds + Lay Pipe

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 34

LEASE	WELL NO.	API WELL NUMBER	DATE
CanDel Et Al Sobc	A-23	Mountain River	4-23-72

OPERATOR	CONTRACTOR	RIG NO.
Canadian Delft	KENTING - PETROLIA	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. Barker

LEGAL LAND DESCRIPTION: A-23, 65° 42' 14" N 129° 19' 12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	15.3	E		3½ H90		1	Emsco	DA500	16
						2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.		NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	24	55	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1/8	8	

FT. CUT OFF — PRESENT LENGTH: 4688

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG. TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. W/O D.P.			
STANDBY			
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		OD	FT.
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD	546.79 FT.
	STB RMR	OD	FT.
1	Bit Sub		4.00
1	XO Sub		2.20
48	STANDS DP		451367 FT.
1	SINGLES DP		FT.
	KELLY DOWN		33.34 FT.
	TOTAL		5097. FT.
WT. OF STRING			106 000 LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1 32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8"s T/B/ GAGE			
GPM/ PD–PSI	/		/

MUD RECORD

TIME	1:00	3:00	5:00
WEIGHT	8.6	8.6	8.6
PRESSURE GRADIENT			
VISC.–SEC.	38	50	58
PV/YP	/	/	/
GELS.	/	/	/
WL.–CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	8500		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		OD	FT.
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD	546.79 FT.
	STB RMR	OD	FT.
1	Bit Sub		4.00
1	XO Sub		2.20
47	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8"s T/B/ GAGE			
GPM/ PD–PSI	/		/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.–CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		OD	FT.
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8"s T/B/ GAGE			
GPM/ PD–PSI	/		/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.–CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Wt. Mat.	9000#		

MORNING TOUR

FOOTAGE

FROM	TO
5097	

DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.–S PAR.EL.–P COM.D.C.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00				Circ. & Conn. Mud - Build Volume
	5:30	5½		Screen Lost Circ. Mat.
5:30	7:30	2		Trip Out To Test
7:30	8:00	½		Run in Tail Pipe

DST #1 - Running 4463-4766 Preflow 5' 151 30' 10 60' FSI 90'
Rec'd 4250' Fluid - 4400 mud 600' MCSW, 3250' Sul. SW

DRILLER: L. Ryke

DAY TOUR

FOOTAGE

FROM	TO
5097	

DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.–S PAR.EL.–P COM.D.C.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:00	2		Make Up Packer.
10:00	11:30	1½		Run In w/DST #1
11:30	11:45	¼		Head Up To Test. & Check Motor Shut Offs.
11:45	3:00	3¼		Testing.
3:00	3:45	¾		Hoist 55 Stds.
3:45	4:00	¼		Mix Wt. Material & Pump Into Hole
				Mud Not Dropping.

DRILLER: G. Mathes

EVENING TOUR

FOOTAGE

FROM	TO

DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.–S PAR.EL.–P COM.D.C.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:45	¾		Work Pipe & Pump Mud Into Hole.
4:45	5:30	¾		Hoist Mud Dropping Normally
5:30	6:00	½		Mix Wt Material
6:00	8:30	2½		Hoist DST #1
8:30	11:30	3		Make up & Run in w/DST #2
11:30	12:00	½		Head up Test

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 33

LEASE	WELL NO.	API WELL NUMBER	DATE
Can. Del Et Al Sorc	A-23	Mountain River	4-22-72

OPERATOR: Canadian Delhi

CONTRACTOR: KENTING - PETROLIA — RIG NO. 7

LEGAL LAND DESCRIPTION: A-23 65° 42' 14" N 129° 19' 12" W

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: J. Barker

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4	15.3	E			

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	DA-500	16
2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.		NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	24	J55	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1 1/8	8	

FT. CUT OFF: PRESENT LENGTH: 4688

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	2 1/4		2
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS	5 3/4	8	6
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. W/O D.P.

STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD	
	BIT	FT.	BIT NO.	TIME	
			SIZE	WEIGHT	
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE	VISC.-SEC.	
	STB RMR OD	FT.	JETS 1/32"	PV/YP	
20	D.C. ID 6 1/4 OD	576.67 FT.	SER. NO.	GELS.	
	STB RMR OD	FT.	DEPTH OUT	WL.-CC'S.	
1	Bit Sub	4.00	DEPTH IN	pH	
1	XO Sub	2.20	TOTAL FTG.	SOLIDS %	
			TOTAL HRS. RUN		
47	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE	MUD & CHEMICALS ADDED	
2	SINGLES DP	44.79.49 FT.	GPM/ PD-PSI	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	34.64 FT.			
	TOTAL	5097 FT.			
WT. OF STRING	110,000 LBS.				

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR.-P COM.-C
5097												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5097	6 1/2							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:15	2 1/4		Survey & Strap Out To Log. Pipe Strap 5108.25
2:15	8:00	5 3/4		Rig To Log & Log. Pipe Tally 5103.76
				Diff: 4.53

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD	
	BIT	FT.	BIT NO.	TIME	
			SIZE	WEIGHT	
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE	VISC.-SEC.	
	STB RMR OD	FT.	JET 1/32"	PV/YP	
20	D.C. ID 6 1/4 OD	576.67 FT.	SER. NO.	GELS.	
	STB RMR OD	FT.	DEPTH OUT	WL.-CC'S.	
1	Bit Sub.	4.00	DEPTH IN	pH	
1	XO Sub	2.30	TOTAL FTG.	SOLIDS %	
			TOTAL HRS. RUN		
47	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE	MUD & CHEMICALS ADDED	
2	SINGLES DP	44.79.49 FT.	GPM/ PD-PSI	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	39.64 FT.			
	TOTAL	5097 FT.			
WT. OF STRING	110,000 LBS.				

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR.-P COM.-C
5097												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	4:00	8		Logging.

DRILLER: J. Morton

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD	
	BIT	FT.	BIT NO.	TIME	
			SIZE	WEIGHT	
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE	VISC.-SEC.	
	STB RMR OD	FT.	JETS 1/32"	PV/YP	
19	D.C. ID 6 1/4 OD	546.79 FT.	SER. NO.	GELS.	
	STB RMR OD	FT.	DEPTH OUT	WL.-CC'S.	
1	Bit Sub	4.00	DEPTH IN	pH	
1	XO Sub	2.20	TOTAL FTG.	SOLIDS %	
			TOTAL HRS. RUN		
49	STANDS DP	4510.67 FT.	COND. 1/8"s T/B/ GAGE	MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	33.34 FT.			
	TOTAL	5097 FT.			
WT. OF STRING	109,000 LBS.				

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR.-P COM.-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	9:30	5 1/2		Logging.
9:30	10:00	1/2		Tear Out Loggers
10:00	12:00	2		Run In w/Bit To Cond. Mud Clean 20' Fill To Bottom.

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 32

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL SORC	A-23	MOUNTAIN RIVER	4-21-72

OPERATOR: CANADIAN DELHI

CONTRACTOR: KENTING - PETROLIA — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	15.3	E		3½ H90		1	EMSCO	DA500	16
						2	"	"	"

LEGAL LAND DESCRIPTION: A-23. 65°42'14" N 129°19'12" W

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8⅝	NKK	24 55	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1/8	8	

FT. CUT OFF: PRESENT LENGTH: 46

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	4	11½	
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE	3½	6¼	7
6. TRIPS			1
7. LUBRICATE RIG		¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	½		
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. W/O D.P.
STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
20	D.C. ID 6¼	OD	576.67 FT.
	STB RMR	OD	FT.
1	BIT SUB		4.00
1	XO SUB		2.20
47	STANDS DP		FT.
1	SINGLES DP		4448.69 FT.
	KELLY DOWN		41.40 FT.
	TOTAL		5072.96 FT.
WT. OF STRING 110000			LBS.

BIT RECORD	
BIT NO.	12
SIZE	7⅞
MFG.	H.W
TYPE	J55
JETS 1/32"	11 11 12
SER. NO.	JC004
DEPTH OUT	
DEPTH IN	4634
TOTAL FTG.	438
TOTAL HRS. RUN	35¼
COND. 1/8"s T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD			
TIME	12⁰⁰	5⁰⁰	7⁰⁰
WEIGHT	9.0	8.9	8.9
PRESSURE GRADIENT			
VISC.–SEC.	50	40	50
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	7000#		
BENEX	12#		
KWIKSEAL	18 SKS.		

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
20	D.C. ID 6¼	OD	576.67 FT.
	STB RMR	OD	FT.
1	BIT SUB		4.00
1	XO SUB		2.20
47	STANDS DP		FT.
2	SINGLES DP		4479.49 FT.
	KELLY DOWN		34.64 FT.
	TOTAL		5097 FT.
WT. OF STRING 110,000			LBS.

BIT RECORD	
BIT NO.	12
SIZE	7⅞
MFG.	H.W.
TYPE	J55
JET 1/32"	11 11 12
SER. NO.	JC004
DEPTH OUT	
DEPTH IN	4634
TOTAL FTG.	463
TOTAL HRS. RUN	36¾
COND. 1/8"s T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD			
TIME		2⁰⁰	4⁰⁰
WEIGHT		8.75	8.7
PRESSURE GRADIENT			
VISC.–SEC.		51	47
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	82⁰⁰#		
BENEX	22#		
KWIKSEAL	3 SAX		

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
20	D.C. ID 6¼	OD	576.67 FT.
	STB RMR	OD	FT.
1	BIT SUB		4.00
1	XO SUB		2.20
47	STANDS DP		4479.49 FT.
2	SINGLES DP		~~34.64~~ FT.
	KELLY DOWN		34.64 FT.
	TOTAL		5097 FT.
WT. OF STRING 110,000			LBS.

BIT RECORD	
BIT NO.	12
SIZE	7⅞
MFG.	H.W.
TYPE	J55
JETS 1/32"	11 11 12
SER. NO.	JC004
DEPTH OUT	5097
DEPTH IN	4634
TOTAL FTG.	463
TOTAL HRS. RUN	36¾
COND. 1/8"s T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD			
TIME	6⁰⁰		11³⁰
WEIGHT	8.7		8.7
PRESSURE GRADIENT			
VISC.–SEC.	67		55
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	4000#		
KWIK SEAL	6 SKS.		

MORNING TOUR

FOOTAGE

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR–P FL–F COM–C
5033	5072	D			55	20	1200	5½	50			
				Lost Circ 5041								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5041	6½°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12³⁰	½		DRILL
12³⁰	4⁰⁰	3½		LOST CIRC. MIX GEL - LOST CIRC. MAT. BUILD VOL
4⁰⁰	4³⁰	½		SURVEY
4³⁰	8⁰⁰	3½		DRILL - LOSING MUD TO FORMATION

DRILLER: J. Kyba

DAY TOUR

FOOTAGE

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR–P FL–F COM–C
5072	5097	D			55	20	1350	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	¼		RIG SERVICE & CHECK BOP & KELLY COCK.
8¹⁵	9⁴⁵	1½		DRILL. - LOSING MUD TO FORMATION
9⁴⁵	4⁰⁰	6¼		CIRC. SAMPLE - CIRC & BUILD VOLUME. MIX GEL.

DRILLER: L. Mathson

EVENING TOUR

FOOTAGE

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR–P FL–F COM–C
5097							1350	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	5¹⁵	1¼		CIRC. BUILD VOLUME.
5¹⁵	6¹⁵	1		DUMMY TRIP 12 STDS. NO FILL ON BTM.
6¹⁵	12⁰⁰	5¾		CIRC. BUILD VOLUME - FORMATION TAKING MUD

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Can Del Et Al Sobc	A-23	Mountain River	4-20-72

OPERATOR: Canadian Delhi

CONTRACTOR: KENTING - PETROLIA RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Baker

LEGAL LAND DESCRIPTION: A-23, 65°42'14" N 129°19'12" W

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	8 5/8	NKK	24 55	13	517	17	511

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1/8	8	

FT. CUT OFF PRESENT LENGTH 4688

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4	15.3	E		3½ H90	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	DA500	16
2	"	"	"

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	6	4½	8
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE	2	3	
6. TRIPS			
7. LUBRICATE RIG		1/4	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY		1/4	
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. W/O D.P.
STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
20	D.C. ID 6¼	OD 576.67	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	XO Sub	2.20	
45	STANDS DP		FT.
2	SINGLES DP	42910.8	FT.
	KELLY DOWN	13.05	FT.
	TOTAL	4887.	FT.
WT. OF STRING	108,000		LBS.

BIT RECORD

BIT NO.	12
SIZE	7 7/8
MFG.	H.W.
TYPE	J.55
JETS 1/32"	11 11 12
SER. NO.	JC004
DEPTH OUT	
DEPTH IN	4634
TOTAL FTG.	253
TOTAL HRS. RUN	19¼
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	12:30	3:30	5:30
WEIGHT	9.0	9.0	9.0
PRESSURE GRADIENT			
VISC.–SEC.	44	42	42
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1800#		
Benex	2#		
Kwik Seal	3 sks.		

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'EL–P COM'D–C
4821	4887	D			55	18/24	1350	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	6:00	6		Drill
6:00	8:00	2		Lost Circ. Mix Lost Circ. Mat. – Circ. w/ Partial Returns
				Lost Circ @ 4887

DRILLER K. Ryko

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
20	D.C. ID 6¼	OD 576.67	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	XO Sub	2.20	
46	STANDS DP		FT.
1	SINGLES DP	4353.90	FT.
	KELLY DOWN	13.23	FT.
	TOTAL	4950	FT.
WT. OF STRING	108,000		LBS.

BIT RECORD

BIT NO.	12
SIZE	7 7/8
MFG.	H.W.
TYPE	J55
JET 1/32"	11 11 12
SER. NO.	JC004
DEPTH OUT	
DEPTH IN	4634
TOTAL FTG.	316
TOTAL HRS. RUN	23¼
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	10:15		
WEIGHT	9.05		
PRESSURE GRADIENT			
VISC.–SEC.	50		
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	5000#		
Benex	18#		
Kwik-Seal	12 sx		

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'EL–P COM'D–C
4887	4950	D			56	18	1350	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4915	6½							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:45	3/4		Build Volume Mix Gel & Lost Circ. Material. Circ. Full Rtns
8:45	10:45	2		Drill.
10:45	11:00	1/4		Rig Serv. Check BOP. Pump Strokes 30 - 600
11:00	11:15	1/4		Survey 45 - 950
11:15	12:30	1 3/4		Drill. 50 - 1150
12:30	2:45	2 1/4		Lost Circ. Mix Lost Circ. Mat. Circ. 55 - 1350
2:45	4:00	1 1/4		Drill. Lost Circ @ 4936

DRILLER L. Matthew

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
20	D.C. ID 6¼	OD 576.67	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	XO Sub	2.20	
47	STANDS DP	4417.09	FT.
	SINGLES DP		FT.
	KELLY DOWN	33.04	FT.
	TOTAL	5038.	FT.
WT. OF STRING	108,000		LBS.

BIT RECORD

BIT NO.	12
SIZE	7 7/8
MFG.	HW
TYPE	J55
JETS 1/32"	11 11 12
SER. NO.	JC004
DEPTH OUT	
DEPTH IN	4634
TOTAL FTG.	399
TOTAL HRS. RUN	31¼
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	6 pm	8:00	10:00
WEIGHT	8.9	8.9	8.9
PRESSURE GRADIENT			
VISC.–SEC.	46	42	45
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000#		
Benex	8#		
Kwik Seal	3 sx		

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'EL–P COM'D–C
4950	5033	D			55	18	1350	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	12:00	8		Drill.

DRILLER

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 30

LEASE	WELL NO.	API WELL NUMBER	DATE
Can Del Et Al Sobc	A-23	Mountain River	4-19-72

OPERATOR: Canadian Delhi

CONTRACTOR: KENTING - PETROLIA — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker

LEGAL LAND DESCRIPTION: A-73, 65° 42' 14" N 129° 19' 12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	15.3	E		3½ H90		1	Emsco	DA 500	16
						2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8⅝	NKK	25 55	13	517	17	511

WIRE LINE RECORD — REEL NO.: SIZE 1/8; NO. LINES 8; FT. SLIPPED: ; FT. CUT OFF: ; PRESENT LENGTH 4688; TON MI. OR TRIPS SINCE LAST CUT: ; CUMULATIVE TON MI. OR TRIPS:

MORNING TOUR

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	2½	6¾	
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE	½		
6. TRIPS	3¼		
7. LUBRICATE RIG		¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY		½	
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. Lay Sq Coll.	¾		
22. Clean Bit		½	
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY): HRS. W/CONTR. D.P.; HRS. W/OPR. D.P.; HRS. WO/D.P.; STANDBY; TOTAL DAY WORK; NO. OF DAYS FROM SPUD; CUMULATIVE ROTATING HRS.; TOTAL MUD COST

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
20	D.C. ID 6¼	OD 576.67	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	X-O Sub	2.20	
42	STANDS DP		FT.
2	SINGLES DP	401.97	FT.
	KELLY DOWN	40.16	FT.
	TOTAL	4634.	FT.
WT. OF STRING 106,000			LBS.

BIT RECORD		
BIT NO.	11	12
SIZE	7⅞	7⅞
MFG.	H.W.	H.W.
TYPE	J44	J55
JETS 1 32"	18 18 20 11	11 11 12
SER. NO.	DH895	JC004
DEPTH OUT	4634	
DEPTH IN	3771	4634
TOTAL FTG.	1363	
TOTAL HRS. RUN	89¼	
COND. 1/8's T/B/ GAGE	8 4 1	
GPM/ PD-PSI		

MUD RECORD			
TIME	1⁸⁰	3⁰⁰	TRIP
WEIGHT	9.0+	9.1	
PRESSURE GRADIENT			
VISC.-SEC.	38	38	TRIP
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
4590	4634	D			60	25	650	5½	54			

DEVIATION RECORD: DEPTH 4634; DEV. 4½; DIRECTION: ; DEPTH: ; DEV.: ; DIRECTION: ; DEPTH: Pipe Strap 4637.84; DEV.: ; DIRECTION: Pipe Tally 4635.24 2.60

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	3³⁰	3½		Drill No Core.
3³⁰	5¹⁵	1¾		Survey – Strap Out
5¹⁵	6⁰⁰	¾		Pick up Sq Collars F/Derrick + Lay Same
6⁰⁰	7³⁰	1½		Run in w/ Bit #12
7³⁰	8⁰⁰	½		Break Circ & Clean 10' To Btm.

DRILLER: A. Ryb

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
20	D.C. ID 6¼	OD 576.67	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	X-O Sub	2.20	
43	STANDS DP		FT.
2	SINGLES DP	410.37	FT.
	KELLY DOWN	40.80	FT.
	TOTAL	4727	FT.
WT. OF STRING 106,000			LBS.

BIT RECORD		
BIT NO.	12	
SIZE	7⅞	
MFG.	H.W.	
TYPE	J55	
JET 1/32"	11 11 12	
SER. NO.	JC.004	
DEPTH OUT		
DEPTH IN	4634	
TOTAL FTG.	93	
TOTAL HRS. RUN	6¾	
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI		

MUD RECORD			
TIME	10⁰⁰	12⁰⁰	2⁰⁰
WEIGHT	9.2	9.0	9.0
PRESSURE GRADIENT			
VISC.-SEC.	42	40	39
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %	DESILTER 15.7 UNDER		
~~Hgm PM~~ GPM			

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
4634	4727	D			54	25	1350	5½	55			
				Held Safty Meeting.								
				Held Blow Out Drill.								

DEVIATION RECORD: DEPTH 4727; DEV. 5½; DIRECTION: ; DEPTH: ; DEV.: ; DIRECTION: ; DEPTH: ; DEV.: ; DIRECTION:

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	10¹⁵	2¼		Drill
10¹⁵	10³⁰	¼		Rig Service, Check BOP & Kelly Cock
10³⁰	3⁰⁰	4½		Drill.
3⁰⁰	3³⁰	½		Survey
3³⁰	4⁰⁰	½		Clean Plugged Bit.

DRILLER: A. Matthew

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
20	D.C. ID 6¼	OD 576.67	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	X-O Sub	2.20	
47	STANDS DP		FT.
2	SINGLES DP	419.23	FT.
	KELLY DOWN	41.40	FT.
	TOTAL	4821.50	FT.
WT. OF STRING 108,000			LBS.

BIT RECORD		
BIT NO.	12	
SIZE	7⅞	
MFG.	H.W.	
TYPE	J55	
JETS 1/32"	11 11 12	
SER. NO.	JC004	
DEPTH OUT		
DEPTH IN	4634	
TOTAL FTG.	187	
TOTAL HRS. RUN	13¼	
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI		

MUD RECORD			
TIME	5⁰⁰	8⁰⁰	10⁰⁰
WEIGHT	9.0	9.0	9.0
PRESSURE GRADIENT			
VISC.-SEC.	40	40	45
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.
Gel 2000# ; Benex 2#

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
4727	4821	D			55	20/25	1350	5½	55			

DEVIATION RECORD: DEPTH 4821; DEV. 6°; DIRECTION: ; DEPTH: ; DEV.: ; DIRECTION: ; DEPTH: ; DEV.: ; DIRECTION:

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	5⁰⁰	1		Drill.
5⁰⁰	6⁰⁰	1		Circ. Btm. Hole Sample
6⁰⁰	11³⁰	5½		Drill.
11³⁰	12⁰⁰	½		Survey

DRILLER:

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 29

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL SOBC	A-23	MOUNTAIN RIVER	4-18-72

OPERATOR	CONTRACTOR	RIG NO.
CANADIAN DELNI	KENTING - PETROLIA	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker

LEGAL LAND DESCRIPTION: H. 23 65° 42' 14" N 129° 19' 12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		3½ IF		1	Emsco	DA 500	16
						2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8⅝	NKK	24	55	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1 1/8	8	

FT. CUT OFF: PRESENT LENGTH: 4688

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

MORNING TOUR

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7	7½	7¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG		¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	1	¼	¾
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
	D.C. ID	OD	
	STB RMR	OD	
20	D.C. ID 6¼	OD	576.67
	STB RMR	OD	
1	Bit Sub		4.00
1	XO Sub		2.20
40	STANDS DP		
1	SINGLES DP		3790.79
	KELLY DOWN		26.34
	TOTAL		4400
WT. OF STRING 100,000			LBS.

BIT RECORD

BIT NO.	11		
SIZE	7 7/8		
MFG.	H W		
TYPE	J.44		
JETS 1/32"	18/18/20		
SER. NO.	DH 395		
DEPTH OUT			
DEPTH IN	3271		
TOTAL FTG.	1129		
TOTAL HRS. RUN	71		
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI	1.0		

MUD RECORD

TIME	12.00	3.00	6.00
WEIGHT	8.8	8.8	9.0
PRESSURE GRADIENT			
VISC.–SEC.	40	36	38
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	800#		
BENEX	2#		
WT. MAT	6000#		
SODA ASH	200#		

FOOTAGE

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–P FL–F COM–C
4307		D			55/60	18/25	650	5½	53			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4323	5⅛°		4354	5°		4384	4¾°	

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	12.45	¾		DRILL
12.45	1.15	½		SURVEY @ 4323'
1.15	4.00	2¾		DRILL
4.00	4.15	¼		SURVEY @ 4354'
4.15	6.30	2¼		DRILL
6.30	6.45	¼		SURVEY @ 4384'
6.45	8.00	1¼		DRILL

DRILLER: L Ryko

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
20	D.C. ID 6¼	OD	576.67
	STB RMR	OD	
1	Bit Sub		4.00
1	XO Sub		2.20
41	STANDS DP		
1	SINGLES DP		3885.61
	KELLY DOWN		21.52
	TOTAL		4490
WT. OF STRING 102,000			LBS.

BIT RECORD

BIT NO.	5N		
SIZE	7 7/8		
MFG.	H.W.		
TYPE	J44		
JET 1/32"	18/18/20		
SER. NO.	DH395		
DEPTH OUT			
DEPTH IN	3271		
TOTAL FTG.	1219		
TOTAL HRS. RUN	78½		
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD

TIME	9.00	11.00	4.00
WEIGHT	9.0	9.0	9.1
PRESSURE GRADIENT			
VISC.–SEC.	39	40	38
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	9.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	600#		
BENEX	2#		

FOOTAGE

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–P FL–F COM–C
4400	4490	D			60	25	650	5½	54			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4446	5°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	9.30	1½		DRILL
9.30	9.45	¼		RIG SERVICE, CHECK BOP & KELLY COCK OK.
9.45	12.30	2¾		DRILL.
12.30	12.45	¼		SURVEY
12.45	4.00	3¼		DRILL.
		7½		

DRILLER: G. Mattson

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
20	D.C. ID 6¼	OD	576.67
	STB RMR	OD	
1	Bit Sub		4.00
1	XO Sub		2.20
42	STANDS DP		
1	SINGLES DP		3979.52
	KELLY DOWN		27.61
	TOTAL		4590.
WT. OF STRING 103,000			LBS.

BIT RECORD

BIT NO.	11		
SIZE	7 7/8		
MFG.	H.W.		
TYPE	J44		
JETS 1/32"	18/18/20		
SER. NO.	DH395		
DEPTH OUT			
DEPTH IN	3271		
TOTAL FTG.	1319		
TOTAL HRS. RUN	85¾		
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD

TIME	6.30	8.00	10.30
WEIGHT	9.1	9.1	9.0+
PRESSURE GRADIENT			
VISC.–SEC.	42	40	40
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–P FL–F COM–C
4490	4590	D			60	25	650	5½	54			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4509	5°		4572	4¾°				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4.00	5.15	1¼		DRILL
5.15	5.30	¼		SURVEY
5.30	9.45	4¼		DRILL.
9.45	10.15	½		SURVEY @ 4572
10.15	12.00	1¾		DRILL
		7¼		

DRILLER:

FORM 375 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. #18

LEASE	WELL NO.	API WELL NUMBER	DATE
Pandem Ex Ten Sobe	A-23	Mountain View	April 17

OPERATOR: Canadian Dev.

CONTRACTOR: **KENTING - PETROLIA** — RIG NO. 1

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		3½ H90		1	Emsco	D 800	16
						2	"	"	"

LEGAL LAND DESCRIPTION: A 23 65 14 4 19 19 11 W

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.		NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 5/8	NKG	14	J55	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1 1/8	8	

FT. CUT OFF — PRESENT LENGTH 4688

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	9½	7	9½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG		¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	½	¾	½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. W/O D.P.
HRS. STANDBY
TOTAL DAYWORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

HORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
10	D.C. ID 6¼	OD 576.67	
	STB RMR	OD	
	D.C. ID	OD	
	STB RMR	OD	
1	Bit Sub	4.00	
1	XO Sub	2.20	
36	STANDS DP		
1	SINGLES DP	3271 84	
	KELLY DOWN	37 40	
	TOTAL	4037	

WT. OF STRING 98,000 LBS.

BIT RECORD

BIT NO.	11
SIZE	7 7/8
MFG.	HW
TYPE	J44
JETS 1 32"	18 18 20
SER. NO.	DH395
DEPTH OUT	
DEPTH IN	3271
TOTAL FTG.	766
TOTAL HRS. RUN	49½
COND. 1/8's T/B/ GAGE	Pink
GPM/ PD–PSI	

MUD RECORD

TIME	1100	400	1100
WEIGHT	8.8	8.6	8.7
PRESSURE GRADIENT			
VISC.–SEC.	41	44	40
PV YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000#		
Benex	4#		
Desilt	Dilution from wt. 4.7 1 Sec / Pit Con.		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
20	D.C. ID 6¼	OD 576.67	
	STB RMR	OD	
	D.C. ID	OD	
	STB RMR	OD	
1	Bit Sub	4.00	
1	XO Sub	2.20	
37	STANDS DP		
1	SINGLES DP	3553.68	
	KELLY DOWN	36.85	
	TOTAL	4132.	

WT. OF STRING 98,000 LBS.

BIT RECORD

BIT NO.	11
SIZE	7 7/8
MFG.	HW.
TYPE	J44
JET 1/32"	18 18 20
SER. NO.	DH395
DEPTH OUT	
DEPTH IN	3271
TOTAL FTG.	861
TOTAL HRS. RUN	56½
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	800	1200	200
WEIGHT	8.7	8.6	8.6
PRESSURE GRADIENT			
VISC.–SEC.	35	37	37
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000		
Benex	4		
WT material	6000#		

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
20	D.C. ID 6¼	OD 576.67	
	STB RMR	OD	
	D.C. ID	OD	
	STB RMR	OD	
1	Bit Sub	4.00	
1	XO Sub	2.20	
39	STANDS DP		
1	SINGLES DP	3699.00	
	KELLY DOWN	25.13	
	TOTAL	4307	

WT. OF STRING 100,000 LBS.

BIT RECORD

BIT NO.	11
SIZE	7 7/8
MFG.	HW.
TYPE	J44
JETS 1/32"	18 18 20
SER. NO.	DH395
DEPTH OUT	
DEPTH IN	3271
TOTAL FTG.	1036
TOTAL HRS. RUN	64
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	430	630	945
WEIGHT	8.8	8.8	8.9
PRESSURE GRADIENT			
VISC.–SEC.	39	39	40
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	500#		
Benex	2#		

HORNING TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCR–S PARTIC–P COMB–C
3944	4037	D			60	30/35	650	5½	57			
				HELD SAFETY MEETING								
				+ BLOWOUT DRILL								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4010	4°							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	515	5½		DRILL.
515	545	½		SURVEY
545	800	2½		DRILL

DRILLER: L. [illegible]

DAY TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCR–S PARTIC–P COMB–C
4037	4132	D			55/60	30/35	650	5½	57			
				HELD SAFETY MEETING								
				+ BLOWOUT DRILL								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4042	3¾°		4105	3¾°				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	830	½		DRILL
830	845	¼		RIG SERV + BOP'S
845	900	¼		SURVEY
900	145	4¾		DRILL @4042'
145	215	½		SURVEY @4105'
215	400	1¾		DRILL
				WELL FLOWING ON CONNECTIONS.

DRILLER: L. [illegible]

EVENING TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCR–S PARTIC–P COMB–C
4132	4307	D			60	24/35	650	5½	57			
				INSPECT SCOTT AIR PACKS O.K.								
				INSPECT. ESCAPE BUGGY O.K.								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4198	3¾		4292	5°				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	645	2¾		DRILL.
645	700	¼		SURVEY
700	1045	3¾		DRILL.
1045	1100	¼		SURVEY
1100	1200	1		DRILL

DRILLER: L. [illegible]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. #141

LEASE	WELL NO.	API WELL NUMBER	DATE
Can Del Et Al Sobc	A-23	Mountain River	Apr 16-72

OPERATOR: Canadian Delhi

CONTRACTOR: KENTING - PETROLIA — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker

LEGAL LAND DESCRIPTION: W. 23 65° 42' 14" N 129° 17' 12" W.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.2	E		3½ HSD		1	Emsco	DA500	16
						2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	25.55	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1/16	6	

FT. CUT OFF: — PRESENT LENGTH: 4740

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7	7½	11½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG		¼	½
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	1	¼	
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
20	D.C. ID 6 1/4	OD 576.67	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	XO Sub	2.20	
33	STANDS DP	3109.28	FT.
	SINGLES DP		FT.
	KELLY DOWN	19.85	FT.
	TOTAL	3708	FT.
WT. OF STRING	91,000		LBS.

BIT RECORD

BIT NO.	11
SIZE	7 7/8
MFG.	H.W.
TYPE	J44
JETS 1 32"	18/18/20
SER. NO.	DH395
DEPTH OUT	
DEPTH IN	3271
TOTAL FTG.	437
TOTAL HRS. RUN	27
COND. 1/8"s T/B/ GAGE	DR/6
GPM/ PD–PSI	

MUD RECORD

TIME	12:30	4:00	7:00
WEIGHT	8.9	8.9	8.9
PRESSURE GRADIENT			
VISC.–SEC.	45	44	42
PV/YP	/	/	/
GELS.	/	/	/
WL.–CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL–S PARTIAL–P COMPL–C
2580	3708	D			50/55	20/25	650	5½	57			

DEVIATION RECORD: DEPTH 3603, DEV. 2½°; DEPTH 3697, DEV. 2½°

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:15	1¼		DRLG
1:15	1:45	½		SURVEY
1:45	7:00	5¼		DRLG
7:00	7:30	½		SURVEY
7:30	8:00	½		DRLG.
				FIRED RING IN THREE BOX REAMER.

DRILLER: L. Ryba

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
20	D.C. ID 6 1/4	OD 576.67	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	XO Sub	2.20	
34	STANDS DP	3239.56	FT.
	SINGLES DP		FT.
	KELLY DOWN	41.40	FT.
	TOTAL	3822.43	FT.
WT. OF STRING	94,000		LBS.

BIT RECORD

BIT NO.	11
SIZE	7 7/8
MFG.	H.W.
TYPE	J44
JET 1/32"	18/18/20
SER. NO.	DH395
DEPTH OUT	DESILTER
DEPTH IN	3271
TOTAL FTG.	551
TOTAL HRS. RUN	34½
COND. 1/8"s T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	8	12:00	3:00
WEIGHT	8.9	8.9	8.8
PRESSURE GRADIENT			
VISC.–SEC.	45	55	47
PV/YP	/	/	/
GELS.	/	/	/
WL.–CC'S.	DESILTER		
pH	UNDER FLOW		9.2
SOLIDS %	OVER FLOW		8.7
	5.	B. Pan.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1400		
Lime	6 ±		

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL–S PARTIAL–P COMPL–C
3708	3822	D										

DEVIATION RECORD: DEPTH 3822, DEV. 2¾°

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:15	1¼		DRILL
9:15	9:30	¼		RIG SERV & BOP ✓
9:30	3:45	6¼		DRILL
3:45	4:00	¼		SURVEY @ 3822

DRILLER: L. Ryba

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
20	D.C. ID 6 1/4	OD 576.67	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	XO Sub	2.20	
35	STANDS DP		FT.
1	SINGLES DP	33.17	FT.
	KELLY DOWN	✓	FT.
	TOTAL	3947	FT.
WT. OF STRING	97,000		LBS.

BIT RECORD

BIT NO.	11
SIZE	7 7/8
MFG.	H.W.
TYPE	J44
JETS 1/32"	18/18/20
SER. NO.	DH395
DEPTH OUT	
DEPTH IN	3271
TOTAL FTG.	676
TOTAL HRS. RUN	41
COND. 1/8"s T/B/ GAGE	DRLG.
GPM/ PD–PSI	

MUD RECORD

TIME	4:00	6:00	8:00
WEIGHT	8.8	8.8	8.7
PRESSURE GRADIENT			
VISC.–SEC.	46	44	38
PV/YP	/	/	/
GELS.	/	/	/
WL.–CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000#		
Pine-X	4#		

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL–S PARTIAL–P COMPL–C
3822	3947	D			50/60	30/35	600	5½	57			

DEVIATION RECORD: DEPTH 3949, DEV. 3½°

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	11:30	7½		DRILL
11:30	12:00	½		SURVEY

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. # 261

LEASE	WELL NO.	API WELL NUMBER	DATE
Can Del Gas 508C	A-23	Mountain River	April 15/72

OPERATOR: Canadian Del Ltd.

CONTRACTOR: **KENTING - PETROLIA** — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. Barker.

LEGAL LAND DESCRIPTION: A-73 65 42 14 W4 N 129 19 12 W.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		3½ H90		1	Emsco	DA500	16
						2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	25	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1/8	8	

FT. CUT OFF: — PRESENT LENGTH: 4740

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	8	7¾	3¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			4
6. TRIPS		3¾	
7. LUBRICATE RIG		¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
Circ Sample			1
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID SQ OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	4 OSUB	2.20	
29	STANDS DP	2730.27	FT.
—	SINGLES DP	—	FT.
	KELLY DOWN	18.73	FT.
	TOTAL	3416	FT.

WT. OF STRING 91,000 LBS.

BIT RECORD

BIT NO.	11		
SIZE	7⅞		
MFG.	H.W		
TYPE	J44		
JETS 1/32"	11 11 12		
SER. NO.	DH395		
DEPTH OUT			
DEPTH IN	3271		
TOTAL FTG.	145		
TOTAL HRS. RUN	9		
COND. 1/8"s T/B/ GAGE	DRLG		
GPM/ PD-PSI	/	/	

MUD RECORD

TIME	12⁰⁰	3⁰⁰	6³⁰
WEIGHT	9.0	8.9	8.9
PRESSURE GRADIENT			
VISC.-SEC.	60	51	40
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %	UNDER FLOW 9.8 6 GAL PER MIN		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CFW	800#		
BENCY	4#		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID SQ OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	4 OSUB	2.20	
30	STANDS DP		FT.
1	SINGLES DP	2854.20	FT.
	KELLY DOWN	1980	FT.
	TOTAL	3531	FT.

WT. OF STRING 94,000 LBS.

BIT RECORD

BIT NO.	11		
SIZE	7⅞		
MFG.	H.W.		
TYPE	J44		
JET 1/32"	11 11 12		
SER. NO.	DH395		
DEPTH OUT			
DEPTH IN	3271		
TOTAL FTG.	260		
TOTAL HRS. RUN	16¾		
COND. 1/8"s T/B/ GAGE			
GPM/ PD-PSI	/	/	

MUD RECORD

TIME	8⁰⁰	12⁰⁰	2⁰⁰
WEIGHT	8.9	8.8	8.8
PRESSURE GRADIENT			
VISC.-SEC.	42	62	52
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
BENEX	4#		

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	BIT SUB	4.00	
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
20	D.C. ID 6¼ OD	576.67	FT.
	STB RMR OD		FT.
1	4 OSUB	2.20	
31	STANDS DP		FT.
2	SINGLES DP	2978.73	FT.
	KELLY DOWN	18.40	
	TOTAL	3580	FT.

WT. OF STRING 91,000 LBS.

BIT RECORD

BIT NO.	11		
SIZE	7⅞		
MFG.	H.W.		
TYPE	J44		
JETS 1/32"	11 11 12 18 18 20		
SER. NO.	DH395		
DEPTH OUT			
DEPTH IN	3271		
TOTAL FTG.	309		
TOTAL HRS. RUN	20		
COND. 1/8"s T/B/ GAGE	DRLG.		
GPM/ PD-PSI	/	/	

MUD RECORD

TIME	4⁰⁰		10⁰⁰
WEIGHT	8.8		8.9
PRESSURE GRADIENT			
VISC.-SEC.	44		65
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
QUICKSEAL	26 SACKS		

FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN
3295	3416	D		Dull 3¼	46 55	25 35	1200	5½	57			

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7⁰⁰	8⁰⁰	8		DRLG.

DRILLER: [illegible]

FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN
3416	3531	D			50 60	25 35	1200	5½	54			

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8⁴⁵	¾		DRILL
8⁴⁵	9⁰⁰	¼		RIG SERV. + BOOM
9⁰⁰	4⁰⁰	7		DRILL

DRILLER: L. Ryle

FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN
3531	3580	D			54	30	600	5½	48			

DEVIATION RECORD: DEPTH 3545 | DEV. 2½° | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				10⁰⁰ TO 12⁰⁰ DRLG - 1¾ H
4⁰⁰	4⁴⁵	¾		DRILL
4⁴⁵	5⁰⁰	¼		CIRC SAMPLE
5⁰⁰				SURVEY & HOIST SLOW. LAY STAB, REAMERS
	7¹⁵	2¼		+ SQUARE COLLARS
7¹⁵	8³⁰	1½		RUN IN W
8³⁰	8⁴⁵	¼		BREAK CIRC, CLEAN 2' TO BTM.
8⁴⁵	9³⁰	¾		DRLG.
9³⁰	10¹⁵	¾		CIRC 3558 SAMPLE.

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. #26

LEASE	WELL NO.	API WELL NUMBER	DATE
Can Del for AL SOBC	A-23	Mountain River	April 14

OPERATOR	CONTRACTOR	RIG NO.
Canadian Delhi	KENTING - PETROLIA	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker

LEGAL LAND DESCRIPTION: A-23, 65°42'14" N 129°19'12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		3½ H90		1	Emsco	DA-500	16
						2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8⅝	NKK	25 55	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1/8	8	

FT. CUT OFF: PRESENT LENGTH: 4740

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7½	7½	
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	½	½	
7. LUBRICATE RIG		½	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. W/O D.P.

STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID 5 OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X-O SUB	2.20	
25	STANDS DP	2355.73	FT.
2	SINGLES DP	63.19	FT.
	KELLY DOWN	16.08	FT.
	TOTAL	3092.	FT.
WT. OF STRING	85,000		LBS.

BIT RECORD		
BIT NO.	4RR	
SIZE	7⅞	
MFG.	H.W	
TYPE	J 33	
JETS 1/32"	11 11 12	
SER. NO.	RR	
DEPTH OUT		
DEPTH IN	2513	
TOTAL FTG.	579	
TOTAL HRS. RUN	27½	
COND. T/B/S GAGE	DRLG	
GPM/ PD-PSI	/	/

MUD RECORD			
TIME	2AM	4AM	7AM
WEIGHT	8.9	8.9	9.0
PRESSURE GRADIENT			
VISC.-SEC.	48	45	43
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL-S PARTIAL-P CONTINUOUS-C
2898	3092	D			59	35	1200	5½	58			

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	430	4½		DRLG.
430	500	½		LAY 5 SINGLES, REPLACE W/ 2 STDS FROM DERRICK
500	800	3		DRLG
				HELD BLOW OUT DRLG.

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID 5 OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X-O SUB	2.20	
27	STANDS DP	2543.26	FT.
	SINGLES DP		FT.
	KELLY DOWN	34.74	FT.
	TOTAL	3235.	FT.
WT. OF STRING	90,000		LBS.

BIT RECORD		
BIT NO.	4RR	
SIZE	7⅞	
MFG.	H.W	
TYPE	J 33	
JET 1/32"	11 11 12	
SER. NO.	RR	
DEPTH OUT		
DEPTH IN	2513	
TOTAL FTG.	722	
TOTAL HRS. RUN	34¾	
COND. T/B/S GAGE		
GPM/ PD-PSI	/	/

MUD RECORD			
TIME	800	1200	200
WEIGHT	9.0	9.0	9.0
PRESSURE GRADIENT			
VISC.-SEC.	40	46	42
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S	DESILTER		
pH	UNDERFLOW		10.8
SOLIDS %	OVERFLOW		8.8
	4.5	G.P.M.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1500#		
BENEX	6#		

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL-S PARTIAL-P CONTINUOUS-C
3092	3235	D			54/60	25/32	1200	5½	54			

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	845	¾		DRILL
845	900	¼		RIG SERV. + BOP ✓
900	200	5		DRILL
200	230	½		LAY 5 SINGLES + PICKUP 2 STDS. F/DERRICK
230	400	1½		DRILL

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID 5 OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X-O SUB	2.20	
27	STANDS DP	2543.26	FT.
2	SINGLES DP	60.74	FT.
	KELLY DOWN	23.01	FT.
	TOTAL	3285	FT.
WT. OF STRING	90,000		LBS.

BIT RECORD		
BIT NO.	4RR	11
SIZE	7⅞	7⅞
MFG.	H.W.	H.W
TYPE	J 33	J 44
JETS 1/32"	11 11 12	11 11 12
SER. NO.	R.R.	DH3995
DEPTH OUT	3273	
DEPTH IN	2513	3271
TOTAL FTG.	760	14
TOTAL HRS. RUN	38	1
COND. T/B/S GAGE	8 1 1	DRLG.
GPM/ PD-PSI	/	/

MUD RECORD			
TIME	400	600	
WEIGHT	8.9	8.9	
PRESSURE GRADIENT			
VISC.-SEC.	52	42	
PV/YP	/	/	
GELS	/	/	
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
1200#	GEL		
4#	BENEX		

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL-S PARTIAL-P CONTINUOUS-C
3235	3271	D		CHECKED BLIND RAMS	54/60	25/32	1200	5½	54			
3271	3285	D		WHEN OUT OF HOLE OKAY	46	25	1300	5½	51.			

DEVIATION RECORD: DEPTH 3271 / DEV. 2°14' / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	715	3¼		DRILL — NO FILL, HOLE GOOD ON TRIP IN
715	915	2.		SURVEY & STRAP OUT — STRAP TOTAL 3248.46
915	945	½		SERVICE 6 JOINT REAMED. — PPH TOTAL 3241.66
945	1045	1		RUN IN W/ R.J. — NO COLLAR ON JEFF 1.80
1045	1100	¼		BREAK CIRC, CIRC ONE FOOD OFF BTM.
1100	1200	1		DRLG.

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. #25

LEASE	WELL NO.	API WELL NUMBER	DATE
Can Del & Al SOBC	A-23	Mountain River	4-13-72

OPERATOR	CONTRACTOR	RIG NO.
Canadian Delhi	KENTING - PETROLIA	1

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. Barker

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		2½ H90		1	Emsco	Dajoo	16
						2	"	"	"

LEGAL LAND DESCRIPTION: H-23 65° 42' 14" N 129° 19' 12" W

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	25.55	13	517	17	511

WIRE LINE RECORD — REEL NO.: SIZE 1/8; NO. LINES 8; FT. SLIPPED; FT. CUT OFF; PRESENT LENGTH 4740; TON MI. OR TRIPS SINCE LAST CUT; CUMULATIVE TON MI. OR TRIPS

MORNING TOUR

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	5¾	7	7¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	2		
7. LUBRICATE RIG		¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			1¼
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. CLEAN SUB & RM	¼		
22. PICKUP 2 STDS	¾	½	
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY): HRS. W/CONTR. D.P.; HRS. W/OPR. D.P.; HRS. WO/D.P.; STANDBY; TOTAL DAY WORK; NO. OF DAYS FROM SPUD; CUMULATIVE ROTATING HRS.; TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID 5 0 OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X0 SUB	2.20	
20	STANDS DP	1996.85	
	SINGLES DP	31.54	FT.
	KELLY DOWN	21.40	FT.
	TOTAL	2594	FT.
	WT. OF STRING	80,000	LBS.

BIT RECORD

BIT NO.	HRR		
SIZE	7 7/8		
MFG.	H.W.		
TYPE	J33		
JETS 1 32"	11 11 12		
SER. NO.	RR		
DEPTH OUT			
DEPTH IN	2513		
TOTAL FTG.	81		
TOTAL HRS. RUN	3¼		
COND. 1/8's T/B/ GAGE	D 2 1/6		
GPM/ PD–PSI			

MUD RECORD

TIME	2300	0100	0600
WEIGHT	8.9	8.9	8.9
PRESSURE GRADIENT			
VISC.–SEC.	47	40	45
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.	13	15	
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WT MAT	3800#		
GEL	2100#		
BENEX	3 BAGS		

FOOTAGE / FORMATION

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–P EL–P COM–C
2513	2594	D		HELD SAFETY MEETING	40/60	36	1200	5½	58			
				CHECK BLIND RAMS								
				WHEN CUT OFF HOLE CHAT								
				WITH OUR SUP OFF'S CREW								

DEVIATION RECORD: DEPTH 2513; DEV. 2½; DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
1200	1245	¾		PULL OUT SLOW FOR BIT #10
1245	200	1¼		RUN IN W/ BIT SLOW
200	215	¼		BREAK CIRC, CLEAN 8' TO BTM.
215	800	5¾		DRLG.
				RUN INTO LEDGE AT 1000' @ 1050 RUNNING IN HOLE.
				HELD BLOWOUT DRLG.

Lunch 4

DRILLER: [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID 5 0 OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X0 SUB	2.20	
21	STANDS DP		FT.
2	SINGLES DP	2043.46	FT.
	KELLY DOWN	29.54	FT.
	TOTAL	2725.00	FT.
	WT. OF STRING	82,000	LBS.

BIT RECORD

BIT NO.	4RR		
SIZE	7 7/8		
MFG.	H.W		
TYPE	J.33		
JET 1/32"	11 11 12		
SER. NO.	R.R.		
DEPTH OUT			
DEPTH IN	2513		
TOTAL FTG.	212		
TOTAL HRS. RUN	12¾		
COND. 1/8's T/B/ GAGE	DRLG		
GPM/ PD–PSI			

MUD RECORD

TIME	800	1200	200
WEIGHT	9.0	8.9	8.9
PRESSURE GRADIENT			
VISC.–SEC.	50	47	42
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000#		
Benex	8#		

FOOTAGE / FORMATION

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–P EL–P COM–C
2594	2725	D			50/60	35	1200	5½	58			

DEVIATION RECORD: DEPTH; DEV.; DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
800	1045	2¾		DRILL
1045	1100	¼		RIG SERV. + BOP
1100	1145	¾		LAY 5 SINGLES + PICKUP 2 STDS. F/DERRICK
1145	400	4¼		DRILL

DRILLER: L. Ryba

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID 5 0 OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X0 SUB	2.20	
23	STANDS DP	2168.39	FT.
1	SINGLES DP	31.57	FT.
	KELLY DOWN	✓	FT.
	TOTAL	2898	FT.
	WT. OF STRING	82,000	LBS.

BIT RECORD

BIT NO.	4RR		
SIZE	7 7/8		
MFG.	H.W.		
TYPE	J 33		
JETS 1/32"	11 11 12		
SER. NO.	R.R		
DEPTH OUT			
DEPTH IN	2513		
TOTAL FTG.	385		
TOTAL HRS. RUN	20		
COND. 1/8's T/B/ GAGE	D 2 1/4		
GPM/ PD–PSI			

MUD RECORD

TIME	400	630	1100
WEIGHT	8.9	8.8	8.8
PRESSURE GRADIENT			
VISC.–SEC.	62	45	50
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.			15.2
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1500#		
BENEX	3 bags		

FOOTAGE / FORMATION

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–P EL–P COM–C
2725	2898	D			50/60	35	1200	5½	58			

DEVIATION RECORD: DEPTH 2868; DEV. 2¾; DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
400	830	4½		DRILL
830	900	½		LAY 5 SINGLES, REPLACE W/ 2 STDS FROM DERRICK
900	1145	2¾		DRLG.
1145	1200	¼		SURVY

DRILLER:

Form 3T5 — APPROVED — APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

KODAK SAFETY FILM

DAILY DRILLING REPORT — REPORT NO. 24

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL SOBC	A23	MOUNTAIN RIVER A-23	APRIL 12-7

OPERATOR	CONTRACTOR	RIG NO.
CANADIAN	KENTING - PETROLIA	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. Barker

LEGAL LAND DESCRIPTION: A. 23 65° 42' 14" N 129° 19' 12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	FM 500	DA 500	16
						2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.		NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	25	55	13	517	17	511

WIRE LINE RECORD — REEL NO. 1

SIZE	NO. LINES	FT. SLIPPED
1/8	8	104

FT. CUT OFF: 208' — PRESENT LENGTH: 4740

TON MI. OR TRIPS SINCE LAST CUT: 40

CUMULATIVE TON MI. OR TRIPS: 1978

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	5 3/4	7 3/4	
3. REAMING TO BTM CLEAN	1		
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	1 1/4		
7. LUBRICATE RIG		1/4	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

HORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6 1/2 OD	8.53	FT.
2	D.C. 10 SQ OD	58.20	FT.
1	STB RMR 6 1/4 OD	6.30	FT.
20	D.C. 10 6 1/4 OD	576.67	FT.
1	STB RMR 6 1/2 OD	5.10	FT.
1	X O SUB	2.20	
18	STANDS DP	1698.06	FT.
1	SINGLES DP	31.57	FT.
	KELLY DOWN	28.17	FT.
	TOTAL	2415	FT.

WT. OF STRING 80,000 LBS.

BIT RECORD			
BIT NO.	10		
SIZE	7 7/8		
MFG.	H.W		
TYPE	XV		
JETS 1 32"	13 12 11		
SER. NO.	17578		
DEPTH OUT			
DEPTH IN	2364		
TOTAL FTG.			
TOTAL HRS. RUN	5 3/4		
COND. 1/8's T/B/ GAGE	DRLG		
GPM/ PD-PSI	/	/	/

MUD RECORD			
TIME	4:00	6:00	9:00
WEIGHT	9.	8.8	8.9
PRESSURE GRADIENT			
VISC.-SEC.	44	41	40
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	5500#		

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6 1/2 OD	8.53	FT.
2	D.C. 10 SQ OD	58.20	FT.
1	STB RMR 6 1/4 OD	6.30	FT.
20	D.C. 10 6 1/4 OD	576.67	FT.
1	STB RMR 6 1/2 OD	5.10	FT.
1	X O SUB	2.20	
19	STANDS DP	1792.80	FT.
	SINGLES DP		FT.
	KELLY DOWN	41.40	FT.
	TOTAL	2491.20	FT.

WT. OF STRING 80,000 LBS.

BIT RECORD			
BIT NO.	10		
SIZE	7 7/8		
MFG.	HW		
TYPE	XV		
JET 1/32"	13 12 11		
SER. NO.	17578		
DEPTH OUT			
DEPTH IN	2364		
TOTAL FTG.	127		
TOTAL HRS. RUN	13 1/2		
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD			
TIME	8:00	10 30	2:00
WEIGHT	8.9	9.0	8.9
PRESSURE GRADIENT			
VISC.-SEC.	40	46	52
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
BENEX	4#		

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6 1/2 OD	8.53	FT.
2	D.C. 10 SQ OD	58.20	FT.
1	STB RMR 6 1/4 OD	6.30	FT.
20	D.C. 10 6 1/4 OD	576.67	FT.
1	STB RMR 6 1/2 OD	5.10	FT.
1	X O SUB	2.20	
19	STANDS DP	1792.80	FT.
1	SINGLES DP	31.57	FT.
	KELLY DOWN	32.	FT.
	TOTAL	2513	FT.

WT. OF STRING 80,000 LBS.

BIT RECORD			
BIT NO.	10		
SIZE	7 7/8		
MFG.	HW.		
TYPE	XV		
JETS 1/32"	11 12 13		
SER. NO.	17578		
DEPTH OUT	2513		
DEPTH IN	2364		
TOTAL FTG.	149		
TOTAL HRS. RUN	16 1/4		
COND. 1/8's T/B/ GAGE	7 1 1		
GPM/ PD-PSI	/	/	/

MUD RECORD			
TIME	4:00	6:00	10:45
WEIGHT	8.8	8.8	8.6
PRESSURE GRADIENT			
VISC.-SEC.	52	55	60
PV/YP	11 30	/	/
GELS.	9 1	/	/
WL.-CC'S.	50		
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WATER			

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'L-P COM'D-C
2364	2415	D		FUELS	64/44	45	1100	5 1/2	58			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:15	1 1/4		RUN IN W/ BIT #10
1:15	2:15	1		BREAK CIRC, CLEAN 10' TO BTM.
2:15	8:00	5 3/4		DRLG.

DRILLER

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'L-P COM'D-C
2415	2491	D			44/45	45	1100	5 1/2	58			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:30	1 1/2		DRILL
9:30	9:45	1/4		RIG SERVICE + BOP V
9:45	4:00	6 1/4		DRILL
				HELD BLOW OUT DRILL - SAFETY MEETING

DRILLER

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'L-P COM'D-C
2491	2513	D		LEDGES RUNNING IN HOLE	@	1000'	@	1060				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	6:45	2 3/4		DRILL
6:45				SURVEY & HOIST UP TO 1456, WELL STARTED TO FLOW. RUN BACK IN TO 1627, CLOSE HYDRIL PUT KELLY ON RUN GAS CUT MUD THROW CHOKE, MIX WT MAT, CIRC THROW FLOW LINE.
	11:45	5		
11:45	12:00	1/4		HOIST FLOW W/ BIT #10

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 23

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL JOBE	A. 23	MOUNTAIN RIVER - A23	4-16-72

OPERATOR	CONTRACTOR	RIG NO.
CANADIAN DELHI	BENTING - PETROLIA	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

D.P. SIZE	WT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		3½ IF	1	1	EMSCO	DA500	16
						2	"	"	"

LOCATION: A.23 65° 42' 14" N 119° 19' 12" W

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 5/8	NKK	25 55	13	517	17	511

WIRE LINE RECORD — REEL NO.: SIZE 1/8; NO. LINES 8; FT. SLIPPED; FT. CUT OFF; PRESENT LENGTH 4696; TON MI. OR TRIPS SINCE LAST CUT; CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	5¼		3¼
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS	13¼		3¼
7.	LUBRICATE RIG			
8.	REPAIR RIG	½		1
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY	½		
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. T&G TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY): HRS. W/CONTR. D.P.; HRS. W/OPR. D.P.; HRS. WO/D.P.; HRS. STANDBY; TOTAL DAY WORK; NO. OF DAYS FROM SPUD; CUMULATIVE ROTATING HRS.; TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
1	STB RMR 6½ OD	8.53	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6¼ OD	6.30	FT.
1	D.C. ID SQ OD	58.20	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X0 SUB	2.20	
16	STANDS DP	1609.26	FT.
	SINGLES DP	—	FT.
	KELLY DOWN	—	FT.
	TOTAL	2207.66	FT.
	WT. OF STRING	65,000	LBS.

BIT RECORD	
BIT NO.	8
SIZE	7⅞
MFG.	H.W
TYPE	XV
JETS 1/32"	12 12 13
SER. NO.	23264
DEPTH OUT	2207
DEPTH IN	1420
TOTAL FTG.	787
TOTAL HRS. RUN	19¾
COND. 1/8's T/B/ GAGE	1 R 1
GPM/ PD-PSI	/

MUD RECORD			
TIME	12⁰⁰	4⁰⁰	6³⁰
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	38	43	54
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.	10.		
pH			
SOLIDS %			

MUD & CHEMICALS ADDED: GEL 52.00; MD-115 VIS

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID SQ OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X0 SUB	2.20	
17	STANDS DP	1604.01	FT.
1	SINGLES DP		FT.
	KELLY DOWN	4.40	FT.
	TOTAL	2302.41	FT.
	WT. OF STRING	74,000	LBS.

BIT RECORD		
BIT NO.	8	9
SIZE	7⅞	7⅞
MFG.	H.W	H.W
TYPE	X.V.	XV
JET 1/32"	12 12 13	13 ✓ ✓
SER. NO.	23264	17574
DEPTH OUT	2207	
DEPTH IN	1420	2207
TOTAL FTG.	787	95
TOTAL HRS. RUN	19¾	4
COND. 1/8's T/B/ GAGE	5 5 1	
GPM/ PD-PSI	/	/

MUD RECORD		
TIME	12⁰⁰	3⁰⁰
WEIGHT	9.2	9.1
PRESSURE GRADIENT		
VISC.-SEC.	78	42
PV/YP	/	/
GELS.	/	/
WL.-CC'S.		
pH		
SOLIDS %	DESILTER	
	OVERFLOW	8.9

MUD & CHEMICALS ADDED: UNDERFLOW 4.5; G.P.M. 5

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID SQ OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X0 SUB	2.20	
17	STANDS DP	1604.01	FT.
2	SINGLES DP	62.58	FT.
	KELLY DOWN		FT.
	TOTAL	2364	FT.
	WT. OF STRING	78,000	LBS.

BIT RECORD	
BIT NO.	9
SIZE	7⅞
MFG.	H.W
TYPE	XV
JETS 1/32"	13 ✓ ✓
SER. NO.	17574
DEPTH OUT	2364
DEPTH IN	2207
TOTAL FTG.	157
TOTAL HRS. RUN	7¾
COND. 1/8's T/B/ GAGE	1 R 1
GPM/ PD-PSI	/

MUD RECORD		
TIME	3⁰⁰	6⁰⁰
WEIGHT	9.1	9.1
PRESSURE GRADIENT		
VISC.-SEC.	42	50
PV/YP	/	/
GELS.	/	/
WL.-CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED: Gel 1000#; Benex 4#

MORNING TOUR — FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-P COM-C
1420	2207	D			110	3.5	1675	5½	72			

DEVIATION RECORD: DEPTH 2144; DEV. 1½°; DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	2⁰⁰	2		DRLG
2⁰⁰	2³⁰	½		LAY 5 SINGLES, REPLACE W/ 2 STDS FROM DERRICK
2³⁰	3⁰⁰	½		DRLG
3⁰⁰	3³⁰	½		SURVEY
3³⁰	4⁰⁰	½		REPLACE O-RING IN STAND PIPE UNION
4⁰⁰	6⁴⁵	2¾		DRLG
6⁴⁵	8⁰⁰	1¼		HOIST BIT #8

DRILLER: [illegible]

DAY TOUR — FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-P COM-C
2207	2302	D			80	40	1200	5½	60			
				CHECKED BLIND RAMS WHEN OUT OF HOLE								

DEVIATION RECORD: DEPTH; DEV.; DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	¼		FINISH OUT W/BIT #8
8¹⁵	9⁰⁰	¾		TURN RAMS IN 6 POINT REAMER
9⁰⁰	9³⁰	½		RUN IN W/ D.C'S
9³⁰	10⁰⁰	½		SLIP 52' DRILL LINE
10⁰⁰				RUN IN, REAM F/1010' - 1260' FINISH IN + CI
	12⁰⁰	2		40' FILL TO BTM
12⁰⁰	4⁰⁰	4		DRILL

DRILLER

EVENING TOUR — FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-P COM-C
2302	2364	D			65/75	40	1200	5½	60			

DEVIATION RECORD: DEPTH 2324; DEV. 1½°; DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	7⁴⁵	3¾		DRILL
7⁴⁵	10¹⁵	2½		HOIST BIT #9
10¹⁵	10⁴⁵	½		RUN DRLG COLLARS
10⁴⁵	11⁴⁵	1		SLIP & CUT DRLG LINE
11⁴⁵	12⁰⁰	¼		RUN IN W/ BIT #10

DRILLER

DAILY DRILLING REPORT — REPORT NO. 22

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL SOBC	A-23	MOUNTAIN RIVER A-23	4-10-72

OPERATOR: CANADIAN DELHI

CONTRACTOR: KENTING - PETROLIA — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

LEGAL LAND DESCRIPTION: A-23 65°42'14" N 129°19'12" W

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	8 5/8	NKK	24	55	13	517	17	511

WIRE LINE RECORD — REEL NO. 1

SIZE	NO. LINES	FT. SLIPPED
1 1/8	8	

FT. CUT OFF: PRESENT LENGTH: 4896

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E	3 1/2	H90	1	1	EMSCO	DA500	16
						2	EMSCO	D500	16

MORNING TOUR

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL		13 1/4	6 3/4
3. REAMING		3/4	
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		1/2	
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY		1/4	1/4
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.		1/4	
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. PICK UP STDS			1
22.			
23.			
COMPLETION A. PERF'R'TN			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY): HRS. W/CONTR. D.P. / HRS. W/OPR. D.P. / W.O./D.P. / STANDBY / TOTAL DAY WORK

NO. OF DAYS FROM SPUD / CUMULATIVE ROTATING HRS. / TOTAL MUD COST

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6 1/2 OD		8.53
20	D.C. ID 6 1/4 OD		576.67
1	STB RMR 6 1/4 OD		6.30
2	D.C. ID 5 0 OD		58.20
1	STB RMR 6 1/2 OD		5.10
1	X O SUB		2.20
7	STANDS DP		
1	SINGLES DP	518.16	
	KELLY DOWN	41.40	
	TOTAL	1416	
WT. OF STRING	58000 LBS.		

BIT RECORD			
BIT NO.	8		
SIZE	7 7/8		
MFG.	HW		
TYPE	X V		
JETS 1 32"	12 12 13		
SER. NO.	23264		
DEPTH OUT			
DEPTH IN	1420		
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD			
TIME	2 am	4 am	6 30
WEIGHT	9.2		
PRESSURE GRADIENT			
VISC.–SEC.	156	121	130
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1800#		

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR EL–P COM D–C
1010	1420	R			95	5	1600	5 1/2	72			

DEVIATION RECORD: DEPTH 1100 — DEV. 1/2 — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	1 30	1 1/2		PICK UP REAMERS & SQ COLLARS & RUN IN
1 30	6 00	4 1/2		CLEAN OUT BRIDGE & REAM FROM 1010'
6 00	6 15	1/4		SURVEY
6 15	8 00	1 3/4		REAM

DRILLER: G. Matteson

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6 1/2 OD		8.53
20	D.C. ID 6 1/4 OD		576.67
1	STB RMR 6 1/4		6.30
2	D.C. ID 5 0 OD		58.20
1	STB RMR 6 1/2 OD		5.10
1	X O SUB		2.20
10	STANDS DP		
1	SINGLES DP	980.97	
	KELLY DOWN		
	TOTAL	1679	
WT. OF STRING	59000 LBS.		

BIT RECORD			
BIT NO.	8		
SIZE	7 7/8		
MFG.	H.W		
TYPE	X V		
JET 1/32"	12 12 13		
SER. NO.	23264		
DEPTH OUT			
DEPTH IN	1420		
TOTAL FTG.	259		
TOTAL HRS. RUN	6 3/4		
COND. 1/8's T/B/ GAGE	DRLG.		
GPM/ PD–PSI			

MUD RECORD			
TIME	8 00	10 00	1 00
WEIGHT	9.2	9.2	9.1
PRESSURE GRADIENT			
VISC.–SEC.	95	75	47
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			8.2
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1500#		

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR EL–P COM D–C
1420	1679	D			110	35	1600	5 1/2	70			

DEVIATION RECORD: DEPTH 1564 — DEV. 1/2° — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	1/4		RIG SERVICE & POP'S DAY
8 15	10 00	1 3/4		CLEAN TO 1420
10 00	1 00	3		DRLG 7 7/8 HOLE.
1 00	1 30	1/2		LAY DOWN 6 SINGLES, RUN TWO STDS FROM DERRICK
1 30	2 00	1/2		DRLG
2 00	2 15	1/4		SURVEY
2 15	4 00	1 3/4		DRLG.

DRILLER: [signature]

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6 1/2 OD		8.53
20	D.C. ID 6 1/4 OD		576.67
1	STB RMR 6 1/4 OD		6.30
1	D.C. ID 5 0 OD		58.20
1	STB RMR 6 1/2 OD		5.10
1	X O SUB		2.20
13	STANDS DP		
1	SINGLES DP	1266.92	
	KELLY DOWN	41.40	
	TOTAL	1955.	
WT. OF STRING	64000 LBS.		

BIT RECORD			
BIT NO.	8		
SIZE	7 7/8		
MFG.	H.W.		
TYPE	X V		
JETS 1/32"	12 12 13		
SER. NO.	23264		
DEPTH OUT			
DEPTH IN	1420		
TOTAL FTG.	535		
TOTAL HRS. RUN	13 1/2		
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD			
TIME	4:30	7 00	9 30
WEIGHT	9.1	8.9	9.0
PRESSURE GRADIENT			
VISC.–SEC.	46	47	45
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR EL–P COM D–C
1679	1955	D			110	35	1600	5 1/2	72			

DEVIATION RECORD: DEPTH 1955 — DEV. 1° — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	6 00	2		DRLG.
6 00	6 30	1/2		LAY 6 SINGLES, RUN 2 STDS. FROM DERRICK
6 30	10 00	3 1/2		DRLG
10 00	10 30	1/2		LAY 5 SINGLES RUN 2 STDS. F/DERRICK
10 30	11 45	1 1/4		DRLG.
11 45	12 00	1/4		SURVEY @ 1955

DRILLER: L. Ryder

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 21

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL SOBC	A-23	MONITARN RIVER	4-9-72

OPERATOR: CanDel Oil Ltd. / CANADIAN DELHI

CONTRACTOR: KENTING PETROLIA. — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

LOCATION: H-23 65°42'14" N 129°19'12" W.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E	3½	H90	1	1	EMSCO	DA500	16
						2	EMSCO	D-500	16

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	20.55	13	517	17	511

WIRE LINE RECORD — REEL NO. 1

SIZE	NO. LINES	FT. SLIPPED
1 1/8	8	

FT. CUT OFF — PRESENT LENGTH: 4896

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL		2	
3. REAMING		3¾	
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		2	
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.		¼	
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK		8	
NO. OF DAYS FROM SPUD	15		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
11	D.C. ID	OD	
	STB RMR	OD	
	D.C. ID	OD	
	STB RMR	OD	
	STANDS DP		
	SINGLES DP		
	KELLY DOWN		
	TOTAL		
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	6		
SIZE	7 7/8		
MFG.	H.W.		
TYPE	XIG		
JETS : 32"	OPEN		
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8"s T/B/ GAGE			
GPM/ PD–PSI		/	

MUD RECORD

TIME	2⁰⁰	4⁰⁰	6⁰⁰
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.	95	163	N.A
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2700#		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
19	D.C. ID 6 1/4	OD	
	STB RMR	OD	
	D.C. ID	OD	
	STB RMR	OD	
1	BIT SUB	4.00	
1	X.O.S.B	2.20	
7	STANDS DP	1.59.	FT.
	SINGLES DP		
	KELLY DOWN	✓	
	TOTAL	1243	FT.
WT. OF STRING		58000	LBS.

BIT RECORD

BIT NO.	6	7	
SIZE	7 7/8	7 7/8	
MFG.	H.W.	H.W.	
TYPE	XIG	X3A	
JET 1/32"	OPEN	18 16 16	
SER. NO.	46343	40291	
DEPTH OUT	1127		
DEPTH IN	900	1127	
TOTAL FTG.	197	116	
TOTAL HRS. RUN	~~[illegible]~~ 4¾	2	
COND. 1/8"s T/B/ GAGE	4 1 1	DRLG.	
GPM/ PD–PSI		/	

MUD RECORD

TIME	16⁰⁰	12⁰⁰	3⁰⁰
WEIGHT			9.2
PRESSURE GRADIENT			
VISC.–SEC.	75	84	43
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	60 sx		

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
19	D.C. ID 6 1/4	OD	
	STB RMR	OD	
	D.C. ID	OD	
	STB RMR	OD	
1	BIT SUB	4.00	
1	X.O.S.B	2.20	
	STANDS DP		
	SINGLES DP		
	KELLY DOWN		
	TOTAL		
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	7		
SIZE	7 7/8		
MFG.	H.W.		
TYPE	X3A		
JETS 1/32"	18 16 16		
SER. NO.	40291		
DEPTH OUT			
DEPTH IN	1127		
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8"s T/B/ GAGE			
GPM/ PD–PSI		/	

MUD RECORD

TIME	4⁳⁰	700	10⁻
WEIGHT	7.2	9.2	9.2
PRESSURE GRADIENT			
VISC.–SEC.	58	48	55
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.			
pH	DESILTER		
SOLIDS %	12 Gal/min		
	UNDER FLOW	10.5#	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1200#		

MORNING TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI–S PARTIAL–P COMPL–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	1⁰⁰	1		CLEAN OUT BRIDGE FROM 900'
1⁰⁰	2⁰⁰	1		TRIP OUT & STAND 8 DRILL COLLARS IN DERRICK
2⁰⁰	8⁰⁰	6		CLEAN OUT BRIDGE FROM 900' – 930

DRILLER

DAY TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI–S PARTIAL–P COMPL–C
					110	30	1600	5½	64			
930	1243	D										

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	1/4		RIG SERVICE – [illegible]
8¹⁵	12⁰⁰	3¾		CLEAN OUT BRIDGE FROM 930'
12⁰⁰	2⁰⁰	2		TRIP F/ BIT
2⁰⁰	4⁰⁰	2		DRLG NEW 7⅞ HOLE
			9½ 5	

DRILLER

EVENING TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI–S PARTIAL–P COMPL–C
1243	1328											

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1243	1/2							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4¹⁵	1/4		RIG SERVICE
4¹⁵	4³⁰	1/4		SURVEY, 1243'
4³⁰	7³⁰	3		DRLG 7⅞ HOLE
7³⁰	11⁰⁰	3½		TRIP F/ BIT CLEAN BRIDGE @ 955' MIX MUD
11⁰⁰	12⁰⁰	1		TRIP OUT TO PICK UP REAMERS & SQ COLLARS

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

PETROLIA OILWELL DRILLING LTD.

DAILY DRILLING REPORT — REPORT NO. 20

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL SOBC	A-23	MOUNTAIN RIVER A-23	4-8-78

OPERATOR: CANADIAN DELHI

CONTRACTOR: KENTING - PETROLIA — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		3½ H90	1	1	EMSCO	DA-500	16
						2	EMSCO	D500	16

LEGAL LAND DESCRIPTION: A-23 65°42'14" N 129°19'12" W.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.		NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	20	55	13	517	17	511

WIRE LINE RECORD — REEL NO. 1

SIZE	NO. LINES	FT. SLIPPED
1/8	8	

FT. CUT OFF: — PRESENT LENGTH: 4296

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	14
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD 547.04	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	BIT S.B	4.00	
1	XO SUB	2.20	
32	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD	
BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.–CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD 547.04	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	BIT S.B	4.00	
1	XO SUB	2.20	
32	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING	0		LBS.

BIT RECORD	
BIT NO.	5
SIZE	7 7/8
MFG.	H.C.
TYPE	XV
JET 1/32"	OPEN
SER. NO.	23819
DEPTH OUT	
DEPTH IN	3570
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.–CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	600#		
BIMEX	26#		

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD	
BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD			
TIME		9:00	1:00
WEIGHT		9	
PRESSURE GRADIENT			
VISC.–SEC.		54	98
PV/YP	/	/	/
GELS.	/	/	/
WL.–CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1600#		

MORNING TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCR–S PAR–P HI–P COM–C
360'							450	5½	72			

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	7:00	7		W.O.C. C.RC
7:00	7:15	1/4		RUN IN & TAGGED CEMENT @ 16'
7:15	8:00	3/4		BREAK C.RC 140' OFF BTM

DRILLER: [signature]

DAY TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCR–S PAR–P HI–P COM–C
360'												

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:45	1 3/4		CIRC 5H OF MUD COND HOLE, GOOD RETURNS
9:45				THOUT DRLG PIPE, RUN ON 1 JTS, DRLG COLLARS
	12:00	2 1/4		DRLG PIPE
12:00				BROKEN OFF @ 529' PICK UP KELLY, CLEAN OUT
	4:00	4		BRIDGE FROM 729, MIX MUD TO 576
				Replacement by Dhanal

DRILLER: [signature]

EVENING TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCR–S PAR–P HI–P COM–C
360'												

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	12:00	8		CLEAN OUT BRIDGE FROM 770' – 900'

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 19

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL SOBC	A-23	MOUNTAIN RIVER A-23	4-7-78

OPERATOR: CANADIAN DELHI

CONTRACTOR: KENTING - PETROLIA — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.5#	E		3½ H90	1	1	Emsco	DA500	16
						2	Emsco	D500	16

LEGAL LAND DESCRIPTION: H-23 65°42'14" N 129° 19'12" W.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.		NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	24	55	13	517	17	511

WIRE LINE RECORD — REEL NO. 1

SIZE	NO. LINES	FT. SLIPPED
1 1/8	8	

FT. CUT OFF — PRESENT LENGTH 4896

TON MI. OR TRIPS SINCE LAST CUT: 1097

CUMULATIVE TON MI. OR TRIPS: 18.27

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. W/O D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	13
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD 547.04	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	X-O Sub	2.20	
32	STANDS DP	2012.07	FT.
	SINGLES DP		FT.
	KELLY DOWN	36.74	FT.
	TOTAL	3602	FT.
WT. OF STRING		80000	LBS.

BIT RECORD

BIT NO.	5
SIZE	7 7/8
MFG.	HW.
TYPE	XU
JETS 1/32"	OPEN
SER. NO.	23819
DEPTH OUT	
DEPTH IN	3570
TOTAL FTG.	32
TOTAL HRS. RUN	4¾
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
3602					95	5	400	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	6:15	6¼		WAIT ON CEMENT.
6:15	7:15	1		RUN IN & TAG CEMENT 120' OFF BTM. CIRC.
7:15	8:00	¾		DRILL OUT CEMENT

DRILLER: [signature]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD 547.04	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	Bit Sub	4.00	
1	X-O Sub	2.20	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	5
SIZE	7 7/8
MFG.	HW.
TYPE	XU.
JET 1/32"	OPEN
SER. NO.	23819
DEPTH OUT	
DEPTH IN	3570
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
3602												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6:00	6:45	¾		DRILL OUT CEMENT LOST RETURNS 30' OFF BTM.
6:45	9:30	2¾		HOLE TIGHT PULL 3 STDS.
9:30	11:15	1¾		WORK PIPE, PUT VALVE ON 400# PUMP W/ NO RETURNS
11:15				HOIST 3 STAND DRILL COLLARS IN DERRICK, RUN IN
				OPEN END W/ DRILL PIPE, BRIDGED OFF 23 STDS
				OFF BTM. CALL OUT BRIDGE, RUN IN 5 STDS.
	4:00	4¾		PUT KELLY ON CIR. SINGLES BTM.

DRILLER: [signature]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
32	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
3602												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	6:30	2½		PICK UP SINGLES, WORK TO BTM
6:30				CIRC LOST RETURNS 30' OFF BTM, WORK PIPE
				RIG TO RUN CEL DETEL CEMENT PLUG.
				RUN 120 SACKS REG W/ DIESEL, 50 SACKS
	7:00	1		CEMENT W/ 2% CAL. SET AT 2383.
7:00	8:15	¼		PULL 12 STDS SLOW
8:15	12:00	3¾		WOC

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 18

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL SORC	A-23	MOUNTAIN RIVER A-23	4-6-72

OPERATOR	CONTRACTOR	RIG NO.
CANADIAN DEL HI	KENTING - PETROLIA	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

LEGAL LAND DESCRIPTION: A-23 65°42'14" N 129° 19'12" W.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		3½ H90	1	1	EMSCO	DA500	16
						2	EMSCO	DS500	16

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	24	55	12	517	17	511

WIRE LINE RECORD — REEL NO. 1

SIZE	NO. LINES	FT. SLIPPED
1 1/8	8	

FT. CUT OFF: | PRESENT LENGTH: 4896

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'RT'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	12
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
19	D.C. ID 6 1/4	OD 547.04	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	BIT SUB	4.00	
1	XO SUB	2.20	
32	STANDS DP	3012.07	FT.
	SINGLES DP		FT.
	KELLY DOWN	35.74	FT.
	TOTAL	3601	FT.
WT. OF STRING	88000	LBS.	

BIT RECORD

BIT NO.	5	
SIZE	7 7/8	
MFG.	HW	
TYPE	XJ	
JETS 1/32"	OPEN	
SER. NO.	23819	
DEPTH OUT		
DEPTH IN	3570	
TOTAL FTG.	31	
TOTAL HRS. RUN	4	
COND. 1/8" & T/B/ GAGE		
GPM/ PD–PSI	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
19	D.C. ID 6 1/4	OD 547.04	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	BIT SUB	4.00	
1	XO SUB	2.20	
32	STANDS DP	3012.07	FT.
	SINGLES DP		FT.
	KELLY DOWN	36.74	FT.
	TOTAL	3602	FT.
WT. OF STRING	88000	LBS.	

BIT RECORD

BIT NO.	5	
SIZE	7 7/8	
MFG.	HW	
TYPE	XJ	
JET 1/32"	OPEN	
SER. NO.	23819	
DEPTH OUT		
DEPTH IN	3570	
TOTAL FTG.	32	
TOTAL HRS. RUN	4 3/4	
COND. 1/8" & T/B/ GAGE		
GPM/ PD–PSI	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL			

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
19	D.C. ID 6 1/4	OD 547.04	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	BIT SUB	4.00	
1	XO SUB	2.20	
32	STANDS DP	3012.07	FT.
	SINGLES DP		FT.
	KELLY DOWN	36.74	FT.
	TOTAL	3602	FT.
WT. OF STRING	88000	LBS.	

BIT RECORD

BIT NO.	5	
SIZE	7 7/8	
MFG.	HW	
TYPE	XJ	
JETS 1/32"	OPEN	
SER. NO.	23819	
DEPTH OUT		
DEPTH IN	3570	
TOTAL FTG.	32	
TOTAL HRS. RUN	4 3/4	
COND. 1/8" & T/B/ GAGE		
GPM/ PD–PSI	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL'S PARTIAL P COM PLC
3601												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1		PULL 15 STDS SLOW.
1:00	2:30	1½		BREAK CIRC @ 2160 & CIRC FULL RETURNS.
2:30	3:15	¾		RUN IN 1 STD & BREAK CIRC @ 2254 FULL RETURNS
3:30	4:00	¾		RUN IN 1 STD & BREAK CIRC @ 2348 " "
4:00	4:30	½		RUN IN 2 STDS & BREAK CIRC @ 2536 " "
4:30	5:30	1		RUN IN 2 STDS & BREAK CIRC @ 2724 " "
5:30	6:30	1		RUN IN 2 STDS & BREAK CIRC @ 2912 " "
6:30	8:00	1½		RUN 2 STDS. NO RETURNS.

DRILLER: [illegible]

DAY TOUR

FOOTAGE FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL'S PARTIAL P COM PLC
3601	3602	D										

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		PULL 3 STDS, NO RETURNS
8:15	10:30	2¼		RUN IN 10 STDS PULL TO RUN CSG. JOB #3
10:30	11:00	½		RUN 12 CHANGE GEL & DIESEL PUMP W/ HALLIBURTON
11:00	11:15	¼		BREAK CIRC GETTING OFF BOTT. GOOD RETURNS
11:15	12:00	¾		PULL TO BUILD & DRILL NO RETURNS
12:00	4:00	4		BUILD VOLUME, ADD WATER

DRILLER: [illegible]

EVENING TOUR

FOOTAGE FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL'S PARTIAL P COM PLC
3601												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		RIG SERVICE & BOPS DRILL
4:15		1		RIG UP SWIVEL PULL RUN 50 SACKS
	5:15			OF CONTROL CEMENT
5:15	6:00	½		PULL 15 STDS & BREAK CIRC, FULL RETURNS
6:00	12:00	6		CIRC, WOPL PIPE, W.O.C.

DRILLER

FORM 375 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 17

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL MOUNTAIN RIVER	A-23	SOBC MOUNTAIN R A-23	4-5-76

OPERATOR: CANADIAN DELHI

CONTRACTOR: KENTING - PETROLIA — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Alex Vojnic

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4"	15.3	E		3½ H90	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	DA500	16
2	EMSCO	D500	16

LEGAL LAND DESCRIPTION: H-23 65°42'14" N 129°19'12" W.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.		NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	24	K55	13	517	17.	511

WIRE LINE RECORD — REEL NO. 1

SIZE	NO. LINES	FT. SLIPPED
1 1/8	8	

FT. CUT OFF: PRESENT LENGTH: 4896

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	1½		
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. WAIT ON WATER & BUILD VOLUME	6½	8	
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. W/O D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD	11		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
19	D.C.	ID 6¼ OD	547.04 FT.
1	STB RMR	OD	FT.
	D.C.	ID OD	FT.
	STB RMR	OD	FT.
1	BIT SUB		4.00
1	X O SUB		2.20
32	STANDS DP		3012.02 FT.
	SINGLES DP		FT.
	KELLY DOWN		35.74 FT.
	TOTAL		3601 FT.
WT. OF STRING	88000 LBS.		

BIT RECORD

BIT NO.	5
SIZE	7 7/8
MFG.	H.W.
TYPE	XV
JETS 1 32"	OPEN
SER. NO.	23819
DEPTH OUT	
DEPTH IN	3570
TOTAL FTG.	31
TOTAL HRS. RUN	4
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Bentonite	12	SAX	

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
19	D.C.	ID 6¼ OD	547.04 FT.
	STB RMR	OD	FT.
	D.C.	ID OD	FT.
	STB RMR	OD	FT.
1	BIT SUB		4.00
1	X O SUB		2.20
32	STANDS DP		3012.02 FT.
	SINGLES DP		FT.
	KELLY DOWN		35.74 FT.
	TOTAL		3601 FT.
WT. OF STRING	88000 LBS.		

BIT RECORD

BIT NO.	5
SIZE	7 7/8
MFG.	H.W.
TYPE	XV
JET 1/32"	OPEN
SER. NO.	23819
DEPTH OUT	
DEPTH IN	3570
TOTAL FTG.	31
TOTAL HRS. RUN	4
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	40	SAX	
QUIK SEAL	60	Bag	
FIBER SEAL	48	Bag	
SAWDUST	1	BAG	

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
19	D.C.	ID 6¼ OD	547.04 FT.
	STB RMR	OD	FT.
	D.C.	ID OD	FT.
	STB RMR	OD	FT.
1	BIT SUB		4.00
1	X O SUB		2.20
32	STANDS DP		3012.02 FT.
	SINGLES DP		FT.
	KELLY DOWN		35.74 FT.
	TOTAL		3601 FT.
WT. OF STRING	88000 LBS.		

BIT RECORD

BIT NO.	5
SIZE	7 7/8
MFG.	H.W.
TYPE	XV
JETS 1/32"	OPEN
SER. NO.	23819
DEPTH OUT	
DEPTH IN	3570
TOTAL FTG.	31
TOTAL HRS. RUN	4
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PARE.-P COM.-C
3592	3601	D			44	15	250	5½	35			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	1³⁰	1½		BUILD VOLUME. WAIT ON WATER.
1³⁰	2³⁰	1		DRILL W/NO RETURNS
2³⁰	6⁴⁵	4¼		BUILD VOLUME & WAIT ON WATER.
6⁴⁵	7¹⁵	½		DRILL W/NO RETURNS.
7¹⁵	8⁰⁰	¾		WAIT ON WATER & BUILD VOLUME.

DRILLER: L. Matthews

DAY TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PARE.-P COM.-C
3601												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰				WAIT ON WATER, BUILD VOLUME,
	4⁰⁰	8		MIX LOST CIR. MAT, PUMP SAME DOWN HOLE, NO RETURNS.

DRILLER: [illegible]

EVENING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PARE.-P COM.-C
3601												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	7⁰⁰	3		RUN WATER, BUILD VOLUME
7⁰⁰	8⁰⁰	1		MIX GEL PLUG W/HALIBURTON W/120 SAX & PUMP SAME.
8⁰⁰	8¹⁵	¼		DISPLACE GEL PLUG W/WATER.
8¹⁵	8⁴⁵	½		PULL TWO STANDS.
8⁴⁵	10⁰⁰	1¼		WAIT F/GEL PLUG TO SET-UP, PUMP, NO RETURNS.
10⁰⁰	11⁰⁰	1		RIG TO RUN GEL PLUG # 2
11⁰⁰	11³⁰	½		MIX GEL PLUG W/120 SAX & PUMP SAME
11³⁰	12⁰⁰	½		DISPLACE W/WATER

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
PUD DEL ETAL SOBO MOUNT	A-23	SOBO MOUNTAIN A-23	4/4/72

OPERATOR: CANADIAN DELHI

CONTRACTOR: KENTING - PETROLIA

RIG NO.: 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

LEGAL LAND DESCRIPTION: A-23 LS 42' 34" N 124° 18' 12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		3½ H90	1	1	EMSCO	DA500	16
						2	EMSCO	D500	16

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	24 55	13	517	17	511

WIRE LINE RECORD REEL NO. 1

SIZE	NO. LINES	FT. SLIPPED
1/8	8	

FT. CUT OFF: PRESENT LENGTH: 4896

TON MI. OR TRIPS SINCE LAST CUT: 990

CUMULATIVE TON MI. OR TRIPS: 1720

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			1¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. BUILD VOLUME MIX LOST CIRC			3¼
22. PUMP LOST CIRC			2
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD 547.04	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMP	OD	FT.
1	BIT SUB	4.00	
1	XO SUB	2.20	
32	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
JETS 1/32"		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HRS. RUN		
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI		

MUD RECORD		
TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC.-SEC.		
PV/YP	/	/
GELS.	/	/
WL.-CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD 547.04	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	BIT SUB	4.00	
1	XO SUB	2.20	
32	STANDS DP	3012.02	FT.
	SINGLES DP		FT.
	KELLY DOWN	21	FT.
	TOTAL	3582	FT.
WT. OF STRING		88000	LBS.

BIT RECORD		
BIT NO.	5	
SIZE	7 7/8	
MFG.	H.W.	
TYPE	KU	
JET 1/32"	OPEN	
SER. NO.	23819	
DEPTH OUT		
DEPTH IN	3570	
TOTAL FTG.		
TOTAL HRS. RUN		
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI		

MUD RECORD		
TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC.-SEC.		
PV/YP	/	/
GELS.	/	/
WL.-CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
BULK SEAL	68 BAGS		

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
19	D.C. ID 6¼	OD 547.04	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	BIT SUB	4.00	
1	XO SUB	2.20	
32	STANDS DP	3012.02	FT.
	SINGLES DP		FT.
	KELLY DOWN	26.74	FT.
	TOTAL	3592	FT.
WT. OF STRING		88000	LBS.

BIT RECORD		
BIT NO.	5	
SIZE	7 7/8	
MFG.	H.W.	
TYPE	KU	
JETS 1/32"	OPEN	
SER. NO.	23819	
DEPTH OUT		
DEPTH IN	3570	
TOTAL FTG.	22	
TOTAL HRS. RUN	2½	
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI		

MUD RECORD		
TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC.-SEC.		
PV/YP	/	/
GELS.	/	/
WL.-CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR.-P COM.-C
3582												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	1⁰⁰	1		PUMP GEL PLUG. PIPE PURGED OFF
1⁰⁰	8⁰⁰	7		TRIP & CLEAN 1500' PURGED PIPE.

DRILLER: [signature]

DAY TOUR

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR.-P COM.-C
3582												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	12¹⁵	4¼		CLEAN OUT PLUGGED DRILL COLLARS.
12¹⁵	1¹⁵	1		RUN IN W/ BIT
1¹⁵				BREAK CIRC & CIRC TO COND HOLE - LOOK RETURN
	4⁰⁰	2¾		LOST RETURNS @ 3575, BUILD VOLUME @ 3583
				& MIX LOST CIRC MAT.

DRILLER: [signature]

EVENING TOUR

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR.-P COM.-C
3582	3592	D			60	10/15	250	5½	35			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	5⁰⁰	1		MIX LOST CIRC MAT.
5⁰⁰	7⁰⁰	2		PUMP LOST CIRC MAT DOWN HOLE.
7⁰⁰	7³⁰	1/2		DRILL W/ NO RETURNS.
7³⁰	9⁰⁰	1½		BUILD VOLUME.
9⁰⁰	9⁴⁵	¾		DRILL W/NO RETURNS.
9⁴⁵	12⁰⁰	2¼		BUILD VOLUME.

DRILLER

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Can Del Et Al Sobc Mountain	A-23	Sobc Mountain A-23	4-3-72

OPERATOR	CONTRACTOR	RIG NO.
Canadian Delhi	Kenting - Petrolia	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. Baker

LOCATION: A-23 65° 42'14" N / 129° 19'12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		3½ H90		1	Emsco	DA 500	16
						2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.		NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8⅝	NKK	24	J55	13	517	17	511

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID 5.0 OD	582.0	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X O SUB	2.20	
30	STANDS DP		FT.
2	SINGLES DP	2886.21	FT.
	KELLY DOWN	26.79	FT.
	TOTAL	3570.	FT.
WT. OF STRING	94000		LBS.

BIT RECORD	
BIT NO.	5
SIZE	7⅞
MFG.	H.W.
TYPE	X V
JETS 1 32"	OPEN
SER. NO.	23819
DEPTH OUT	
DEPTH IN	3570
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME			6.00
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			48
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
Gel	5000#		
Benex	12#		
Sawdust	1/4 Box		
Kwik Seal	2 Bags		

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
3570												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	1.00	1		Trip Out
1.00	2.15	1¼		Run in To 2182
2.15	4.15	2		Mix Gel & Lost Circ. Mat.
4.15	4.45	½		Circ. @ 2162 Good Returns
4.45	5.30	¾		Run in To 2960' & Circ (Good Returns)
5.30	7.30	2		Run in To 3535 Circ & Clean Fill To Btm.
7.30	8.00	½		Lost Circ Pump Mud Down Hole

DRILLER: L. Parks

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID 5.0 OD	582.0	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	X O SUB	2.20	
30	STANDS DP		FT.
1	SINGLES DP	2886.21	FT.
	KELLY DOWN	26.79	FT.
	TOTAL	3570	FT.
WT. OF STRING	82000		LBS.

BIT RECORD	
BIT NO.	5
SIZE	7⅞
MFG.	H.W.
TYPE	X V.
JET 1/32"	OPEN
SER. NO.	23819
DEPTH OUT	
DEPTH IN	3570
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
Gel	9000#		
Benex	24#		
Kwik Seal	88 sax		
Sawdust	4 Boxes		

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
3570												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	8.30	½		Pull 12 Stands.
8.30	11.00	2½		Mix Gel & Lost Circ Material.
11.00	12.00	1		Pump 400 Bbls of Plug No Returns.
12.00				Build Volume, Mix Gel & Lost Circ Material.
	4.00	4.		TR - To Lay Square Collars & Reamers.

DRILLER: [redacted]

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
19	D.C. ID 6¼ OD	542.04	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	Bit Sub	4.00	
1	X O Sub	2.20	
32	STANDS DP	3012.02	FT.
	SINGLES DP		FT.
	KELLY DOWN	21	FT.
	TOTAL	3582.	FT.
WT. OF STRING	88,000		LBS.

BIT RECORD	
BIT NO.	5
SIZE	7⅞
MFG.	H.W.
TYPE	X V
JETS 1/32"	OPEN
SER. NO.	23819
DEPTH OUT	
DEPTH IN	3540
TOTAL FTG.	12
TOTAL HRS. RUN	1¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
Diesel	40 Bbls		
Gel	150 lbs		

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
3570	3582	12 ft		Drlg	46	15	200	5½	34			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4.00	5.30	1½		Build Volume
5.30	5.45	¼		Drlg - No Returns
5.45	6.45	½		Build Volume
6.45	7.00	¼		Drlg - No Returns
7.00	7.30	½		Build Volume
7.30	7.45	¼		Drlg - No Returns
7.45				Clean Suction Tank & Pump 50 bbls Diesel & Mix Plug
	12.00	4¼		For Diesel Plug.

DRILLER: [redacted]

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

PETROLIA OILWELL DRILLING LTD.

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CANDEL ETAL SOBC MOUNT R	A-23	SOBC MOUNTAIN A-23	4-2-72

OPERATOR: CANADIAN DELHI

CONTRACTOR: KENTING - PETROLIA RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker

LEGAL LAND DESCRIPTION: A-23 65° 42' 14" N 129° 19' 12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	15.3	E		3½ H90		1	EMSCO	DA 500	16
						2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB TO CSG. HD.	SET AT
	8⅝	NKK	24 55	13	517	17	511

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED
FT. CUT OFF	PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT		
CUMULATIVE TON MI. OR TRIPS		

MORNING TOUR

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¾	7¾	
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG		¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¼		
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

NO.	DRILLING ASSEMBLY (At end of tour)	FT.
	BIT	
1	STB RMR 6½ OD	8.53
2	D.C. ID SQ OD	582.0
1	STB RMR 6¼ OD	6.30
20	D.C. ID 6¼ OD	576.67
1	STB RMR 6½ OD	5.10
1	XO SUB	2.20
29	STANDS DP	2729.77
	SINGLES DP	
	KELLY DOWN	18.23
	TOTAL	3405.
	WT. OF STRING 92,000 LBS.	

BIT RECORD

BIT NO.	4		
SIZE	7⅞		
MFG.	H.W.		
TYPE	J33		
JETS 1/32"	10 10 11		
SER. NO.	JK415		
DEPTH OUT			
DEPTH IN	3054		
TOTAL FTG.	351		
TOTAL HRS. RUN	16¾		
COND. 1/8" T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD

	1⁰⁰	3⁰⁰	7⁰⁰
TIME	1⁰⁰	3⁰⁰	7⁰⁰
WEIGHT	8.4	8.4	8.4
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S			
pH	10.5	10.5	10.5
SOLIDS %	DESILTER OVERFLOW		
	OUTPUT ½ GAL/MIN. UNDERFLOW		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.–S PAR'EL–P COM'D–C
3250	3405	D			54	32	1400	5½	54			

DEVIATION RECORD: DEPTH 3365, DEV. 3°

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	5⁴⁵	5¾		DRILL
5⁴⁵	6⁰⁰	¼		SURVEY
6⁰⁰	8⁰⁰	2		DRILL

DRILLER: L. Ryko

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)	FT.
	BIT	
1	RMR 6½ OD	8.53
2	D.C. ID SQ OD	582.0
1	RMR 6¼ OD	6.30
20	D.C. ID 6¼ OD	576.67
1	STB 6½ OD	5.10
1	XO SUB	2.20
30	STANDS DP	
1	SINGLES DP	2854.98
	KELLY DOWN	33.02
	TOTAL	3545.
	WT. OF STRING 94,000 LBS.	

BIT RECORD

BIT NO.	4		
SIZE	7⅞		
MFG.	H.W.		
TYPE	J33		
JET 1/32"	10 10 11		
SER. NO.	JK415		
DEPTH OUT			
DEPTH IN	3054		
TOTAL FTG.	491		
TOTAL HRS. RUN	24½		
COND. 1/8" T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD

	9⁰⁰	11⁰⁰	3⁰⁰
TIME	9⁰⁰	11⁰⁰	3⁰⁰
WEIGHT	8.4	8.4	8.4
PRESSURE GRADIENT			
VISC.–SEC.	28	28	28
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S			
pH	10.5		
SOLIDS %	DESILTER OVER 8.4		
	UNDERFLO 9.7 @ 6 P.M		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.–S PAR'EL–P COM'D–C
3405	3545	D			54	32	1400	5½	54			

DEVIATION RECORD: DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	9¹⁵	1¼		DRILL.
9¹⁵	9³⁰	¼		RIG SERVICE. CHECK B.O.P. & KELLY COCK.
9³⁰	4⁰⁰	6½		DRILL.

DRILLER: G. Matthew

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)	FT.
	BIT	
1	RMR 6½ OD	8.53
2	D.C. ID SQ OD	58.20
1	RMR 6¼ OD	6.30
20	D.C. ID 6¼ OD	576.67
1	STB 6½ OD	5.10
1	XO SUB	2.20
30	STANDS DP	
2	SINGLES DP	2886.21
	KELLY DOWN	2679
	TOTAL	3570.
	WT. OF STRING 94,000 LBS.	

BIT RECORD

BIT NO.	4		
SIZE	7⅞		
MFG.	H.W.		
TYPE	J33		
JETS 1/32"	10 10 11		
SER. NO.	JK415		
DEPTH OUT	3570		
DEPTH IN	3054		
TOTAL FTG.	516		
TOTAL HRS. RUN	25¼		
COND. 1/8" T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	~~1000~~	260G	
BENEX	~~400~~	10 #	

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.–S PAR'EL–P COM'D–C
3545	3570	D			54	3..	1400	5½	54			

DEVIATION RECORD: DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4⁴⁵	¾		DRILL
4⁴⁵	11⁰⁰	6¼		MIX GEL & WORK STUCK PIPE LOST CIRC.
11⁰⁰				PICK UP KELLY & BREAK CIRC NO RETURNS
	12⁰⁰	1		TRIP OUT

DRILLER

FORM 375 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL ET AL SOBC MOUNT R	A-23	SOBC MOUNTAIN R A-23	4-1-72

OPERATOR	CONTRACTOR	RIG NO.
CANADIAN DELHI	KENTING PETROLIA DRLG.	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker

LOCATION: A-23 65°42'14" N 129°19'12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	15.3	E		3½ H90		1	Emsco	DA500	16
						2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.		NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8⅝	NKK	24	55	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1/8	8	

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¾	5¼	8
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		2½	
7. LUBRICATE RIG		¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¼		
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6½ OD		8.53
2	D.C. ID 5Q OD		58.20
1	STB RMR 6¼ OD		6.30
20	D.C. ID 6¼ OD		576.67
1	STB 6½ OD		5.10
1	XO SUB		2.20
23	STANDS DP		
2	SINGLES DP		223.24
	KELLY DOWN		41.40
	TOTAL		2929.64
WT. OF STRING 98,000 LBS.			

BIT RECORD			
BIT NO.	3		
SIZE	7⅞		
MFG.	H.W		
TYPE	XV		
JETS 1/32"	10	10	11
SER. NO.	17579		
DEPTH OUT			
DEPTH IN	2447		
TOTAL FTG.	482		
TOTAL HRS. RUN	24¼		
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD			
TIME	1⁰⁰	4⁰⁰	7⁰⁰
WEIGHT	8.4	8.4	8.4
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	10.5	10.5	10.5
SOLIDS %	DESILTER UNDERFLOW 9.8		
	OVERFLOW 8.4		

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6½ OD		8.53
2	D.C. ID 5Q OD		58.20
1	STB RMR 6¼ OD		6.30
20	D.C. ID 6¼ OD		576.67
1	STB RMR 6½ OD		5.10
1	XO SUB		2.20
25	STANDS DP		
1	SINGLES DP		2387.36
	KELLY DOWN		25.64
	TOTAL		3070
WT. OF STRING LBS.			

BIT RECORD			
BIT NO.	3		4
SIZE	7⅞		7⅞
MFG.	H.W.		H.W.
TYPE	XV		J33
JET 1/32"	10	10	11
SER. NO.	17579		JK415
DEPTH OUT	3054		
DEPTH IN	2447		3054
TOTAL FTG.	607		16
TOTAL HRS. RUN	28½		1
COND. 1/8's T/B/ GAGE	7	1	1
GPM/ PD–PSI			

MUD RECORD			
TIME	10⁰⁰	12⁰⁰	
WEIGHT	8.5	8.5	
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	10.5	10.0	
SOLIDS %	DESILTER OVERFLO 8.5		
	UNDERFLO 9.6	½ GPM	

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

TRIPPING

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	STB RMR 6½ OD		8.53
2	D.C. ID 5Q OD		58.20
1	STB RMR 6¼ OD		6.30
20	D.C. ID 6¼ OD		576.67
1	STB RMR 6½ OD		5.10
1	XO SUB		2.20
27	STANDS DP		
1	SINGLES DP		2573.41
	KELLY DOWN		19.59
	TOTAL		3250
WT. OF STRING 90,000 LBS.			

BIT RECORD			
BIT NO.	4		
SIZE	7⅞		
MFG.	H.W.		
TYPE	J33		
JETS 1/32"	10	10	11
SER. NO.	JK415		
DEPTH OUT			
DEPTH IN	3054		
TOTAL FTG.	196		
TOTAL HRS. RUN	9		
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD			
TIME	6⁰⁰	8⁰⁰	11⁰⁰
WEIGHT	8.4	8.4	8.4
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	10		10.
SOLIDS %	DESILTER OVER 8.4		
	UNDER 9.8		

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

MORNING TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SG–S PA–P FL–F CO–C
2755	2929	D			62	45	1300	5½	54			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2898	2¾							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	6⁰⁰	6		DRILL
6⁰⁰	6¹⁵	¼		SURVEY
6¹⁵	8⁰⁰	1¾		DRILL

DRILLER L. Lyka

DAY TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SG–S PA–P FL–F CO–C
2929	3070	D			62	45	1350	5½	54			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3054	2¾							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	¼		RIG SERVICE & CHECK B.O.P.
8¹⁵	12³⁰	4¼		DRILL
12³⁰	3⁰⁰	2½		TRIP F/BIT CLEAN 75' TO BTM.
3⁰⁰	4⁰⁰	1		DRILL.
				CHECKED BLIND RAMS & MOTOR SHUT OFFS
				HELD BLOW OUT DRILL.

DRILLER L. Matthews

EVENING TOUR

FOOTAGE FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SG–S PA–P FL–F CO–C
3070	3250	D			54	32	1400	5½	54			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	8⁰⁰	8		DRILL.

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

PETROLIA OILWELL DRILLING LTD.

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CANDEL ET AL SOBC MOUNTAIN	A-23	SOBC MOUNTAIN A-23	3-31-72

OPERATOR: CANADIAN DELHI
SIGNATURE OF OPERATOR'S REPRESENTATIVE:

CONTRACTOR: KENTING PETROLIA DRLG — RIG NO. 7
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker

LOCATION: A-23, 65° 42' 14" N 129° 19' 12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4"	15.3	E		3½ H90	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	DA500	16
2	"	"	"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8⅝	NKK	24 55	13	517	17	511

WIRE LINE RECORD — REEL NO. 1
SIZE 1/8 — NO. LINES 8 — FT. SLIPPED 52
FT. CUT OFF — PRESENT LENGTH 4896
TON MI. OR TRIPS SINCE LAST CUT 668
CUMULATIVE TON MI. OR TRIPS 1398

MORNING TOUR

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	5¼	7¾	
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	2½		
7. LUBRICATE RIG		¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE	¼		
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID SQ OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	KO Sub	2.20	
19	STANDS DP	1792.11	FT.
	SINGLES DP		FT.
	KELLY DOWN	14.89	FT.
	TOTAL	2464.	FT.
WT. OF STRING	82,000		LBS.

BIT RECORD — Bit Change

BIT NO.	2	3	
SIZE	7⅞	7⅞	
MFG.	H.W	H.W	
TYPE	X16	XV	
JETS 1/32"	10 10 11 10 10 11		
SER. NO.	40322	17579	
DEPTH OUT	2447		
DEPTH IN	2188	2447	
TOTAL FTG.	259	17	
TOTAL HRS. RUN	15	1	
COND. 1/8"s T/B/ GAGE	8 7 1		
GPM/ PD–PSI			

MUD RECORD

TIME	1⁰⁰	3³⁰	7⁰⁰
WEIGHT	85	8.5	8.4
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP			
GELS.			
WL.–CC'S.			
pH	10.5	10.5	
SOLIDS %	DESILTER UNDERFLOW 11.8		
	OVERFLOW 8.5	½ GAL/MIN.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
BENEX	2 sk		
LIME	100 lb		

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN
2419	2464	D			63/80	40	1250	5½	54			

DEVIATION RECORD: DEPTH 2400 — DEV. 2°

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	4¹⁵	4¼		DRILL
4¹⁵	5⁴⁵	1½		SURVEY – TRIP F/BIT – RUN IN DRILL COLLARS
5⁴⁵	6⁰⁰	¼		SLIP DRILL LINE
6⁰⁰	7⁰⁰	1		FINISH RUN IN, CLEAN 20' TO BTM.
7⁰⁰	8⁰⁰	1		DRILL.
				CHECK BLIND RAMS WHEN OUT OF HOLE

DRILLER: L Kyle

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	STB RMR 6½ OD	8.53	FT.
2	D.C. ID SQ OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB RMR 6½ OD	5.10	FT.
1	XO Sub	2.20	
20	STANDS DP	1917.32	FT.
1	SINGLES DP	35.68	FT.
	KELLY DOWN		
	TOTAL	2610	FT.
WT. OF STRING	82,000		LBS.

BIT RECORD

BIT NO.	3		
SIZE	7⅞		
MFG.	H.W.		
TYPE	XV		
JET 1/32"	10 10 11		
SER. NO.	17579		
DEPTH OUT			
DEPTH IN	2447		
TOTAL FTG.	163		
TOTAL HRS. RUN	8¾		
COND. 1/8"s T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD

TIME	10⁰⁰	12⁰⁰	2⁰⁰
WEIGHT	8.4	8.45	8.5
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP			
GELS.			
WL.–CC'S.			
pH	11.5	11.5	11.5
SOLIDS %	DESILTER UNDERFLO 13.1		
	OVERFLO 8.5	½ GPM	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN
2464	2610	D			62	45	1300	5½	54			

DEVIATION RECORD: DEPTH ~~2447~~ — DEV. ~~2½~~ — DEPTH 2½ — DEV. 2½

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	9⁰⁰	1		DRILL.
9⁰⁰	9¹⁵	¼		RIG SERVICE & CHECK B.O.P.
9¹⁵	4⁰⁰	6¾		DRILL.

DRILLER: G. Mattson

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	STB R/4R 6½ OD	8.53	FT.
2	D.C. ID SQ OD	58.20	FT.
1	STB RMR 6¼ OD	6.30	FT.
20	D.C. ID 6¼ OD	576.67	FT.
1	STB 6½ OD	5.10	FT.
1	XO Sub	2.20	
22	STANDS DP	2073.82	FT.
	SINGLES DP		FT.
	KELLY DOWN	2418	FT.
	TOTAL	2755	FT.
WT. OF STRING	84,000		LBS.

BIT RECORD

BIT NO.	3		
SIZE	7⅞		
MFG.	H.W.		
TYPE	XV		
JETS 1/32"	10 10 11		
SER. NO.	17579		
DEPTH OUT			
DEPTH IN	2447		
TOTAL FTG.	308		
TOTAL HRS. RUN	16½		
COND. 1/8"s T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD

TIME	4³⁰	8³⁰	10³⁰
WEIGHT	8.5	8.5	8.4
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP			
GELS.			
WL.–CC'S.			
pH	11.5	11.5	
SOLIDS %	DESILTER UNDER 9.8		
	OVER 9.4		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN
2610	2755	D			62	45	1300	5½	54			

DEVIATION RECORD: DEPTH 2647 — DEV. 2½

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	5⁴⁵	1¾		DRILL
5⁴⁵	6⁰⁰	¼		SURVEY
6⁰⁰	12⁰⁰	6		DRILL.

DRILLER:

FORM 315 — APPROVED — APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

PETROLIA OILWELL DRILLING LTD.

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CANDEL E-AL SOBC MOUNT R	A-23	SOBC MOUNTAIN A-23	3-30-72

OPERATOR	CONTRACTOR	RIG NO.
CANADIAN DELHI	KENTING PETROLIA DRLG.	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Banks

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	DA500	16
2	"	"	"

LOCATION: H-23 65°42'14" N 129° 19'12" W

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	24	55	13	517	17	511

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7 3/4	4	7 1/2
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		3 3/4	1/4
7. LUBRICATE RIG			
8. REPAIR RIG		1/4	
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	1/4		1/4
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
2	D.C. ID SQ	OD	582.0 FT.
1	STB RMR	OD	6.30 FT.
20	D.C. ID 6 1/4	OD	576.67 FT.
	STB RMR	OD	FT.
1	XO SUB		2.20
16	STANDS DP		1504.26 FT.
	SINGLES DP		FT.
	KELLY DOWN		17.37 FT.
	TOTAL		2170 FT.
WT. OF STRING	70,000		LBS.

BIT RECORD			
BIT NO.	3		
SIZE	7 7/8		
MFG.	H.W.		
TYPE	X16		
JETS 1/32"	10 10 11		
SER. NO.	29411		
DEPTH OUT			
DEPTH IN	511		
TOTAL FTG.	1659		
TOTAL HRS. RUN	21 1/4		
COND. 1/8's T/B/ GAGE			
GPM/ PD—PSI			

MUD RECORD			
TIME	2:30	5:00	7:00
WEIGHT (Flowline)	8.6	8.6	8.6
PRESSURE GRADIENT (Bottom)	8.4	8.4	8.4
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH	10.5	10.5	10.5
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
BENTEX	6#		
LIME	50#		

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT		FT.
1	REAMER		8.53
	STB RMR	OD	FT.
2	D.C. ID SQ	OD	582.0 FT.
1	STB RMR 6 1/4	OD	6.30 FT.
20	D.C. ID 6 1/4	OD	576.67 FT.
1	STB 6 1/2	OD	5.10 FT.
1	XO SUB		2.20
12	STANDS DP		1604.01 FT.
	SINGLES DP		FT.
	KELLY DOWN		28.99 FT.
	TOTAL		2290 FT.
WT. OF STRING	72,000		LBS.

BIT RECORD			
BIT NO.	3	4	
SIZE	7 7/8	7 7/8	
MFG.	H.W.	H.W.	
TYPE	X16	X16	
JET 1/32"	10 10 11	10 10 11	
SER. NO.	29411	40322	
DEPTH OUT	2188		
DEPTH IN	511	2188	
TOTAL FTG.	1677	102	
TOTAL HRS. RUN	27	3 1/4	
COND. 1/8's T/B/ GAGE			
GPM/ PD—PSI			

MUD RECORD			
TIME	2 PM	4 PM	
WEIGHT	8.45	8.5	
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH	10.	10	
SOLIDS %	Desilter Underflow 12.5		
	Underflow 8.4 1/2 6 P.M		

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
BENTEX	4#		

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
1	STB RMR 6 1/2	OD	8.53 FT.
2	D.C. ID SQ	OD	58.20 FT.
1	STB RMR 6 1/4	OD	6.30 FT.
20	D.C. ID 6 1/4	OD	576.67 FT.
1	STB RMR 6 1/2	OD	5.10 FT.
1	XO SUB.		2.20
13	STANDS DP		FT.
18	SINGLES DP		1728.86 FT.
1	KELLY DOWN		33.14 FT.
	TOTAL		2419. FT.
WT. OF STRING	75000		LBS.

BIT RECORD			
BIT NO.	4		
SIZE	7 7/8		
MFG.	H.W.		
TYPE	X16		
JETS 1/32"	10 10 11		
SER. NO.	40322		
DEPTH OUT			
DEPTH IN	2188		
TOTAL FTG.	231		
TOTAL HRS. RUN	10 3/4		
COND. 1/8's T/B/ GAGE			
GPM/ PD—PSI			

MUD RECORD			
TIME	6 AM	9:00	11:00
WEIGHT	8.5	8.5	8.4
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH	10.		10.5
SOLIDS %	Desilter Underflow 12.2		
	Over Flow 8.4		

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
BENTEX	2#		
LIME	50#		

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PARTIAL-P COMPLE.-C
1850	2170	D			67/75	30	1250	5 1/2	54			

DEVIATION RECORD: DEPTH 1958 — DEV. 1 3/4 — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	3:15	3 1/4		DRILL
3:15	3:30	1/4		SURVEY
3:30	8:00	4 1/2		DRILL

HELD BLOWOUT DRILL + SAFETY MEETING — DRILLER L Ryba

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PARTIAL-P COMPLE.-C
2170	2290	D			80	30	1250	5 1/2	54			

DEVIATION RECORD: DEPTH 2142 — DEV. 1 7/8 — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:45	3/4		DRILL — PICK UP NEAR BIT & BLADE REAMER
8:45	12:30	3 3/4		SURVEY & TRIP F BIT — 25' FILL
12:30	2:00	1 1/2		DRILL
2:00	2:15	1/4		WORK ON PUMP
2:15	4:00	1 3/4		DRILL

HELD BLOW OUT DRILL & SAFETY MEETING — DRILLER A Matter

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PARTIAL-P COMPLE.-C
2290	2419	D			75/80	35/45	1250	5 1/2	54			

DEVIATION RECORD: DEPTH 2364 — DEV. 1 7/8 — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:30	1/2		DRILL
4:30	4:45	1/4		RIG SERVICE
4:45	6:15	1 1/2		DRILL
6:15	6:30	1/4		SURVEY
6:30	12:00	5 1/2		DRILL

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.—A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

PETROLIA OILWELL DRILLING LTD.

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN. DEL ET AL SOBC MOUNTR	A-23	SOBC MOUNTAIN A-23	3-29-72

OPERATOR	CONTRACTOR	RIG NO.
CANADIAN DE. HI	KENTING PETROLIA DRLG.	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Banks

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	DA500	16
2	"	"	"

LOCATION: A-23 65°42'14" N 129°19'12" W

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	24 55	13	517	17	511 KB

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO. — OPERATION	DAY	EVE.
1. RIG UP AND TEAR DOWN		
2. DRILL ACTUAL	7	7 1/4
3. REAMING		
4. CORING		
5. CONDITION MUD & CIRCULATE		
6. TRIPS		
7. LUBRICATE RIG	1/4	
8. REPAIR RIG		1/4
9. CUT OFF DRILLING LINE		
10. DEVIATION SURVEY	3/4	1/2
11. WIRE LINE LOGS		
12. RUN CASING & CEMENT		
13. WAIT ON CEMENT		
14. NIPPLE UP B.O.P.		
15. TEST B.O.P.		
16. DRILL STEM TEST		
17. PLUG BACK		
18. SQUEEZE CEMENT		
19. FISHING		
20. DIR. WORK		
21.		
22.		
23.		
COMPLETION: A. PERF'R'T'N		
B. TBG TRIPS		
C. TREATING		
D. SWABBING		
E. TESTING		
F. ADDIT'N'L		
G.		
TOTALS	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR	OD	
2	D.C. ID	OD	58.20
1	RMR	OD	6.30
20	D.C. ID 6 1/4	OD	576.67
	STB RMR	OD	
1	XO SUB		2.20
1	STANDS DP		
1	SINGLES DP		125.99
	KELLY DOWN		4.40
	TOTAL		810.76

WT. OF STRING 56,000 LBS.

BIT RECORD	
BIT NO.	3
SIZE	7 7/8
MFG.	H.W
TYPE	X16
JETS 1/32"	10 10 11
SER. NO.	29411
DEPTH OUT	
DEPTH IN	510
TOTAL FTG.	300
TOTAL HRS. RUN	4 1/4
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD	
TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	WATER
PV/YP	/ /
GELS.	/ /
WL.-CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED TYPE	AMT.	TYPE	AMT.
CaCl	500#		
LIME	200#		
BENEX	6#		

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR	OD	
2	D.C. ID SQ	OD	58.20
1	RMR	OD 6 1/4	6.30
20	D.C. ID 6 1/4	OD	576.67
	STB RMR	OD	
1	XO SUB		2.20
9	STANDS DP		849.56
	SINGLES DP		
	KELLY DOWN		18.07
	TOTAL		1511

WT. OF STRING 62,000 LBS.

BIT RECORD			
BIT NO.	3		
SIZE	7 7/8		
MFG.	H.W.		
TYPE	X16		
JET 1/32"	10 10 11		
SER. NO.	29411		
DEPTH OUT			
DEPTH IN	511		
TOTAL FTG.	1000		
TOTAL HRS. RUN	11 1/4		
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI			

MUD RECORD			
TIME	10^00	12^00	3^00
WEIGHT	8.45	8.5	8.6
PRESSURE GRADIENT			
VISC.-SEC.	29	29	29
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH	11.0	11.0	10.5
SOLIDS %			

MUD & CHEMICALS ADDED TYPE	AMT.	TYPE	AMT.
BENEX	8#		
LIME	50#		

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR	OD	
2	D.C. ID SQ	OD	58.20
1	RMR	OD 6 1/4	6.30
20	D.C. ID 6 1/4	OD	576.67
	STB RMR	OD	
1	XO SUB		2.20
12	STANDS DP		
2	SINGLES DP		1214.13
	KELLY DOWN		12.50
	TOTAL		1850

WT. OF STRING 14,000 LBS.

BIT RECORD		
BIT NO.	3	
SIZE	7 7/8	
MFG.	H.W.	
TYPE	X16	
JETS 1/32"	10 10 11	
SER. NO.	29411	
DEPTH OUT		
DEPTH IN	511	
TOTAL FTG.	1339	
TOTAL HRS. RUN	18 1/2	
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI		

MUD RECORD		
TIME	6^PM	11^30
WEIGHT	8.6	8.6
PRESSURE GRADIENT		
VISC.-SEC.	29	
PV/YP	/	/
GELS.	/	/
WL.-CC'S.		
pH	10.5	10.
SOLIDS %		

MUD & CHEMICALS ADDED TYPE	AMT.	TYPE	AMT.
BENEX	6#		
LIME	100#		

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
510	810	D			80	30	1050	5 1/2	52			
				CHECKED MOTOR SHUT OFFS (OK)								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	670	⊙							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12^00				RUN IN HOLE
	1^30	1 1/2		PRESSURE TEST PIPE RAMS & DRILL TO 1200# F/15 MIN. OK
1^30	2^45	1 1/4		DRILL OUT
2^45	3^15	1/2		LAY 2 SINGLES + PICK UP STAND COLLARS.
3^15	6^00	2 3/4		DRILL 7 7/8" HOLE
6^00	6^15	1/4		WORK ON AIRLINE
6^15	6^30	1/4		DRILL
6^30	6^45	1/4		SURVEY @ 670

6^45 - 8^00 1 1/4 DRILL

DRILLER

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
810	1511	D			80	30	1250	5 1/2	54			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	890	1/2		1110	7/8		1330	1	

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8^00	8^15	1/4		RIG SERVICE & CHECK B.O.P.
8^15	9^15	1		DRILL.
9^15	9^30	1/4		SURVEY
9^30	11^15	1 3/4		DRILL.
11^15	11^30	1/4		SURVEY
11^30	1^30	2		DRILL.
1^30	1^45	1/4		SURVEY
1^45	4^00	2 1/4		DRILL

DRILLER

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
1511	1850	D			80	30	1250	5 1/2	54			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1550	1 1/2		1740	1 3/4°				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4^00	6^00	2		DRILL.
6^00	6^15	1/4		SURVEY
6^15	7^15	1		DRILL
7^15	7^30	1/4		WORK ON ROTARY AIR LINE
7^30	10^00	2 1/2		DRILL.
10^00	10^15	1/4		SURVEY @ 1740
10^15	12^00	1 3/4		DRILL

FORM 315 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

PETROLIA OILWELL DRILLING LTD.

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN. DEL FT AL SOBC MOUNTAIN	A.23	SOBC MOUNTAIN A. 23	3-28-72

OPERATOR: CANADIAN DELHI

CONTRACTOR: KENTING PETROLIA DRLG — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LOCATION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	NKK	24 SS	13	517	17	511 KB
	320 SKS. OILWELL CEMENT w/ 2% CaCl						

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
15	D.C. ID OD 432.86	FT.	TYPE		VISC.-SEC.	
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/
	STB RMR OD	FT.	DEPTH OUT		WL.-CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL-S PAR-P COM-C

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:30	1/2		Rig To Cement
12:30	1:30	1		Cement Surface Csg - Plug Down 1:30 AM
1:30	8:00	6 1/2		W.O.C.
				Clean Mud Tanks, Dig Cellar
				Prepare Heading up Equip.

DRILLER: L. Pike

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
	STB RMR OD	FT.	JET 1/32"		PV/YP	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/
	STB RMR OD	FT.	DEPTH OUT		WL.-CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL-S PAR-P COM-C
511												

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Pressure Test Bowl To 2000 PSI
8:00	10:30	2 1/2		Cut Off Casing & Weld On Bowl.
10:30	4:00	5 1/2		Head Up BOP's

DRILLER: L. Martin

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/
	STB RMR OD	FT.	DEPTH OUT		WL.-CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

FOOTAGE FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL-S PAR-P COM-C

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	7:00	3		Finish Nippling Up
7:00	7:15	1/4		Pressure Test Blind Rams To 1200 PSI 15 Mins. OK
7:15				~~W.O.C.~~ Lay Flare Lines
	12:00	4 3/4		Pick up Square Collars - String Reamer

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

PETROLIA OILWELL DRILLING LTD.

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN DEL. F+A. SOBC MOUNT	A-23	SOBC MOUNTAIN A-23	3-27-72

OPERATOR	CONTRACTOR	RIG NO.
CANADIAN DELHI	KENTING PETROLIA	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker.

LOCATION: A-23, 65° 42' 14" N 129° 19' 12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
FT. CUT OFF	PRESENT LENGTH	

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING	7¼		
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¾		
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT REAMER	2.60	FT.
1	BELL SUB	2.40	
	STB RMR OD		FT.
14	D.C. ID 6½ OD	402.27	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	XO SUB	2.60	
1	XO SUB	2.20	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	41.40	FT.
	TOTAL	453.47	FT.
WT. OF STRING		44000	LBS.

BIT RECORD	
BIT NO.	REAMER
SIZE	12¼
MFG.	REED
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	40
TOTAL FTG.	413
TOTAL HRS. RUN	11½
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD			
TIME	200	400	600
WEIGHT			9.1
PRESSURE GRADIENT			
VISC.–SEC.	52	50	48
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1200#		
LIME	20#		

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.–S PAR.EL.–P COM.DC.–C
196	453	R			130	20	600	5½	72			C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	225	¾		307	½°		396	½°	

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1		REAM
1:00	1:15	¼		SURVEY @ 225
1:15	3:15	2		~~Ret~~ REAM
3:15	3:30	¼		SURVEY @ 307
3:30	6:00	2½		REAM
6:00	6:15	¼		SURVEY @ 396
6:15	8:00	1¾		REAM

DRILLER: A. Ryba

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT REAMER	2.60	FT.
1	BELL SUB	2.40	
	STB RMR OD		FT.
15	D.C. ID 6½ OD	432.86	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	XO SUB	2.60	
1	XO SUB	2.20	
	STANDS DP		FT.
1	SINGLES DP	31.56	FT.
	KELLY DOWN	36.78	FT.
	TOTAL	511	FT.
WT. OF STRING		45000	LBS.

BIT RECORD	
BIT NO.	REAMER
SIZE	12¼
MFG.	REED
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	511
DEPTH IN	40
TOTAL FTG.	471
TOTAL HRS. RUN	14¾
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.–S PAR.EL.–P COM.DC.–C
453	511	R			125	20	650	5½	72	5½	73	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30	½		REAM
8:30	9:45	1¼		STRAP OUT & CHECK REAMER - RUN IN
9:45	11:00	1¼		REAM
11:00	12:15	1¼		TRIP OUT REAMER – BALLED UP
12:15	1:45	1½		REAM.
1:45	3:30	1¾		CIRC. TO RUN CASING.
3:30	4:00	½		SURVEY & HOIST.

DRILLER

EVENING TOUR

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.–S PAR.EL.–P COM.DC.–C
511												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	511	½							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:45	¾		RIG TO RUN CASING
4:45	7:00	2¼		PICK UP 8⅝ CASING & INSTALL SHOE & FLOAT & RUN SAME
7:00	12:00	5		CIRC CASING & RIG TO CEMENT INSTALL Halliburton mixing pump

DRILLER: G. Mattson

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

PETROLIA OILWELL DRILLING LTD.

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CAN. DEL ET AL SOBC MOUNTAIN	A-23	SOBC MOUNTAIN A-23	3-26-72

OPERATOR: CANADIAN DELHI

CONTRACTOR: KENTING PETROLIA DRLG. RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Baker

LOCATION: A-23, 65° 42' 14" N 129° 19' 12" W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF: PRESENT LENGTH:

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR OD		FT.
7	D.C. ID 6½ OD	201.09	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X-O SUB	2.20	
1	BIT SUB	4.00	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	4.40	FT.
	TOTAL	248.69	FT.

WT. OF STRING 52,000 LBS.

BIT RECORD

BIT NO.	1
SIZE	7 7/8
MFG.	H.W
TYPE	X16
JETS 1/32"	13 13 13
SER. NO.	28962
DEPTH OUT	
DEPTH IN	40
TOTAL FTG.	208
TOTAL HRS. RUN	6½
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME		7[illegible]
WEIGHT		
PRESSURE GRADIENT		
VISC.–SEC.		60
PV YP		
GELS.		
WL –CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000#		
SAWDUST	½ Box		
LIME	60#		

FOOTAGE / FORMATION

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–P ELS–E COM–C
180	248	D			85	15	275	5½	52			

DEVIATION RECORD: DEPTH 193, DEV. ½

DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	12.15	¼		DRILL
12.15	12.30	¼		SURVEY @ 193
12.30	2.00	1½		TRIP OUT F/PLUGGED BIT & CLEAN 60' TO BTM.
2.00	2.30	½		DRILL
2.30	4.00	1½		TRIP F/PLUGGED BIT + CLEAN 60 TO BTM
4.00	7.15	3¼		BUILD VOLUME MIX MUD + SAWDUST
7.15	8.00	¾		DRILL

DRILLER: L. Pike

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR OD		FT.
13	D.C. ID 6½ OD	374.83	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X-O SUB	2.20	
1	BIT SUB	4.00	
1	STANDS DP	94.41	FT.
	SINGLES DP		FT.
	KELLY DOWN	34.54	FT.
	TOTAL	510	FT.

WT. OF STRING 44000 LBS.

BIT RECORD

BIT NO.	1
SIZE	7 7/8
MFG.	H.W.
TYPE	X16
JET 1/32"	13 13 13
SER. NO.	28962
DEPTH OUT	510
DEPTH IN	40
TOTAL FTG.	470
TOTAL HRS. RUN	11¾
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC.–SEC.		
PV/YP		
GELS.		
WL –CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–P ELS–E COM–C
248	510	D			85	20	400	5½	52			

DEVIATION RECORD: DEPTH 248, DEV. ½; DIRECTION 303; DEPTH ¼; DEV.; DIRECTION; DEPTH 363; DEV. ½°; DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	8.15	¼		SURVEY @ 248
8.15	9.15	1		DRILL
9.15	9.30	¼		SURVEY @ 303
9.30	9.45	¼		RIG SERVICE
9.45	10.45	1		DRILL
10.45	11.00	¼		SURVEY @ 363
11.00	12.15	1¼		
12.15	12.30	¼		SURVEY @ 411 – ¼

12.30 – 2.30 – 2 DRILL.
2.30 – 3.00 – ½ CIRC & SURVEY
3.00 – 3.30 – ½ HOIST
3.30 – 4.00 – REPAIR PUMP DRIVE
SURVEY @ 510 – ⅛

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	REAMER	2.60	FT.
1	BELL SUB	2.40	
	STB RMR OD		FT.
5	D.C. ID 6½ OD	145.59	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X-O SUB	2.60	
1	X-O SUB	2.20	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	41.40	FT.
	TOTAL	196	FT.

WT. OF STRING 25000 LBS.

BIT RECORD

BIT NO.	1 REAMER
SIZE	12¼
MFG.	REED
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	40
TOTAL FTG.	156
TOTAL HRS. RUN	4¼
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC.–SEC.		
PV/YP		
GELS.		
WL –CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL–S PAR–P ELS–E COM–C
40	196	R			120	20	300	5½	72	5½	73	

DEVIATION RECORD: DEPTH 126, DEV. ⅞; DIRECTION; DEPTH; DEV.; DIRECTION; DEPTH; DEV.; DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4.00				INSTALL SPIDER ON OUTBOARD PUMP DRIVE & HOOK
	6.15	2¼		UP PUMP DRIVE & PUMP BELTS.
6.15	7.15	1		PICK UP REAMER 12¼"
7.15	10.15	3		REAM 7⅞ HOLE.
10.15	10.45	½		CONN & SURVEY
10.45	12.00	1¼		REAM

DRILLER L. Matts

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

PETROLIA OILWELL DRILLING LTD.

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CanDel Et Al SOBC Mountain	A-23	SOBC Mountain A-23.	3-25-72

OPERATOR: Canadian Delhi

CONTRACTOR: Kenting Petrolia Drlg — RIG NO. 7

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D Barker.

LOCATION: A-23 65°42'14" N 129°19'12" W.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	DA500	16
2	Emsco	D500	16

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO SG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			5
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			2½
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO. | DRILLING ASSEMBLY (At end of tour)

	BIT	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO. | DRILLING ASSEMBLY (At end of tour)

	BIT	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO. | DRILLING ASSEMBLY (At end of tour)

	BIT	FT.
	STB RMR OD	FT.
5	D.C. ID 6½ OD	145.59 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	XO Sub	2.20
1	Bit Sub	4.00
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	28.21 FT.
	TOTAL	180 FT.
WT. OF STRING		28000 LBS.

BIT RECORD

BIT NO.	1
SIZE	7 7/8
MFG.	H.W.
TYPE	X16.
JETS 1/32"	13 13 13
SER. NO.	28962
DEPTH OUT	
DEPTH IN	40
TOTAL FTG.	140
TOTAL HRS. RUN	5
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10⁰⁰
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	75
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	45 00#		
Quick Seal	25x		
Sawdust			
Lime	40#		

MORNING TOUR

FOOTAGE: FROM | TO | DR-D RM-R CORE-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | S.P.M. | PUMP NO. LINER SIZE | S.P.M. | METHOD RUN SGL-S PAR-P COM-C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	8⁰⁰	8		Put On Prefabs. Rigging Up. Jack Mud Tanks

DRILLER

DAY TOUR

FOOTAGE: FROM | TO | DR-D RM-R CORE-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | S.P.M. | PUMP NO. LINER SIZE | S.P.M. | METHOD RUN SGL-S PAR-P COM-C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	4⁰⁰	8		Rig To Spud.

DRILLER

EVENING TOUR

FOOTAGE: FROM | TO | DR-D RM-R CORE-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. 2 LINER SIZE | S.P.M. | PUMP NO. LINER SIZE | S.P.M. | METHOD RUN SGL-S PAR-P COM-C

FROM	TO	D			RPM	WT.	PRESS	LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	
40	180	D			85	10	275	5½	52			

DEVIATION RECORD: DEPTH 94 | DEV. ½ | DIRECTION | DEPTH 154 | DEV. ½ | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4³⁰	½		Spud w/ 7 7/8 Bit.
4³⁰	7⁰⁰	2½		Build Volume & Mix Lost Circ.
7⁰⁰	8³⁰	1½		Drill.
8³⁰	8⁴⁵	¼		Survey
8⁴⁵	10⁴⁵	2		Drill
10⁴⁵	11⁰⁰	¼		Survey
11⁰⁰	12⁰⁰	1		Drill.

DRILLER D. Matter

3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

PETROLIA OILWELL DRILLING LTD.